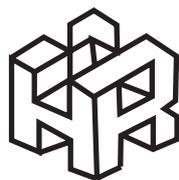




*The flame of leadership.
The flame of hope.
The flame of India's future.*

*Vibrant, bold and eternal.
The flame that lights up every
Indian,
to make this INDIA'S CENTURY.*



NATIONAL HRD NETWORK
Presents

India's Century
The Challenge for Indian Business Leadership

www.indiascentury.in

Acknowledgements

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On behalf of the National HRD Network, we wish to place on record our deep appreciation of the efforts put in by this committed team to make this publication possible.

Organizing Committee
11th National Conference

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The Making of 'India's Century'



This can indeed be India's century! Having survived the onslaught of globalization over the last decade with a fair degree of success, India is now seeking to give shape to strategies and processes that could make the 21st Century India's own. This publication, being brought out on the occasion of the 11th National Conference of the National HRD Network, is to do with examining the many facets of the evolving paradigm. Accordingly, the publication has been divided into six sections:

Section I deals with global mega trends that begin with scientific endeavours to create life; explore the frontiers of the brain and initiate change that will alter the fundamentals of human thinking.

Section II talks about the importance of being Indian at a time when India is striving to achieve the commanding heights of technology, management, science and research and yet suffers the ignominy of having millions of Indians going without two square meals a day. It also provides an understanding of the fortune at the bottom of the pyramid.

Section III cautions industry and business and the professional management community that, with growth and progress, mother earth needs to be protected like never before. It underscores some aspects of the interplay of ecology-damaging actions and their impact on human lives.

Section IV considers global and Indian corporate trends and explores how they may shape our future. It also focuses on the overriding need for the Indian corporate sector to participate in the process of deepening the Indian market and to convert every one of India's billion plus citizens into active participants of a thriving economy.

Section V considers the leadership issues that these challenges throw up. It explains what makes for leadership; how leaders can galvanize organizations around a shared vision and values and enhance organizational capability. It analyzes the quality of new talent that HR would need to manage effectively. Finally, it presents some thoughts on transforming HR for tomorrow.

Section VI goes off the beaten track and dwells on some facets of 'social entrepreneurship' that often go unnoticed in India. It features some exceptional people who have been driven by pure compassion married to their professionalism and have brought their passion, training and expertise to bear on some of society's most intractable problems through innovation and with dedication and commitment, coupled with a deep faith in themselves as changemakers.

This publication salutes the thousands of unsung heroes who are bringing about change where it is needed most and are putting a smile on the tragic face of humanity.

Eventually, the challenge facing the Human Resource fraternity is to put a winning smile on every face; to make the 21st Century India's own. 

Where the mind is without
fear and the head is held high;
Where knowledge is free;
Where the world has not been
broken up into fragments by
narrow domestic walls;
Where words come out from
the depth of truth;
Where tireless striving
stretches its arms towards
perfection;
Where the clear stream of
reason has not lost its way
into the dreary desert sand of
dead habit;
Where the mind is led
forward by Thee into
ever-widening thought and
action;
Into that heaven of freedom,
my Father,
Let my country awake.

– **Rabindranath Tagore**

Executive Summary



SECTION I

The 21st Century Manifesto: Leverage Knowledge to Create Value

As man ascends the commanding heights of knowledge-driven development, society is poised for dramatic change. The contours of this change will be determined by the outcome of the current research that is exploring the frontiers of the brain, tracking the human DNA, seeking to farm for food differently and trying to restore the ecological balance. Even as human activity exceeds earth's carrying capacity, consumption of fossil fuels, for instance, continues at an alarming rate, fuelling conflicts between nations.

Most certainly, ecology rather than economics will dominate thought and ecological models will be the most important component of successful business models; as the cost of global-warming-related disasters threatens to touch \$150 billion per year.

It is equally clear that the current age will be the age of biotechnology; following in the footsteps of the information technology-driven 'age of access' that followed the 'end of jobs age', when technology replaced man and radically altered the character of the workspace.

Significantly, in this emerging world, the economies of India and China will surpass those of Japan and the United States within the next 30 years. India may surpass Japan's economy by 2032; China the USA's by 2039!

Also emerging is a new global demography, thanks to better medicine and healthcare, especially among the affluent. Add to it the power of connectivity and a tech savvy workforce and what obtains is a new age profiling of the world, accompanied by new workplace realities with virtual offices, virtual colleagues and teams. The number of the elderly will be overwhelming; the over-60 population will reach a billion by 2020 or 13 per cent of the projected global population. Three-fourth's of it will be in developing countries. There will also be increasing urbanization with its attendant woes. Nine of the 10 countries contributing more than half of all urban growth between 2025 and 2030 will be from the developing countries; India and China prominent amongst them.

Meanwhile, the millennial generation (post-1980) is emerging as one of compulsive spenders, triggering off a construction

and retail boom, among others. In India, it is driving the development of more than 500 malls by 2009, with people calling the phenomenon anything from consumerism in action to a celebration of mass affluence.

Conflicts within borders and across borders – often driven by inequities and sheer greed – will increasingly grab global attention. Socio-economic stratification between nations and between regions within nations will prompt the impoverished to migrate; terrorism will become a daunting problem. Battles over oil and water threaten the emerging world.

Will market-friendly reforms succeed in this changing world? Not unless institutional reform, good governance and ecological understanding accompany them, even though globally market forces, rather than government policy, have emerged as the principal influencers of choice that men make. Corporates have to build in the new risk factors of a still unknown future – in both technology and ecology terms – into their strategies. Innovation will hold centre stage in the pursuit of healthy bottomlines, just as it will in determining geopolitical structures and societal commitment to universal health and education.

As the corporate sector focuses on top-line growth, business strategy will have to respond to the state of flux. The message is clear: understand the implications of dramatic change and prepare adequate responses at both business and societal levels, for business must exist in harmony with society, or not at all. 

SECTION II

The Importance of Being Indian

The overriding slogan, as India celebrates its 60th anniversary of Independence, is that the Indian has indeed "arrived" in the globalized world. Political and corporate leadership across the world has almost unanimously endorsed the view that this is India's century with Indians and people of Indian origin seeking to straddle the world of business, enterprise, science, technology and research. Indian business and industry are growing like never before. More than a hundred Indian enterprises have exceeded a market cap of a billion dollars and the world is rushing in to invest in Indian equity, driving the Sensex across the 20,000 mark on the one hand and

sourcing software, hardware and other intellectual property out of this country on the other.

Yet, when the Indian Prime Minister analyses these accomplishments, he is not happy just applauding the remarkable successes but emphasizes that the high growth path must now focus on inclusiveness and on bridging divides. These divides are particularly glaring in the areas of education, health, agriculture and irrigation, with persistent regional imbalances in the level and pace of development that has bypassed millions of Indians.

The paper indicates 16 strategic directions that India is poised to take to correct its debilitating imbalances, provided the planning at the state and central government levels comes to a fruition. Arguably, there are plenty of ifs and buts that make life difficult for those at the bottom of the pyramid. This, India can ill afford, if it is to retain its democratic fabric and its social harmony.

Thus, even as the Indian manager seeks to scale the peaks of professional excellence, he can hardly ignore the complex growth issues around stratification that erode the value of being Indian for a large section of his countrymen. When the overwhelming concern for the Indian manager is around being a global citizen; it is very important for every Indian to be as much an Indian as any other.

That indeed is the challenge for the Indian manager; to contribute to society in a manner that provides every Indian the opportunity to become a fully functional participant of the country and system that is India. For, it is only when every Indian has the right to become Indian in the fullest sense of the term, that the importance of being Indian as a whole magnifies manifold: emotionally, spiritually, intellectually, academically, financially and completely. 

SECTION III

Focus the earth

After being pitted against each other the two 'eco's; ecology and economics, seem to be seeking common ground with economic/entrepreneurial powers admitting that what is good for economics is good for ecology and vice versa. Yet the global truth is far from consoling even as it is elementary: natural resources are finite and cannot take the increasing pressure of population and ecologically damaging industrial

activity. This foretells food insecurity; extinction of species, destruction of forests, decrease of global fish stock and, of course, the quite perceptible deterioration in the quality of the air that we breathe.

People and corporations are eventually conceding that all is not right with the way humankind is conducting itself and more people want to do something about it despite ecosceptics, some of whom are from the world of science and technology, with considerable constituencies of corporate and political following. Consumers are exhorting corporates to be ecology-driven and this trend will continue and strengthen.

With the increasing structured uniformity of economic and manufacturing systems, thanks to the worldwide structural reforms, larger increasing geographical areas will come under this common development programme, based on making demands on nature. China and India may soon produce even more greenhouse gases than the major industrialized nations. Helping these two countries to enhance their living standards without perpetrating ecological offenses will demand much more aid and diplomacy, than the developed world has ever been willing to devote.

Even natural industries such as agriculture are now a product of chemical inputs at an unprecedented scale. Willy nilly, every human system is being chemically interfered with by the food it eats, by the air it breathes, by the water it drinks and very often by the workspace in which it earns a living. Multiply the enormity of this threat to a human being by the number of humans – around nine billion by 2050 – and one does not need to be an expert of any kind to understand the dimensions of this threat.

Has there been a serious corporate response to this emerging ecological scenario? There has certainly been a heightened level of acceptance of corporate social responsibility with CSR and triple bottomline (economic, social and environmental) commitments finding a place in the agenda of top Indian corporations. Some of this translates into genuine environmental responsibility. India Inc's greater focus has been on benefiting from the business opportunities of the Kyoto Protocol's Clean Development Mechanism. Such responses, while welcome, are far from adequate as the world's ecological capacity can no longer satisfy the ambitions

of China, India, Japan, Europe and the United States, as well as the aspirations of the rest of the world in a sustainable way. 

SECTION IV

India Inc: Leading from the front

The India Inc story is not only about Indians taking over global industry – absolutely striking though they may be – but about Indians providing leadership to business, political and socio-economic issues on the world stage; the Indian emerging as the thought leader.

The size of 'performing India' has grown remarkably. Even the small and the unorganized sectors are making use of globally accessible software and taking help from homegrown management consultants to give the top players a run for their money. Some of the smartest developments have taken place in the SME sector that is projected to grow at a CAGR of around 30 per cent by 2010, as it sheds its cheap labour and antiquated practices image and wears the slick operations' cap.

The global big game is about the big Indian taking on the bigger multinational on the strength of his superior global delivery models. India Inc's growth has four definite trends: the mega corps consolidating their act and seeking to be the biggest in the business globally; large companies/consultancies seeking to protect their turf; and a host of Indian companies seeking to diversify in all available growth paths. In this they are being helped by the Indian worker who is naturally innovative and given the right ambience, can achieve wonders at the workplace. Finally, it is a story of India Inc emerging as a global turnaround expert; Tata Steel taking over Corus to turn it around, being one such example.

As more Indians are able to buy more, factories project a demand for 73 million workers by 2015, which is 50 per cent more than current requirements. India's airlines will add 440 new planes by 2010, which means 3,200 additional jobs for pilots, according to the Center for Asia Pacific Aviation in New Delhi. As India's traditional village kiosks and mom-and-pop shops get supplanted by hypermarkets, around 250 new malls coming up over the next three years will help the retail sector add 2.5 million jobs by 2010.

India is clearly no longer the world's back office of the call

centre variety. India is morphing into a global R&D hub with an impressive list of high-end services waiting to be outsourced to the Indian knowledge/engineering processing sectors. Research and Development, Business and Technical Analysis, Learning Solutions; Animation and Design; Business and Market Research; Pharmaceuticals and Biotechnology; Medical Services; Writing and Content Development; Legal Services; Intellectual Property Research; and Data Analytics. High-end work is being done in the sub-continent as firms sending IT / ITeS /BPO work realize they can trust their Indian partners to deliver.

Yet there is a flip side to this story of Indians who are not connected with this flourishing India. Many are now being forced to make way for industrial expansion, without having alternative livelihoods and almost being turned into the nowhere people. The sense of excitement around those who are conquering new worlds, however, seems to override all other concerns.

Hopefully matters will change with pressure coming from the grassroots of underdevelopment; from the socially-awakened conscience of civil society; from the vast numbers of Indian consumers who would have been sensitized to the needs of the neglected India and, of course, enlightened corporate self interest that must realize that the poor Indian represents a loss of market and the poor neglected India represents a loss of market opportunity. The ITC Chairman rues that the 'market for virtue' is practically non-existent in India. Nevertheless, a small beginning has been made. "With concerted action from policy makers and civil society, a significant force can be created by enlightened consumer franchise to spur industry into innovative thinking for social action", he says.

There lies the dilemma and the hope. Eventually, it is on how India resolves its legendary underperformance around education, health and opportunities for its poor with its phenomenal intellectual and technical power that the eventual sustainability of the India Century will depend. 

Democratizing Commerce: The Challenge for the 21st Century

The corporate challenge for this century is to democratize commerce, says C. K. Prahalad. The future to be envisioned is one that combines in equal measure economic

development and eradication of poverty, ecological stewardship and social justice and harnesses the forces of globalization to create this outcome.

Democratization of commerce is built on a very simple premise. Every human being must have access to the benefits of globalization as a consumer and as a producer. This is far from reality today. It would not be a gross exaggeration to say that global firms have not paid much attention to more than five billion people – 80 per cent of humanity at the "bottom of the economic pyramid".

The key to setting the balance right is to innovate appropriate economic models that impact on the bottom of the pyramid with a focus on the micro-consumers and their needs and to then develop access to markets for goods and services that the poor can produce to improve their livelihoods. Democratizing commerce by harnessing the energy of globalization is both possible and do-able. The results of this effort can be the elimination of abject poverty in our life time.

C. K. Prahalad concludes that "this massive undertaking cannot proceed without debate, trials and errors. There is no precedent. We have to innovate our way forward. We cannot and should not fear the unknown. Neither should we be paralyzed by a singular focus on 'what can go wrong'. As Mahatma Gandhi said: 'Poverty is the worst form of violence'. We have to move forward with hope and determination and bring to this task our collective imagination, passion, courage, humanity, humility and intellect. We cannot expect less of ourselves". [Ω](#)

SECTION V

Leadership: Unleashing People Power

Corporations are realizing three essential truths around leadership and success. Leadership is primarily about people; not technology or markets. Therefore, there is need to constantly identify and multiply talent. The second truth is that companies have no option but to succeed. Third, such success can be achieved by a harmonization of mindsets, practices and processes and by striking a balance between market making and disciplined execution. Technology is a strategic asset and continuous organizational renewal the life sustaining elixir in this process.

Indeed, 21st century organization building is virtually all about new businesses with old businesses having to remodel themselves so comprehensively that they are new entities. In such changing structures, organizational pride assumes paramount importance. The 21st century is all about excellence that begets pride and, even if pride is not artificially injected into a system, global recognition of excellence automatically instills pride. The pride factor becomes more critical in the employee because it exercises a stabilizing influence on his psyche and body while other discontinuities around him are inherently insecurity-inducing. In current corporate environments it is common to see one half of the business suffer heart-wrenching change and the other be presented with tremendous growth opportunities.

Those providing leadership in such times are necessarily men of action, with passion and purpose, who enjoy organizational trust as they exude hope and optimism and seek to learn even as they lead. Finally, leadership is about morality and goodness even when the eye is on profits. The best thing about a great leader is that he reveals himself: as a Mahatma Gandhi or a Nelson Mandela. [Ω](#)

SECTION VI

Social Enterprise: Time for the 'Inclusivity' Quotient

The sixth section pays a tribute to social entrepreneurs; unique personalities committed to pioneering innovation to reshape society for those who need it the most. They are inspired by the power of their vision and a never-say-die spirit that can move mountains, literally. They are the people who enhance equality in an unequal world. [Ω](#)



India's Century

The Challenge for Indian
Business Leadership

SECTION I

The 21st Century Manifesto: Leveraging Knowledge to Create Value

EVEN in a millennium in which man has ascended to the commanding realms of knowledge-driven development, the prospect of scientists creating life from scratch between the next three to ten years is a matter of unimaginable accomplishment and unprecedented drama. Albeit this is tempered by a fear of the unknown but equally enthused by great expectations that man will be able to answer the ultimate question: what exactly is life. For, man would have created it.

...the creation effect

This profound philosophic satisfaction apart, the fact of creation will be a scientific triumph and much more. The primary determining trend that this will usher in is an alteration of the fundamentals of our thought process: around the way we address life; our genetic legacy, face disease, generate general wellness, deal with the environment and, indeed, the way we procreate and progress as a species. Not even the most erudite of minds dares to declare with authority the precise paradigms of that future; no one knows how man will use the new knowledge that such discovery will spawn to confront current natural, physical, physiological,

ecological and intellectual problems that besiege him. What is definite is that it will be the most definitive force to propel civilization.

...on man, mind and industry

As man travels through a new world of the impossible becoming possible; where science-fiction becomes reality, amidst constant demand that humankind retains its logic, makes rational choices and yet be constantly innovative, he is coming to terms with amazing discontinuities. If climate change and the vast pockets of enormous poverty across the world pose solution defying issues, bioengineering – ushering in a veritable industrial revolution – represents mind-blowing progress. Both will contribute to the greatest intellectual debates of the times.

...in a biotech century

The second determining trend will be the debate over the use of the emerging knowledge in this 'biotech era'. The dilemma is not with the advent of technology but over whether or not mankind will use its knowledge of the workings of plant and animal genomes to create, for instance, genetically-engineered 'super crops' and transgenic animals? Or, will better sense prevail and, as Jeremy

"Any strategy for knowledge cannot be about planning what to explore and what not to explore or about guessing what is worthwhile and what is not. The history of learning and discovery shows that it is best to set teachers and thinkers free to make the discoveries. Applied research and solving specific problems will always be important for our academics but restricting what they can explore or how they will explore it will only restrict our horizons. Creativity must be encouraged and supported even where we cannot see immediate results". – **The Knowledge Society**; Submission to the Scottish Higher Education Review

A quest to define life

For centuries scientists have pushed the bounds of biology, astronomy and robotics, asking the question "what exactly is life?" More recently, researchers have attempted to define life as they search for it on other planets and, eventually, hope to create it.

9000 BC	700 BC	1665 Ad	1717	1859	1866	1950	1953	1973	1990	1994	1997	2002	May 2007	June 2007
First evidence of plant domes-tication in hills above Tigris River	Hand of date palm by Assyrians and Babylonians	English scientist Robert Hooke first describes the 'cell'	First artificial hybrid flower made by Thomas Fairchild	Louis Pasteur disproves the theory of spontaneous generation of life from nothingness	Mendel publishes a major set of principles on heredity based on tracking pea plants	Alan Turning develops the Turning Test for artificial intelli-gence	James Watson and Francis Crick identify the double helix structure of DNA, the blueprint of life	Stanley Cohen and Herbert Boyer pioneer cloning and recombinant DNA research, taking genetic material from one organism and putting it in another	U.S. Supreme Court rules researchers can patent a genetically - engineered bacterium developed to break down oil spills	First Genetically modified food plant, the FlavrSavr tomato, released to the market	IBMs Deep Blue computer defeats reigning chess champion	First synthetic virus created by Eckard Wimmer	J. Craig Venter Institute applies for patent on technique - still not perfected- to create a synthetic bacteria	Institute conducts first complete gene swap, changing one species of bacteria into another

Source : AP, as published in the Times of India

Emerging science-driven business opportunities will lie in...

- Evolution of neuroinformatics and neuromorphic engineering
- Creation of new mental health tools
- Emergence of neurocognitive
- Move to more personalized education
- Growth of neuromarketing
- Pharmaceuticals and devices for psychiatric and age-related mental disorders
- Acceptance of mental/cognitive/emotional enhancements and prosthetics
- Intellectual debates around what is natural versus artificial
- New generation neuroimaging devices for lie detection and detection of varied emotional/cognitive states

Rifkin, President of the Foundation on Economic Trends, asks so pertinently: "the knowledge used to advance ecological agriculture and more humane animal husbandry practices?" These issues assume earth-shattering significance quite literally in an age in which human activity has far exceeded earth's carrying capacity and man is yet far from satiated. Ecology, rather than economics, will then be the dominant influence on thought. Ecological models will be the most important components of successful business models.

The costs of global-warming-related disasters will reach \$150 billion per year, according to the insurance firm Swiss Re. The world's total economic loss from weather-related catastrophes has risen 25 per cent in the last decade. Yet, the fact the global economy is moving ahead at an exciting clip tends to temper down the realities around the environment.

...and a consumption-oriented world

Our's is an increasingly and alarmingly a consuming world in which:

- China will overtake the USA as the leading consumer. It has already overtaken the USA in consumption of basic commodities such as food, energy, meat, grain, oil, coal and steel
- Though, as individuals, Americans lead the world in consumption, if the

Chinese economy continues its rapid growth, per capita consumption levels will match or surpass those of the USA

- This will have a dire impact on the global environment, says Lester R. Brown in *Rescuing a Planet Under Stress* (July-August, 2006, p. 19).

...yet an intellectual world

Rifkin's exploration of the stages of industrial-intellectual development is useful to get a perspective of the future. He has taken readers through the possible dawn of the hydrogen economy that will change the growth trajectory around markets and political and social institutions in quite the same manner that coal and steam did as they ushered in the industrial revolution. He has addressed "the end of work" phenomenon around technology displacement, corporate downsizing and the future of jobs; and the "Age of Access", which has taken capitalism from the realms of geographic markets to e-commerce networks and from industrial to cultural production; through to the evolving biotech era and has explained critical issues accompanying the new age of genetic commerce.

...exploring the frontiers of the brain

If the primary global mega trend is about creating life, the second is about exploring the frontiers of the brain; an activity that is

Global Economy: Sprinting Ahead

The global economy continues to expand at a brisk pace, with emerging markets leading the way, says a recent International Monetary Fund report.

	PROJECTIONS					PROJECTIONS			
	2005	2006	2007	2008		2005	2006	2007	2008
World output	4.9	5.5	5.2	5.2	Central and Eastern Europe	5.6	6.3	5.7	5.4
Advanced economies	2.6	3.1	2.6	2.8	Commonwealth of Independent States	6.6	7.7	7.6	7.1
United States	3.2	3.3	2.0	2.8	Russia	6.4	6.7	7.0	6.8
Euro zone	1.5	2.8	2.6	2.5	Developing Asia	9.2	9.7	9.6	9.1
Japan	1.9	2.2	2.6	2.0	China	10.4	11.1	11.2	10.5
United Kingdom	1.8	2.8	2.9	2.7	India	9.0	9.7	9.0	8.4
Asian economies, other					West Asia	5.3	5.7	5.4	5.5
emerging markets	7.5	8.1	8.0	7.6	Western Hemisphere	4.6	5.5	5.0	4.4
and developing countries					Brazil	2.9	3.7	4.4	4.2
Sub-Saharan Africa	6.0	5.5	6.9	6.4	Mexico	2.8	4.8	3.1	3.5

Figures are annual percentage change

being driven by business and science alike, with politics serving as a willing supporter. A prospective revolution in the understanding of the human brain will impact on every domain of human activity: from mental health to software design; from academic performance to real-life decision-making.

It is this that inspires global business to support research for seeking an understanding of human progress over the past half a century, from the early stages of genomics research to the discovery of the double-helix structure of DNA, to decoding the human genome and making a blueprint of the human organism. The corporate financial support for such research comes from the belief that the current crop of technologies and scientific findings can enable further advances in brain research and bring about closer integration between the relevant disciplines that will take this investigation forward.

¹Human Brain: The Next Frontier analyses the primary areas of development and their import for business trends in such new areas as neuromarketing techniques. Corporations and political entities will embrace it because it will be the next most effective means of consumer targeting.

The study of brain responses to products and marketing messages – as exemplified by the use of brain imaging by UCLA brain researchers to understand how the brains of Democrats and Republicans differ in their response to campaign advertisements – is a case in point.

...as man visualizes thought in the scientific sense

Such imaging technology as "functional magnetic resonance imaging (fMRI), positron emission tomography (PET) and others, increasingly enable researchers to visualize ongoing cognitive activity at a resolution of a few hundred thousand cells", says the article, which is essentially a plausible view of the future based on the best available expertise² of Delta Scan. fMRI, being non-invasive, enables researchers to observe changes in human subjects being "questioned about their perceptions or while performing cognitive tasks". The discernible trend here is that imaging technology could permit "changes in brain structure and function associated with normal and pathological behaviours to be followed at a cellular level". Further, functional neuroimaging methods could help in rather precise identification of "alterations in brain function that take place even in the absence of discernible

"To sustain the growth of knowledge in society, both public censorship (regulation of ideas) and its sibling in the patent system (regulation of the use of ideas) must be brought under control. Like censorship, an overzealous patent system poisons the development of the Knowledge Society. When applied to business processes and software, patents represent a perverse variation of the dual nature of government as censor and facilitator. Through regulatory gymnastics, patents attempt to promote the freedom to innovate while simultaneously blocking that innovation's free use. The two faces of government along the Information Highway become one. As the number and variety of patents grow, an increasing swath of knowledge is treated officially as property for the benefit of its presumed inventors and this is enforced by the legal machinery of the government. Because all new knowledge is built on prior research and knowledge, whole families of ideas and discoveries become off-limits. Curiously, in today's over-reaching patent system, the apparent opposites of market freedom and government control come full circle to collude surreptitiously at their polar ends". – **Robert Adkins**; Towards an Open Knowledge Society

<http://www.technetra.com/writings/archive/2006/04/21/towards-an-open-knowledge-society>

1. (Source: <http://humanitieslab.stanford.edu/2/372>)

2. Institutions associated with Delta Scan
 Massachusetts Institute of Technology
 King's College
 EPFL (Switzerland)
 Duke University
 UCLA
 Centre for the Mind, University of Sydney
 Cardiff University Brain Repair and Imaging Centre
 University of Cambridge Behavioural and Clinical Neuroscience Institute and Medical Research Council Cognition and Brain Sciences Unit
 University College London Institute of Cognitive Neuroscience
 Utrecht University Medical Centre, The Netherlands (including psychosurgery)
 Max Planck Institute for Brain Research, Germany
 Max Planck Institute, Martinsried, Germany (Tobias Bonhoeffer, imaging of individual neurons in a living brain in action)
 Institute des Sciences Cognitives, Centre National de la Recherche Scientifique (CNRS)
 European Brain Institute, Italy
 Chinese Society for Neuroscience

Cloud computing

"We call it 'cloud computing,'" Eric Schmidt, formerly of Sun, now of Google, proclaims. "The servers should be in a cloud somewhere...if you have the right kind of browser or the right kind of access, it does not matter whether you have a PC or a Mac or a mobile telephone or a Blackberry – or new devices still to be developed – you can get access to the cloud." – **Christopher Dawson**; Six Trends for 2007 and the 21st Century; Posted by ZDNet Editor; December 22, 2006; <http://education.zdnet.com/?p=722>

changes in brain structure". What this indicates is a possible "visualization of thought".

...using the powers of computational neuroscience

Moving on to computational neuroscience, the trends suggest a future ability to "correlate studies of the brain with the nature and amount of information necessary to perform cognitive functions such as perception, memory, decision making, motivation and learning". Hopefully, science can decipher far more information from raw biological data and, "with increased ability to store and access the data, perform sophisticated analyses and simulations and create visualizations that reveal underlying patterns of activity". Thus the clear trend is towards the working of computational neuroscience with systems neuroscience to enhance the understanding of brain functioning.

The Human Genome Project, about which much is written, has combined progress in genomics and proteomics over the past decade, to improve the understanding of the brain functions at the genetic and cellular levels. The forecastable trends are a better understanding of genetic influences on mental processes and disease with more availability of the human genome sequences. "These sequences could make genetic manipulation of model organisms easier and more precise, in turn potentially enabling detailed mapping of basic activities within and between brain cells".

...which have exciting corporate implications

Why are these advances important for the corporate sector? They impact on the medicine and health industry and will lead to better treatment of psychiatric illnesses.

They "could also fuel the emergence of 'neurocognocentials' – lifestyle drugs for enhancing or augmenting cognitive function or creating desirable psychological/emotional states". IBM and EPFL in Switzerland have already launched the Blue Brain Project to create a detailed computer-based model of the entire brain. NeuroInsights, a San Francisco research firm, talks about 300 companies worldwide developing brain-related products for everything from sleep and anxiety disorders to multiple sclerosis and stroke, with much of the focus on finding treatments for ailments likely to hit aging baby boomers.

...and education will be tailored to suit the new age

These will also impact on the education industry that forms the bedrock of progress: "educational programmes tailored to fit different learning patterns could be developed and the new principles of neural computation and behaviour are likely to make a major contribution to the development of future software and other intelligent technologies". Armed with this knowledge, scientists could consider brain enhancement/prosthetics possibilities and, alongside, fuel intense debate around the norms of what is authentic and what is artificial.

...nanotechnology will take centre stage

From exploring the brain, the trend moves towards nanotechnology. Sophisticated ability to image, manipulate and probe the properties of matter at the atomic scale – along with emerging insights into structure, function and self-assembly in biological systems – are bringing to a fruition the promise of nanotechnology that Richard Feynman talked of more than four decades ago.

The science and technology of

nanostructures will impact on fields ranging from consumer electronics to space exploration and medicine. By 2025, the first nanotechnology-based medical therapies should reach clinical use. Smart drug-delivery systems that release medicines into the body at a precise location could arrive before the end of the decade. Bio-nanotubes developed at the University of California at Santa Barbara respond to electrical charges that occur inside the body in order to release drug payloads at specific locations. Researchers believe that the chemotherapy drug, Taxol, is one potential candidate for the smart bio-nanotube capsules³.

...with its impact on how medicine is practiced

Microscopic machines will monitor our internal process, remove cholesterol plaque from artery walls and destroy cancer cells before they have a chance to form a tumor. The development of molecular machinery will be a boon to a wide assortment of industries. The brightest nano-futures are in manufacturing and materials, food and agricultural products and packaging, more powerful and efficient computers and electronics, medical devices and pharmaceuticals, alternative energy systems and luxury goods, such as stain-resistant clothing.⁴

...and new knowledge becomes crucially important

Knowledge will hold the key amidst fast paced discoveries and applications that will shrink the design and marketing cycle (idea, invention, innovation and imitation). Even in the 1940s, the product cycle stretched to 30 or 40 years; today one is

lucky if it lasts 30 or 40 weeks.

Eighty per cent of the scientists, engineers and doctors who ever lived are alive today and exchanging ideas in real time on the internet, churning out new knowledge constantly. All the technical knowledge humans work with will represent only one per cent of the knowledge that will be available in 2050. Whether or not this knowledge will be used to deal with the growing economic stratification across the world is a matter for global politicians to decide because such disparities are dangerous for a peaceful world. The ratio of the total income of people in the top five per cent to those in the bottom five per cent has grown from six to one in 1980 to more than 200 to one in 2006.

...with India and China as dominant economies

The important story in the population scenario is the role that India and China will play in it. Economically, India and China will surpass Japan and the United States within the next 30 years, having emerged from deep poverty to a status of techno-economic dominance in global geopolitics. India may surpass Japan's economy by 2032; and China the USA's by 2039⁵.

...but the energy crisis will become critical

Energy will continue to be a critical issue. The world used only 57 million barrels of oil per day in 1973, when the first major price shock hit. By 2004, it was using nearly 82 million barrels daily, according to the International Energy Agency. Consumption is expected to reach 110 million barrels daily by 2020. However,

In the first quarter of 2007, venture capital investors put \$2.9 billion into private U.S. healthcare companies, including \$1.8 billion in biopharmaceuticals and \$953 million in medical device ventures. This represents the largest stakes made in these categories in any quarter since Venture Source and Ernst & Young LLP began quarterly reporting of healthcare funding in 2000.

On an annualized basis, this \$2.9 billion may be \$12 billion. Thus, 2007 could see the biggest ever infusion of venture support into health sciences and technologies. The previous record was set in 2000 at \$9.8 billion. The 2007 amount will be about half more than last year's \$8.3-billion aggregate life science funding). – **VC Funding Trends for Life Science Firms; Investors Are Spending More Money and Making Higher Valuations** (September 1 2007 (Vol. 27, No. 15) Genetic Engineering and Biotechnology News. <http://www.genengnews.com/articles/item.aspx?aid=2196>

3. Tomorrow in Brief, November-December 2005, p. 2

4. World Trends & Forecasts, May-June 2006, p.15

5. Marvin J. Cetron and Owen Davies, "The Dragon vs. the Tiger: China and India Reshape the Global Economy", July-August 2006, p. 40

"A longer view is clearly needed as so many slow but huge waves of fundamental change begin to present themselves for our consideration. Climate change, the decline of the carbon fuel economy, the growth of a pervasive culture of urban slums and the prospects for bioengineering on the scale of an industrial revolution have their roots in the present and their most disruptive consequences in the very long term.

"To collectively sift through those consequences and make choices today that will sustain the world through this century and beyond, we will need collaborative tools and co-operative strategies that can engage an entire planet. We will need techniques to filter the massive and growing amounts of present-day data to see the patterns of the future. We will need economies and communities with feedback mechanisms to bring us into alignment with these impending futures. We may even find ourselves bioengineering the very way we think about the future". – **Institute for the Future** 2007 Ten-Year Forecast: Perspectives Executive Summary

oil's share of world energy consumption has begun to decline: It is expected to drop from 40 per cent in 1999 to 37 per cent in 2020.

Oil companies will, however, have to become more environmentally conscious – though the consequences of actions such as tapping the Arctic National Wildlife Refuge for oil will be environmentally questionable. It has been stated that the drilling will be confined to the winter, when the tundra is rock hard and will use techniques that make it possible to extract oil with minimal damage to the surroundings. Oil companies are even likely to use costly double-walled pipelines to minimize environmental risks in sensitive areas, such as double hulled tankers to reduce the chances of oil spills at sea. The 20 most-industrialized countries have at least three months' supply of oil in tankers and underground storage. Most have another three months' worth in "strategic reserves".

In times of high oil prices, customer nations can afford to stop buying until the costs come down. Meanwhile, the energy choices that China and India make will be crucial. Heavy reliance on fossil fuels, particularly coal, could undermine the investments that China and India have made in growing their economies. What is recommended is a focus on renewable energy with solar and wind energy systems at the forefront.

Not all seems lost on the energy front though, provided there is an equal focus on conservation. The SciTech Daily (see box, next page) explains how conservation can counteract energy use trends provided the world does not exceed "current European" standards of living. If the world wants to continue to "improve" lives at the

expense of the environment, there is disaster ahead.

...while new demands are made of medicine

Medicine is to be critical in a world that will see its population doubling in the next 40 years⁶ with the highest rise in the areas that have the least capacities to support it. These include Palestinian territory (217 per cent), Nigeria (205 per cent), Yemen (168 per cent), Angola (162 per cent), the Democratic Republic of the Congo (161 per cent) and Uganda (133 per cent), according to conservative estimates.

With global population set to reach between 9.5 billion and 12 billion, if fertility rates do not continue to decline, there will be increased spending on family-planning services, sex education and women's education and empowerment. Populous and poor countries will need medical care of a certain kind to deal with disease, malnutrition and possibly pumping in of generic drugs of a large variety to make health care affordable.

The advances in health care -- that may bypass the impoverished nations -- will nonetheless be significant. By 2030, the world expects drugs to be individualized according to a patient's genome. These drugs will be both safe and effective but the overall market will become fragmented due to individualization. Pharmaceutical firms may find themselves less profitable or with limited growth opportunities under these scenarios. If so, they may diversify into other industries, such as cosmetics, veterinary medicine, clinical laboratories, and industrial agricultural chemicals⁷.

...to address urbanization-driven health problems

There will also be increasing urbanization

6. Demographic Trends for the Future; The Futurist

of the population. Nine of the ten countries that will contribute more than half of all urban growth between 2025 and 2030 are developing countries: Indonesia, Pakistan, Brazil, Nigeria, Mexico, Ethiopia, Iran, Colombia, and Korea (the tenth is Germany). The U.N. estimates that the urban population of China will increase by 293 million before 2025⁸.

However, large parts of the developed world will experience an alarming drop in fertility rates. The population of the developed nations will fall from 23 per cent of the total world population in 1950 and about 14 per cent in 2000 to only 10 per cent in 2050. In 10 years or so, the workforce in Japan and much of Europe will shrink by one per cent per year. By the 2030s, it will contract by 1.5 per cent annually. Impacting on the new population in the economically better off parts of the world will be new education systems that will be personal and mobile.

...demands of new education systems

The millennial generation poses challenges to traditional classroom-bound educators. "Millennials are comfortable with multitasking, which forces their teachers to fight for their time and attention. Millennials also work and learn more collaboratively than previous generations, so testing an individual learner's progress may become increasingly difficult", says World Trends & Forecasts, May-June 2006.

...and problems of longer life

Of equal interest are the population trends around age. Much of the population will live longer. This opens up a new focus area for the wellness industry that has been the force behind longer lives with both preventive and curative drugs. In the USA,

an 80-year old in 1950 could expect 6.5 more years of life; today's 80-year-olds are likely to survive 8.5 more years. Life expectancy in Australia, Japan and Switzerland is over 75 years for males and over 80 for females; the state credited with enabling a healthy society in these countries.

- The world's over-60 population will reach a billion by 2020, which will be 13.3 per cent of the projected world total. Three-fourths will be in developing countries, mainly in China, India, Brazil, Indonesia and Pakistan.
- In the United States and other developed countries, public spending on retirement benefits could grow to one-fourth of the GDP by 2050, even as the number of workers available to support each retiree declines sharply.
- The aged in Europe, the United States and Japan comprise the wealthiest segment of society.
- Barring dramatic advances in geriatric medicine, the cost of health care will shoot up throughout the developed world and lead to a crisis in health-care financing and delivery. However, dramatic advances in geriatric medicine are inevitable.
- Paying the high cost of new drugs and technologies will reduce the cost of caring for patients who would have suffered from disorders eliminated or ameliorated by new therapies. In the end, cost increases and reductions should just about balance out.
- In Germany, the retirement-age population will climb from under 16 per cent of the population in 2000 to nearly 19 per cent in 2010 and 31 per

The **SciTech Daily** analyses that at 2 per cent growth, conservation outruns population by a large factor. Two per cent compounded over 100 years reduces energy use by a factor of 7.2. By 2100, with a world population of 10 billion people, everyone can be living at the current European standard of living and yet expending half the energy we are using today. ... If we allow conservation to putter along at 1 per cent, on the other hand, in 2100 we will be using 40 per cent more energy than today.

Technological catch-up in LDCs will require the co-evolution of improvement in physical infrastructure, human capital and financial systems together with improved technological capabilities within enterprises and more effective knowledge systems supporting the supply of knowledge and linkages between creators and users of knowledge. – **The Changing Challenge of Development; Year 2000**, UNCTAD's Least Developed Countries Report

7. Jay Herson, "Innovation in Pharmaceuticals: Speeding Up Development of New Cures," January-February 2006, p. 29

8. World Trends & Forecasts, November-December 2005, p. 11

An important dimension to the aging and often affluent population in much of the developed world is the quality and volume of geriatric care that will be needed. People over 65 comprised only eight per cent of the population in the developed world in 1950; this went up to 15 per cent in 2000 and will grow to 27 per cent of the population in the next half-century. Governments and the global health system will have to take this on board.

Time saving products and 'quick fixes' are important to 82 per cent of European and U.S. consumers. This could explain why prepared meal consumption in Europe and America is forecast to double in ten years, to exceed \$40bn by 2009, up from \$29bn in 1999".
 – Food USA Navigator.com
<http://www.foodnavigator-usa.com/news/ng.asp?id=61970-food-convenience-trends>

cent in 2050.

- Also, workers within a company will span four generations. Workers over the age of 55 are expected to grow from 14 per cent of the labour force to 19 per cent by 2012. In less than five years, 77 million baby boomers in the United States will begin reaching age 65, the traditional retirement age.⁹

...while people get accustomed to doing things themselves

The DIY (do it yourself) philosophy – a cornerstone of the emerging manufacturing and design world – will impact on the health arena too¹⁰. Web sites today provide real-time dietary advice, the history of individual food items (via barcodes scanned by camera phone) and even information on local biohazards and minute details on health issues. Along with open-source DIY biotech, they change the entire perspective around health care. Whether or not the established medicare system will support this development is not clear but, with or without that support, DIY health care will take off.

...and the state's role becomes blurred

At a totally different level, the trends are towards a rekindled interest in the role of the state in development simply because inadequate governance has been considered to be the root cause for "persistent poverty, disease, drug and human trafficking, terrorism and a host of other social dysfunctions" in large areas of the world. Francis Fukuyama's thoughts on this are enlightening as ever: "Since the Reagan-Thatcher revolution of the late 1970s to early 1980s, much of the

emphasis in public policy has been on reducing the scope of the state and getting government out of the way of private markets. This emphasis was appropriate for countries like China and India that had reasonably competent but overreaching governments". Clearly the prescription would not work for governments that were non-functional and yet were being led into the realms of the free markets.

"Free markets are not self-sustaining: they presume the existence of governments that are capable of enforcing the rule of law, adjudicating disputes and establishing property rights as the basis of long-term investment and growth. Even the act of reducing the scope of a state, through privatization, necessitates government agencies that can value and auction state-owned enterprises in a transparent and non-corrupt fashion", Fukuyama notes. Thus, there will be increasing global pressure for democratic governments and an increasing voice of the people.

...as civil society becomes powerful

In established democracies such as India, there is a clear trend around alternative politics being led by civil rights activists who, through some forum or another, have mobilized some 400 million Indians¹¹, representing what is clearly a loss of official governmental space.

Amidst all this, the most domineering trend will, of course, be towards increasing globalization and that will necessitate trends towards strengthening of institutions that make for orderly transitions and create enabling conditions that trigger growth. If market-friendly reforms have to succeed,

9. John A.Challenger, Working in the Future: How Today's Trends Are Shaping Tomorrow's Jobs, November-December\2005, p.45

10. 2007 Ten-Year Forecast Toolkit by Institute for the Future (www.iff.org)

they need institutional reform, 'state'-building and good governance without which the on-going second-generation reforms "that focus on strengthening those very state institutions are much more difficult to implement". As Fukuyama says: "While a handful of technocrats might be able to 'fix' monetary policy or a dysfunctional central banking system, there is no comparable group of specialists who can reform a legal system or clean up a corrupt police force".

What one is looking at is the increasing space being taken up by non-government organizations and the collaboration that they will engage in with the corporate sector.

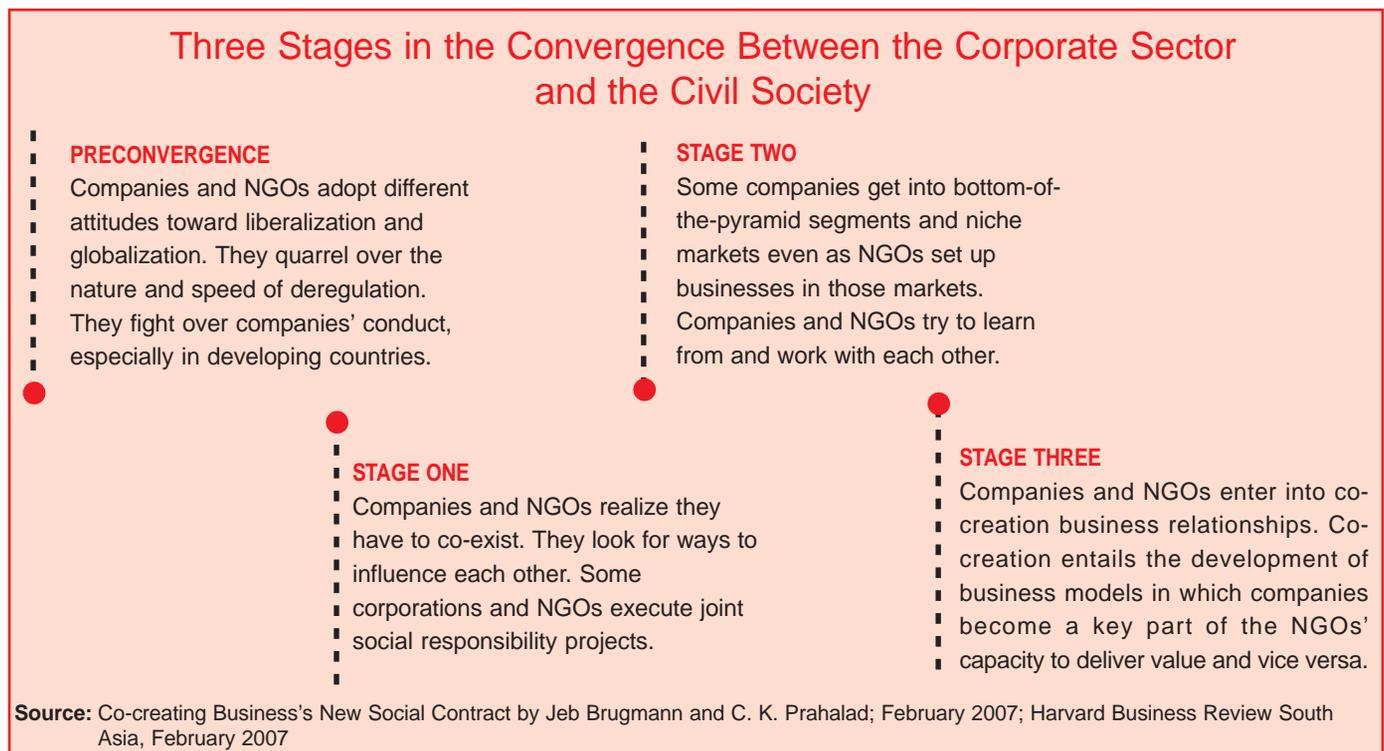
...and women and minority power increase too

The public pressure then will be for strengthening of institutions, including the vast and complex systems of local

institutions around socio-cultural heritage within each country, each state and each region that will have to be dovetailed into the great globalization pattern to ensure that the vast fabric does not develop tears.

Within this overall perspective for creating space for different interest groups – minorities, backward segments of society, culturally evolved groups (artists and artisans), children, street children – whose specific interests have to be woven into the global societal fabric, will be an increasing role for women – especially where women's rights have been trampled upon and where the fight for gender equality is being taken to its logical destination.

The additional dimension to the female power issue comes from the tremendous strides women have made in the field of academics, science and technology and all other fields of socio-economic activity. Other pressure groups could be, African



11. Marking Your Card as a Fresh Firebrand, Priti Patnaik, Economic Times, August 15, 2007

Women are a 'Mega Niche': the under-served market of all markets. Just consider the fact that women, who comprise just over 50 per cent of the U.S. population, make over 80 per cent of the consumer purchasing decisions (and in case you are wondering, consumer spending accounts for two-thirds of U.S. GNP). Consulting firm A.T. Kearney estimates that women determine 80 per cent of consumption, purchase 60 per cent of all cars and own 40 per cent of all stocks. No wonder some companies have female fever these days. –Trendwatching.com (<http://www.trendwatching.com/briefing/>)

Americans, Hispanics and Asians in the USA, for example, who now have a greater influence over the national agenda. Indians from the Silicon Valley, of course, enjoy a very special position in American society because of the sheer brain power that they represent.

The Asians, Blacks and Hispanics collectively represent nearly \$500 billion annual consumer spending¹² and since sociocultural identities affect buying behaviour, marketing people build in suitable responses to cultural nuances in a diverse marketplace.

...and the workspace is taken over by 'virtual' people

The techno-societal trends in the globalized "era of access" or intricately networked world are already evident: primarily, the internet is becoming ubiquitous. One may expect to find it even in some back of the beyond regions of the vast Indian subcontinent.

These globally networked groups not only become functional bodies for a certain business purpose but the world of netizens becomes a societal structure with multidimensional co-operation and collaboration. "The technologies of the participatory panopticon become tools for collaborative well-being, not just collaborative politics". Further, this group fed on a diet of "casual online visibility and

deeply aware of the growing climate threat is likely to embrace public accountability regarding environmental behaviour: emissions quotas, carbon footprint records and other measures that could easily seem like invasions of privacy

PricewaterhouseCoopers' report, "Corporate Responsibility: Strategy, Management and Value, identifies the following major trends:

- Growing influence of global market forces, rather than government policy. The influence of the markets in decision-making will grow as they reflect rising demand, shrinking supply and changing patterns of demand for natural resources.
- Revisions in the financial model used to set corporate and government strategy. The new model will include new scenarios, new risk factors and a growing number of intangible and non-financial factors.
- Innovation, particularly in core industries. Changing economic conditions will expand the rate of innovation exponentially to include changes in behaviour, product design, supply chains and geopolitical structure, in addition to technology.
- Globalization. International institutions will be responsible for formulating global policies; the role of national or local institutions will be limited to implementation.
- Evolution, not revolution. Progress toward sustainable development will be largely incremental. Barriers to rapid change will die hard but specific catalysts may cause spurts of great change.
- Communication. The global media may influence which issues governments and industries focus on and accelerate the speed of change in policy and behaviour.

to earlier generations", says Forecasting International's latest 10 Year Trends.

- The internet's pervasion is obviously powered by the business prospects that the installation of the internet engenders. E-Commerce is in.
- This internet culture has not only spawned business connections at the local and national levels but has

12. The Challenge of Managing Diversity, Cox. (Chapter 1 4/23/01 10:07 AM Page 10)

encouraged small scale entrepreneurs to do global business. Some are competing on an equal footing with globally-established companies.

- The ability of the internet and cable-TV home shopping channels to bring manufacturers closer to remote customers is turning many retail industries on their heads.
- Internet marketing has had a salubrious impact on global trucking that is further encouraged by "just-in-time" inventory management. With internet-driven deliveries increasing, so is the market for shipping, which will find increased efficiencies as GPS- based truck tracking and other new technologies spread through the industry. More-efficient vehicles, especially with hybrid power trains, should begin to reduce the demand for oil by 2008¹³, easing one of few remaining sources of inflation.
- E-Commerce has meant encouraging the growth of knowledge-workers and even rural India has schools for computer training – never mind the quality of training imparted by some of them.
- The entire BPO industry has grown in India on the basis of a widely spreading 'computer culture' that is now encouraging the progression from business process outsourcing to knowledge process outsourcing or getting sophisticated scientific research (for instance) to be sourced out of India and other suitable destinations. An estimated 3.3 million U.S. jobs are expected to migrate to India and China by 2015 while jobs in Western Europe are migrating to Eastern Europe, the former Soviet Union and the English

and French speaking former colonies of Africa. India has begun to ship jobs to even lower-cost countries in Africa.

...generation X yields place to Gen-Y

This common virtual space that the global knowledge workers have created – where the issues and interests are common – shapes global attitudes around incomes and lifestyles with distinctions bred by geographic boundaries getting blurred in a virtual world of common interests. A 2001 poll by Time and Market & Opinion Research International found that 21 per cent of young British adults viewed themselves as primarily European, rather than British. Some 31 per cent of French Gen X'ers, 36 per cent of Germans and 42 per cent of Italians also said they thought of themselves as primarily European. However, in many countries there are powerful reactions against these changes. The growth of the German neo-Nazi movement after unification in 1992 is one obvious example that has been kept in check by a vigilant public opinion.

...and there is rise in migrating populations

Even so, socio-economic stratification between nations and between regions within nations will prompt the impoverished to migrate in large numbers and even lead to a redistribution of global population. Migrants will often place a growing strain on social security systems in the regions they choose to settle down in.

...amidst some backlash

Europe and North America have felt the pinch with some disturbing trends around backlash. Europe's skinhead movement is one example. In Scandinavia, resentment against foreign workers is strong, in part because they can return to their native

Friedman identifies six distinct forms of collaboration:

Uploading – as in open source software development and new technologies such as wikis and blogs.

Outsourcing – India has benefited enormously from the surplus capacity in telecom links and the surplus of trained engineers in India. They can work around the world without ever leaving India.

Offshoring – Moving its operations somewhere cheaper. This mode has increased markedly since China joined the WTO.

Supply-chaining – along the whole chain from point of manufacture to delivery to customer, very adaptable

Insourcing – UPS moved from delivering faulty printers to HP for repair to fixing the printers locally on behalf of HP. And finally

Informing – Google enables each of us to become a self-directed researcher – **Geoff Parcell**, Co-author of Learning to Fly

http://www.practicalkm.com/Text_of_Presentation_Knowledge_Society.pdf

13. Geo-political Trends; Summary of The Futurist

lands after working for three years and collect a pension equal to the minimum wage for the rest of their lives. India too has its share of across-the-border transfers

Peter Alexander talks of four recent innovations in technology that will be more widespread: **Video conferencing**; extension mobility lets you allocate work spaces to employees on an as-needed basis, which can significantly reduce the costs associated with permanent office accommodations; **CRM technology** to improve customer satisfaction by enabling a business to better understand its customers. CRM software is particularly useful when connected, via software plug-ins, to a small business's **IP telephony system**; and **unified messaging** that streamlines business communications, enabling employees to send and retrieve their voice mail, e-mail and fax messages from one device – either their computer or an IP phone and get notified of all messages received.

What is needed to take advantage of these trends:

- **A single, intelligent IP network.** Solutions such as video conferencing, extension mobility, CRM applications and unified messaging require the same foundation: a single, intelligent IP network capable of handling voice, video and data. Such networks are robust enough to handle today's applications, flexible enough to meet tomorrow's needs and scalable enough to grow along with organizations.
- **Top-notch security.** Security threats today are more widespread than ever, and they can spread quickly. The infamous Slammer virus infected 55 million hosts per second at its peak. A secure, easily adaptive network is especially important for smaller businesses that may not have the support of an in-house security resource.
- **Proper planning.** As always, discuss any technology plans with a trusted adviser before making an investment. A well-planned and executed technology investment gives businesses a solid foundation for growth today, tomorrow and years to come. – **Peter Alexander**; Entrepreneur.com's "Tech Trends" columnist and Vice President, Worldwide Commercial Marketing, Cisco Systems Inc.

and its attendant problems but, again, remittances from Indian migrants to their home states have helped to relieve

poverty – India's Kerala being a prime beneficiary.

In China, 98 million people have moved from rural areas to cities in recent years, without ever leaving the country. There are about 80 million international migrant workers in the world, according to the United Nations. About half settle in Europe; the rest are divided evenly between North America and Asia.

Even Americans will migrate; Generation Y quite heavily, attracted by overseas opportunities¹⁴. Forecasting International Ltd. President Marvin J. Cetron and science writer, Owen Davies, say that even as technologies increasingly facilitate cultural and professional exchanges around the world, local conflicts will continue to erupt in societies where xenophobia is common. Some of the most fervent cultural movements will continue to spring from religious fundamentalism that would-be dictators and strongmen will exploit to promote their own interests. Terrorism will be a daunting problem. Companies will hire more minority workers and will be expected to adapt to their values and needs. Much of the burden of accommodating foreign-born residents will continue to fall on employers, who must make room for their languages and cultures in the workplace. Public schools and libraries must prepare to shoulder the burden of preparing this future workforce.

...and the travel and transportation industry remodels itself

The most positive aspect of the wave of internationalization is its import for the travel and tourism industry that gets a further boost in a society with twin earning members per family. The hospitality industry foresees a five per cent growth over the next few years with travel and

14. Edward Cornish; Planning in an Age of Hyperchange" (Book Review of Future Think by Edie Weiner and Arnold Brown), March-April 2006, Page 61

tourism accounting for \$9.5 trillion in revenues. Come the Beijing Olympics in 2008 and China expects 130 million international visitors. By 2020, around 50 million Indians are expected to take international trips.

The first commercial hybrid gas-electric cars are available and new models have begun to win market shares. India will produce a Rs 1 lakh car but, more importantly, advances in automobile technology such as road condition sensors, continuously variable transmissions, automated traffic management that tailors airbag inflation to the passenger's weight will be common by 2010. By 2010, "smart car" technologies will begin to reduce deaths due to auto accidents in Europe and slightly later, the United States. Cities, increasingly, will struggle to reduce auto congestion, either by limiting the use of private automobiles as in Munich, Vienna and Mexico City or by encouraging the development of mass transit as in Copenhagen.

...the skies will be crowded and, hopefully, safer

The airline industry will find technology injections in safer seat design and flash-resistant fuels reducing aircraft crashes and fatalities. There will also be a major reorganization in the airline industry through mergers and improvements in conveniences for passengers. By 2010, New York, Tokyo, and Frankfurt will emerge as transfer points for passengers of high-speed, large-capacity supersonic planes. Following European practice, the U. S. airline industry will begin to replace the spokes of its existing hub-and-spokes system with high speed trains for journeys of 100 to 150 miles.

...on the ground, it is the mall mania that takes over

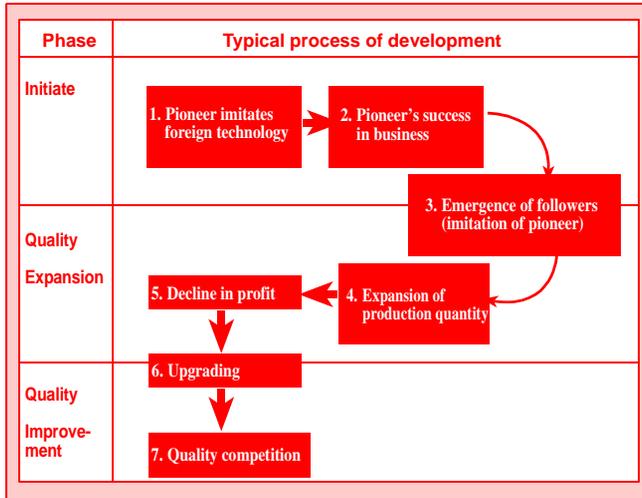
The millennial generation is becoming increasingly prone to compulsive spending. In the United States, 10 per cent of millennials can be classified as clinically compulsive spenders, compared with 5 per cent of Gen X'ers and 1 per cent to three per cent of the baby boomers, says a Baylor University study. Brand savvy children are a substantial marketing constituency but the major story is the shift of the malls to the east, feeding on such statistics that India alone has a middle class larger than the entire population of the USA. A construction boom and fast-growing retail market are fuelling the development of more than 500 malls in India by 2009 with people calling the phenomenon anything from consumerism in action to a celebration of mass affluence.

According to a study by Images Group Retail, the size of organized retail, of which malls form a very significant part, is expected to grow from Rs 38,000 crores (Rs 380 billion) at present to Rs 100,000 crores (Rs 1,000 billion) by 2010 – a 2.8 times jump. Alongside come the new centres of fashion: around a hundred of them – and in Asia. This entails a new move towards branding and brand creation

YouTube is just the latest and most spectacular example of how the democratization of the internet is about to change everything. For education, the populism inherent in the internet means one key thing: Call it student-centered learning, project-based education, constructivist pedagogy – all these related education philosophies and movements finally have a medium to give them genuine momentum.

YouTube also illustrates the levelling effect the internet is having on technology and business. This has big implications for schools and colleges as they seek to prepare their students for life and work in the 21st century. It is notable too that Google figures into this rags-to-riches tale because Google is a central player in another emerging trend affecting education. – **Christopher Dawson**; Six Trends for 2007 and the 21st Century; Posted by ZDNet Editor; December 22, 2006 (<http://education.zdnet.com/?p=722>)

Phases of development of an industry during catch-up



Source: Based on Otsuka (2006).

with the rise of Asian brands and Asian cities (Dubai being the trendsetter). On the flip side of this public celebration of mass affluence is the condemnation of pervasive dispossession.

...much of terror is economics driven

Essentially, the ultra threat is over economic well being, beginning with food. India's much vaunted food security has not helped large areas of its territory to get adequately supplied with food. Reports of rampant starvation deaths represent not only inadequate food supply but inadequate purchasing power, poor food logistics management and indifferent governance.

Globally, agricultural issues are a bigger kettle of fish:

- The share of agriculture as a part of economic activity fell to about 2 per cent in developed countries compared to 11 per cent in the developing nations from 1970 to 2001.
- The percentage of labour engaged in agriculture in the developing countries was, however, the highest at about 55 per cent in 2001. Thus arose grave problems around low agricultural productivity and surplus labour.
- China has 45 per cent of its population working in the agricultural sector,

...elsewhere it is the fanatics and terrorists

With terror showing its fangs much of global security focus will be on combating terror, particularly in South Asia that is emerging as the world's most troubled spot. India is in the vortex of the turmoil, having lost more lives to terrorism since 2004 than North America, South America, Central America, Europe and Eurasia put together.

The world, however, seems to be more worried about the threats to the USA where the military will focus more on shaping perceptions than on human targets. Many U.S. security experts feel that the key challenges ahead are rooted in how people around the world perceive the West and themselves. The most-dangerous military threat in the coming decades will arise from small, independent groups without the ability to directly challenge the USA's might, says the year 2006 report on World Trends & Forecasts. The graver concern in India is the threat from the Leftist ultras that has threatened to go international very strongly but is yet to get listed as an area of global concern.

DEADLY NUMBERS		
COUNTRY	DEATHS	INCIDENTS
Iraq	29,070	12,718
India	3,674	3,032
Afghanistan	2,405	1,682
Colombia	1,550	1,721
Thailand	1,324	1,959
Russia	1,206	660
Pakistan	1,121	1,112
Chad	1,096	32
Nepal	1,059	2,989
Sudan	1,057	155

Source : Times of India, August, 2007

producing only 12 per cent of the GDP.

- The advent of globalization has impacted agricultural production and trade with consequences for the sustainability of both conventional and organic agriculture.
- Enormous increase in fertilizer and pesticide use has seen higher agricultural yields, especially in industrialized countries and China, "where cereal yields have increased a remarkable two-fold and 4.5-fold respectively, since 1961".

Writing on "Global Trends in Agriculture and Food Systems", Marie Trydeman Knudsen, Niels Halberg, Jørgen E. Olesen, John Byrne, Venkatesh Iyer and Noah Toly¹⁵ point out that food security has increased, a greater variety of food has been offered and diets have changed towards a greater share of meat and dairy products in such countries. "However, this development has led to a growing disparity among agricultural systems and population", especially in developing countries in Africa, that "have seen very few improvements in food security and production. The vast majority of rural

households in developing countries lack the ecological resources or financial means to shift into intensive modern agricultural practices as well as being integrated into the global markets".

Focusing on agriculture-driven environmental problems such as global warming, reduction in biodiversity and soil degradation, the authors say that:

- Pollution of surface water and groundwater with nitrates and pesticides remains a problem of most industrialized countries and will presumably become a growing problem of developing countries.
- Nitrate pollution is now serious in parts of China and India.
- The growing global trade in agricultural products and the access to pesticides and fertilizers have changed agricultural systems.
- Easier transportation and communication have enabled farmers to buy their inputs and sell their products further away and in larger quantities.
- Giving rise to regions with specialized

Trends in agriculture:

The spread of the modern agricultural revolution in developed countries (involving large-scale mechanization, biological selection, use of chemicals, specialization) means:

- a modern agricultural revolution in some developing countries that is not dependent on heavy motorized mechanization but involves the use of chemicals and the selection of varieties,
- the expansion of irrigated surfaces, from about 80 million ha in 1950 to about 270 million ha in 2000,
- the expansion of arable land and land under permanent crops, from some 1,330 million ha in 1950 to 1,500 million ha in 2000,
- the development of mixed farming systems using high levels of available biomass (combining crop, arboriculture, livestock and, sometimes, fish farming) in the most densely populated areas that lack new land for clearing or irrigation.

Source : **Global Trends in Agriculture and Food Systems; Marie Trydeman Knudsen, Niels Halberg, Jørgen E. Olesen, John Byrne, Venkatesh Iyer and Noah Toly**

15. (http://ceep.udel.edu/publications/sustainabledevelopment/2006_sd_organic_agriculture_ch_1_Trydeman_et_al_Byrne_Iyer_Toly.pdf)

"The recent development holds the risk of pushing organic farming towards the conventional farming model, with specialization and enlargement of farms, increasing capital intensification and marketing becoming export-oriented rather than local. Furthermore, as organic products are being processed and packaged to a higher degree and transported long-distance, the environmental effects need to be addressed". – Knudsen, Halberg, Olesen, Byrne, Iyer and Toly

livestock production and virtual monocultures.

The story of Roundup Ready soybeans in Argentina is a case in point. "Since 1996, the Argentinean area devoted to soybeans has increased remarkably from 6 to 14 million hectares, covering approximately 50 per cent of the land devoted to major crops in 2003. Since 1997, Brazilian Amazon has seen a deforestation of more than 17.000 km² each year with medium or large-scale cattle rangers presumably being the key driving force", the authors point out.

...for organic agriculture is limited in application

Moving on to organic farming practiced in around 100 countries with increasing area under it, the authors say that "European countries have the highest percentage of land under organic management but vast areas under organic management exist, for example, in Australia and Argentina. Europe and North America represent the major markets for certified organic products, accounting for roughly 97 per cent of global revenues". The international trade with organic products has two major strands: trade between European and other Western countries (USA, Australia, New Zealand) and South-North trade, involving production sites, most importantly in Latin America, which ship to major northern organic markets.

"The recent development holds the risk of pushing organic farming towards the conventional farming model, with specialization and enlargement of farms, increasing capital intensification and marketing becoming export-oriented rather than local. Furthermore, as the organic products are being processed and packaged to a higher degree and transported long-distance, the environmental effects need to be

addressed", the authors say.

- Organic farming might offer good prospects for marginalized, small land holders to improve their production without relying on external capital and inputs, either in the form of uncertified production for local consumption or certified export to northern markets.
- However, in order to create sustainable trade with organic products, attention should be paid to issues like trade and economics, certification obstacles and ecological justice and fair trade.
- Furthermore, the implications of certified and non-certified organic farming in developing countries need to be addressed, including issues of soil fertility and nutrient cycles and their "contribution to food" security.

...and the worst hit by globalization is the poor farmer

The issues around agriculture in developing nations are determined by their typically small (often less than one or two hectares) areas and the substantial rural population of landless households. India typifies this case where on-farm mechanization of agricultural activities cannot happen on the same scale as in industrialized countries. Nevertheless, India has had the Green Revolution that provided it with food security and brought considerable wealth to the countryside. The ecological damages of the Green Revolution are revealing themselves only now.

Globally, large rural populations have benefited from better irrigation facilities and access to subsidized diesel and electricity for pumping water from canals or deep aquifers but "the vast majority of rural households in developing countries, especially Sub-Saharan Africa, lack the

ecological resources or the financial means to shift to intensive modern agricultural practices", say Knudsen, Halberg, Olesen, Byrne, Iyer and Toly.

...typified by the Indian cultivator

The story of the Indian cotton farmer is the best example of the pitfalls of the integration into the global markets without safety nets. With declining real prices of agricultural produce, such farmers have gone for cash crops such as cotton, sugarcane and groundnuts to take advantage of the widening access to external trade. They make increased use of chemical fertilizers and pesticides, not only increasing their costs but often failing to achieve commensurate production due to inhospitable climates, vagaries of nature and even market conditions. The hard hit farmers may then concentrate their efforts on short-term returns and neglect the maintenance of the cultivated ecosystem, leading to fertility decline (FAO, 2000). "This process of impoverishment and exclusion is affecting primarily the most deprived, small farmers who are especially numerous in resource-poor regions and constitute the bulk density (three quarters) of the undernourished people in the world (FAO, 2000)".

...what does the corporate sector do

Where does the corporate sector stand in this world of mixed signals. Clearly, its focus will be on the top-line growth that will be determined by the intellectual and industrial trends outlined here, much of them being driven by the emerging economies. Wendy Becker and Vanessa Freeman caution business leaders (in *Going from Global Trends to Corporate Strategy: Will your business catch them before they catch it?* The McKinsey Quarterly, October 18, 2006) to work

proactively to take advantage of that growth.

"Recognizing that shifting global demand will drive niche markets, CEOs can create their own niche – or determine which existing niches will be most appropriate for their business – and then establish themselves as the early market leader. Understanding the trend toward atomization and the future importance of 'soft' value drivers such as improved collaboration and personalized customer service, CEOs may look at restructuring their organization and shifting employee roles and responsibilities as a way to help deliver that value. In the end ...all of this comes down to one key message: The global economy is changing in dramatically new ways. Those companies that can change with it will be successful; those that cannot will struggle.

...respond to trends

The secret is to respect and respond to the trends: Auto manufacturers, for instance, should view the trend of booming markets in developing economies through another lens: constrained energy resources and increasing concerns about pollution. What are the likely implications when hundreds of millions of Indian and Chinese consumers buy cars for the first time? Automakers face a series of challenges: designing energy-efficient cars that are cheap to buy and drive and do not put intolerable pressure on the environment.

"To ride the coming waves of global forces, a company must prepare by undertaking a comprehensive longer-range analysis of the external environment. The analysis should go well beyond a superficial scan of global issues not only to build a detailed understanding of the trends and how they will affect the company but also to facilitate open dialogue within the top team about what the future will bring. In addition, the company should regularly

"There are over six billion people on the planet right now and we know that number is on pace to be eight billion by the year 2025. Since every single one of them will need to eat, we will need to produce about 33 per cent more food than we do now. That is not going to be a small feat. The problem is that we are eating food faster than we are making it. Five of the last six years, the human race collectively consumed more grains than farmers produced. The result? Global grain stocks are at the lowest levels we have seen in three decades. And it is not just grains. Produce, meats, dairy – even with inorganic (steroid) 'help' – are getting harder and harder to supply relative to the demands of a growing population, safer standards and a new clamouring for pure, organic foods". – **Small Cap Network.**

<http://www.smallcapnetwork.com/archive/listserv/20070813-1.html>

review and update this aligned view of the future; only then can it identify growth opportunities, plan for economic discontinuities and risks and make the big bets necessary to capture the most rewarding opportunities", the authors conclude.

...keeping equity in mind

Where is the world headed amidst this dilemma of harmonizing its commitment to the haves and have nots. Much will depend on the final use that emerging technology is put to but the important learning is that the corporate sector will be the one determining this use. Mature

economies such as Europe have committed themselves and their corporations to greener philosophies and business strategies, better governance, ethical behaviour and sound risk management. There is a growing trend towards personal responsibility by directors amidst increased transparency and corporate social responsibility.

Peter Drucker adds another dimension to 'people development' to serve the social sector whose activities are focused on equity. "I take a dim view of most of the programmes companies create to develop

Some Global Trends

KEY TRENDS	KEY BUSINESS ISSUE	BUSINESS IMPERATIVE
1. Permanent, increasingly pervasive information connectivity		
<ul style="list-style-type: none"> Increasingly informed buyers and the search for arbitrage possibilities Increasing consumer bipolarity – bargain shopper verses mass affluence 	Creating pricing power	Managing competitive advantage by counteracting pricing transparency
<ul style="list-style-type: none"> Increasing ability to use technology as a predictive indicator and to generate business insight Continuation of Moore's law, growth in processing power Information extending its horizontal and vertical reach 	Competing on business analytics	Creating real-time business and market insights to change the competitive game
<ul style="list-style-type: none"> Employee team and business enablement through IT Rise in "knowledge work" and "knowledge workers" 	Improving knowledge worker productivity	Engineering the context and nature of work for optimal performance
2. The ascendancy of major emerging economies		
<ul style="list-style-type: none"> Rise of economic influence of Brazil, Russia, India and China New emerging market opportunity of 1 billion middle-class consumers in China 	Winning in China	Preparing to compete in the Chinese industry segments that are right for your business
3. The accelerating pace of globalization		
<ul style="list-style-type: none"> Falling barriers to trade Rapid decline in transportation costs and increase of delivery speed of both physical and information-base goods Step change in ability to address complexity and coverage of global supply chain capabilities 	Achieving high performance global sourcing	Creating best-of-breed global solutions for operating business with the best capabilities at the lowest possible cost
<ul style="list-style-type: none"> Declining costs of outsourcing/continued growth of BPO Growing labour and knowledge worker markets in emerging, low-cost countries 	Extending business networks	Pursuing a transformative outsourcing strategy
<ul style="list-style-type: none"> Increasing prosperity in developing countries Growing case of market entry for foreign brands Increasing exposure to foreign brands through media 	Becoming a truly global brand	Enabling a brand strategy that is simultaneously global and local
4. Rapidly changing demography		
<ul style="list-style-type: none"> Aging knowledge workers, many with critical skills and capabilities, exiting the workforce Global shortages of highly skilled labour, versus projected demand 	Managing human capital shortfalls	Supporting workforce performance to raise the productivity of every employee
<ul style="list-style-type: none"> Generational differences in goals aspirations and expectations 	Managing diversity in the workforce	Treating employees like a "workforce of one"
<ul style="list-style-type: none"> Increasing percentage of urban dwellers Movement to 'edge cities' as well as major cities 	Responding to the new realities of place	Focusing on offerings that increase or address the effects of urban congestion

Source : www.accenture.com/Outlook year 2006, number 2, "Making the Trend your Friend".

their people. The real development I have seen of people in organizations, especially in big ones, comes from their being volunteers in a non-profit organization – where you have responsibility, you see results, and you quickly learn what your values are. There is no better way to understand your strengths and discover where you belong than to volunteer in a non-profit. That is probably the great opportunity for the social sector – and especially in its relationship to business”, he says in *Managing Knowledge Means Managing Oneself*.

...for knowledge must lead to a fairer world

For a large segment of the world's population that has entered the coveted world of globalization's glories, comes a world of unimagined opportunities. These include a large section of Indian youth and many more in the least developed countries reeling under the pressure of less than a dollar-a-day poverty and worse.

The problem is with those who are hopelessly behind; they will pose the biggest challenge of the decades to come, for they represent the worst form of

resource misutilization and expose the bankruptcy of global intellect in terms of achieving a universal quality of life for mankind.Ω

“At the one extreme, the LDCs will remain trapped at a low level of economic development. By 2015, they will be the major locus of extreme dollar-a-day poverty in the global economy. They will continue to fall behind other developing countries and be obliged to call on the international community for aid to tackle humanitarian crises and for peace-keeping missions to deal with recurrent conflicts. They will also be epicentres of the global refugee population, incubators of global health crises and major sources of international migrant workers, who leave their countries, sometimes dramatically risk their lives, for the sake of earning a living because their life-chances are simply too restricted at home.

“At the other extreme, it is possible to envisage a progressive transition in which sustained and accelerated economic growth is achieved through the development of productive capacities and that with the associated expansion of productive employment opportunities, there will be substantial poverty reduction. In that scenario, foreign aid supports development rather than ‘fire fighting’ complex humanitarian emergencies. Moreover, dependence on development aid is reduced as economic growth is more and more sustained by domestic resources mobilization and the LDCs are no longer marginalized from beneficial international private capital flows. – **The Changing Challenge of Development; Year 2000**; UNCTAD's Least Developed Countries Report

“It (knowledge) also explains why we suddenly have women in the same jobs as men. Historically, men and women have always had equal participation in the labour force – the idea of the idle housewife is a 19th-century delusion. Men and women simply did different jobs. There is no civilization in which the two genders did the same work. However, knowledge work knows no gender; men and women do the same jobs. This, too, is a major change in the human condition”. – **Peter Drucker**, *Managing Knowledge Means Managing Oneself*



India's Century

The Challenge for Indian
Business Leadership

SECTION II

The Importance of Being Indian

"I think I am an Indian. Therefore, I am an Indian". – Writer on the internet

Possibly the single most important message delivered by the devastation wrought by hurricane Katrina is that there is a Third World living in the heart of the global superpower; where colour of skin and depth of pockets determine access even to standard crisis management response. Conversely, there is much of the First World in Third World India, where breathtaking achievements cover the entire gamut of human activities from culture and craftsmanship to commerce, entrepreneurship, governance, justice and leadership. The 'Mahatma Gandhi' phenomenon continues to be a lesson in leadership, unsurpassed globally. Nevertheless, 21st century India has its own set of human resource management issues that demand leadership of a unique kind and across a spectrum of arenas.

...realities around the globalization model

Thus, as one is cautious about falling into what is described as the 'trap of United Nations reporting', one needs to understand the grim realities of adopting a 'globalization model' that shapes itself on the parameters that determine quality of living in the 'First World'. Needless to underscore that the enormous pockets

of the 'First World' in India, with their cumulative impact on the global order – from science and technology to economics and sociology – have given birth to the conviction that this indeed is India's century; much more than that of China's. India's democratic society is the critical differentiator.

...in the India century

In a world where human resource is king, any modern nation with a billion plus population should have been the undisputed champion. That is, unfortunately, not the case with India thus far. Nor can it ever be the case with China for, never mind the pace of change, it is well nigh impossible for any 'development' dialogue to borrow from the Chinese model. The scourge of rule by dictat and the enormous inequities that it breeds makes it difficult to take the Beijing *bandobast* as a benchmark despite the striking growth figures coming out of the land of the Tiananmen Square.

Map of India's Income Classes			
	1994-95	1999-00	2005-06
<ul style="list-style-type: none"> RICH (Annual income > \$4,700) Benefit Maximizers: Own cars, PCs 	1 million households	3 million households	6 million households
<ul style="list-style-type: none"> CONSUMING (\$1,000-4,700) Cost-benefit optimizers: Have bulk of branded consumer goods, 70% of two-wheelers, refrigerators, washing machines 	29 million households	55 million households	75 million households
<ul style="list-style-type: none"> CLIMBERS (\$500-1,000) Cash-constrained benefit seekers: Have at least one major durable (mixer, sewing machine/television) 	48 million households	66 million households	78 million households
<ul style="list-style-type: none"> ASPIRANTS (\$350-500) New entrants into consumption: Have bicycles, radios, fans 	48 million households	32 million households	33 million households
<ul style="list-style-type: none"> DESTITUTES (Less than \$350) Hand-to-mouth existence: Not buying 	35 million households	24 million households	17 million households

Source: *The Great Indian Retail Story, An Ernst & Young Report*

...tell of poverty and prosperity

One needs to consider with far greater seriousness the truth emanating out of figures that say that India, despite its pockets of unspeakable poverty, has a better distribution of income than the United States. That India may well be the undisputed champion if its vast human resources are effectively marshalled is what the human resource management community has begun to feel passionately about. Whether or not the 21st century eventually becomes India's century will thus depend on whether every Indian has

the wherewithal to realize the importance of being Indian. Winning the future then is primarily a human resource challenge in India.

...making 'winning the future' difficult

Some things are easier said than done. Others are easier done than imagined. Clearly, at their current levels, adult literacy is an imperfect indicator of functional literacy. Yet a computer-based functional literacy tool developed by Tata Consultancy Services has the capacity to make an illiterate adult read a newspaper in eight to

Some Socio-Economic Indicators				
	Agerage/All India		Best State	Worst State
	Around 1990	Recent Year	Recent Year	Recent Year
Per Capita Net National Product: (Rs per person at 1993-94 Prices) ¹	7321	11799	16679	3557
Consumption Poverty: Head Count Ratio (%) ²	36.0	27.8	5.2	46.5
Literacy (age 7+) Male: ³	64.1	75.3	94.2	59.7
Literacy (age +7) Female ³	39.3	53.7	87.7	33.1
Attending Elementary Schools (6-14) years ³	55.3	71.1	103.1	55.8
Child Sex Ratio (0-6 year olds): ((females/1000 males) ³	945	927	975	793
Infant Mortality Rate: (2003) (Per 1000 live births) ⁴	80	60	11	83
Maternal Mortality Rate: (1997) (Per 1000 live births) ⁴		4		
Undernourished Children: (1998-99) ⁵				
Weight-for-age		47.0	20.6	55.7
Height-for-age		45.5	18.1	55.5
Weight-for-height		15.5	4.8	24.3
1. For the years 1990-91 and 2003-04 2. The poverty estimates given are for 1993-94 and the latest estimates based on the NSS 2004-05 survey which is comparable with 1993-94 3. Calculated from information based on Census 1991 and 2001 4. Based on SRS 5. Percentage below 2 standard deviation from the mean of an international reference population.				
Source Planning Commission				

10 weeks. If deployed nationally as a mission, India can become 100 per cent literate within half a decade. It is thinking along these lines that provides the elements of the winning formula to make every Indian as important as the other.

...despite enormous potential

Indeed, it is imperative to analyse the importance of being Indian and not only from the Indian perspective. It is important to do so from the global perspective because even the small part of India that is triumphant on the global arena makes it a global superpower in a world where perceptions are determined by the accomplishments of the likes of Vinod Dahm, the creator of the Pentium chip; Sabeer Bhatia, creator of Hotmail, Manish Adhiya, considered the guru of franchise sales; Arun Netravalli, the President of AT&T-Bell Labs; Sanjay Tejwrika, Microsoft's Testing Director; the former Chief Executives of CitiBank; McKinsey & Stanchart, Victor Menezes, Rajat Gupta, and Rana Talwar or Rajiv Gupta, General Manager of Hewlett Packard. Not only is it a story of some high profile accomplishers. The fact is that 38 per cent of doctors in USA; 12 per cent of the scientists in USA; 36 per cent of NASA scientists; 34 per cent of Microsoft employees; 28 per cent of IBM employees; 17 per cent of Intel scientists are Indians.

...and the rich heritage

Providing the backdrop to these remarkable achievers is the astounding constellation of ancient thinkers. While the Indus Valley Civilization is widely known, other stellar contributions are not. Beginning with Aryabhata who invented the Zero and gave birth to the decimal system or the Ayurveda, representing the

first ever school of medical thought and theory, the value of which is being rediscovered by the west today, the comprehensive intellect of the ancient Indian is legendary: From the 6th century calculation of the value of pi by Budhayana, to algebra, trigonometry and calculus, to 11th century quadratic equations by Sridharacharya that used four digit figures, to Sushruta, who worked some 3,000 years ago and is considered to be the father of surgery, to the setting up of global centres of learning – the Takshila in 700BC, where more than 10,500 students from all over the world studied more than 60 subjects.

...in multidimensional leadership

The University of Nalanda, built in the 4th century B.C., was one of the greatest achievements of ancient India in the field of education. In navigation, wireless communication (Jagdish Chandra Bose), to construction technology and, even in chess, India has provided multidirectional leadership. These attainments have come in for global recognition and prompted the belief that India is only reclaiming its glorious position in the comity of nations.

...today 300 million Indians speak English

One is not being entirely facetious in one's evaluation of the power of the Indian when one pauses to appreciate the import of the fact that some 300 million Indians are speaking the English language. It may not quite be the Queen's English but the fact remains that India has the world's largest English-speaking population and whether the quintessential Englishman likes it or not, Prof David Crystal (Cambridge Encyclopaedia of the English language) believes that "when 300 million

India is set to be a powerhouse of the 21st century as it becomes more a centre of intellectual capital and less a cheap place to outsource work. – **Arun Seth**, Chairman, BT India.

Indians speak a word in a certain way, that will be the way to speak it".

The bottomline is about the driving force that India has started providing and will continue to provide in every facet of development – from oration to organization

per cent for China.

- Nearly one third (30 per cent) of western directors also rated India as the country in which they would be most comfortable doing business.
- According to the study, 'Building Business With BRICS', India is also seen as having fewer barriers to effective collaboration between western and Indian businesses than its BRICS competitors.

...but that is not enough to wipe out poverty

Cut to the perspective of the Indian Prime Minister expressing his mind on the eve of the 60th anniversary of its Independence while he is working out the priorities of the country's 11th Five Year Plan: "The defining characteristic of the path we are about to embark on is not just a high growth ambition but the focus on inclusiveness and bridging divides". Dr Manmohan Singh acknowledged that "Poverty is falling" but cautioned that it was not "fast enough" and that the "current consumption poverty rates of over 20 per cent are simply not acceptable in this high growth scenario." Nevertheless, the discussions were prefaced by a sense of optimism over the accomplishments.

The Planning Commission presented both the facets of development – the achievements and the achievable:

to established order and this is a perception that much of the world is beginning to agree with.

- Contemporary global research has shown that western executives would rather do business in India than with its international competitors.
- India is perceived by four out of 10 (41 per cent) of western directors to be the most advanced in terms of technology support for business, compared to 29

- On the eve of the 11th Plan, our economy is in a much stronger position than it was a few years ago. After slowing down to an average growth rate of about 5.5 per cent in the 9th Plan period (1997-98 to 2001-02), it has accelerated significantly in recent years.
- The average growth rate in the last four

Key Trends in Growth and Poverty by State

State	Percapita Net State Domestic Product 2001	Growth rate of GDP 1991-2001	Project SDP growth rate in Tenth Plan	%poor in 1973/4	%poor in 1999-2000	Projected % poor in 2006-07 at end X Plan
Andhra Pradesh	9982	5.4	6.8	48.86	15.77	8.49
Arunachal Pradesh	9013	5.3	8.0	51.93	33.47	29.33
Assam	5867	2.5	6.2	51.21	36.09	33.33
Bihar	3345	2.0#	6.2	61.91	42.60	43.18
Goa	26106	7.2	9.2	44.26	4.40	2.00
Gujarat	12975	6.3	10.2	48.15	14.07	2.00
Haryana	14331	4.8	7.9	35.36	8.74	2.00
Himachal Pradesh	10942	6.1	8.9	26.39	7.63	2.00
Jammu & Kashmir	7383	4.5	6.3	40.83	3.48	NA
Karnataka	11910	7.7	10.1	54.47	20.04	7.85
Kerala	10627	5.7	6.5	59.79	12.72	3.61
Madhya Pradesh	7003	4.4#	7.0	61.78	37.43	29.52
Maharashtra	15172	6.5	7.4	53.24	25.02	16.18
Manipur	7955	6.2	6.5	49.96	28.54	30.52
Meghalaya	8460	5.3	6.3	50.20	33.87	31.14
Mizoram	NA	NA	5.3	50.32	19.47	20.76
Nagaland	NA	NA	5.6	50.81	32.67	31.86
Orissa	5187	3.9	6.2	66.18	47.15	41.04
Punjab	15390	4.9	6.4	28.15	6.16	2.00
Rajasthan	7937	4.4	8.3	46.14	15.28	12.11
Sikkim	10250*	NA	7.9	50.86	36.55	33.78
Tamil Nadu	12779	6.2	8.0	54.94	21.12	6.61
Tripura	8372	6.8	7.3	51.00	34.44	31.88
Uttar Pradesh	5770	2.8	7.6	57.07	31.15	24.67
West Bengal	9778	6.7	8.8	63.43	27.02	18.30
A & N Island	NA	NA	6.6	55.56	20.99	5.82
Chandigarh	29208	NA	10.6	27.96	5.75	2.00
Dadra & Nagar Haveli	NA	NA	NA	46.55	17.14	2.00
Daman & Diu	NA	NA	NA	NA	4.44	2.00
Delhi	24450	6.8	10.6	49.61	8.23	2.00
Lakshadweep	NA	NA	NA	59.68	15.16	4.59
Pondicherry	18500	7.3	10.7	53.82	21.67	7.72
All India	10306**	5.6	8.0	54.88	26.10	19.34

* : For the Year 2000.

: For the period 1991 to 2000 and includes Jharkhand.

\$: For the period 1991 to 2000 and includes Chattisgarh.

NA : Not Available

Planning Commission documents

years of the 10th Plan period (2003-04 to 2006-07) is likely to be a little over 8 per cent, making the growth rate 7.2 per cent for the entire 10th Plan period.

- Though, this is below the 10th Plan target of 8 per cent, it is the highest growth rate achieved in any plan period.
- This performance reflects the strength of our economy and the dynamism of both the private and public sectors.

...as India needs more inclusive growth

The future then is about a "more inclusive growth"; one that presents "formidable challenges and requires determined action by both the Centre and the states. Achieving these targets will not be an easy task but it is definitely feasible. The knowledge that the economy is in many ways better placed today than it has ever been should help us achieve such ambitious targets."

Truth to tell, there was nothing new being said here but it was important that the Prime Minister shared his main areas of concern: "A few areas have emerged as major areas of common concern across all states. In short, these are education, health, agriculture, irrigation and the persistence of regional imbalances in the level and pace of development. I agree with the general consensus that we need to address the problem of rejuvenating our agriculture with renewed vigour..... In education, there seems to be a widespread consensus that the universal

access, which we are on the verge of achieving in elementary education, must be expanded to the secondary level as well. Secondary education is more complex..... I do agree that there are many parts of our country where public sector intervention in health is absolutely essential to carry conviction with our people and to improve the quality of delivery of services in our country. There are regional imbalances in infrastructure and development..."

The dichotomy between the internal failures and external accomplishments do send out mixed signals even though global perceptions tend to get guided by India's unique accomplishments. If earlier India was all about being a land of snake charmers and *fakirs*, today it is all about information technology whiz kids and a large mass of people with urban mindsets and considerable purchasing power. Such perceptions have been created by the size and quality of the Indian middle class that accounts for 32 per cent of its population

India and Comparable Countries				
	India	Sri Lanka	China	Vietnam
Infant mortality	60	13	30	19
(per 1000 live births)	(2003)	(2003)	(2003)	(2003)
One year olds fully immunized	58	99	84	93
for measles (%)	(2002-04)	(2003)	(2003)	(2003)
Population with sustainable	30	91	44	41
access to improved sanitation (%)	(2002)	(2002)	(2002)	(2002)
Under-five mortality	87	15	37	23
(per 1000 live births)	(2003)	(2003)	(2003)	(2003)
Births attended by skilled birth	47.6	97	97	85
attendants (%)	(2002-04)	(1995-2003)	(1995-2003)	(1995-2003)
Maternal mortality	407	92	56	130
(per 100,000 deliveries)(adjusted 2000)	(adjusted 2000)	(adjusted 2000)	(adjusted 2000)	(adjusted 2000)

Source : Planning Commission

and its per capita income improvements. Perceptions have been impacted on by the current growth drivers in the Indian economy that currently seem to be qualitatively superior to those in east and south east Asia; its improved input factors that are reflected in the demographic trends around age dependency and savings rates.

...based on its striking strengths

Irrespective of what the perceptions are however, India's progress towards its destiny must be marked by an appreciation and respect for what management experts have called the four 'D's. In a very simple explanation of the reality, Arun Maira told a Calcutta audience not too long ago that: "India is Diverse (a one billion people country), 350 dialects, religions, disparity in incomes that are associated with infinite number of possibilities, of combinations and also the probability of chaos. India is a Democracy, not granted by the British but acquired

through the Independence movement. India has a Demographic uniqueness in terms of the sheer overall numbers and, now, the large number of the very young and in the manner that they link with the world. The young will be earners and the savers of tomorrow and yield the much awaited demographic dividend. Finally, India is on the path of Development, in terms of growth, politics, culture and economics. Not all development is satisfactory and this is what prompts the question on what is the most appropriate form of leadership: what must India do to meet its own aspirations and frustrations? How would the model be different from China or Singapore? The answer is clear: a country as vast as India needs its people to find the leadership resident within and bring it to the fore to achieve things that they are passionate about".

...but there are miles to go

The issue that the Indian must be most passionate about has been long identified

Bharat Nirman	
Bharat Nirman is a time-bound business plan for action in rural infrastructure over the four year period (2005-2009). Under Bharat Nirman, action is proposed in the areas of irrigation, rural roads, rural housing, rural water supply, rural electrification and rural telecommunication connectivity. Specific targets have been set under each of these goals as under:	
Irrigation	- to create 10 million hectares of additional irrigation capacity
Rural roads	- to connect all habitations (66802) with population above 1000 (500 in hilly/tribal areas) with all weather roads
Rural housing	- to construct 60 lakh houses for rural poor
Rural water supply	- to provide potable water to all uncovered habitations (55067) and also address slipped back and water quality affected habitations
Rural electrification	- to provide electricity to all un-electrified villages (1,25,000) and to connect 23 million households below the poverty line
Rural telephony	- to connect all remaining villages (66822) with a public telephone
While the agenda is not new, the effort is to impart a sense of urgency to these goals, make the programme time bound, transparent and accountable. The funding for the programme will be met through an appropriate mix of budgetary support by the Centre and states, external aid, market borrowing and a separate window for rural roads.	
To ensure accountability, the names of villages electrified, villages connected by all weather roads, villages provided drinking water and villages provided telephone will be put on the internet.	

and much debated: Inclusive and sustainable growth as India seeks to power itself to enter the ranks of 'developed nations' in less than a decade and a half from now. Nevertheless, statistics from the U.N. Development Programme make one pause to think: at 2000-05 growth trends, reaching the status of rich countries is more than a century away: "it will still take India until 2106 to catch up with high-income countries". Meanwhile, the ground realities that one must address include even such basic problems as the prospects of survival of an Indian born child. Grandiloquent speeches about winning the future come to a nought if India cannot ensure that the child born an Indian has a fair chance of living. Yet:

- India accounts for one in five child deaths in the world.
- Only 42 per cent of the children are immunized.
- A person born in India lives 14 years less than one born in the USA.

...before India can bridge the chasm

The importance of being Indian is thus woefully eroded by the chasm dividing the successful participants in the modern-India-on-the-move phenomenon and the 'also rans' and between the 'also rans' and the non-participants and, finally, between the non-participants and those that the enormous Indian phenomenon has totally bypassed. For them there is no feel good, feel bad or any feeling whatsoever. Yet the triumph of being Indian lies in that not all the exploitation and injustice, not all the endeavours to belabour the religious or even socio-cultural differences in its people, have been able to disintegrate the country. The triumph of being Indian lies in the surfacing of an ethereal unity that

seems to transcend these huge disparities and differences and establishes a common platform for a sharing of ideals, ideas, beliefs, mores, culture that is beautifully bewildering. Rabindra Nath Tagore's much quoted letter to C.F. Andrews contains a possible explanation: "Whatever we understand and enjoy in human products instantly becomes ours, wherever they might have had their origin."

It is possibly in the ability of a large number of Indians to assimilate alien ways and thoughts that the secret to the clichéd phrase 'unity in diversity' lies. It is also possibly the ability of some 200 million desperately poor Indians to make allowances for the ways of the better off that allows Indian democracy to prevail as an electoral system, even as it is smashed to smithereens with every class and caste exploitation or nepotism and bureaucratic corruption or as irreligious acts are perpetrated in the name of religion.

...and all Indians can feel happy

What then are the counts on which India's status as the dominant player in the 21st century world order will be determined? A group of global economists under the aegis of Oxford Poverty and Human Development Initiative, the redoubtable Amartya Sen included, have come up with the Gross Well-being Index that supplements the United Nation's and World Bank indices, based on research conducted in Kerala and provides for multiple dimensions of poverty. Is there a case for poverty amidst freedom as opposed to life in a 'gilded cage'?

As the name suggests, the happiness factor of the masses – notwithstanding their poverty – has been taken into account in a bid to add the 'wealth' of happiness with material well being in what is being

"Whatever we understand and enjoy in human products instantly becomes ours, wherever they might have had their origin." -- **Rabindranath Tagore to C. F Andrews** explaining India's ability to assimilate the best in the world.

described as an effort to measure "the meaning of life". It links the yardstick of human development and sustainable economic growth to a policy framework that leads to equitable distribution of wealth in a democratic political order with affordable and accessible health and education facilities; equality before law that is a protector of human rights and a social order that allows for the full play of socio-cultural forces and people are empowered to decide things for themselves irrespective of their economic circumstances: bliss versus the buck.

...or is there a case for bliss versus the buck

Be that as it may, a poor Kerala woman who calls the shots at home may be better off than a wealthy compatriot who meekly acquiesces to whatever is demanded of her. However, bread and butter development has other vital connotations around inclusive growth, balanced growth across the country, freedom from terrifying wants around food and healthcare. These are Indian failings that have fomented such discontent over the past six decades that generations of dispossessed Indians have turned to terrorism. The Prime Minister of India believes it to be the "single biggest security challenge ever faced by our country." These modern day rebels are working towards a plan to create a completely liberated compact revolutionary zone (that the media describes as the Red Corridor) that will run from Nepal through Bihar, Jharkhand, Chhattisgarh, Madhya Pradesh, Orissa and Andhra Pradesh!

...there are more urgent concerns around 'ultra' power

It is acknowledged that these are no idle threats and, indeed, there are substantial

areas that are under the control of these 21st century revolutionaries. Feared though these rebels are, they are not exactly hated because they have sympathizers at the highest intellectual echelons who believe that the rebellion is born out of years of endless misgovernance under a national government that has never cared for these people save when it came to securing their votes.

Universal adult suffrage in India may not give every man the right to eat but certainly gives him the right to choose his representative in Parliament and the State legislatures. With democracy having failed them comprehensively, they have chosen to join the Naxalites, who want nothing less than an upheaval that will result in a total wealth redistribution because they reject the theory that the incremental gains emanating from the current path of growth will ever mitigate the extreme poverty of the people or ever set right the gross inequalities under India's "bourgeois comprador democracy". Once again, the country has been found wanting in its approach to the Red menace, even as the movement gains sympathizers and strength.

...and the unsustainable disequilibrium

What are the strategy trends that the Indian administration seeks to adopt as it tries to deal with the unsustainable levels of disequilibrium? What will be the main arms through which the country will implement change? Clearly three kinds of actions point themselves out: Affirmative action to deal with inequities; regenerated local self governments to deal with the destinies of people at the local levels; and activism by civil society organizations to intervene where lapses continue to plague the people. These will happen with or without

A poor woman from Kerala, who calls the shots at home may be better off than a wealthy compatriot who meekly acquiesces to whatever is demanded of her.

help or supportive intervention from the government. Also discernible are a series of trends that will become more evident as the 11th Plan progresses and these will have the backing of government and policy measures. These are what may eventually achieve greater inclusiveness in the Indian growth profile.

...the emerging trends

Clearly, the **first discernible trend** is the commitment to rapid growth of no less than nine per cent. Planning Commission research suggests that the economy can accelerate from eight per cent per year to an average of around nine per cent over the 11th Plan period. Given the annual 1.5 per cent population growth, a 9 per cent GDP growth would double the real per capita income in 10 years. This must be combined with policies that will ensure that this per capita income growth is broad based, especially elevating the living standards of the hitherto deprived.

Trend two would see a focus on such basic facilities as health, education and clean drinking water. While in the short run these essential public services impact directly on welfare, in the longer run they determine economic opportunities for the future and the basic quality of the Indian human resource.

Trend three pursuant to a broader based growth, the country would identify the still marginalized groups such as

primitive tribal groups, adolescent girls, the elderly and the challenged who lack family support, infants and such others that do not have lobbies to fight their cause.

Trend four will see a vibrant focus on the Indian farming community to reverse the

Some monitorable socio-economic targets of the 11th Plan

Income & Poverty

- Accelerate growth rate of GDP from eight per cent to 10 per cent and then maintain at 10 per cent in the 12th Plan in order to double per capita income by 2016-17
- Increase agricultural GDP growth rate to four per cent per year to ensure a broader spread of benefits
- Create 70 million new work opportunities.
- Reduce educated unemployment to below five per cent.
- Raise real wage rates of unskilled workers by 20 per cent.
- Reduce the headcount ratio of consumption poverty by 10 percentage points.

Education

- Reduce dropout rates of children from elementary school from 52.2 per cent in 2003-04 to 20 per cent by 2011-12.
- Develop minimum standards of educational attainment in elementary school and by regular testing to monitor effectiveness of education to ensure quality.
- Increase literacy rate for persons of age seven years or more to 85 per cent.
- Lower gender gap in literacy to 10 percentage points.
- Increase the percentage of each cohort going to higher education from the present 10 per cent to 15 per cent by the end of the 11th Plan.

Health

- Reduce infant mortality rate (IMR) to 28 and maternal mortality ratio (MMR) to one per 1000 live births.
- Reduce Total Fertility Rate to 2.1.
- Provide clean drinking water for all by 2009 and ensure that there are no slip-backs by the end of the 11th Plan.
- Reduce malnutrition among children of age group 0-3 to half its present level.
- Reduce anaemia among women and girls by 50 per cent by the end of the 11th Plan.

Women and Children

- Raise the sex ratio for age group 0-6 to 935 by 2011-12 and to 950 by 2016-17.
- Ensure that at least 33 per cent of the direct and indirect beneficiaries of all government schemes are women and girl children.
- Ensure that all children enjoy a safe childhood, without any compulsion to work.

Infrastructure

- Ensure electricity connection to all villages and BPL households by 2009 and round-the-clock power by the end of the Plan.
- Ensure all-weather road connection to all habitation with population 1000 and above (500 in hilly and tribal areas) by 2009, and ensure coverage of all significant habitation by 2015.
- Connect every village by telephone by November 2007 and provide broadband connectivity to all villages by 2012.
- Provide homestead sites to all by 2012 and step up the pace of house construction for rural poor to cover all the poor by 2016-17.

Environment

- Increase forest and tree cover by five percentage points.
- Attain WHO standards of air quality in all major cities by 2011-12.

deceleration in agricultural growth from 3.2 per cent observed between 1980 and 1996-97 to a trend average of around 2.0 per cent subsequently.

- The Planning Commission holds this deceleration to be the root cause of the problem of the acute rural distress in several parts of the country.
- Low farm incomes due to inadequate productivity growth combined with low prices of output and with lack of credit at reasonable rates, have pushed many farmers into crippling debt.
- One outstanding feature of the agriculture revival strategy will be investments in irrigation with the Bharat Nirman programme creating 10 million hectares additional assured irrigation in four years (2005-2009). The trends show that the pace of potential creation will increase from 1.42 million hectares per year in recent years to 2.5 million hectares per year.
- 'Bridging the Knowledge Gap' will no longer be a corporate slogan; it will be the slogan for the farming community as well.
- The farming community will be covered by insurance that currently covers no more than four per cent of

the farmers under crop insurance schemes.

- Land reforms will receive critical focus with particular reference to tenancy laws, distribution of ceiling-surplus land, attention to common property and wasteland resources and the consolidation of holdings. Joint *pattas* will empower women farmers and there will be stringent restrictions on the diversion of prime farmland for non-farm purposes.

Trend five will see a focus on innovative financing featuring micro-finance that will be upscaled and made to expand the nature of financial services offered to micro enterprises and also to make these the springboard for entrepreneurial development.

Trend six will see an increasingly improved place for the child from the prenatal to the post natal stages. Improved schooling process, with public spending on education up to six per cent of the GDP, will help move towards fulfilling the Constitutional obligation of providing free and compulsory elementary education of good quality to all children up to the age of 14. Elementary Education (Sarva Shiksha Abhijan) will cover all children in the six to 14 years age group by 2010 and

Child Nature - Starting Right

Development of children is at the centre of the 11th Plan. We are committed to ensuring that our children do not lose their childhood because of work, disease or despair. We aim to give the right start to children from 0-6 years with effective implementation of the ICDS programme. It is to be a community-based programme involving parent groups. The nutrition component has to have imaginative menus based on seasonal and regional variations. The scheme will nurture and strengthen pregnant and lactating mothers.

Currently, the pre-school component of ICDS centres is very weak. Early Childhood Education (ECE) could be placed under the Sarva Shiksha Abhijan. The ICDS centres then will concentrate on inculcating good health and hygienic practices among the children. For this it will be essential that these centres have toilets and drinking water. The elders of the community could be asked to visit the children on a weekly basis to narrate folk tales, poetry etc., which are often missing from school curriculum. This will serve the dual purpose of enriching the child and making the elderly feel a part of the education process.

Source: Planning Commission

seek to bridge social, gender and regional gaps with the active participation of the community in the management of schools.

Trend seven will see a major move to remove gaps in effective health care to the rural population with special focus on 18 states with weak public health indicators and infrastructure. The new health architecture will make for inclusive health development and integrate health concerns with safe drinking water, sanitation and nutrition through integrated District Plans for Health.

This will be backed by flexible funding so that the states can utilize them in the areas they feel are important. The health initiative will build on India's indigenous systems of health care such as Ayurveda, Yoga, Siddha and Unani along with diverse ecosystem specific, local health traditions. These systems could be used to complement the allopathic system, as they could be more useful in certain areas of curative/preventive health care.

Trend eight will see a greater incorporation of private initiative in this inclusive growth plan. This means a role for the private sector, including farming, micro, small and medium enterprises (MSMEs) and the corporate sector. Private enterprise accounts for 76 per cent of the total investment in the economy and an even larger share in employment and output.

Trend nine will find medium and small enterprises playing a more critical role in expanding production in a regionally balanced manner and generating widely dispersed off-farm employment with policy backing to create a supportive environment in which entrepreneurship can flourish at all levels.

Trend ten will see a focus on employment generation by every

conceivable means, especially for 10 million workers in agriculture who must be provided with remunerative non-agricultural employment. While a doubling of the agricultural GDP to an annual four per cent will improve rural employment conditions by raising real wages and reducing underemployment, the overall growth of nine per cent will further increase income disparities between agricultural and non-agricultural households. Absorbing the new entrants into the labour force would mean increasing non-agricultural employment to over six per cent per annum during the 11th Plan.

The enormous HR challenge will be generating non-agricultural employment of suitable nature and at required locations. The inadequacy of widely dispersed and sustainable off-farm productive employment opportunities is a basic cause of most divides and disparities. The Planning Commission says that "Growth without jobs can neither be inclusive nor can it bridge divides" and a solution has to be found to this problem because if India fails to do so its "demographic dividend can turn into a demographic nightmare".

Trend eleven will see a focus on institutionalizing quality of service to obviate delivery of poor service quality and to hold those responsible for inadequacies accountable. Without such accountability in place, investment of resources into facility creation will represent a waste of money.

Trend twelve will feature a focus on creating a level playing field for India's entrepreneurial class by improving the physical infrastructure which it uses: roads, railways, ports, airports, communication and power supply. Indian enterprise must compete not only to win export markets but also to retain domestic markets.

Trend thirteen will see a focus on high quality skills needed in knowledge-

India's health initiative will build on its indigenous systems of health care such as Ayurveda, Yoga, Siddha and Unani along with diverse ecosystem specific, local health traditions. These systems will complement the allopathic system, as they could be more useful in certain areas of curative/preventive health care.

intensive industries and in areas of pure sciences through investments in public sector institutions of higher learning and a correction in curricula and improved service conditions for faculty. In this effort, the private sector will be expected to play the role of a dominating partner.

Trend fourteen will see a reshaping of policies and practices around rehabilitation of the displaced from their land because of development projects, conflicts or calamities that are very deficient. These have caused many people to feel vulnerable and there is anger because of forced exclusion and marginalization. This would be imperative to address issues of the pain of marginalization and the consequent "unrest and insurgency in many regions". The Planning Commission believes that "this discontent is likely to grow exponentially if the benefits from enforced land acquisition are seen accruing to private interests, or even to the state at the cost of those displaced".

Trend fifteen will see a commitment to improved governance with transparency built into public programmes and also in government's interaction with the average

citizen. This would include better designed projects, implementation mechanisms and procedures that can reduce the scope for corruption. The Right to Information Act has already started making the mountains move and a more rigorous use of the RTI should take the movement further.

Trend sixteen will see a commitment towards bridging gaps in education at all levels, especially at the higher end. The open university system will emerge as an important instrument for expanding higher education since it overcomes the infrastructure constraint.

- Public private partnerships in higher education, particularly in research in universities and high technology areas will be the order of the day.
- There will be far greater industry-academia collaborations for development, application and flow of technologies from lab to the market place with industry investing in strengthening national S&T infrastructure.
- These will lead to stronger linkages with other countries in the area of

The Emerging Skill Shortage

While India's young demographic profile has the country favourably placed in terms of manpower availability, talent supply shortages are emerging. This is extremely disconcerting especially for the knowledge services sector, which, over the last few years, has emerged as a significant growth engine with demonstrated gains in terms of exports, employment and very visibly in urban development across several cities in the country. Research has shown that, so far, only a tenth of the global addressable market for these services has been tapped. With its early lead and strong fundamentals (demographics, economics and expertise), India is best positioned to take advantage of this opportunity. Yet the unsuitability of a large proportion of the talent pool in the country could lead to significant lost opportunities.

The NASSCOM-McKinsey Report 2005 projections indicate that these will fall short by about 500,000 suitable professionals (representing an opportunity cost of \$10bn) by the end of the decade and in the absence of corrective action, this gap will continue to grow. However, if current trends are maintained, the IT-ITES sector (IT-ITES alone of the knowledge sector) will need an additional 1 million plus qualified people in the next 5 years and will generate exports of \$86 billion in FY 2012. If the country is to capitalize on the huge opportunity in this and other areas of knowledge services, what is needed is a major thrust at all levels of education.

Source : Planning Commission

science and technology, including participation in mega international science initiatives.

...despite positive currents

Notwithstanding such positive currents, the spectre of unbalanced growth within states will continue to haunt India along with striking differences within states on human development indicators. These generally include districts with rainfed agriculture or extensive land degradation, generally poor infrastructure and connectivity; often regions with large tribal populations.

B. B. Bhattacharya and Sakthivel's analysis of regional growth and disparity in pre and post reforms India speak of a sharper regional disparity in the growth rates. "The poorer states have not only performed poorly but their failure to stem population growth has left them in an even worse position....the tertiary, rather than the industry, has become the engine of growth in the last two decades." Given the deregulation of private investment, fast paced growth and greater investment threaten accentuated regional disparity.

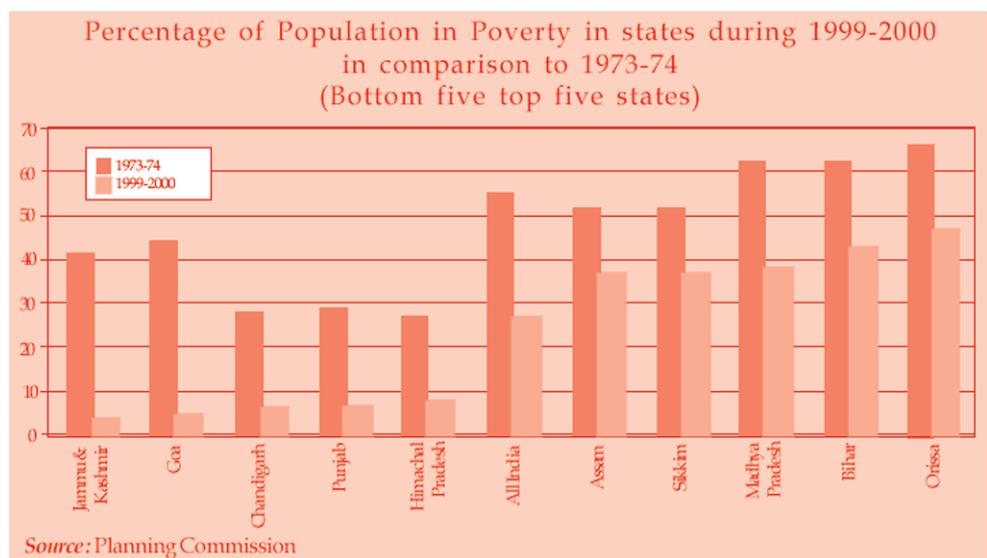
"The problem is compounded by the negative relationship between population growth and income growth during the 1990s. Unfortunately, backward states with higher population growth are not able to attract investment – both public and private – due to a variety of reasons, like poor income and infrastructure and probably also poor governance". Their results support the view that there is a "strong case for pro-active public policy to induce more investment in backward states either through public investment or through fiscal incentives". Alongside, they

believe that efforts to restrain population growth, especially in backward states are essential. "Finally, the quality of governance and, in particular, the efficiency of investment should be given more attention to at the state level", they say.

...there are grave fears

Such an inverse relationship between income and population growth is amongst the worst threats facing India. "The solution, however, does not lie in curbing growth in fast growing and market friendly states but in accelerating reforms in backward states to attain a balanced regional growth".

For Indian management today, neither the India of the *fakirs* and snake charmers nor the feudal India of the *raj*as and *zamindars* nor even the modern India of the 'monsoon wedding' kind that so enamours the western world need to be reckoned with. What are of concern are current mindsets and current reality and complex growth issues that erode the value of being an Indian. For the emerging crop of Indian managers, born well into post-Independence India, the important thing is to understand that democracy and freedom are substantive issues even though they



It is only when every Indian has the right to become Indian in the fullest sense of the term that the importance of being Indian as a whole magnifies manifold: emotionally, spiritually, intellectually, academically, financially and completely.

have been theirs for the taking; that patriotism and country are not passé even when the overwhelming concern is around being a global citizen; that it is very important for every Indian to be as much of an Indian as any other.

There is no doubt that the 21st century will find excellence emanating out of India and pervading every corner of the world. The challenge for the modern manager is to guarantee to every Indian the opportunity to become a fully functional participant of the country and the system that is India. For, it is only when every Indian has the right to become Indian in the fullest sense of the term that the importance of being Indian as a whole magnifies manifold: emotionally, spiritually, intellectually, academically, financially and completely. **Ω**



SECTION III

Focus the Earth

Where is the life, we have lost in living? Where is the knowledge we have lost in information? Where is the wisdom we have lost in knowledge?" – T. S. Eliot

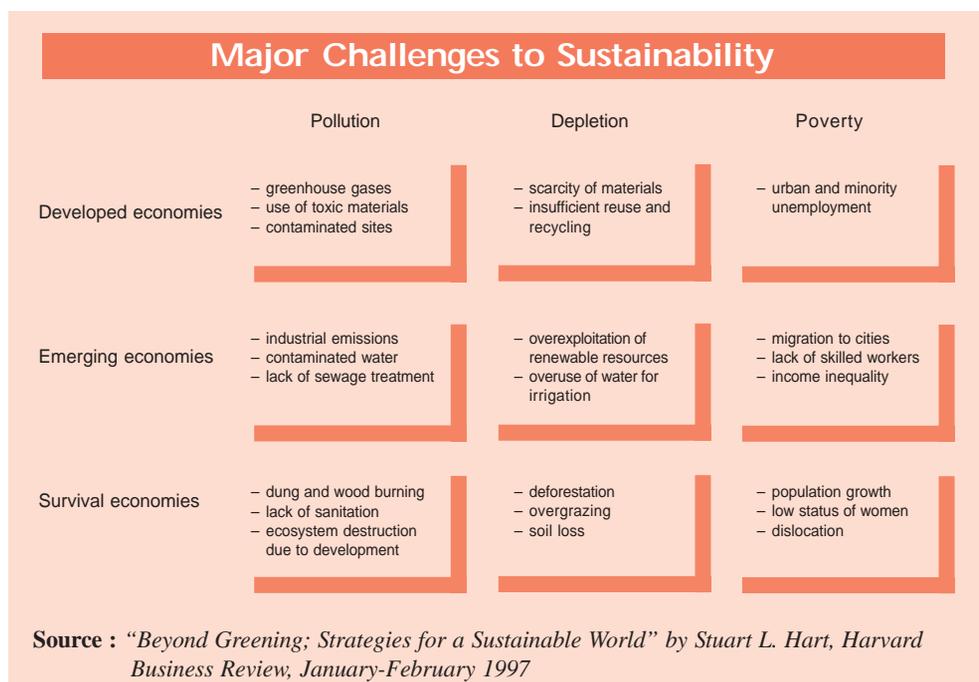
In 2005, the GE Chief Executive Officer, Jeffrey Immelt, made an announcement to a distinguished Washington audience the import of which even he was finding hard to accept. Jeffrey Immelt had just made a public statement about his company's Ecomagination strategy that was based on the conviction that the future of the world's 11th largest corporation lay in a portfolio of "ecofriendly" products. Virtually bucking global business thought trends, Immelt announced that ecological concerns, woven into his business strategy, would provide the cutting edge that GE needed in the 21st century. He went on to quantify that before the decade was out, the new portfolio would enhance the company's revenue by \$20 billion. A couple of years down the line, the government of U.K. made another pathbreaking announcement. The

Intergovernmental Panel on Climate Change had published its devastating document on the ecological threat that loomed in terms of global warming – much of which it attributed to human activity – and Nobel Prize winner Al Gore's 'An Inconvenient Truth' was forcing governments across the world to sit up. The Stern Review had expressed its opinion on the economic impact of climate change on the U.K. and the government decided that it would gift a copy of the Gore documentary to every secondary school in England and Wales.

...ecology is not about politics

The plan had to be kept on hold because the move was judicially challenged – allegedly because 'An Inconvenient Truth' was considered to be a political issue that demanded a more balanced treatment. While the courts can carp over whether the

Mattel, the world's largest maker of toys had to recall around 19 million toys (made at a Chinese facility) because of toxic levels of lead in the coat of paint on them, Mattel's stock price (end August) was down 24 per cent since May 2007. That provides an idea of the costs that corporations must pay if they are environmentally callous.



A damaged earth...

Air

The WHO estimates that three million people die each year from the effects of air pollution, about five per cent of the total annual deaths.

About 70 per cent of the energy used in China comes from coal-burning power plants, ill-equipped with pollution controls. Scientists estimate that by 2025 China will emit more carbon dioxide and sulphur dioxide than the United States, Japan and Canada combined.

In sub-Saharan Africa, there are between 300,000 and 500,000 deaths annually due to cardio pulmonary disease from breathing particulates.

In Asia, between 500,000 and a million people die of particulate exposure every year.

Even in the USA, some 64,000 people die each year from cardio-pulmonary causes from breathing particulates.

Thus soot and other particulates are coming under greater scrutiny as threats more dangerous to human health than sulphur dioxide and other gaseous pollutants.

Chronic obstructive pulmonary disease is five times more common in China than in the United States.

Acid rain like that afflicting the United States and Canada will appear wherever designers of new power plants and factories neglect emission controls.

A 1995 study of 77 Chinese cities found that 81 per cent experienced acid rain. [Ω](#)

Water

By 2040, at least 3.5 billion people will run short of water, almost 10 times as many as in 1995.

By 2050, fully two-thirds of the world's population could be living in regions with chronic, widespread shortages of water.

Contaminated water is implicated in 80 per cent of the world's health

problems.

In India, an estimated 300 million people lack access to safe drinking water, due to widespread pollution of rivers and groundwater.

Water wars, predicted for more than a decade, are an imminent threat in places like Kashmir.

Periodic famine and desertification will intensify.

Globally, around 40,000 people die each day of diseases caused by contaminated water directly.

One-third of the population of Africa and most major cities in the developing world will face water shortages, according to the U.N.

The northern half of China, home to perhaps half a billion people, is short of water. The water table under Beijing has fallen nearly 200 feet since 1965. It declined by eight feet in 1999 alone.

Water usage is causing other problems as well. Irrigation water evaporates, leaving minerals in the soil. By 2020, 30 per cent of the world's arable land will be salty; by 2050, 50 per cent.

Salinization already is cutting crop yields in India, Pakistan, Egypt, Mexico, Australia and parts of the USA.

The European Parliament estimates that 70 per cent of the continent's drinking water contains dangerous concentrations of nitrate pollution.

In the United States, cities such as Atlanta, where the delivery system is a century old and poorly maintained, suffer frequent water-main breaks, which suck dirt, debris, bacteria and pollutants into the water supply.

There are an estimated 237,600 such breaks each year in the United States. [Ω](#)

Biodiversity

Loss of biodiversity will be a growing

worry with around 50,000 species disappearing each year, up to 1,000 times the natural rate of extinction, according to the United Nations Environmental Program.

Eleven per cent of birds, 25 per cent of mammals and 20 to 30 per cent of all plants are estimated to be nearing extinction.

Throughout the world, amphibian populations are in decline, for reasons that, after more than a decade of intensive research, remain poorly understood.

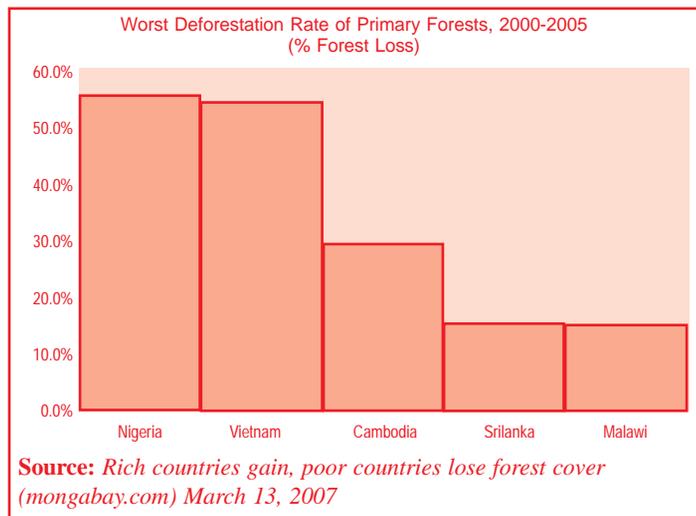
Coral reefs throughout the world are dying rapidly, again for reasons that are not entirely clear.

The chief cause for species loss, according to University of Colorado scientists, is the destruction of natural habitats by logging, agriculture and urbanization. [Ω](#)

Forests

The Food and Agriculture Organization of the United Nations 2005 Global Forest Resources Assessment concludes that net deforestation rates have fallen since the 1990-2000 period. However, some 13 million hectares of the world's forests are still lost each year, including six million hectares of primary forests. Primary forests – those with no visible signs of past or present human activities – are considered the most biologically diverse ecosystems on the planet.

Industrial logging, clearing and forest conversion for agriculture, fuelwood collection by rural poor and forest fires – often purposely set by people – are considered the leading causes of deforestation. [Ω](#)



The bottomline is that people are beginning to believe that all is not right with the way mankind is conducting itself. More and more are beginning to believe that something must be done about it, despite ecosceptics, some of whom are from the world of science and technology with considerable

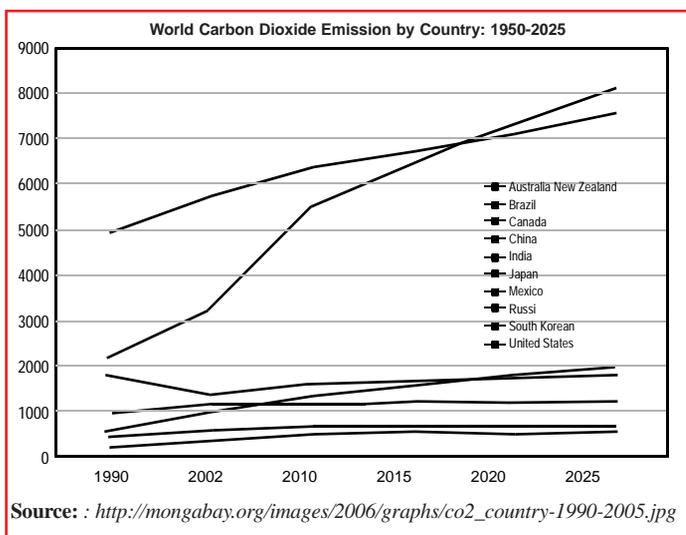
In 2004, investors filed 327 resolutions regarding social or environmental issues with U.S. companies – 22 per cent more than in the previous year. They subsequently withdrew 81 of these after companies agreed to address the issues raised, ranging from animal welfare and climate change to political contributions and global labour standards.

truth on the environment and climate change are a matter of politics, the fact is that the compelling documentary grossed over \$24 million in the USA alone Globally, the sales were said to be around \$50 million by June 2007.

...it is time to go green

Several years ago, the World Bank commissioned a review of its own approval and funding of the Narmada Dam and the Morse Commission review – a masterpiece in environmental literature – made such a strong case for the inequity of the project vis-à-vis the tribal population, the destruction of their original habitat and the other ecological concerns that had been ignored that the funding was withdrawn by the bank – possibly representing a first time admission by the bank that it was wrong.

constituencies of corporate and political following. An environmentally-sensitive government such as the Netherlands, acknowledging the three-foot rise in the global sea level threat, has committed substantial investments to building new dykes. Others were sensitized to the issue by the havoc wrecked by the Tsunami. Overall, economic losses from natural disasters in 2004 totalled \$145 billion,



with two-thirds of this attributed to windstorms and the other one-third to geological events, including the Tsunami in South Asia. Meanwhile, tales of lost forest cover, increased desertification, parched

...with inadequate government response

Legislation

Governments are deregulating across the world and falling in to a standardized development pattern based on market driven forces. Market forces are not necessarily environment friendly.

However, an increasingly strong global environmental lobby is pushing the save the earth agenda through global ecological meets and earth summits. The 2002 World Summit on Sustainable Development was a path-breaking meet.

Non-government organizations have been finding a stronger voice in this world and there is a more vibrant public-private partnership on ecological issues with corporate social responsibility assuming an influential role in corporate agenda.

In the United States, despite an administration generally considered unfriendly toward environmental causes, the EPA's mandate to cut tailpipe emissions by 70 per cent is still on track and California has refused to ease or delay its even-tighter restrictions on auto emissions.

In India, government policies consistently rate industrial development more important than the environment. Yet, in an effort to reduce air pollution, India's Supreme Court has limited sales of new cars in New Delhi to 18,000 per year, less than one-fourth of the average previously sold.

An estimated 80 per cent of logging in the Amazon basin is illegal. In 1999, Brazil raised the maximum fine for illegal logging to more than \$27 million and changed legal procedures so that the fines can actually be

imposed.

After years of ineffective gestures, Costa Rica has incorporated about 25 per cent of its land into protected areas, such as national parks.

Cambodia has protected a million-acre forest. Gabon has set aside 10 per cent of its land for parks.

Liberia is protecting 1,55,000 acres of forest in an effort to safeguard endangered western chimpanzees.

To promote cleaner energy technologies and to slow global warming, most European nations tax carbon emissions on fossil fuels.

In Germany, a carbon tax raised the cost of gasoline by nearly 11cc per gallon.

Even China is coming on board. The Tenth Five-Year Plan was China's "greenest" ever, with investments to meet environmental objectives set at \$85 billion. These targets were 'nearly' met. There are now at least 2,000 registered independent environmental NGOs in China and more than 200 university green groups in the provinces.

...The Indian Scene

Faced with a massive loss of forest cover, India revised its forest policy to protect, conserve and develop its forests and attempt to minimize the burden of fuel wood, fodder and other local requirements on forests. The policy remained on paper and the denudation of forest continued merrily especially in states such as Uttar Pradesh, Bihar and Madhya Pradesh. The Forest Conservation Act 1980, was amended in 1988 to make it more stringent by prescribing punishment for violation and the central government even issued

guidelines for the active involvement of women, social organizations and voluntary agencies for the regeneration of degraded forest land. Hardly any efforts were made by the states in this regard. Coupled with reckless and unplanned urbanization, growing population, over-grazing and over-cultivation by peasants, they have been responsible for the shrinking forest cover resulting in climatic changes.

In India, if opportunity costs on accessing water were taken into account, it would be clear that in most rural areas, households are paying far more for water supply than the often-normal rates charged in urban areas. If this cost of fetching water, which is almost equivalent to 150 million women days each year, is converted into a loss for the national exchequer, it translates into Rs 10 billion a year!

The government has accorded the highest priority to rural drinking water for ensuring universal access as a part of the policy framework to achieve the goal of reaching the unreached. Despite the installation of more than 3.5 million hand pumps and over 116,000 piped water supply schemes, in many parts of the country, the people face water scarcity almost every year, thereby meaning that our water supply systems are failing to sustain despite huge investments. [Ω](#)

lands and heightened carbon dioxide emissions come pouring in and some corporates are coming up with "green" responses – some genuine, others pretending to care.

...as erring corporates have begun to realize

Mattel's 'toxic' plight is making constant headlines. Royal Dutch Shell made another striking observation that did not really catch corporate attention in the manner that it should have: "A quick look at reports by leading insurers and re-insurers shows clearly that climate change has become a significant risk on the balance sheets of companies. While political stances remain widely divergent, notably on either side of the Atlantic, a quiet revolution has indeed begun in company boardrooms and in the market place".¹

...for investors are pushing change

In 2004, investors filed 327 resolutions regarding social or environmental issues with U.S. companies – 22 per cent more than in the previous year. They subsequently withdrew 81 of these after companies agreed to address the issues raised, ranging from animal welfare and climate change to political contributions and global labour standards.

Steve Case² (of America Online fame) has started Revolution, a company that will help "translate green practices into mainstream tastes and apply mainstream business principles in a way that green businesses and consumers can accept." Revolution is being funded by \$500 million of Case's own funds and is investing in health care, wellness, and resorts. This

means that Case will consider everything from spa treatments to organic food and resorts because he predicts that over the next two decades they will become mainstream industries. Case will spend about half of that \$500 million on companies that help patients take a more active role in their treatment. He is interested in those that provide online data about the price and quality of doctors and those that make available electronic medical records; and is considering everything from high-end personalized health coaching services to clinics housed in Target stores. Admitting that "Health care is monumentally complex, confusing, inefficient and inconvenient", he clarifies that it is "the biggest industry in the country and everybody hates it"². Case emphasized at his own press conference that "You've got to have a more holistic way of considering health."

...India is in the vortex of this ecological dilemma

Where do Indians stand in this global dilemma around ecology? At the turn of the millennium, the internet newspaper, Samachar, asked its readers to list out major problems the country was confronted with. Notwithstanding the enormous price that Indians pay for environmental degradation, it was considered as the last of the 10 main issues affecting India and cited by only one per cent of the respondents!

Worsening environmental conditions have, hopefully, set the perspective right to a certain extent but, by and large, environmental awareness continues to be low in India where the primary preoccupation is with securing two square

The loss of biodiversity following the depletion of forest cover, among others, has major corporate implications. Drug makers source half their medicines from natural sources. Around 55 of the top 100 drugs prescribed in the United States are derived from nature.

1. Shell Global Scenarios to 2025

2. BusinessWeek, April 2005

...and hesitant corporate response...

Multinationals will play a critical role in a world that projects a \$140 trillion GDP by 2050 with two of the world's top corporations reporting revenues exceeding the GDP of sub-Saharan Africa.

Wal-Mart's revenues of \$316 billion would make it the 19th largest economy in the world.

The world's top 100 corporations report revenues equal to the GDP of the entire non-OECD world. MNCs thus have it in their power to change the global ecological order. Some responses are encouraging.

There is increasing evidence that smart corporations have gone beyond ecological compliance and taken up voluntary initiatives towards self greening. Nevertheless, there are others who have tried to greenwash their operations and not done anything substantive to change their colours.

The World Wildlife Fund for Nature's year 2005 research (titled Let Them Eat Cake) of leading marketing professionals on ecological issues showed that:

- 87 per cent of respondents considered it "important to buy sustainable brands"
- 81 per cent said they believe they have a strong influence over consumer behaviour.
- 53 per cent thought customers were influenced by environmental and social factors in their consumption choices

A Global Market Institute (see www.gmi-mr.com/gmipoll) poll shows that

- 42 per cent of all Americans are willing to spend more for

products branded as organic, environmentally friendly or fair trade

- 31 per cent of Americans boycott at least one brand
- 40 per cent to 46 per cent of Europeans boycott at least one brand.

The Year 2004

PricewaterhouseCoopers Survey showed, among others, that:

- 79 per cent of CEOs agreed that sustainability is vital to the profitability of any company (an increase from 69 per cent from the previous year).
- 71 per cent of CEOs said they would sacrifice short-term profitability for long-term shareholder value when implementing a sustainability programme.

The World Bank's year 2003 report (titled Race to the Top: Attracting and Enabling Global Sustainable Business) of 107 multinational enterprises showed:

- 88 said that corporate social responsibility factors are "more influential" or "much more influential" than they were 5 years ago.
- CSR considerations were of equal or greater influence than traditional considerations (e.g., cost, quality, delivery) in their decision for new ventures.

British Petroleum has consciously positioned itself as "Beyond Petroleum"

Wal-Mart's year 2006 commitments include doubling organic food sales; selling only seafood that has been

independently certified as sustainably harvested, requiring redesigned eco-efficient transport trucks, and cutting greenhouse gas emissions at existing stores 20 per cent over the next seven years. CEO Lee Scott led the initiative, with the help of sustainability guru Amory Lovins of the Rocky Mountain Institute, to improve its image and save millions through efficiency gains.

The much acclaimed Rocky Mountain Institute claims to create abundance by design and change how people approach design to maximize efficiency. It uses whole-system analysis to achieve vastly greater productivity from energy and resources. It emphasizes that it is a not-for-profit "think and do tank", which works with individuals and organizations of every imaginable kind to help them use energy and resources efficiently while being ever-better stewards of the environment.

Nearly every one of the largest 50 corporations in the world (based on Fortune's Global 500) has undertaken significant new corporate environmental commitments over the past 10 years or so. [Ω](#)

Reference :

PricewaterhouseCoopers Corporate Responsibility Report (2005); Goldman Sachs Willard (2005); Hart (2005); and Elkington (1997).

Peter McKay, "Goldman is Told to Stick to Making Money," The Wall Street Journal, 1 April 2006, p. B3.

J. Ottman, "The Real News About Green Marketing: Yesterday, Today, Tomorrow," Environmental News

meals a day at one level and a globally smart career progression at another. The point is that India cannot afford to remain ignorant because with its billion people, many on the fringes of poverty, India stands to be worst affected.

...for the poor are most vulnerable

Indeed, a disproportionate number of the world's poor lie on the frontline of exposure to disasters: countries with low human development account for 53 per cent of recorded deaths from disasters even though they are home to only 11 per cent of the people exposed to natural hazards worldwide.

Globally, however, the good news is that after being pitted against each other, the two 'eco's, ecology and economics, seem to be seeking common ground with economic/entrepreneurial powers even saying what is good for economics is good for ecology and vice versa. Yet the global truth is far from consoling. What began as polite reminders from such organizations as the World Watch Institute and its eminently readable publications – around simple cautionary details of natural resources being finite; increasing pressure of population and, therefore, prospective food insecurity, extinction of species, destruction of forests, decrease of global fish stock and, of course, the quite perceptible deterioration in the quality of the air we breathe – became ominous over time.

...amidst loss of global biodiversity

The next set of information was even more frightening: an account of the loss of biodiversity following the depletion of forest cover, among others, and its implications for humanity that sources half its medicines from natural sources.

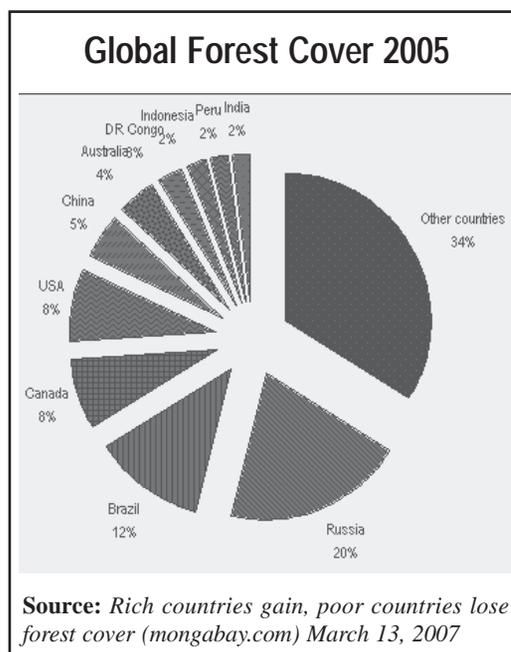
Around 55 of the top 100 drugs prescribed in the United States are derived from nature. Varied global ecosystems are also responsible for absorbing carbon dioxide – the more diverse the ecosystem the more effective the absorption. Loss of biodiversity is then a potential cause of global warming.

Then came the February 2007 Intergovernmental Panel on Climate Change report saying that the concentration of carbon dioxide, methane and nitrous oxide in the atmosphere have moved up sharply, thanks to the nature of human activities since 1750 and "far exceed pre-industrial values determined from ice cores spanning many thousands of years".

...sustainability has become an issue that no one can ignore

Even for the uninitiated, this sets the alarm bells ringing and gets people flocking to understand the dimensions of sustainability and norms that are considered essential for societies and corporates. In simple terms, sustainability is all about balancing human

Globally, the good news is that after being pitted against each other, the two 'eco's ecology and economics seem to be seeking common ground with economic/entrepreneurial powers even saying what is good for economics is good for ecology and vice versa. Yet the global truth is far from consoling.



...leading to serious societal issues

Urbanization

Continuing urbanization will aggravate most environmental and social problems. Cities' contribution to global warming can only increase.

In 2000, some 2.8 billion people (47 per cent of the world population) were urbanites. By 2030, 60 per cent of the global population will live in cities.

Between 2000 and 2030, the global population will grow by an estimated 2.2 billion. Of this, 2.1 billion people will be added to the world's cities.

In the past, urbanization has proceeded fastest in the countries now industrialized. In the more developed countries, 76 per cent of the population lives in cities in the developing lands; only 40 per cent are urbanites.

Today, cities are growing fastest in the developing world. The big are getting bigger. In 1950, there were just eight megacities, with populations over five million, in the world. By 2015, there will be 59 megacities, 48 of them in less developed countries. Of these, 23 will have populations over 10 million, all but four in the developing lands.

Natural increase now accounts for more than half of population increase in the cities; at most, little more than one-third of urban growth results from migration.

Up to a billion city dwellers lack adequate shelter, clean water, toilets, or electricity. The United Nations estimates that these problems cause 10 million needless deaths annually.

According to the Worldwatch Institute, fuels burned in cities account for 75 per cent of global carbon emissions from human activity.

Even though the rate of urbanization in India is among the lowest in the world, India has more than 250

million city-dwellers and by 2020 about 50 per cent of India will be living in cities. The strained centralized urban water supply and sanitation systems may well collapse.

None of India's 23 cities with million-plus populations meets WHO air-quality standards. Indoor smoke from cooking fires kills an estimated 5,00,000 people in India each year, mostly women and children.

NASA scientists point out that urbanization also tends to put buildings on the most fertile land, eliminating significant quantities of carbon-absorbing plants.

Urbanization also deprives surrounding areas of water: instead of sinking into the ground, rain is collected, piped to the city, used, treated as gray water and then discarded into the ocean. In some regions, such as near Atlanta, water levels in local aquifers are declining rapidly because the water that once replenished them now is lost.

The United States is the one major counter example to this trend. This automobile-reliant society built one of the best highway systems in the world and has relatively little mass transit, so more Americans live in the suburbs than in the cities.

The garbage glut

Recycling has delayed the "garbage glut" that threatened to overflow the world's landfills but the threat has not passed simply because it has not yet arrived.

Nevertheless, Kolkata, which has the world's largest peri urban wetland that doubles up as a natural waste recycling zone, is fighting a losing battle with realtors who have mercilessly encroached on it.

In August 2005, a week of monsoon rain killed more than 400 people in Mumbai, caused damage estimated at nearly \$700m and completely paralysed life. Two years later, nothing seems to have changed in

India's financial capital. Urban development issues are low down in the development agenda as ecologically untenable policies haunt the city that has lost about 1,000 acres of its mangrove cover, leaving it bereft of its natural flood-barrier and silt trap. As the monsoon rains wash silt into the bay today after flooding the city with sewage and filth for days, even Mumbai's natural harbour is threatened.

Americans now produce about 4.4 pounds of trash per person per day, twice as much as they threw away a generation ago.

In June 2002, New York City abandoned its 14-year-old recycling effort for glass, plastic and beverage cartons, which city authorities held was not cost effective. This cut recycling from about 21 per cent of waste to an estimated 10 per cent and sent an extra 1,200 tons of litter to landfills each day. By contrast, Seattle recycles about half of its solid waste.

Seventy per cent of U.S. landfills will be full by 2025, according to the EPA. United States has more than 2,200 landfills.

In London and the surrounding region, landfills will run out of room by 2012. For household trash, landfill space will be exhausted by 2007.

In some other regions, simply collecting the trash is a major problem.

Brazil produces an estimated 240,000 tons of garbage daily, but only 70 per cent reaches landfills. The rest accumulates in city streets, where it helps to spread disease.

Recycling and waste-to-energy plants are a viable alternative to simply dumping garbage. [Ω](#)

needs; the requirement to extract from nature with the quality of what is ejected back into nature, as mankind pursues its development agenda. Sustainable development assumed popular currency following the Brundtland Commission report that talked of meeting the needs of the present without compromising the ability of the future generations to do so.

It would not just be a matter of environmental sustainability but of socio-economic and political sustainability as well. The ethical and social aspects of this concept are now being woven into corporate costs because, eventually, the 21st century corporation is all about stakeholder acceptance – not exclusively shareholder approval. That is what makes out the "business" case for sustainable corporate practices – from extractive industries to the high performance automotive sector. There are fairly simple formulae that companies can use to determine whether or not their strategies are consistent with sustainability requirements.

...as human needs are ever increasing

One need not be an environmental expert to figure out that human advances are over-dependent on a limited supply of energy: oil, natural gas, fossil fuels; on a growing need for water; on an increasing need for land to grow more food and an even more pressing demand for land for industries to be sited on and, finally, on the atmosphere's ability to cleanse itself given the volume of noxious air that is thrown back into it by man and machines. Worldwide, half or more of the land in nearly one-third of 106 primary watersheds has been converted to agriculture or urban-

industrial uses. In other words, the character of development is such that it will make enormous demands on nature and this indeed will be so onerous that it will damage nature's ability to hold itself in a state of balance. This is what the proponents of climate change warn the world about.

What is worse is that with the increasing structured uniformity of economic and manufacturing systems, thanks to the worldwide structural reforms (the new LPG of growth: liberalization, privatization and globalization), increasing geographical areas will come under this common development programme that is based on making demands on nature. Environmental researchers believe that China and India soon will produce even more greenhouse gases than the major industrialized nations. Helping these two populous countries to enhance their standards of living without perpetrating ecological offenses will demand much more aid and diplomacy than the developed world has ever been willing to devote to this cause.

...and even agriculture becomes toxic

Even absolutely natural industries such as agriculture are now a product of chemical inputs at an unprecedented scale. The implications are quite clear: agrochemicals are leeching into the soil and finding their way into the food chain and eventually into the human body. In the USA, there is growing concern that pollutants such as perchlorate, the gasoline additive MTBE, and even the chlorine used to kill waterborne pathogens may represent significant health concerns. OECD countries support their farmers to the tune of over \$300 billion per year and much of that

Indian forests: A profile:

Deforestation rates, 2000-2005

Forest area: 67,701,000 ha

% of land area: 22.8

Annual change in forest cover: 29,400 ha

Total forest loss since 1990: 3,762,000 ha or 5.9 per cent

Forest Classification

Public: 98.4 per cent

Private: 1.6 per cent

Use:

Production: 21.2 per cent

Protection: 14.8 per cent

Conservation: 21.7 per cent

Multiple purpose: 42.4 per cent

Forest Area Breakdown :

Modified natural: 32,943,000 ha

Semi-natural: 31,532,000 ha

Plantations

Plantations, 2005: 3,226,000 ha

% of forest cover: 4.8 per cent

Annual change rate (00-05):

84,200,000 ha

Carbon storage

Above-ground biomass: 4,093 Mt

Below-ground biomass: 1,085 Mt

Area annually affected by

Fire: 3,700,000 ha

Insects: 1,000,000 ha

Diseases: 8,400,000 ha

Tree species in IUCN red list

Critically endangered: 50

Endangered: 98

Vulnerable: 98

Wood removal 2005

Industrial roundwood: 1,252,000 m³ o.b.

Wood fuel: 3,472,000 m³ o.b.

Value of forest products, 2005

Industrial roundwood:

\$208,644,000

Wood fuel: \$8,023,000

Non-wood forest products:

\$179,132,000

Total Value: \$395,799,000

(Source: <http://rainforests.mongabay.com/20india.htm>)

ends up encouraging overuse of chemical inputs and cultivation on unsuitable land.

...and toxicity enters human systems through the food chain

Willy nilly, every human system is being chemically interfered with by the food it eats, by the air it breathes, by the water it drinks and very often by the workspace in which it earns a living. Multiply the enormity of this threat to a human being by the number of humans – around 9 billion by 2050 – and one does not need to be an expert of any kind to understand the dimensions of this threat. Supporting the diets of the additional 1.7 billion people, expected to join the human population by 2030, at current average dietary water consumption would require 2,040 cubic kilometers of water per year – as much as the annual flow of “24 Nile rivers”.

...India is no exception

The Indian subcontinent is a good case to study as an ecological disaster story. From the plight of the forests to those of the hills, the rivers and the countryside, the bad news pours in. The good news is few and far between. Officially, India has a gross area of 752.3 lakh hectares notified as forests (though skeptics question the veracity of this claim). This covers around 19.47 per cent of India's geographical area giving the country a paltry per capita forest area of 0.088 hectare that is the lowest in the world. The Ministry of Environment and Forests, however, says that the country has achieved a reduction in the pace of forest cover loss and hopes that it will achieve a forest cover of 25 per cent by 2007.

...India's degraded forest typify the problem

Writing perceptively on the issue,

environmentalist Ravinder Sood says that only 50 per cent of India's forest area is actually under tree cover, the rest is in various stages of degradation. The U.S. spacecraft, Landsat's revelations are telling: India's forest cover declined from 16.9 per cent to 14.1 per cent in the early eighties. In other words, India is losing forest cover at the rate of 1.3 million hectares every year and the forest covers falling within 100 kms of major cities are diminishing at the rate of 15 per cent every year, which is nothing short of a disaster.

Reports now suggest the government will plan 'forest SEZs' in a 'multi-stakeholder partnership' and give degraded forest land to industry to produce raw material like paper pulp. Thus government-owned forest lands with a tree cover of less than 10 per cent will be contracted out for growing plantations after a bidding process for industries to 'farm' trees, which can be used as raw material. Industry has been asking the government to open up 1.2 million hectares of degraded forest land to such 'partnerships'. The ministry believes it will help generate investment in increasing India's forest cover to 33 per cent by 2012 while industry is looking at an assured source of raw material. Those who live off the land are expected to benefit from being employed as labour by industry and whatever else they can negotiate with the industry.

...exacerbated by shrinking water supplies

Water is the next sad Indian story. One facet is around the depleting water resources and the other about inadequate water supply. Lester Brown underscores the water crisis caused by countries by overpumping aquifers to satisfy their water needs. In the lead are the big three grain

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producers: China, India and the USA. "More than half the world's people live in countries where water tables are falling", says Brown of the Earth Policy Institute, making a special reference to India where water shortages are so serious simply because the margin between actual food consumption and survival is so precarious.

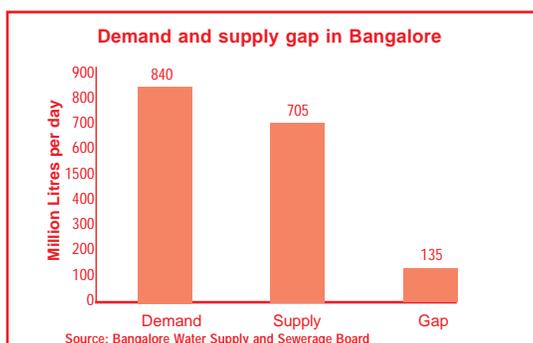
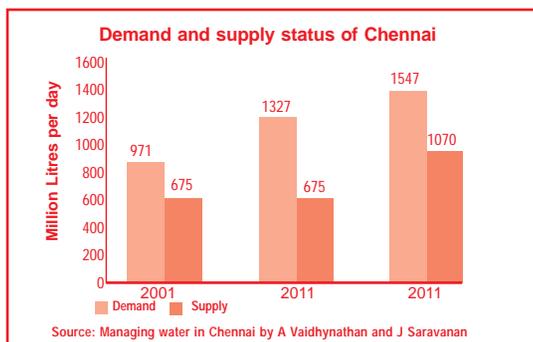
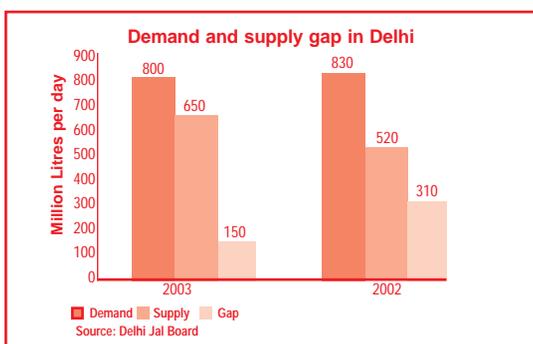
Fred Pearce writes in the New Scientist that the 21 million wells drilled are lowering water tables in most parts of the country. "In north Gujarat, the water table is falling by 6 metres per year. In Tamil Nadu, a southern state with more than 62 million people, wells are going dry almost everywhere and falling water tables have dried up 95 per cent of the wells owned by small farmers, reducing the irrigated area in the state by half over the last decade", says Brown.

...and contaminated water

The more critical concern is drinking water for which a majority of Indians depend on groundwater. Yet the shallow wells are often found affected by fluoride, arsenic, iron, salt and/or microbial contamination. Punjab, Haryana, Rajasthan, Gujarat, Uttar Pradesh, Madhya Pradesh, Bihar and West Bengal have a very dangerous arsenic problem.

Yet, there is never enough water. Notwithstanding efforts to improve access to drinking water in India, the World Bank estimates that 21 per cent of communicable diseases in India are related to unsafe water. In India, diarrhoea alone causes more than 1,600 deaths daily. Combined with the water scarcity are unhygienic practices with only 14 per cent of the rural population having access to latrines. Such people do not wash their hands, further transferring disease. Matters

are equally pathetic at rural and urban levels. The Central Public Health Engineering Organization estimated (March 31, 2000) that, though 88 per cent of the urban population has access to a potable water supply, such supply was erratic with poorly maintained transmission and distribution networks. What this means is that between 25 per cent and 50 per cent of the water is wasted and low pressures and intermittent supplies lead to back siphoning. Water is typically available for



Source: WaterPartners (www.water.org/waterpartners.aspx?pgID=968)

only two to eight hours a day in most Indian cities. The situation is worse in summer when water is available only for a few minutes, sometimes not at all.

...as ecosystems get degraded

From the Himalayas to the Bay of Bengal – India has the world's most cherished natural resources and the dubious distinction of destroying whatever it can. The Himalayas are today a fast degrading ecosystem – thanks to the population pressure, agricultural practices, extractive industries and massive denudation of forests. All this has taken a toll of the mountain system that extends for 2,500 kilometers from north-west to the south-east extending into the north-east of India with a breadth between 250 km and 400 km, serving as the catchment area for the main Indian rivers.

"In irrigated valleys, cultivation of fruits, vegetables and other high value cash crops as in Himachal Pradesh and elsewhere has ushered a new era of economic development. Although Himachal Pradesh is today cited as a model of hill development, the disproportionate development in different regions calls for a thorough introspection as to whether this growth is sustainable or not from the ecological view point", writes P. K. Khosla, Vice-Chancellor, Himachal Pradesh Agricultural University, Palampur.

Closer home is being perpetrated the silent destruction of the still active Sundarbans delta that was considered an area of utmost global concern by the directors of An Inconvenient Truth. Once again, Kolkata came up for discussion but in a rather dubious light. The wanton destruction of the Sunderbans at the mouth of the Bay of Bengal, with its vast

mangroves, distinctive ecosystem and biodiversity, was not only a matter of destroying nature but also one of destroying a natural bulwark against tropical storms that may one day destroy the entire populous area.

... there is trouble in the jungle book too

Elsewhere it is the animal world that is being attacked. To go by Bittu Sahgal's account, India may well be losing a tiger a day, courtesy poachers in cahoots with international traders. The Editor of Sanctuary and a passionate conservationist writes: "At least one elephant and two leopards lose their lives to the same network every day. Rhinos, lions, lesser cats and birds such as the Great Indian Bustard and Bengal Florican are faring no better. Turtles are dying at Gahirmata, chinkaras and houbara bustards are being wiped out by cement factories in Kutch and poachers have infiltrated the highest echelons of political power". Poachers use guns and often dig pits with sharp stakes in them and "cause rhinos and other animals to fall to their deaths as the animals follow predictable paths every day. Poisoning waterholes and using steel traps are other methods that these harbingers of death employ".

The state governments are usually apathetic sometimes not even paying guards their salaries or equipping them with shoes or uniforms. In "Assam, there are around 600 confiscated horns locked away in forest safe-houses and conservationists are asking that they be burned to send a message to the trade that their nefarious business has no future. Others suggest that the horns be sold and the money used to buy more guns and

"More than half the world's people live in countries where water tables are falling", says Brown of Earth Policy Institute, making a special reference to India, where water shortages are so serious simply because the margin between actual food consumption and survival is so precarious.

equipment but this is only likely to fuel the illegal trade in rhino horn".

...will there be a new growth trajectory?

Faced with what has been described as a veritable environmental holocaust, development experts have been urging both India and China to develop their own development trajectory that would be different from that of the United States. Indeed, the world cannot afford India and China going the USA way and the Worldwatch Institute states in its State of the World 2006 report that the "dramatic rise of China and India presents one of the gravest threats – and greatest opportunities – facing the world today". The choices that the two countries make "will lead the world either towards a future beset by growing ecological and political instability – or down a development path based on efficient technologies and better stewardship of resources".

...CDM may provide some hope, however bleak

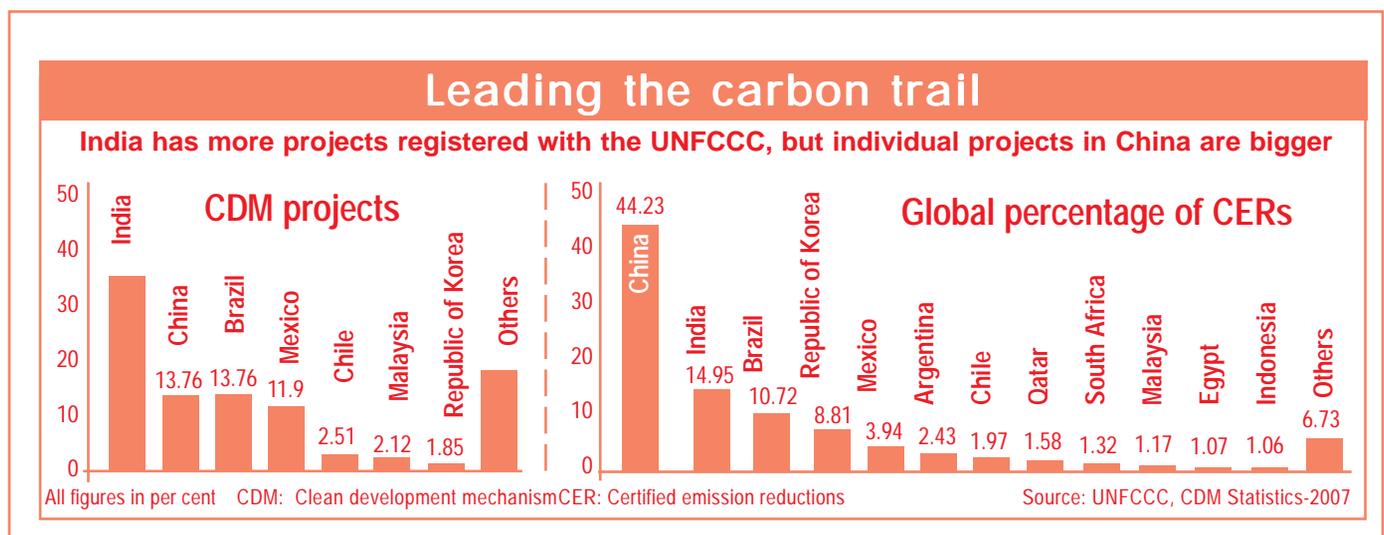
Has there been a serious corporate

response to this emerging ecological scenario? There has certainly been a heightened level of acceptance of corporate social responsibility with CSR and triple bottomline commitments finding a place in the agenda of top Indian corporations. Some of this translates into genuine environmental responsibility. India Inc's greater focus has been on benefiting from the business opportunities of the Kyoto Protocol's clean development mechanism (CDM). India is benefiting from carbon credits or earning certified emission reductions (one metric tonne of carbon dioxide emission reduced earns one CER valued at around \$13, which is tradable globally). However, India itself does not have a carbon emission reduction target and, until that becomes a reality, Indian companies may not take the environment seriously.

...only China and India can change the existing order

To go by one telling example: Currently, only China and India have the large coal-dominated energy systems. Coal provides more than two-thirds of China's energy and half of India's. Clearly, both have a critical role to play in the global efforts to slow

The grim truth is that "Rising demand for energy, food, and raw materials by 2.5 billion Chinese and Indians is already having ripple effects worldwide", according to the Worldwatch President Christopher Flavin and the "record-shattering consumption levels in the U.S. and Europe leave little room for this projected Asian growth" because if China and India consume resources and produce pollution at the current U.S. per-capita level, it would require two planet earths just to sustain their two economies.



Around 18 million CERs have so far been awarded to Indian companies by the United Nations Framework Convention on Climate Change that has a CDM executive board under its aegis. This means an income in excess of Rs 959 crores. India has also registered 267 projects under CDM in 2007, which is the highest in the world and India Inc is waking up to the possibilities of adding extra shine to its annual reports courtesy the environment.

global climate change. China is already the world's second largest emitter of climate-altering carbon dioxide, while India is fourth and this indicates serious trouble. If the dimensions of this damage do not serve as a wake up call for corporates, what will?

The Worldwatch Institute is categorical in saying that the earth lacks the energy, arable land and water to enable the fast-growing economies of China and India to attain Western levels of resource consumption. The "State of the World 2006" report explains how the planetary powers are shaping the global biosphere and affecting world economic policies because "the world's ecological capacity is simply insufficient to satisfy the ambitions of China, India, Japan, Europe and the United States as well as the aspirations of the rest of the world in a sustainable way".^Q

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SECTION IV

India Inc: Leading From the Front

Commentators and leaders of business, talking about India's importance in the global corporate order, seem to be missing the most important point. For the world, India is an enormous market opportunity, which it is; it is also an enormous pool of technological manpower functioning in a democratic system under the rule of law.

The most striking development in the evolving drama around India Inc is that its members are now providing leadership to the world industrial and even political order. Dilip Singh Saund set the ball rolling several decades ago by becoming the first Indian American to serve in Congress. Today there is the Republican whiz kid Bobby Jindal becoming the first Indian American Governor of Louisiana. Closer to home there is the amazing story of Indian leadership in the Persian Gulf: some four million Indians making an enormous difference to the region and to their home land through inward remittances.

Creating value globally

All this is a far cry from just a matter of a ubiquitous presence in America's Silicon

Valley – impressive though that was. It is equally a matter of dominating the decision making process with global finance companies. One is not referring to the likes of Vinod Khoslas or Ram Sriram only, one is looking at a whole world of 40 year old Indians suddenly taking over public corporate space (15 per cent to 20 per cent of the team members of global funds are Indians¹), some making a quiet entry and others, such as fund manager Mohinish Pabrai who made global headlines with his \$6,50,000 bid to lunch with Warren Buffet.

...through quality leadership

The India Inc story is not then about Indians taking over global industry – absolutely striking though they may be – but about Indians' providing leadership to business, political and socio-economic issues. There are questions about whether India is the best investment destination or not. Apple cancelled plans to open a support center in Bangalore, sacked its recruits and announced that "We have re-evaluated our plans and have decided to put our planned support center growth in other countries". No explanations were

"I am convinced that the 21st Century will be an Indian Century. The world will once again look at us with regard and respect, not just for the economic progress we make but for the democratic values we cherish and uphold and the principles of pluralism and inclusiveness we have come to represent which is India's heritage." – **Dr Manmohan Singh**, January 7, 2005 addressing the Indian diaspora at the Pravasi Bharatiya Divas, Mumbai

Trends 1: Economic agenda, assuming that the current thinking in the Prime Minister's Office and the Planning Commission does not change, will include:

- Encouraging labour-intensive employment, particularly agricultural production and small-scale industry reform.
- Investing in agricultural diversification, including meat, fishing and dairy industries.
- Expanding agricultural productivity by investing in rural infrastructure, expanding microfinance projects and investing in human capital, such as rural education and child day care.
- Enhancing current small-scale industry reforms, such as in the textile and apparel industry.
- Reducing the remaining vestiges of protectionism, such as tariff in the automobile sector.
- Strengthening implementation stages of current and new economic reform programmes by bolstering regulatory agencies and establishing precise monitoring processes and systematic mechanisms for ensuring accountability.
- Adopting a participatory approach to economic reform by initiating more public-private partnerships.

Based on A Vision for a 21st Century India: Economic Powerhouse and Global Leader

¹ Indians are the Flavour of PE, Venture Funds, The Economic Times, August 28, 2007

"There is not a top-tier VC fund without a couple of successful partners of Indian origin – KPCB, Sequoia, Matrix Norwest, NEA, DFJ etc – the list is endless". – **Ajit Nazre**, Partner, Kleiner Perkins Caufield & Byers KPCB

provided.

No one can offer any arguments about the Indians at the top though. Nor is the strength of the billion strong Indian market a critical differentiator. Representing as it does one sixth of humankind, it has no option but to influence global order. It is the quality of the leadership that this one sixth of humanity is throwing up that is setting the stage for the Indian conquest of the 21st century with far greater conviction than China. It is the quality and quantity of investment that India is taking abroad that assumes significance as India Inc's outward FDI has crossed \$19 billion in 2006 up from \$9.6 billion in 2005. The story of India's overseas acquisitions numbering in excess of 300 is astounding.

...and leading in median earnings

Since global business and politics are closely intertwined, the presence of Indian business leaders in the U.K. House of Lords for instance – Kolkata's own Lord Swraj

Paul included – enhances the power of the Indian voice. So do the Indian born Canadian Members of Parliament and the senior federal appointees in the USA, thanks to which "Indians are poised to capitalize on the double dip diversity of Western democracies", says Parag Khanna² (in Bollystan: India's Diasporic Diplomacy)".

...as a 'best educated group'

'We the People: Asian Americans in the United States', released by the US Census Bureau, confirms that Indians are the best-educated, highest-earning, youngest and most liked white-collar workers among all major ethnic groups in the U.S., including native-born Americans. They are also among the top earners. Indian men had the highest year-round full-time median earnings (\$51,900), more than the Japanese (\$50,900) and well ahead of the national average (\$37,057) and the Asian average (\$40,650). There are other

Trends II: Development priorities on the cards are:

- A comprehensive socio-economic reform agenda that recognizes that social and economic challenges must be addressed holistically rather than in isolation.
- Ensuring that reform efforts are participatory, encouraging the involvement of and co-ordinating efforts with local governments, businesses, civil society and non-governmental organizations.
- Recognizing that it is a mistake to replicate U.S. development models. India cannot afford to delay addressing resource misuse. It must do so immediately to improve the livelihoods of the lower quintiles of society and sustain its current path of development.
- Increasing water supply and distribution in agricultural areas by designing tank rebuilding projects to store and distribute rain water during dry periods and by focusing on attention to sewage system design in urban areas.
- Continuing to strengthen policies for reducing vehicle pollution and encouraging innovative strategies that would challenge the reliance on private transportation.
- Recognizing that focus on HIV/AIDS treatment should not come at the cost of deploying adequate resources to HIV/AIDS prevention and striking a balance between treatment and prevention to successfully battle the AIDS/HIV crisis.
- Acknowledging the connection between women's unequal status in India and their high rates of infection; reform laws to protect women's rights, including those regarding marriage, sexual and domestic violence, inheritance and education.
- Enhancing funding and strengthen programmes concerned with social factors underlying the current HIV/AIDS crisis, particularly those focused on women's unequal status, including women's health, education, and legal issues regarding marriage, sexual and domestic violence.

Based on **A Vision for a 21st Century India: Economic Powerhouse and Global Leader**

2. The Foreign Policy Centre <http://fpc.org.uk/fsblob/377.pdf>

accounts suggesting that Indians report a median income of \$60,093 that is double the American average with 200,000 millionaires in the key technology and financial centres.

...also leading Asia

India's position in the Asian arena is of even greater significance. Asia's growth trend indicates an increased share of global GDP to around 30.1 per cent by 2020 with India and China as the strongest growth drivers. India's share in this regional growth could well be as high as 10 per cent by 2020, says a just released ILO report: Visions for Asia's Decent Work Decade: Sustainable Growth and Jobs to 2015. All this is, of course, subject to the continuing of the reforms agenda on lines that have been repeatedly indicated by the Indian Prime Minister. A Vision for a 21st Century India: Economic Powerhouse and Global Leader (March 17, 2005) has prepared an interesting outline of issues on India's economic development and multilateral agenda that will create ambient conditions for maximizing India's growth potential over the largest cross section of people.

...and getting better at home

Current indications point to a spreading of improving productivity to the small and hitherto unnoticed sector of "performing India", which has seen even the small and the unorganized sector making full use of globally accessible software and help from

homegrown management consultants giving the top players a run for their money. There is an interesting case for Indian business practices that defies global standards that MV Subbiah of the Murugappa group realized when he introduced the best management practices of the British collaborator in a cycle-manufacturing operation but found in the Hero group unit an unbeatable competitor.⁴ The Indian worker is naturally innovative and, given the right ambience, can achieve wonders at the workplace which, for instance, a Chinese counterpart, who is better at following orders meticulously, may not be able to.

...as India Inc moves

India Inc's growth has three definite trends: the mega corps consolidating their act and seeking to be the biggest in the business globally. Large companies/consultancies seeking to protect their turf and then there is a whole world of Indian companies that is seeking to diversify in all available growth paths. Edible oils company Amrit Banaspati's steps into education; switch maker Anchor makes toothpaste, adhesive manufacturer, Pidilite makes sweet snacks, Action footwear enters healthcare. They are only some examples. Arvind Mahajan, executive director, KPMG Advisory Services explains that⁵ "Most markets in India are growing at 20-30 per cent, which makes it easier to enter a market and

Goldman Sachs Dreaming with BRICs: The Path to 2050, which first opened global minds to the real India story, showed three clear trends:

- The Indian economy could be larger than Japan's by 2032
- It has a consistent growth potential of five per cent over the next 30 to 50 years.
- This means an Indian potential to raise its per capita dollar income by 2050 to 35 times its current levels.

Trends III: India's multilateral engagement programme with telling impact on global leadership position

- Securing the country's position as a regional leader by promoting democracy in the region.
- Demonstrating greater political will and leadership on south-to-south cooperation by pressing forward on a South Asian Free Trade Agreement and strengthening organizations already in place, such as SAARC and ASEAN.
- Working towards resolving the India-Pakistan conflict by establishing a bilateral and preferential trade agreement with Pakistan.
- Strengthening non-security and economic Indo-Pak programmes such as those that foster people-to-people contacts.

Based on A Vision for a 21st Century India: Economic Powerhouse and Global Leader

4. The Foreign Policy Centre <http://fpc.org.uk/fsblob/377.pdf>

garner shares."

...with credible performance

THE BIG PICTURE

Results of 2,308 companies look good but there are dangers in the fine print

	JUNE '07*	JUNE '06*	% CHANGE
Sales	5,33,784,	4,49,058	19
Other income	23,578	13,619	73
Expenditure	4,10,240	3,59,386	14
Raw material costs	2,85,169	2,53,830	12
Salary costs	36,964	30,310	22
PBDIT	1,54,594	1,14,368	35
Interest	55,127	38,028	45
PBDT	99,467	76,340	30
Depreciation	15,834	14,219	11
PBT	80,709	57,850	40
Tax	21,436	15,264	40
PAT	59,273	42,586	39
SENSEX COMPANIES	JUNE '07*	JUNE '06*	% CHANGE
Sales	1,33,042	1,14,860	16
PBDIT	38,238	32,474	18
PAT	24,668	19,900	24

Source: CMIE & Motilal Oswal
(Business Today, August 26, 2007)

India Inc is doing well, to go by the results of the June 2007 quarter, with 2,308 companies registering a 39 per cent growth and a top line enhancement of 19 per cent. However, it is the second rung companies that are doing better and the operating incomes of the Sensex 30 companies were up 17.7 per cent only the rest coming from other incomes in a PBDIT growth of 18 per cent. High oil prices, global slowdown and the American sub prime fallout coupled with a talent scarcity at home are areas of concern. The QI performance is a happy 9.3 per cent growth with inflation at 3.94 per cent. The small and medium Indian enterprise too is trying to grow both organically and through acquisitions, some global as well.

...and SMEs make a mark

Some of the smartest developments in India have taken place in the SME sector

that is increasingly shedding its cheap labour and antiquated practices image and wearing the slick operations cap. SMEs must perform 'develop' products in a shorter timeframe and market them as quickly as possible if they are to receive the outsourced orders of the larger manufacturing companies.

The SME segment is growing at 12 per cent CAGR in India⁶ and this is expected to go up to between 27 per cent and 30 per cent by 2010. A Tholons report states that the year 2007 will be that of SMEs, which will play a significant role in the services globalization arena. Anticipating the next wave, private equity investors, who are flush with funds, are all set to power the SMEs by investing up to \$5 billion in the Indian market to fund the expansion plans of BPOs and KPOs. Coming in for increased attention are SMEs in smaller towns. Channel Technologies reports that the vast and untapped reservoir of SMEs in non-metro cities will be the next important solution providers for cost-effective IT solutions. SAP India plans to increase its Indian customer base to 15,000 by 2010 of which 80 per cent will come from the SME segment. IBM India reports that its small and medium business division is its fastest growing unit and contributes nearly 20 per cent of the company's revenues worldwide.

...the global gameplan is different

"Increasingly, the main drivers for Indian companies making overseas investments are acquisition of new markets, accessing new technologies, improving efficiencies and becoming global leaders in their respective fields. Indian companies are also being compelled to actively consider cross border acquisitions to maintain their growth momentum, take on global competition and to acquire global visibility and international brands." – **The MBA Universe**

5. Gimme Growth, India Inc's Latest Mantra: Perna Raturi and Govindkrishna Seshan; June 26, 2007; Rediff news June 26, 2007 <http://www.rediff.com/money/2007/jun/26spec2.htm>

6. IT Companies Target SMEs in Smaller Centres, Business Today, September 9, 2007

The global big game is not about the small and innovative Indian though. It is about the big Indian taking on the bigger global multinational on the strength of their superior global delivery models. Several management experts have projected interesting business futures for the Indian corporate sector and management author Mohan Babu⁷ builds an interesting three-scenario perspective that is worth considering as India Inc starts to accept the idea that its beginning may have been brilliant and eye-catching but taking on the world means a great deal of harder work and smarter strategizing.

Scenario 1. Mergers and Acquisitions:

Global consulting companies are masters of growing by acquiring (IBM bought PwC) and big consulting firms will seek to acquire large Indian software houses.

Scenario 2. Control by Proxy: Most large Indian software companies are still controlled by their founders and there will be efforts to "manage a web of partnerships and gain control by proxy". GE's entry into the Indian software arena is a case-in-point. GE started by sourcing parts of its work from several vendors in India and even had the option of acquiring a controlling stake in one of them before expanding its own development centre in India, bypassing the old partners.

Scenario 3. If you cannot buy them...beat them at their game:

The big multinationals will play their dual-game, one at home (the 'home boy' role) and the other in India around throttling Indian competitors in India by reducing margins and growing here. Accenture, incorporated in Bermuda, a multi-billion dollar consultancy, projects itself as a blue-blooded American company. Similarly, IBM is able to seamlessly project itself as a 'local' in most western countries where it operates, though it is a thoroughbred American company. On the flip side though, such Indian companies as TCS have subsidiaries that find it extremely hard to shed their 'low cost Indian techie' image.

Says Babu: "Regardless of how the scene pans out, one thing is for certain: This is definitely not the time to kick up the boots and party. It is time for India Inc to roll up the sleeves and strategize".

...as turnaround experts

While this is about protecting one's turf, there is another facet to the India trend story of India emerging as a global turnaround expert. Tata Steel's take over of Corus with a credible commitment to turning it around is just an immediate case in point. There have been several other such global turnaround stories which

"If you are not here in India, making the right investments and finding and developing the best employees and business partners, then you won't be able to combine the skills and expertise here with skills and expertise from around the world, in ways that can help our clients be successful".

Samuel Palmisano, CEO IBM.

The M&A scene

Cross-border deals from India in 2006 (480 valued at \$20.3 billion) grew much faster than domestic deals. Of them, 40 were worth over \$100 million. The domestic, inbound and outbound deals increased in the range from 36 per cent to 42 per cent. The share of domestic, inbound and outbound deals were more or less stable, with domestic deals having a share of 44 per cent, inbound deals 16 per cent and outbound deals 40 per cent. Tata Steel's acquisition of the Anglo Dutch steel maker Corus at a price of \$12.1 billion has already set the trend for year 2007. Hindalco's announcement of the acquisition of Novelis for \$6 billion has further fuelled this trend. Vodafone's deal of \$11.1-billion for Hutchison's stake in telecom operator Hutchison-Essar spells the trend for inbound investments. –

Source: Grant Thornton

7. No Time for India Inc to Relax <http://www.garamchai.com/mohan/ITP02Feb04.htm>

Possible high-end services to be outsourced to the Indian KPO sector

- Research & Development
- Business and Technical Analysis
- Learning Solutions
- Animation & Design
- Business & Market Research
- Pharmaceuticals and Biotechnology
- Medical Services
- Writing & Content Development
- Legal Services
- Intellectual Property
- Research
- Data Analytics
- Network Management
- Training & Consultancy

<http://www.outsource2india>

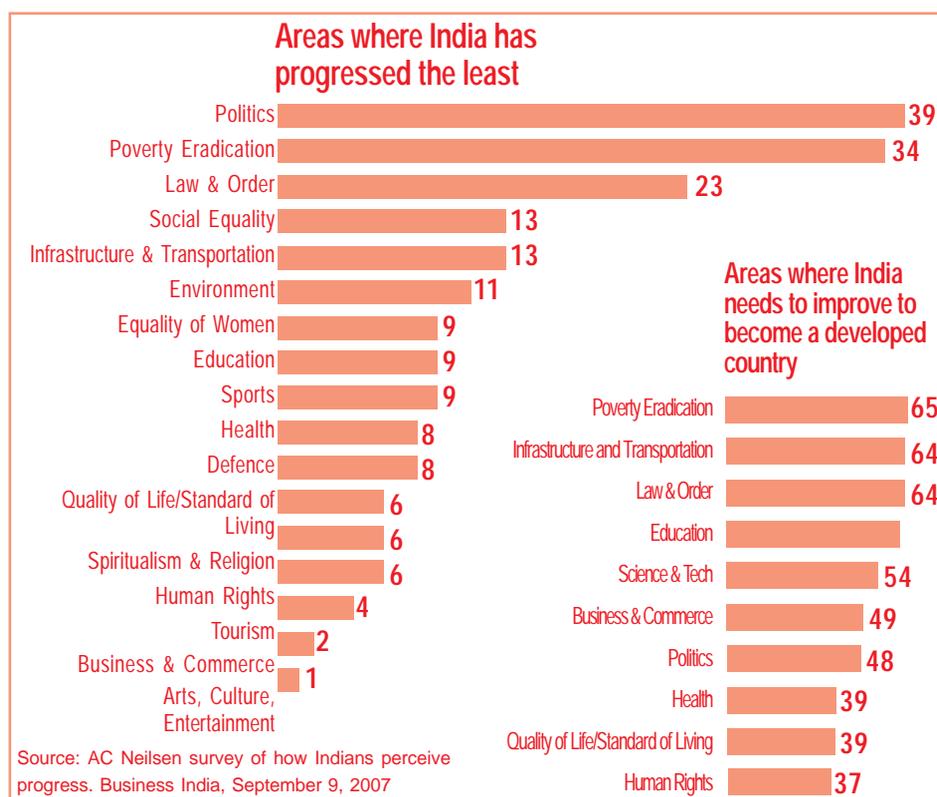
translate into export of management excellence. Wockhardt, having acquired U.K.'s Wallis Laboratories, first let it be run by an European CEO but realized that running it from India as an integrated part of its own operations would quicken the turnaround story, which it accomplished within six months.

The Tata group cut its takeover teeth with Tata Tea's successful acquisition and assimilation of Tetley of the U.K. through a strategic debt restructuring exercise that reduced interest costs and an injection of £30 million into the Tetley group to replace the high-cost debt, using Tetley's global retailing operations to complement its own. Since then there has been an M&A rise, growing at a compounded annual growth rate of around 28 per cent between 2002 and 2006, with 2005 and 2006 really finding India Inc step on the gas. The value of M&A deals is up from \$7.5 billion in 2004 to \$21.4 in 2006⁹.

...as policy supports global investments

Egging this activity on is favourable policy on overseas investments, allowing companies to invest the entire ADR/GDR issues proceeds for overseas acquisitions, direct investments in joint ventures and wholly-owned subsidiaries. Even so India Inc seems to want to rest a while before relaunching itself with renewed appetite. "The whole environment right now is to wait and see. The credit problem and its impact on the ability to finance these deals is making some corporates take a wait-and-watch stance", according to Falguni Nayar, managing director of Kotak Investment Bank.¹⁰

The next trend will then be developing acquisition financing options in India with a pronounced role of structured finance in transactions. Leveraged buyouts are becoming an attractive option for funding



9. CII report on M&A trends

10. India's M&A drive slows amid credit squeeze fears; August 21, 2007, Reuters

acquisitions with Tata Steel's acquisition of Corus in February 2007 and the Kohlberg Kravis Roberts & Co. buyout of Flextronics in April 2006.

...and India gets increased market access

Such successes and presence in diverse economies give India market access to more and more regions as the turnaround experts of choice. This is supplemented by the increasingly strong voice of India through its international professional and social organizations. "Acquisitions also give Indian firms access to developed markets. In fact, Bharat Forge has emerged the world's second-largest forging company mainly by way of mergers and acquisitions. It acquired Carl Dan Peddinghaus GmbH, one of the largest German forging companies, in late-2003; CDP Aluminiumtechnik of Germany in December 2004; Federal Forge of the US in June 2005; and Imatra Kilsta AB of Sweden, along with its wholly-owned subsidiary Scottish Stampings, Scotland, in September 2005 and the forging major is reaping dividends as a result", says Ajay Khanna, CEO, India Brand Equity Foundation (BusinessWeek, January 30, 2006).

...and ceases to be only the world's back office

Quite clearly the hullabaloo over outsourcing is over even though the outsourcing business continues at a steady clip. The Union Minister for Trade and Commerce Kamal Nath talked of "10 paradigm shifts taking place simultaneously in India" last year at Davos and insisted that outsourcing was not one of them. "We now want people to see India as a manufacturing base, as the youngest nation

with fortunate future demographics." The future lies in engineering and knowledge process outsourcing. The current order books show that India is receiving engineering, knowledge processing and manufacturing projects with high-end work done on the sub-continent, as firms sending IT/ITeS/BPO work realize they can trust their Indian partners to deliver on the higher end of the scale.

...but serves the higher end of the scale

GlobalSourcing Now says that the Global Knowledge Process Outsourcing industry will be worth \$17 billion by 2010, of which \$12 billion would be outsourced to India. Indian KPOs will employ more than 250,000 KPO professionals by 2010, compared with the current figure of 25,000 employees. A report by Evaluateserve predicts that India will capture more than 70 per cent of the KPO sector by 2010. Apart from India, countries such as Russia, China, the Czech Republic, Ireland, and Israel are also expected to join the KPO industry¹¹, says [outsource2india](http://www.outsource2india.com).

...and becomes a software testing hub

India is on its way to becoming a leader in the software testing market with more and more companies outsourcing their software testing services to India that has a large availability of testers. Over the last few years, the Indian players have proved that they can offer testing services at a fraction of the cost. Software testing, makes sense, since it costs a lot of money and time to find and fix the software bugs or errors in software, once the product is released in the market. Software bugs cost the U.S. economy an estimated \$59.5 billion annually, which is equivalent to 0.6

"They (Indians) have sprouted dozens of professional and social organizations, from the American Association of Physicians of Indian Origin to the Indian National Overseas Congress. Consistent with other diaspora groups, accruing wealth is an essential first step to gaining access and influence in the democratic marketplace. A clutch of groups such as the U.S.-India Political Action Committee (USINPAC) are becoming Washington power brokers, using power lunches to recruit the likes of New York Senator Hillary Clinton for the Senate's growing "Friends of India" caucus. – **The Foreign Policy Centre** <http://fpc.org.uk/fsblob/377.pdf>

11. <http://www.outsource2india.com/default.asp>

Questions around the Knowledge Society

India's near miraculous ascendancy in the global knowledge society is clearly a tribute to its focus on higher education that the country set out to give its people at the time of Independence. India's literacy rate then was quite an amazing 87 per cent. The focus on higher education helped those who entered the charmed circle and started what was to become a deep educational stratification and, therefore, loss of opportunities for those who missed out.

With the evolving knowledge society demanding more and more people, India's talent crunch has reached a tipping point. A couple of years ago, BusinessWeek reported: "With more Indians able to afford cars, tractors and refrigerators, the country's factories are expected to need 73 million workers by 2015, 50 per cent more than today...India's airlines will add 440 new planes by 2010, which means 3,200 additional jobs for pilots, according to the Center for Asia Pacific Aviation in New Delhi... As India's traditional village kiosks and mom-and-pop shops are supplanted by hypermarkets and some 250 new malls over the next three years, the retail sector will add 2.5 million jobs by 2010, (Ma Foi Management Consultants Ltd. Estimates)" – BusinessWeek, November 7, 2005, India: Desperately Seeking Talent

The government is focused on manufacturing business and create Manufacturing Investment Regions of 250 square kms each. The first priority is to create Petrochemicals and Chemicals Investment hubs that will be developer managed. – Business India, September 9, 2007

per cent of its gross domestic product. Users and the developers end up paying for the bugs in the software. This loss can be reversed if the companies invest in timely and high quality software testing. The META Group study reveals that the software testing market in India will touch \$700 million to \$1 billion by 2007.

At another level, the future lies in maximizing productivity of the manufacturing tradition with 41-million employed in the sector, which has reported a 12 per cent growth for the past few years. The future lies in engineering goods, chemicals, pharmaceuticals and biotech, also fashion, lifestyle products and leather goods. This would be the future with jobs for India's unemployed, with an average of three jobs created in the service sector with every job created in the manufacturing sector, as Minister Kamal Nath repeatedly emphasizes at international meets.

...and an EPO

Meanwhile, engineering process outsourcing would gain momentum in the country with a potential to exceed \$ 40 billion by 2020, catapulting India's market share in this category to 30 per cent from the current 12 per cent. This would need the government's support, adequate quality of service providers and trade bodies that will need to boost investments in infrastructure and improve marketing efforts, according to Mr Kamal Nath. Engineering goods exports from India have crossed \$5 billion in the first quarter of 2006, showing a growth of 20 per cent but this could be topped by another 10 per cent, he said, citing an A. F. Ferguson strategy paper prepared for the Engineering Export Promotion Council¹².

12. <http://www.indlawnews.com/3ded63dcc12eb4600970d1c200d8549f>

13. Rediffnews <http://www.rediff.com/money/2006/aug/01bpo.htm>

...also an LPO

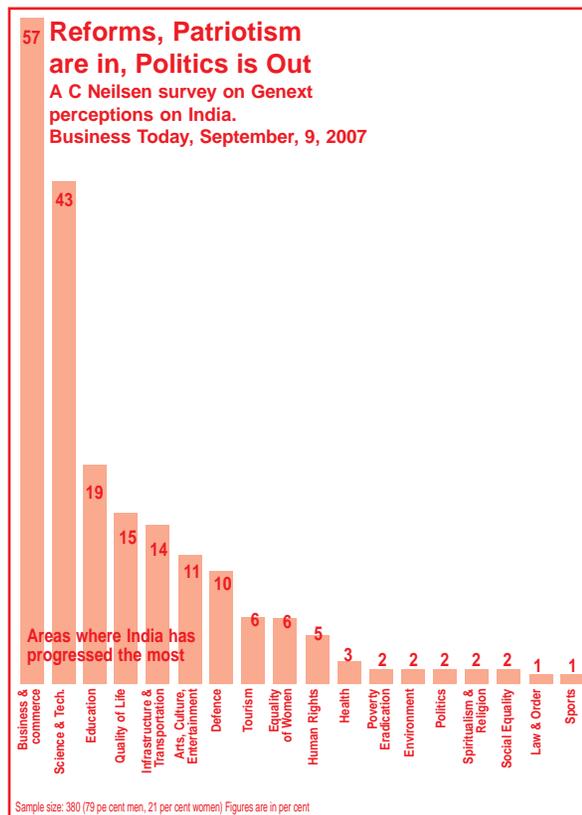
The next exciting frontier is legal process outsourcing that has a potential to create 70,000 jobs by 2015. Nasscom estimates of current addressable market potential for legal services that can be outsourced from the U.S. alone are pegged at \$3 billion to \$4 billion. It is estimated that only 2-3 per cent of the potential market has been tapped so far. With the Indian legal system akin to both the British and the U.S. legal systems, it is a matter of providing adequate security assurances on transfer of data and secrecy before India can make a serious dent in this market. "Lawyers in India charge a pittance in comparison to their U.S. counterparts where legal services are billed at a whopping \$125-150 per hour. In India, the same job costs \$20-30 per hour", says Shival Satyarthi, a lawyer with an outsourcing firm¹³.

...with other areas of outstanding growth such as mobile telephones

The mobile and the mall stories are the most pervasive in India because they are so visible and because they have spawned so many new businesses, inconvenienced others and provided employment opportunities to so many. That on the one hand and, on the other, telecom operators who are breaking up monolithic infrastructures into smaller companies and receiving high valuations for them with profitable use of their tower power (there will be 2,20,000 towers in India by the next year) and 220 million mobile phone subscribers. Leveraging tower strength by telecom companies will be the next interesting development in the business.

...there are mega bucks in R&D too

More than 75 per cent of R&D sites planned (between 2006-09) will be in China and India, says a survey on global



backs from India"¹⁵. "We do no research that can be classified as cheap", insists Rahul Bedi, a director in the India office. Most of Intel's latest chips and processors have been designed extensively by its researchers in Bangalore. Intel's India Development Centre employs 3,000 staff of which close to 2,900 are devoted only to R&D. Intel India is responsible for conducting over 800 invention disclosures and has filed 50 patents to date.

...as in 'services science'

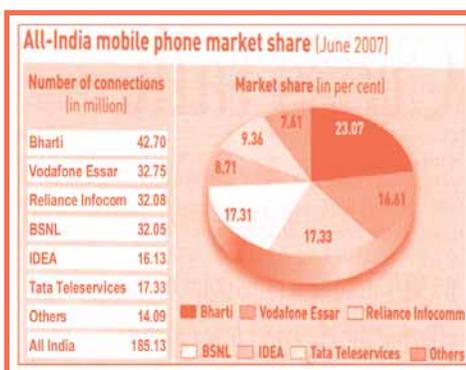
Global researchers are now working alongside Indian consultants to design and deliver services for larger corporate clients. IBM India's transition into 'services science' is one ready example. With the services

Reports from India say that "IT service firms are up in arms over the rising rupee and are taking those concerns to the Commerce and Finance Ministries. As the Rupee rises against the dollar, it eats away at the margins gained in exports to the U.S., which includes services performed in India. Shifts are underway in India's powerful outsourcing business, although not seismic, and more U.S. companies are looking to set up captives elsewhere. ...Energizer (the battery people) bypassed India for Malaysia, which has a good English-speaking population but not India's talents. Second: an expected shakeout in the India's IT services market, including consolidation and some reports of lower growth in revenue and profits in coming quarters. – Information Week, June 12, 2007

R&D networks jointly conducted by INSEAD and Booz Allen Hamilton¹⁴ with a focus on strengthening their internal capabilities to run them efficiently and effectively. With 22 million graduates, six million science graduates, 1.2 million engineering degree holders and 600,000 doctors and more than 2.5 million graduates entering the workforce every year, the potential is enormous.

At Hewlett-Packard, innovative R&D has an addressable market of nearly \$1.1 trillion and it invests nearly \$3.5 billion annually on R&D, of which a sizeable amount comes to India. At Intel's India Development Centre, (its largest non-manufacturing site outside of the U.S.) the "chipmaker takes a highly disciplined approach when selecting the projects it

business from India becoming commoditized¹⁶, just as hardware before it, IBM is adding intellectual property to its India offerings. "Putting researchers on the case is a great way to charge clients a premium", says Ambarish Dasgupta, executive director at research and consulting major PricewaterhouseCoopers. Companies usually invest development



14. The Growth of Global Innovation Networks Creates New Management Challenges: A Booz Allen Hamilton release, May 3, 2006

15. India Morphs into Global R&D Hub; Priyanka Joshi, July 21, 2007, Rediffnews

India morphing into a global R&D hub

The indications were there even at the turn of the millennium and then got authenticated by research. In 2004, a Frost & Sullivan study projected investments in areas such as semiconductors, photonics, pervasive data management, hearing conversions and speaking interfaces, virtual reality and simulations, embedded software and billing software.

There has been an increased growth in merchant and offshore R&D in IT, communication and electronics. The more successful models range from joint research to collaboration to complete outsourcing of R&D and product development.

The country is creating an R&D ecosystem to encourage such investments in such factors as vertical specialization, strong legacy in basic and applied research, R&D from government research organizations, international collaboration and collaboration of global technology industry with Indian academics and, of course, ensuring state-of-the-art security of data.

Source: India On Course To Being Global R&D

Destination: Financial Express, January 12, 2004

dollars to stay ahead with products their customers are using. To some extent this is a matter of protecting the cash cow – the virtual computer at IBM, printers at Hewlett-Packard, desktop applications at Microsoft. Then it is a story of constant research to ensure a position in front of the pack. That is where India is chipping in.

...yet there are worries

There are worries on the R&D front though with pharma companies, for instance, worried about the misuse of "residual knowledge" or strategy or best practices that are being addressed by requiring researchers to be "quarantined" after sensitive projects. In the final analysis, companies are not dealing with skills in the conventional sense; but with 'tacit' knowledge says Peter Cappelli, Professor of Management and Director of Wharton's Center for Human Resources¹⁷. The loss of tacit knowledge has for long been a concern with companies that restructure and lay off employees. "Outsourcing to India is so much cheaper that companies are tempted to think about doing it without worrying about tacit knowledge", which could be "a real problem." This can be resolved by companies running captive centers in countries like India, which provide the arm's length security aspect. "The less tangible the work you are doing, most people believe, the more closely you should hold it inside your own company."

...but biotech is hot!

The other exciting growth area, is biotechnology, which promises to deliver major economic, health, environmental and corporate benefits. An ASSOCHAM paper¹⁸ says that the domestic biotechnology sector (\$1.5 billion in 2005-

06) will reach the \$5 billion mark by 2009-10 with a consecutive CAGR rate of 35.1 per cent. India's more than 300 biotech firms operating in different areas of the value chain will thrive and more than double in the next three to four years, growing globally and locally.

Already, exports (\$763 million), accounted for 52 per cent share of total industry's revenues with biopharma accounting for 75 per cent of the exports and 70 per cent of domestic sales. Of these, agri biotech and bio services are registering the fastest growth. The sector attracted more than \$360 million in 2005-06, growing 36 per cent over the previous year. Leading companies such as Bharat Biotech, Biocon, Dr Reddy's Labs, Panacea Biotech, Serum Institute, Shanta Biotech, Workhardt and Zydus focus on vaccines and biogenerics. The trend is towards joint ventures for application of biotech not only in knowledge based industries but in agriculture, horticulture and viticulture as well.

The ASSOCHAM paper talks of potential international funding from institutional and private investors. With many biologic drugs expected to go off patent soon, including such blockbusters as Epogen, Novolon and Humulin, Indian biotech companies are gearing up to garner outsourced drug manufacturing contracts and companies such as Biocon, Dr Reddy's Labs, Wockhardt, Panacea Biotech and Shantha Biotechnics are preparing generic versions of biotech drugs. The focus of this sector would be primarily in product categories such as-EPO products, Human Insulin, Interferons, G-CSF. Taking this effort further are government initiatives. On July 18, 2007, the Indian Agricultural Research

16. India Morphs Into Global R&D Hub; Priyanka Joshi, July 21, 2007, Rediffnews

17. Human Capital: Can India Bridge the Knowledge Gaps Needed for Research? November 21, 2005 in Knowledge@Wharton

18. http://www.biospectrumasia.com/Home/BioTech_Trends_Home.asp

Institute announced that the Indian government has plans to invest Rs 1,000 crores to develop its agri-biotech sector with the help of public private partnerships.

...and the other promising arrivals include

There is also a range of trends in varied industries that are policy inspired and can be judged from sector snippets:

Funding options are becoming interesting. Among others, privately-placed debt funds are making their presence felt. The first three months of the current financial year saw India Inc mobilize Rs 23,252 cores through private placement bonds – representing a 23 per cent hike over the corresponding period last year.

...microcredit

Equally important is the microcredit growth

story in India. The country has 3,161 microcredit finance institutions of which 90 per cent serve less than 10,000 members. Just two per cent of the MFIs serve more than one lakh members and this number should increase sharply. Funds are available and the demand for micro-credit in India is around Rs 2,40,000 crores.

Money lenders and the informal sector make merry and MFIs account for Rs 20,000 crores only. The larger MFIs are expected to step in and assist entrepreneurship at the micro level.

...the auto show

The auto show is picking up too. Not only will the country produce its first Rs 1 lakh car next year, auto exports will touch 2.9 million by 2010. India exported more than 970,000 vehicles in 2006 at a CAGR for exports of 41.7 per cent during 2001-2006 compared to the domestic CAGR of 16.6 per cent. About 2.9 million vehicles could be exported from India in 2010 and this number could double again over the next four to five years. An enabling factor could be a special government export package, as outlined in the draft Automotive Mission Plan 2006-2016. The AMP projects an industry size of \$145 billion by 2016 with exports of automobiles and components accounting for \$35 billion¹⁹.

...the bourses

The bourses are opening up as well. The New York Stock Exchange and other foreign investors, including General Atlantic, SAIF Partners and Goldman Sachs have together picked a 20 per cent stake in the Mumbai-based National Stock Exchange. The deal size for the entire stake is estimated to be around \$460 million to \$480 million.

UBS Global Asset Management has

"We in India wish to see you engaged in India's great adventure of building an India free from fear of war, want and exploitation. Invest not just financially but intellectually, socially, culturally and, above all, emotionally". **Dr Manmohan Singh** to participants at the Overseas Indians Conference, January, 2007

Key Findings in Indian Biotechnology Market Outlook (2006)

- Growing at the rate of 28.09 per cent from the year 2005, Indian biotechnology industry is likely to touch the mark of \$5 billion by the end of 2010.
- India will emerge as a key destination for clinical trials and stem cell research.
- Biotechnology will play an important role in the agriculture sector by developing large numbers of genetically modified crops.
- BioPharma industry, comprising vaccines, therapeutics and other products, will emerge as a major segment of the Indian biotech industry.

Source: <http://www.marketresearch.com/product/display.asp?productid =1225475&g=1>

"Overall, GDP growth is very strong. I do not think that is going away. If we start with that premise, then the rest of it is really about tweaking the margins ...Yes, the gaps are narrowing (referring to escalating costs and salaries) So we will go wherever there are cheaper labour markets but can you really get the same volume that you get in Indian anywhere else?" – HSBC's **Naina Lal Kidwai** (Business Today, September 9, 2007)

acquired Standard Chartered's mutual fund business in India for \$120 million, subject to certain regulatory approvals. Standard Chartered AMC managed a total asset base of \$2.8 billion (Rs12,624 crores) at the end of December 2006. The Indian mutual fund industry had close to \$73.5 billion assets under management at the end of December 2006.

...financial services

The Government of Singapore Investment Corporation and the New York-based hedge fund, Galleon Partners, have invested 20 per cent stake in Edelweiss Capital for around \$90 million. With around 600 employees, it offers services ranging from brokerage to investment banking, asset management and insurance advisory. Edelweiss reported total revenues of \$32.2 million (Rs147 crores) and a profit after tax of \$9.3 mn (Rs 42 crores) for 2006.

The Oman-based BankMuscat will acquire a 43 per cent stake in the stock broking group Mangal Keshav for an undisclosed sum. The Mangal Keshav Group, headquartered in Mumbai, has 20 branches and 220 franchises at 70 locations across India. It accounts for around two per cent of the total volume of exchange business in India. In October 2006, BNP Paribas acquired 33 per cent stake in Geojit Financial Services (subject to final approvals).

...and IT

What would be the future of the IT industry that ushered in this phenomenal growth? Azim Premji believes that the IT industry will sustain this 25 per cent to 30 per cent growth over the next five years because the Indian market is growing at 40 per cent a year and globally around 25 per cent to 30 per cent. Of course, there will

be considerable consolidation within the industry and "larger firms will have to drive pricing, non-linearity, better operational efficiency and go up the value chain to partly compensate for this appreciation (in costs)".

Meanwhile, Wipro, the iconic Indian software company that has a multiproduct presence in India, has picked up 11 companies overseas. The \$600 million acquisition of Infocrossings provides the base for Azim Premji to launch the next phase of the multinationalization of this corporation.

...real estate is the star performer

The two fastest paced growths in India are, however, those in real estate and retail, some of which is prompted by the growing demands of the outsourcing industry. The policy changes introduced by the government in February 2005 allowed 100 per cent foreign investment in construction projects with fast-track approvals.

Property consultants Jones Lang LaSalle estimates that \$10 billion foreign investment will be injected into the Indian real estate sector in the next 12-18 months²⁰. Industry sources say over 90 foreign investors are already in the country tapping investment avenues. Nearly two dozen U.S. funds are raising \$3.5 billion for investments in Indian realty. They include the Blackstone Group (\$1 billion) Goldman Sachs (\$1 billion), Citigroup Property Investors (\$125 million), Morgan Stanley (\$70 million) and GE Commercial Finance Real Estate (\$63 million). Others raising funds are JP Morgan, Warburg Pincus, Merrill Lynch, Lehman Brothers, Warren Buffett's Berkshire Hathaway, Colony Capital and Starwood Capital.

19. Sectoral snippets is an India-focused monthly, freely-distributable newsletter brought out by KPMG in India.

...the retail experience is mindblowing

The phenomenal growth story is in Indian retailing, which has for long been a major influencer of global business. With global retailing revenue at \$6.6 trillion, retailing is the world's largest private industry with more than 50 Fortune 500 companies working in this space. Wal-Mart's turnover is \$260 billion, almost one-third of India's GDP. The main corporate questions around the growth of the Indian retail sector feature the conditions for FDI inflows and franchise arrangements but there is a larger question. What happens to the traditional Indian retailer if his custom is taken over by technology backed by big money and bigger showbiz, reflected in the shopping malls of today?

India has more than 12 million shopkeepers and 78 per cent of them are very small family businesses utilizing only household labour. Even among retail enterprises that employ hired workers, the bulk of them use less than three workers. Almost 96 per cent of these retail outlets are less than 500 sq.ft. in size, the per capita retail space in India being two square feet. Compared to the USA's figure of 16 square feet. India's per capita

retailing space is thus the lowest in the world. With more than nine outlets per 1,000 people, India has the largest number in the world. Most of them are independent and contribute as much as 96 per cent to total retail sales. What will the advent of big retail mean for them?

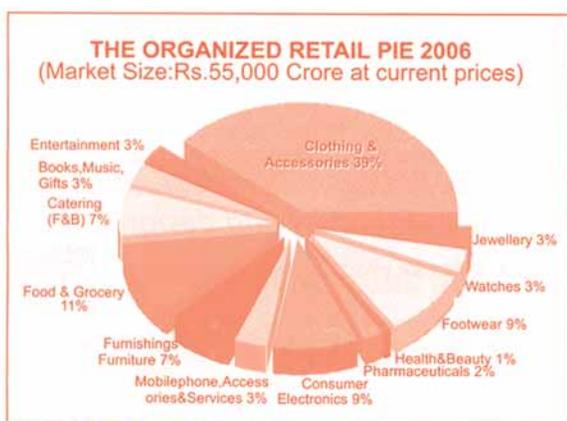
The Prime Minister of India has made a public statement that the small shopkeepers will not be affected. However, sincere efforts would need to be made to ensure that this is in fact the case. "I've lost half my business", says Rajiv Das²¹, who has been selling fruits and vegetables for 18 years and now has to contend with a large modern retail store a three-minute walk away. "I'm not able to fight but I would if I could." Will the small retailers give up without a fight? Time will decide their ability to stand up to an idea whose time seems to have come in India.

...and there are terrible transition pains

As a set of Indian people is forced to make way for another without having been provided with alternative livelihoods there is enormous heartache for those who are being turned into the 'nowhere' people. Yet the sense of excitement around those who are conquering new worlds seems to override all other concerns: The price that some segments of agriculture are paying for wanting to be part of the new economy; the price that some small landowners, especially in the countryside, are paying for the land that industry demands for its expansion and which they have to surrender for meagre compensations; the sadness in the eyes of the school dropout who gaze into the glass windowed glitzy

Almost unreal growth

- Growth in commercial office space requirement is led by the burgeoning outsourcing and information technology industry.
- By 2010, the IT sector alone is expected to require 150 million sq.ft. of space across major cities.
- The residential sector faces a housing shortage of 19.4 million units out of which 6.7 million are in urban India.
- The increase in purchasing power and exposure to organized retail formats has redefined the consumption pattern.
- Retail projects have come up even in B-grade cities. The retail market is expected to grow at around 35 per cent.
- The real attraction for foreign investors is potential investment returns of 25 per cent and more in Indian projects that might be hard to come by in the U.S. and in western Europe today.
- International companies like Ayala of the Philippines, Signature from Dubai, Och-Ziff Capital, EurIndia and Old Lane have indicated their interest in the Indian real estate markets. On the cards is sizeable FDI inflow from Malaysia, followed by the U.K., U.S., Israel and Singapore.



© IMAGES INDIA RETAIL REPORT 2007

20. India Brand Equity Foundation <http://www.ibef.org/industry/realestate.aspx>
 21. India's Retail Revolution: Will India's Mom-and-Pop Stores Perish with the Arrival of Modern Supermarkets? John Elliott, Fortune Magazine, June 27, 2007

The "India Retail Sector Analysis (2006-2007)" report says that:

- Cultural and regional differences in India are the biggest challenges facing retailers. These deter the retailers in India from adopting a single retail format.
- Hypermarket is emerging as the most favorable format for the time being.
- The arrival of multinationals will push the growth of the hypermarket format, as it is the best way to compete with unorganized retailing in India.
- Organized retail will form 10 per cent of total retailing by the end of 2010. From 2006 to 2010, the organized sector will grow at an annual CAGR of 49.53 per cent.

malls that they dare not enter. The regret is that entrepreneurial India does not worry about the mismanagement at the grassroots level.

...which represent an opportunity lost

That brings one back to C. K. Prahalad's lost fortune at the bottom of the pyramid; the fortune lost through neglect of at least one third of India's population. What obtains after adapting Prahalad's assumptions to make them applicable to India Inc runs somewhat thus:

- The poor in India are so poor that they cannot profitably compete for the market for the globalized Indian.
- The poor cannot afford and have no use for the products and services sold in developed markets.
- Only developed markets appreciate and will pay for new technology. The poor can use the previous generation of technology.
- The bottom of the pyramid is not important for the long-term viability of business and can be left to the governments and non-profit organizations.
- Indian managers are, therefore, not excited by business challenges that have a humanitarian dimension.
- Indian managers are not intellectually challenged by the greatest challenge facing their country.
- It is, therefore, hard to find talented managers keen to work at the bottom of the pyramid.

...and it is time to regain perspective and control the future

Hopefully, matters will change with pressure coming from the grassroots of underdevelopment; from the socially awakened conscience of the civil society; from the vast numbers of Indian consumers

who would have been sensitized to the needs of the neglected India. Enlightened corporate self interest must also realize that the poor Indian represents a loss of market and the poor neglected India represents a loss of market opportunity.

...hopefully e-governance will change matters

The government driven by the rising expectations and demands of a highly aware citizenry has responded by changing the quality of public governance through the introduction of technology. E-governance is today on its way to ushering in:

- "E-administration – The use of ICTs to modernize the state; the creation of data repositories for MIS, computerization of records.
- E-services – The emphasis here is to bring the state closer to the citizens. Examples include provision of online services. E-administration and e-services together constitute what is generally termed e-government.
- eGovernance – The use of IT to improve the ability of government to address the needs of society. It includes the publishing of policy and programme related information to transact with citizens. It extends beyond provision of on-line services and covers the use of IT for strategic planning and reaching development goals of the government.
- E-democracy – The use of IT to facilitate the ability of all sections of society to participate in the governance of the state. The remit is much broader here with a stated emphasis on transparency, accountability and participation. Examples could include online disclosure policies, online grievance redress forums and e-referendums". – says EGovernance: 20 Hot eGov

Projects in India by the IT for Change team.

...and the Right to Information has enhanced the democratic space

The creation and expansion of the democratic space, courtesy the enactment of the Right to Information, has meant an empowerment of the ordinary Indian, no matter how sad his circumstances, to exercise control over the corrupt and arbitrary exercise of state power. The RTI, implicit in the Constitution of India, had been virtually killed by the bureaucratic culture of secrecy and the denial to access to information till a grassroots struggle forced governments and courts to sit up, followed by effective legislation.

As the power of the RTI is felt by the remotest hamlets in the country, there is no doubt that "the quality of participatory political democracy by giving all citizens further opportunity to participate in a more full and informed way in the political process. By securing access to relevant information and knowledge, the citizens would be enabled to assess government performance and to participate in and influence the process of government decision-making and policy formulation on any issue of concern to them", say Mander and Joshi.

...as hope awakens

The ITC Chairman, Mr Y. C. Deveshwar, rues that "Unfortunately, the 'market for virtue' in India is practically non-existent. However, a small beginning has been made. With concerted action from policy makers and civil society, a significant force can be created by enlightened consumer franchise to spur industry into innovative thinking for social action".

...in India's ability to overcome

There lies the dilemma and the hope. Eventually, it is on how India resolves the

differences between its legendary underperformance around education, health and opportunities for its poor with its phenomenal intellectual and technical power that the sustainability of India's Century will depend. [Ω](#)

"In the quest for systemic answers to this chronic malaise, it is important to identify the sources of corruption inherent within the character of the state machine. These include a determined denial of transparency, accessibility and accountability, cumbersome and confusing procedures, proliferation of mindless controls, and poor commitment at all levels to real results of public welfare". – Harsh Mander and Abha Joshi; The Movement for Right to Information in India: People's Power for Control of Corruption

Democratizing Commerce: the Challenge for 21st Century Leadership

The challenge for this century is to democratize commerce. Imagine a world that combines in equal measure economic development and eradication of poverty, ecological stewardship and social justice. Now harness the forces of globalization to create this outcome. We have to imagine this future. If we cannot imagine it, we cannot create it.

...globalization is here to stay

Globalization is like gravity. We can debate whether it is good or bad for the poor (or the rich). The asymmetric gains (and pain) of rapid economic development, for example, in China and India are a reality. As the numbers suffering abject poverty go down in these countries, income inequality is widening. Alleviation of abject poverty and increasing income inequalities can and do result from rapid change. Simultaneously, there is a growing debate about the impact of globalization on the middle classes in developed countries. The debate is most pronounced in the USA and will no doubt spread to Europe as well.

My focus, however, is not on whether globalization is good or bad. I prefer not to defy gravity but to understand it well enough to build airplanes. I want to ask myself (and you) how to make globalization benefit all. Can we build an economic system that is inclusive? Can we democratize commerce?

...can democratized commerce soften its impact?

Democratization of commerce is built on a very simple premise. Every human being must have access to the benefits of globalization as a consumer and as a producer. This is far from reality today. It would not be a gross exaggeration to say that global firms have not paid much attention to more than five billion people – 80 per cent of humanity. The "bottom of the economic pyramid" has been totally ignored. Consider an alternative to this neglect. I started my book with the statement: "If we stop thinking of the poor as victims or as a burden and start recognizing them as resilient and creative entrepreneurs and value conscious consumers, a whole new world of opportunity will open up".

...by creating a new collective spending power

Five billion new underserved consumers with enormous collective spending power (as opposed to individual spending power) can become the next engine of global growth. However, we have to start with the recognition that they are micro consumers. We have to learn to create affordable, world class products and services to enable these underserved to be included in the global economy. We can do well and do good. Consider cell phones. The estimates are that by the end of this decade about three billion people will be connected. These three billion consumers include

I want to ask myself (and you) how to make globalization benefit all. Can we build an economic system that is inclusive? Can we democratize commerce?

two billion at the bottom of the pyramid. Just in India, they are adding five million new subscribers a month. In China, in sub-Saharan Africa and in Latin America the story is the same. None of the global firms in this business – Nokia, Motorola, or Samsung – can ignore this market.

...and appropriate economic models

The key is to innovate appropriate economic models – wide, unorthodox and low-cost distribution such as phone ladies, pricing based on pay/use, prepaid cards and new features – such as cell phones with a torch light for rural folks- and new features such as SMS-based financial transactions, which make it accessible, affordable and available and useful to this segment. My thesis is that a similar impact of the bottom of the pyramid micro-consumers will be repeated in all businesses – from fast moving consumer goods to two-wheelers to energy, to financial services, food, education and healthcare.

...to develop access to markets

The second dimension of democratizing commerce is to develop access to markets for goods and services that the poor can produce to improve their livelihoods. How do we mobilize micro producers? Consider, the Gujarat Co-operative Milk Marketing Federation, popularly known as Amul. For more than 50 years Amul has been organizing poor subsistence farmers, mostly women, into milk co-operatives. The women still tend to their two or three buffaloes in the village. They bring their production to the village collection centre every morning and evening. The milk is collected, weighed and paid for everyday. The milk is then transported to

centralized, modern, processing centres using refrigerated vans.

...the Amul way, for instance

Amul, as a co-operative, has a membership of 2.2 million farmers, spread over 10,000 villages and 3,000 collection centres. They process about 6.4 million kgs of milk a day. Their sales are currently at \$850 million. There is an emerging export market for their products. Amul has, by effectively organizing subsistence farmers, created a national powerhouse and competition for Nestle and Unilever. The lessons from the ITC eChoupal, a system that was started for accessing and aggregating soya bean from subsistence farmers is the same. About two million farmers are covered by this system.

One can multiply the examples – from Brazil, Mexico, South Africa, Philippines, Thailand and Indonesia – of effective creation of a market-oriented economy of consumption with micro consumers and livelihood development for micro producers at the bottom of the pyramid through innovative economic models. These are just illustrative of the opportunity to transform the face of poverty and these are still "weak signals" of the untapped opportunity at the BOP that need to be amplified. If the opportunity is obvious, what stops the managerial community from moving more rapidly?

...shedding our biases

It would seem that we are prisoners of our own socialization and a resultant dominant logic. The dominant logic manifests itself in many forms. It becomes the "lens" through which we view the world. Some of the most common "distortions" are:

"If we stop thinking of the poor as victims or as a burden and start recognizing them as resilient and creative entrepreneurs and value conscious consumers, a whole new world of opportunity will open up".

- a. There appears to be one issue on which there is widespread agreement among all stakeholders. The poor are seen for over 50 years as the wards of the state or NGOs and philanthropists. The top of the pyramid is where the MNC and the large firm must operate.
- b. As a result of this divide, the poor have become a constituency and victims of an ideological battle between civil society, multilateral aid organizations, public sector, philanthropy and the private sector. The poor have become a constituency; not a problem to be solved.
- c. Managers also assume that there is no market at the bottom of the economic pyramid as the poor do not have the capacity to consume. They do not believe that it is their job to create the capacity to consume, even though that is what they do in developed countries such as easy monthly payments, access to credit, single serve, pay/use and packaging innovations. The real issue is not that the market does not exist; the cost structures of MNCs are out of line to make their products and services affordable. Managers protect their cost structure and ignore the latent opportunity.
- d. There is a deep-seated belief that the poor cannot pay for advanced technology products in spite of the widespread and rapid adoption of cell phones by the poor all around the world.
- e. Managers often believe that the work at the BOP is not intellectually demanding and stimulating. On the

contrary, my experience is that young men and women love to work at the BOP.

There is thus need to examine our own biases; our ideologically-driven positions; our elitist view of the poor; our inability to see them as active, value-conscious consumers; as active, capable and efficient producers. What is needed is imagination, organization and new economic models. It is natural for one to ask: Yes, there may be a market at the BOP but why should I participate? I can ignore this segment of the global market? Can I not? I would like to suggest that:

- a. The market is so large that it is not wise to ignore it. Consider Sony vs. Nokia in this market. Nokia was early to enter this market and is now a dominant player. This market will change the economics of most businesses. The evidence is accumulating from a wide variety of industries as distinct as consumer electronics and steel
- b. More importantly, BOP can become a source of innovations; not just in technology and products and processes but in business models. Consider the last national elections in India. More than 450 million people went to the polls. The entire polling was electronic. More than 1.5 million electronic polling booths were deployed across India. The incumbents lost but they accepted the technology. The technology worked well without hitches. Germany and Japan went to the polls after India. So did the USA. None of them were electronic. Netherlands' recent polls were not be fully electronic either.

"There is need to examine our own biases; our ideologically-driven positions; our elitist view of the poor; our inability to see them as active, value-conscious consumers; as active, capable and efficient producers".

Emerging markets can be a source of innovations. They can leapfrog because they have "nothing to forget". The forgetting curve can be a big drag on developed countries – both firms as well as consumers.

- c. Every case of successful market creation at the BOP – be it Aravind Eye hospital, Casas Bahia or ITC's eChopal – has a significant element of innovation. The question is: can BOP markets become a source of innovations? If so, should prudence dictate that we participate in those markets to innovate?

...treating poverty as an opportunity for innovative solutions

I have gently made three transitions. First, we should not think of poverty as an intractable problem. We should start seeing poverty as an opportunity to create an inclusive, market-based system. Second, the poor as micro consumers and micro producers can help create large and growing markets. It is no more just a hope. The evidence is mounting. Third, once we conceive of the poor as a market, we have to innovate to meet the goals of "awareness, access, affordability, availability". So BOP becomes a source of innovations. It is unwise to ignore this opportunity for too long. It would be naïve to believe that market-oriented solutions do not create social consequences that are complex. Some of the critical socio-economic consequences of this approach merit our attention. They are:

a. Can economic development and social justice co-exist?

Yes, if we pay attention to four critical issues: The system must be inclusive.

We must co-create solutions at the bottom of the pyramid and not dictate solutions as we are used to. The poor must be engaged in developing useful solutions. We must build a meritocracy; fairness in access to opportunities. Finally, we must protect property rights such that all of us can enjoy the benefits of our work. So, inclusion, co-creation, meritocracy and property rights are at the heart of economic development and social justice.

b. Can one solution fit five billion poor?

We have to recognize that the BOP is a very heterogeneous and complex group and cannot be treated as a monolith, even though multilaterals have tried to do this. It is the variety that makes it interesting. Global standards, global scale and technology must be coupled with local responsiveness to help solve the problems of poverty.

c. What are the checks and balances in the system? Can "greedy managers" hurt the interests of the poor?

This is an important and legitimate concern. The real checks are in how large firms (and MNCs) approach this market. The pressures of access, cost and trust forces MNCs to work with social institutions that have deep local knowledge. NGOs also realize that they need the resources and the scale of MNCs to accomplish this mission. This slow recognition of mutual dependence has changed the often bitter and adversarial relationship between the two (as in Seattle and

"We should not think of poverty as an intractable problem. We should start seeing poverty as an opportunity to create an inclusive, market-based system... The poor as micro consumers and micro producers can help create large and growing markets... Once we conceive of the poor as a market, we have to innovate to meet the goals of awareness, access, affordability, availability".

Davos) and is quietly engendering collaboration.

Two forms of collaboration are visible. One is the close and ongoing work in which both the MNC and the NGOs participate as partners. Micro credit is a good example. So is cause-related marketing. More importantly, there is a self regulating system that is evolving as in the U.S. Apparel Industry Partnerships, the Forest Stewardship Council, the Marine Stewardship Council and the Kimberley Process. MNCs and NGOs are the main actors in developing and enforcing global standards and governments are often facilitators of this dialogue. This process provides checks and balances and a new social compact. The governance innovations here are significant.

d. What is the equivalent of venture capital funding in development?

We need to recognize that development dollars from the state and investment dollars from a MNC are not the same. Accountability for performance, concern for time and risk enables the MNC to focus on real need and real economic returns. Public spending lacks the pressure for accountability and performance. This is true even if we consider non-financial performance such as quality in education or healthcare.

e. Should we have a gender bias in socio economic development?

The evidence says yes. Consider Amul, Grameen Bank, ICICI rural efforts, Velugu, which is one of the largest collections of self help groups (SHGs) in the world covering eight

million women, or Cemex. From Bangladesh to India to Mexico the pattern repeats itself. Women seem to be better at leveraging the meagre opportunities that are given to them. Gender issues deserve our attention.

...without fearing the unknown

My objective is to table these issues and to indicate that there are encouraging signs of innovations in global governance and regulation of markets and firms. Democratizing commerce by harnessing the energy of globalization is both possible and doable. The results of this effort can be the elimination of abject poverty in our life time. This massive undertaking cannot proceed without debate, trials and errors. There is no precedent. We have to innovate our way and I am very optimistic. We cannot and should not fear the unknown. Neither should we be paralyzed by a singular focus on "what can go wrong".

In a task of this magnitude, plenty will go wrong. There will be many surprises on the way but the journey is exciting and the goal is noble. As Gandhi said "poverty is the worst form of violence". We have to move forward with hope and determination and bring to this task our collective imagination, passion, courage, humanity, humility and intellect. We cannot expect less of ourselves. 

Based on an address by Prof.C.K. Prahalad at the Tilburg University on the occasion of the Dies Natalis of the University, when he received a Doctorate Honoris Causa

"Women seem to be better at leveraging the meagre opportunities that are given to them. Gender issues deserve our attention".



India's Century

The Challenge for Indian
Business Leadership

SECTION V

Leadership: Unleashing People Power

ON Wednesday, August 29, 2007 the floodlit Ambedkar stadium in New Delhi erupted in jubilation for a different victory. India had won the Nehru Cup for soccer for the first time, beating the superior Syrian team and eyes turned to the soccer coach, Bobby Houghton. Houghton, the Fulham midfielder of the late sixties had been credited with transforming Swedish football. He had also coached China and among his most striking accomplishments was the fact that he could call every Chinese player by name within a few weeks of taking over as coach.

As Baichung Bhutia's boys did the victory lap, they acknowledged the contribution of the chief coach even as the self-effacing coach said that "the credit goes to the boys, not to me". Sports writer, Jaydeep Basu, wrote¹: "Few would know that it was a personal triumph for British coach Bob Houghton, who plotted a coup of sorts with his sharp football acumen and ability to understand the problems of Indian soccer. By executing that plot to perfection, Baichung Bhutia and Co. simply offered a salute to their coach's hard work and self belief".

What was on display was not just remarkable football but a team transformed by a sense of confidence, pride and motivation; a combination that unleashes potential. That is what a good leader can instill in his troupe; and what most leaders, undeservedly foisted on men, cannot.

...leadership is about people and potential

Leadership is primarily about people; not technology or markets. The second truth that corporations must understand right at the outset is that they have to succeed for there is no other option. Third, such success can be achieved by a harmonization of mindsets, practices and processes and the outcome. Robert J. Thomas, Fred Harburg and Ana Dutra² outline five mindset states that provide the key ingredients to high performance:

- Maintaining the right balance between market making and disciplined execution
- Obsessively identifying and multiplying talent
- Using a simple and memorable way to measure business performance and sharing successes with the rest of the organization, whenever possible
- Recognizing technology as a strategic asset and using it to push business performance
- Emphasizing continuous renewal

...amidst change and continuous renewal

Embracing continuous renewal involves preserving the good and discarding the discardable. When Mayo Shattuck became CEO of a poorly performing Constellation Energy at a time when the Enron shock had battered corporate minds, he was faced with the need to remind employees

"If you want to get a clear sense of the importance of pride as a force to motivate higher levels of employee performance in the 21st Century, start by comparing today's work environments to the one that Henry Ford devised at the beginning of the 20th century. In the Broadway musical Ragtime, Ford shows up as a character, describing the genius behind his assembly line. While this scene is a whimsical characterization, it does epitomize the traditional production line model of that period. Today... (the) economy is based less and less on one person tightening, ratcheting, or reaching to pull one cord. More and more, it is a matter of men and women performing a very broad spectrum of rapidly-changing tasks, who are guided by an understanding of their employer's constantly evolving competitive needs and aspirations.... Human resource leaders of the 21st Century must find ways to tap the emotions as well as the – minds of employees at all levels. – **Jon Katzenbach, Niko Canner and Marc A Feign**; Putting Pride to Work: Recapturing the Power of the Most Effective Motivational Force

1. The Telegraph, August 30, 2007
2. www.accenture.com/Outlook 2007, Number 1

"The most significant thing to learn about motivation from the experience of high-performing organizations is the importance of cultivating institution-building pride as opposed to self-serving pride. Enterprises that excel at engaging the emotions of their employees pay enough to attract and retain good workers but they rely much more on non-monetary approaches to motivate those workers to higher levels of performance".
– Cox.Chapter1 4/23/01

of the company's proud innovation heritage. Shattuck used an array of "artifacts from the company's past and created a museum on each floor of Constellation's headquarters", to serve as reminders to all that "Constellation had never flinched from taking major (but calculated) risks or from embracing necessary changes to the business (a typical example: early incandescent lights that replaced oil lamps and, in the process, dramatically changed the company's technology and skill base)", say Thomas, Harburg and Dutra.

When one talks of discarding the past, one is necessarily talking about "past mental liabilities and irrelevant experiences as organizations embrace the future", says Anoop Hoon of Invigorsys Consulting. "The idea is to create a wider mindspace for the new learnings".

In their Anatomy of a Healthy Corporation, Aaron De Smet, Mark Loch and Bill Schaninger, talk about harnessing existing competencies and assets and leveraging them, "usually with the help of a winning formula that has been honed from experience and facilitates smooth integration across the entire value chain and the efficient extraction of synergies. Nike's forays into golf, ice hockey and soccer in the areas of footwear, sportswear and equipment, for example, follow a pattern that the company first set with basketball".

...where workforce pride holds the key

A clear aspect of the mindsets in every high-performing company is a sense of pride. Pride – in one's work; one's workplace and even in one's colleagues – has emerged as a unifying factor in an age when societies and corporates are faced with enormous discontinuities. At an

individual level, the worker/executive is always on notice – unexpected changes in markets, thanks to emerging technologies, means changing one's business models and even the character of one's workforce and, possibly, payroll paring in some aspects of business and increased hiring for others.

...as businesses build anew

Indeed, 21st century organization building is virtually all about new businesses. Old businesses have to remodel themselves so comprehensively that they are new entities in terms of business models, markets, staffing patterns, global reach and dependence on global developments or IT levels.

For all practical purposes then, leadership is about new businesses. Why has pride emerged as such an important factor? Primarily because the 21st century is about excellence that begets pride and, even if pride is not artificially injected into a system, global recognition of excellence automatically instills pride. The pride factor becomes more critical in the worker because it exercises a stabilizing influence on his psyche and body because other discontinuities around him are inherently insecurity-inducing in current corporate environments, which see one half of the business amidst heart-wrenching change and the other half among discontinuities with tremendous growth opportunities.

It is a legitimate pride in self that sees a person through a painful or a not so painful transition. In the former case, it gives him the confidence that he will be able to deal with life after retrenchments, for instance, or, in the latter case, be able to deal with challenges thrown up by the new growth opportunities. Leadership has to deal with these varied emotional responses to change and create a stabilizing corporate

environment in which the system can function.

...pride helps achieve entrepreneurial equilibrium at

Corporations can grow new businesses by performing three kinds of balancing acts:

Balance trial-and-error strategy formulation with rigour and discipline.

- Narrow the range of choices before diving deep.
- Closely observe small groups of consumers to identify their needs.
- Use prototypes to test assumptions about products, services, and business models.
- Use non-financial milestones to measure progress.
- Know when – and on what basis – to pull the plug on infant businesses.

Balance operational experience with invention.

- Appoint “mature turks” as leaders of emerging businesses.
- Win veterans over by asking them to serve on new business’ oversight bodies.
- Consider acquiring select capabilities instead of developing everything from scratch.
- Force old and new business to share operational responsibilities.

Balance new businesses’ identity with integration.

- Assign both corporate executives and managers from divisions as sponsors of new ventures.
- Stipulate criteria for handing new businesses over to existing business.
- Mix formal oversight with informal support by creatively combining dotted and solid-line reporting relationships.

times of change

Pride facilitates the achievement of an entrepreneurial equilibrium. David A Garvin and Lynne C. Levesque (Meeting the Challenge of Corporate Entrepreneurship, Harvard Business

Review, October 2006) talk about entrepreneurial equilibrium being attained by either a "balance trial and error strategy formulation" with rigour and discipline or by balancing "operational experience with

invention" or by balancing new business' identity with integration. (See box). One cannot expect too much with new and even excellent growth models in existing companies when there is no fundamental integration.

Garvin and Levesque talk about General Motors Saturnizing experience: "GM launched Saturn in 1990 to be a different kind of car company; with innovative advertising, labour practices, operational processes and sales strategies that were meant to serve as models for the rest of the organization. However, by 2004, GM had re-annexed Saturn, tightly linking the business to its established factories, marketing programmes and labour contracts, partly because the company's other divisions had no desire to be 'Saturnized'."

The success story lay in IBM's Lou Gerstner's response to the challenge of the company losing out on the opportunities in the emerging sciences space. He set up a special management team that determined six root causes for missing the bus:

"Leadership is the whole game. No institution-religious, military, educational, political or business can be great unless it has a great leader at the top who develops leaders at all levels of the organization. The goal is leaders at all levels who all teach and develop other leaders". – **Robert Knowling** in his foreword to *The Cycle of Leadership*

"Think big, think fast think ahead. Ideas are no one's monopoly". – Dhirubhai Ambani

"It is not the strongest of the species that survive, nor the most intelligent but the one most responsive to change". – **Charles Darwin**

- "a management system that rewarded execution and short-term results rather than strategic business building;
- a preoccupation with IBM's current markets and existing offerings;
- a business model that emphasized sustained profits and improvement in earnings per share rather than actions to drive higher price-earnings ratios;
- a financial, data-driven approach to gathering and using market insights that was inadequate for embryonic markets;
- an absence of processes suitable for selecting, developing, funding and terminating new growth businesses;
- A lack of entrepreneurial skills".

IBM's senior executives were then asked to spend more time on emerging businesses and identify promising opportunities in every division and build an Emerging Business Opportunity management system to complement its existing systems. Gerstner made John Thompson, leader of the software group, Vice Chairman and put him in charge of the new-business effort. Thompson had the right exposure to many cross-business initiatives such as the pervasive-computing and life sciences programmes and commanded respect across the board.

He started as an "evangelist" for emerging businesses, explaining the company's commitment to the new processes, even putting an unresponsive person in the doghouse when the need arose. Alongside, he consolidated responsibility, bringing in the corporate strategy and technology groups for staff support and created a \$100 million corpus to support the EBOs.

Most importantly, "Thompson started creating the development, oversight and review processes that would form the core

of IBM's Emerging Business Opportunity management system. In the process, Thompson and his successor, Bruce Harreld, artfully managed a series of balancing acts", say Garvin and Levesque.

...and change is all pervasive

It has been said that things do not happen; they are made to happen and those that make things happen are the ones who will lead the current corporate race. Coming a close second will be the one that quickly adapts to the new happenings while, as Harold Wilson's famous statement goes: "He who rejects change is the architect of decay".

Change is not necessarily initiated by competition, it could be prompted by the economy. Canon's top management, responding to a deflation in Japan, quickly moved in to tap into global demand and soon derived seventy per cent of its revenues from outside Japan. The domestic adversity became an inspiration for far greater success. Volkswagen's management was faced with an equally difficult situation with 20 per cent of its equity state owned and the need to pare payrolls. Confronted with a dilemma in which it could not retrench, the management went in for a range of new cars and ramped up production to bring about its own revival. These are stellar examples of institution-rebuilding that required an intellectual direction from the leadership and the emotional commitment of the managers to make it successful.

...and employees must be kept motivated to respond

The keyword was motivation. Garvin and Levesque hold that most important motivational elements in a company come from the "anticipation of achievement" because pride only follows the successful

"The discipline of managing tensions among the different characteristics of health requires a willingness to transcend daily routines and conventional mind-sets and to view the performance system in its full complexity". – Smet, Loch and Schaninger

execution of something. Motivation must precede it." The U.S. Marine Corps, for example, has sustained its remarkable culture and the 200-plus year record of winning critical battles for the country on a very simple insight: "Be proud of doing the right thing in the right way for the right reason. It is a Marine's definition of courage. Yet, most Marines wait several years before an actual battle experience. Their pride is based on always being prepared to do the right thing when it counts".

Motivation and pride then form an interdependent force that functions in a self-reinforcing cycle in which "workforce performance builds on business success, that feeds back into workforce performance" as the "closed-loop of energy" links pride to workforce performance and business success. Motivation implies influence and for Kenneth Blanchard, "The key to successful leadership is influence, not authority".

...especially in a diverse world

Core values play a critical role in all this because the leader may be confronted with the dilemma of sacrificing core values to create stakeholder value. "Common sense tells one that there should never be a trade off between embracing core values and the creation of stakeholder value. Doing otherwise would affect its sustainability; the organization ending up winning the battle only to lose the war. Amongst the core values that every corporate leader must believe in, cherish, nurture, preach and practice is that of celebrating diversity of people and diversity of thinking in organizations", says

Roopen Roy³. Although the existence of diversity in the workforce is now widely recognized in organizations throughout the world, it is too often viewed only in terms of legal compliance and human rights protection.

In reality, the implications of diversity are much more demanding and much more interesting. Increasing diversity presents a double-edged sword; hence the challenge is to whittle down its ability to obstruct performance while enhancing its potential to improve organizational performance⁴.

An automobile manufacturer in Japan cannot afford to ignore the fact that nearly half of all new-car buyers in the United States are women, regardless of the gender composition of car buyers in Japan. Again, no reasonable person in the consumer goods industry can afford to ignore that roughly a quarter of the world's population is Chinese or that immigration to the United States mostly from Asian and Latin American countries is occurring at the rate of more than one million people per year.

Yet organizations have failed to meet the diversity challenge effectively for three main reasons:

- Failure to recognize that the central problem is the presence of a diversity-toxic organizational culture
- A consequent failure to take a systems approach to meeting the challenge of diversity
- Error in thinking that the learning curve is steep rather than flat.

...and strive to stay healthy

Essentially, it is about a healthy mix of workforce, technology and marketing skills that makes for a healthy enterprise and it

"Even though theory and research suggest that diversity can be a resource to enhance organizational performance, there is a crucial distinction between merely having diversity in the workforce and developing the organizational capacity to leverage diversity as a resource. The challenge of diversity is not simply to have it but to create conditions in which its potential to be a performance barrier is minimized and its potential to enhance performance is maximized." – The Challenge of Managing Diversity

3. Contemporary Manager, August 15, 2005

4. Cox.Chapter1 4/23/01 10:07 AM Page 1

"...We are in a competitive human capital market and that young human capital is looking for quick growth. There isn't the corporate loyalty there used to be 15-20 years ago. The way to hold employees today is to make their work and their day-to-day activities in the company exciting enough for them to stay. Not everyone will stay but, I think, if we can empower more people and are willing to pass on the responsibility for that, and if people are satisfied and motivated, there is less chance of them wanting to leave and go to a competitor. If we cannot provide such an environment, if there is frustration, then the only way to hold a person is by the money you pay – and we certainly are not at the top end of that scale. So, for us, it has to be making the job exciting for people and for them to profit from a reward-and-recognition system that enables them to grow with the organization". – Ratan Tata

is for the leader to embed healthy mindsets at all organizational levels to ensure that the company is resilient to shocks, executes well, rallies employees around a common purpose, focuses on renewal and ensures that its practices complement each other, say Smet, Loch and Schaninger. The quickest route to getting managerial minds working on the health aspect, they add, is "to break down resources in two categories – those devoted to driving performance and health, respectively. One ready reckoner is labour costs: executives, for example, should routinely know how many of their employees work on delivering the current operating plan as opposed to looking after the underlying health issues... That way, they can have well-informed conversations about whether or not they are investing resources in a balanced way".

..the leader must have a grasp of the entire corporate ecosystem

It is for the leader then to impact on the entire ecosystem of the corporation; something easier said than done. For Warren Bennis the five competencies of new leaders⁵ are simple:

- They have passion and purpose
- They sustain and generate trust
- They are purveyors of hope and optimism
- They manifest a bias for action
- They keep learning and growing

...and never forsake ethics

India's R. Gopalakrishnan has another perspective around leadership's ethical

challenges⁶: "Great leadership has a sustained impact on people... Leadership is never proven; it is tested each day... The public life flaws of leaders affect moral purpose." The Enron episode, if nothing else, must have done something to tell the world that morality is not dead. Since leadership is a matter of sustained impact with everyday emerging as a test, it is reasonable to assume that effective leaders bring about long-lived companies.

A Shell research found that such companies are necessarily sensitive to the environment and react to ecological errors quickly; they are also cohesive with a "strong sense of identity; they are tolerant to their activities in the margin within the boundaries of the cohesive firm" and they are conservative with their financing. Nevertheless, they lend mental and physical (financial) vibrancy to the organization and make them come alive.

...and there are pitfalls

There are pitfalls on the way. Typically, there is the lure of the short-term gain at the cost of the long term perspective. Second, there is the curious belief that the 'problem' (as Smet, Loch and Schaninger point out) lies in the unknown future though, often times, they lie in the present. Third, is the tendency of leaders to say something and do something quite different. "Managers often see themselves as strategic visionaries though in practice they spend a remarkably small proportion of their time on anything related to strategy".

Thus leaders must practice what they preach and be seen to be active and proactive; they must represent the adrenalin

5. Executive Excellence September 1999; Five Competencies of New Leaders

6. The Contemporary Manager, February 15, 2005

that keeps the workplace going. Milind Pant⁷ talks of leadership in action that demonstrates both a strong value system and core skills in the leader's work area. As one progresses up the leadership pyramid, many leadership behaviours reveal themselves: among others, the leader is decisive; puts people and customers ahead of everything else; pushes the envelope to set higher benchmarks and seeks diversity in assignments.

What makes for a perfect leader is not rocket science but common sense but such comprehensive common sense is difficult to find in individuals, which is why leaders are rare. They need to be confident and poised, yet leave room for doubt and caution; they need to know their minds yet listen to others at all times; they should know how things are done but delegate wherever possible; they need to know people yet they are expected to work in a virtual workplace in the 21st century; finally, leaders need to be with people, yet be alone – it is frequently lonely at the top, especially when things are not going right.

...so leaders must learn, even as they teach

Leadership is also about teaching even as the leader learns along the way; the coach is a student as well but often a self-taught one. Jack Welch, for instance, took his teaching assignment



Leadership in Action (LIA) Pyramid

very seriously as he laboured with his teaching at GE's Crotonville leadership institute. He was there in the "pit", teaching, learning, growing, developing others and setting the example. Leaders necessarily listen and learn as they lead, "especially in a knowledge age when leaders have to deal with a wealth of young knowledge workers with abundant talent. They have to train themselves to be facilitators, helping new talent to stay on the knowledge track; to harness their full potential", says Anoop Hoon.

...and a leader must understand products and markets and innovate accordingly

In today's diffused market conditions from Canada to China, effective leadership is about exploiting an understanding of product markets. Some emerging giants from the developing countries have capitalized on the knowledge of their home products while exploiting similarities "between geographically proximate developing markets to grow across borders", say Tarun Khanna and Krishna G. Palepu⁸.

Over the last 25 years, IT has been the prime mover in creating millions of jobs, not just in IT firms but in all the industries and services needed to support it. The next five years are going to be critical for the IT revolution. It is becoming increasingly clear that this is not just about a few back office jobs. The flat world created by the confluence of technology, globalization, demographics and the rising economic power of India and China are making companies fundamentally alter their business assumptions. What and where they produce, whom they sell to, at what price, and how they manage it all – the fundamental tenets of their business model are being entirely revisited. This is likely to lead to the most dramatic transformation of firms in every aspect of their business, as significant as the role of mass manufacturing in remaking the industrial revolution in the early 20th century. In this new environment, companies that are able to increase productivity, use technology intelligently, globalize their talent base and practice financial discipline will derive sustainable competitive advantage. Achieving this will require from all of us who are in a position to effect change, a strategic view not a tactical response to get through the next quarter. It would require us to question fundamental business assumptions and drive long-term operational changes – for in a flat world, operational excellence is strategy. – **Nandan M. Nilekani**

7. The Contemporary Manager, November 15, 2006

“The potential of an enterprise for wealth creation is set apart by the distinctive amalgam of its Vision, Values and Vitality. It represents a mix of constancy and change; of a timeless core and constantly evolving strategies and processes built around the core. The effectiveness of interplay between these complementary elements determines the extent to which latent potential is realized. The enlargement of enterprise potential, therefore, requires Vision, Values and Vitality to be continuously recharged through practice and insight, revalidated for relevance and tested for appropriateness to the evolving competitive context. It is the role of leadership to nurture a unique combination of the 3Vs towards ensuring that the enterprise sustains superior wealth-generating capacity in an environment of escalating competitive pressures. Such leadership, in a multi-business context needs to extend beyond the corporate level to the strategic business units and their constituents. Distributed leadership then engenders transformation by enhancing adaptive capability and sharpening responsiveness to change.” – Y. C. Deveshwar

McDonalds has increased its depth of penetration of the Indian market by adapting to Indian vegetarian tastes. In China, Haier dealt with competition from the GEs and the Whirlpools by making smaller washing machines that could take small washes because the user population would need to wash clothes everyday. They even modified their machines to take in vegetables that the local population liked to wash in them!

...for global markets are tough nuts to crack

All this heart break over cracking global markets poses an interesting question around whether the essence of leadership lies in successful globalization. The issue has been raised and answered by Khanna and Palepu: "Is it better to be more global? The answer may appear to be yes. Well-managed companies do spread their wings over time and enter many geographic markets. There is a co-relation between global scope and performance. But executives should not confuse that with a causal relationship. What is important is whether global scope results in competitive advantage derived in some other fashion. Our research shows that there is more than one way to skin the proverbial cat: some emerging giants operated in several countries but others sell only at home. The point they make is that the financial performance of 'world-class' companies with a global presence is not necessarily superior to those that have not. This means that the emerging giants can succeed even without "global footprints".

It is eventually a matter of getting the

other elements of business leadership right. Edgar Schien presents an interesting four-point focus areas for leaders:

- Creating – The Leader as an Animator
- Building – The Leader as a Creator of Culture
- Maintaining – The Leader as a Sustainer of Culture
- Changing – The Leader as a Change Agent

...HR should be aware of the management agenda

It is equally important for human resource professionals the world over to integrate their function and thinking in line with those of the company and understand the global business themes that will drive the HR agenda: Very simply they are⁹:

- Generating top-line growth
- Controlling costs and managing risks
- Globalizing business operations
- Engaging employees
- Addressing emerging skills shortage
- Changing workforce demographics
- Continuously improving processes

The answer lies in developing performance management systems; leadership development styles; effective employee compensation and communications . Another interesting aspect is to align core values of the company that are derived from core strengths to the emotional commitment that the corporate leaders exude when engaging with the workforce.

...and introduce an emotional surplus to the approach to HR

8. Emerging Giants: Building World-Class Companies in Developing Countries, Tarun Khanna and Krisha G. Palepu, Harvard Business Review, October 2006

9. Mercer Report, March 2007, How Global Business Themes are Driving the HR Agenda

This involves adding the emotional surplus to the overall leader's persona. Adding such emotional surplus – whether to a person or a product – achieves wonders in terms of delivering a message and strongly establishes identities with people and even with civilizations. Says Shombit Sengupta who formulated the emotional surplus¹⁰ concept: "The pyramids of Egypt provide such emotional surplus identity for the country as they translate the mystery and grandeur of the past in a futuristic manner that continues to inspire several thousand years later".

Finally, there is the ethical surplus that lends enormous substance to corporate might, especially when the going is tough – as it will increasingly be in the 21st century. To go back to R. Gopalakrishnan's take on ethics "The greatest mistake that leaders can make is to assume that results alone matter, that morality and goodness do not count. On the contrary, as amorality becomes more rampant, as the heart of darkness expands, the natural human instinct is a craving towards light. We need results and we need them desperately – but with goodness and moral purpose". The best thing about the great leaders is that they reveal themselves, as did Mahatma Gandhi or Nelson Mandela.^Ω

"As customer-focused, time-based strategies demand increasingly decentralized decision-making, pride-building capabilities must be broadly extended. Increasingly, building pride is not just the responsibility of the CEO and other senior executives; it is also the daily task of the line managers and frontline supervisors. It matters most in segments of the workforce that are closest to the actions that deliver performance results, for instance, where the product is crafted, the sale is made and the service is rendered. Without the emotional commitment of people in those critical spots, you cannot expect to sustain a competitive advantage for long". – **Jon Katzenbach, Niko Canner and Marc A Feign** in *Putting Pride to Work Recapturing the Power of the Most Effective Motivational Force*

10. The Contemporary Manager, November 15, 2005

Talent = Competence; Commitment; Contribution

Some go to war for *it*. Professional sports teams draft for *it*. Actors audition to show they have *it*. Others consider *it* the ultimate solution and try to manage *it*. Agents contract for *it*. Some are innately endowed with *it* while others strive diligently to earn *it*. All try to grow *it*: talent.

Talent is evolving into a science for some HR professionals and a passion for many line managers. A multitude of programmes and investments have been made to attract, retain and upgrade talent. Yet, sometimes after stipulating that talent matters, it is easy to get lost in the myriad of promises, programmes and processes and lose sight of the basics. There is, however, a deceptively simple formula for talent that can help HR professionals and general managers turn their talent aspirations into actions: Talent = Competence; Commitment; Contribution.

...talent begins with competence

Competence means that individuals have the knowledge, skills and values required for today's and tomorrow's jobs. One company clarified competence as right skills, right place and right job. Competence matters because incompetence leads to poor decision-making but without commitment, competence is discounted. Highly competent employees who are not committed are smart but do not work very hard. Committed or engaged employees work hard; put in their time; and do what they are asked to do.

In the last decade, commitment and competence have been the bailiwicks for

talent. However, the next generation of employees may be competent (able to do the work) and committed (willing to do the work) but unless they are making a real contribution through the work (finding meaning and purpose in their work), their interest in what they are doing diminishes and their talent wanes. Contribution occurs when employees feel that their personal needs are being met through their participation in their organization. Organizations are the universal setting and individuals find abundance in their lives through their work and they want this investment of their time to be meaningful. Simply stated, competence deals with the head (being able), commitment with the hands and feet (being there) and contribution with the heart (simply being).

...in limb and body

In this talent equation, the three terms are multiplicative, not additive. If any one is missing the other two will not replace it. A low score in competence will not ensure talent even when the employee is engaged and contributing. Talented employees must have skills, wills and purposes; they must be capable, committed and contributing. HR leaders can engage their general managers to identify and improve each of these three dimensions to respond to the talent clarion call.

Competent employees have the ability to do today's and tomorrow's tasks. Creating competence comes by following four steps.

Simply stated, competence deals with the head (being able), commitment with the hands and feet (being there) and contribution with the heart (simply being).

Rather than focus on what has worked in the past by comparing low and high-performing employees, more recent competence standards come from turning future customer expectations into present employee requirements.

...that can be created by articulating a theory

Articulating a theory or setting a standard is step 1. Competence begins by identifying the required competencies to deliver future work. Rather than focus on what has worked in the past by comparing low and high-performing employees, more recent competence standards come from turning future customer expectations into present employee requirements. At any level in a company, a HR professional can facilitate a discussion about

- What are the current social and technical competencies that we have within our company?
- What are the environmental changes facing our business and what are our strategic responses?
- Given our future environment and strategic choices, what technical and social competencies must employees demonstrate?

By facilitating these questions, HR professionals help general managers create a theory or a point of view on competencies that leads to a set of employee standards. When general managers build competence models based on future customer expectations, they direct employee attention to what they should know and do. The simplest test of the competence standard is to ask target or key customers: "if our employees lived up to these standards, would they inspire confidence from you in our firm?" When customers answer: yes, the competence model is appropriate; if they answer: no, it needs more work.

...assessing individuals and organizations

With standards in place, employees may be assessed on the extent to which they meet or do not meet standards. In recent years, most talent assessments evaluate both results and behaviours. Talented employees deliver results in the right way. The right way is defined by the competence standards described in step 1. These behaviours may be self assessed by the employee and others through a 360 by subordinates, peers and supervisors. To provide a holistic view of externally facing employees, they can also be evaluated by those outside the organization: suppliers, customers, investors, community leaders and other external stakeholders. This shifts the 360 to a 720 (360 times 2 = 720) and helps the individual understand what to do to improve. It also provides valuable input to the organization about how to design and deliver HR practices to upgrade talent.

...investing in talent improvement

Individual and organizational gaps may be filled by investing in talent. We have found six investments that may be made to upgrade talent. We have categorized these HR investments in six areas:

Buying: recruiting, sourcing, securing new talent into the organization

Building: helping people grow through training, on the job or life experiences

Borrowing: bringing knowledge into the organization through advisors or partners

Bounding: promoting the right people into key jobs

Bouncing: removing poor performers from their jobs and/or the organization

Binding: retaining top talent

When HR professionals create choices in these six areas, they help individuals and organizations invest in future talent.

...and following-up and tracking competence

Ultimately, talent measures should be derived to track how well individuals are developing their skills and how well the organization develops its talent bench. Individual employees can be tracked on their understanding of their next career step and their capacity to do it. Organizations can track the extent to which back ups are in place for key positions. Leaders who are measured on how much value they contribute to their company can also be assessed on the extent to which they are talent producers rather than talent users.

These basic four steps will help HR professionals and general managers ensure competent employees to do today's and tomorrow's work.

...that must be backed by commitment

Competence is not enough. Commitment means that employees are willing to give their discretionary energy to the firm's success. This discretionary energy is generally conceived as an employee value proposition. An employee value proposition makes a very simple statement: employees who give value to their organization should get value back from the organization. The ability to give value comes when employees are seen as able to deliver results in the right way.

Those employees who give value should get value back. In many studies of employee engagement, researchers have identified what employees get back from their work with the firm. Almost all

consulting firms have engagement indices that can be used as a pulse check to track employee engagement. Generally, these instruments suggest that employees are more committed when their organization offers them:

- Vision: a sense of direction or purpose
- Opportunity: an ability to grow, develop and learn
- Incentives: a fair wage or salary for work done
- Impact: an ability to see the outcome or effect of work done
- Community: peers, bosses and leaders who build a sense of community
- Communication: knowing what is going on and why
- Entrepreneurship or flexibility: giving employees choice about terms and conditions of work

When these seven dimensions exist in an organization, employees demonstrate their engagement by being at work on time, working hard and doing what is expected of them. Commitment (not just satisfaction) may be measured through surveys or productivity indices.

...and contribution

One of our colleagues graduated from a top business school (a surrogate for competence), got her ideal job and was willing to work very hard (commitment) but left after about a year. She still savoured the job and was willing to work hard but felt that the job was not helping her meet her needs. In recent years, many people are finding that traditional organizations (families, neighbourhoods, hobby groups, fraternities) where

"An employee value proposition makes a very simple statement: employees who give value to their organization should get value back from the organization".

“As employees work longer hours with technology removing work/life boundaries, companies need to learn how to help employees meet their needs. When people have their needs met through their organizations, they feel that they are contributing and finding abundance”.

people's needs have traditionally been met are faltering. As employees work longer hours with technology removing work/life boundaries, companies need to learn how to help employees meet their needs. When people have their needs met through their organizations, they feel that they are contributing and finding abundance.

...for organizations and leaders can help employees find abundance

We have identified seven questions that leaders may help employees answer so that employees feel an abundance in their work. Abundance occurs when individuals feel that they are contributing.

- Who am I? How does the employee identity weld with the company's reputation?
- Where am I going and why? How can the organization help the employee reach his or her goals?
- Who do I travel with? How does the organization build a community of support so that an employee feels connected?
- How well do I practice spiritual disciplines? How well does the organization practice spiritual disciplines of humility, service, forgiveness, gratitude and such others?
- What challenges do I enjoy? How does the organization help an employee find challenges that are enjoyable and energizing?
- How well can I access resources? How does the organization help the employee manage health, space and financial requirements?

- What are my sources of delight? How does the organization help the employee have fun?

When managers help employees find answers to these seven questions through their participation in the organization, these employees will find abundance in their lives and feel that they are contributing.

Talent is not an *'it'*, some abstract, unknown and impersonal set of ideal principles.

Nor is it a random set of programmes and policies that evolve according to the whims of talent-fashion. Using the simple (and simplistic) talent formula: competence; commitment; contribution, leaders and HR professionals may join in helping talent become a reality. It is worth doing. [Ω](#)

*Adapted from **A Talent Formula** by Dave Ulrich*

Human Resource Competency Study

Reprinted from Human Resource Competency Study, conducted jointly by the RBL Group and the Ross School at the University of Michigan.

This paper reviews the findings of the 2007 round of the Human Resource Competency Study (conducted jointly by the RBL Group and the Ross School at the University of Michigan), conducted five times over the past 20 years. It has provided the most comprehensive global empirical review of the HR profession, having involved, over its lifespan, more than 40,000 HR professionals and their line management associates. Six partner organizations in six regions were involved with this survey.

With the help of these regional partners, the 2007 round of the HR Competency Study involved the participation of over

Region	Partnering Organization
North America	Society for Human Resource Management (SHRM)
Latin America	IAE School of Business
Europe	Irish Management Institute (IMI)
China	Tsinghua University
Australia	Australia Human Resource Institute (AHRI)
India	National HRD Network

10,000 HR professionals and their line management.

The information in this study report is divided into three parts:

1. Business Context and Demographics
2. The New HR Competency Model for 2007 HRCS
3. Key Findings

Business context

In our dealings in the world of business,

similar themes continually surface. Globalization has made the world a global village where new markets (particularly in China, India, Brazil, and Russia) offer new challenges and opportunities. Global issues like trade barriers, exchange rates, tariff and distribution become important elements of managerial choice. Technology has increased accessibility, visibility, and connection. The connected world is shrinking, changing rapidly and information is flowing more freely. Employees represent increasingly diverse demographic backgrounds. In some parts of the world, employees are aging more than in others. Employee expectations are constantly rising as they gain in education and skills. Customers are increasingly segmented, literate and demanding.

Investors have become increasingly attuned to and actively concerned about not only financial results but intangibles. Competitors come from both traditional large global players and increasingly smaller investors.

Many spend enormous time specifying these trends and their implications on the business. Most of these trends are outside the control of any one individual or any one company. They occur in both predictable and unpredictable ways. They affect all aspects of business from how to fund a firm to how to position the firm in customer minds and how to engineer and

"Leadership development is absolutely crucial to the future of our business. If we aspire to grow, our cadre of leaders must grow". – Hector Ruiz, CEO of Advanced Micro Devices, in his first letter to employees.

“We define competencies not just as knowledge, ability and values but also as the ability to use this knowledge”.

deliver products. They also affect Human Resources. HR Practices are becoming more integrated, aligned, and innovative. HR departments are operating more like a business within the business with a clear strategy and channels of distribution. HR professionals are expected to contribute, utilizing the competencies they possess.

Demographics

The 2007 round of HRCS is based on a 360^o methodology with about 1,700 participants and 8,300 associate raters. Overall, this dataset is comprised of survey responses from over 10,000 HR professionals and their line management from six regions. More than ever before, this has been a global effort.

These respondents comprise three groups:

- Participating HR professionals completed the survey in evaluating themselves
- HR professionals who are peers or associates evaluated the participating HR professionals.
- Non-HR associates (who are generally line executives and internal customers) evaluated the participating HR professionals

These groups provided the opportunity to look at different perspectives regarding HR as a profession, the HR department, and the competencies needed by HR professionals to be effective in their organization.

Within this dataset, several trends are

apparent simply by looking at the demographics of the dataset. Some of these trends are as follows:

- **More women in HR.** In 1988, 23 per cent of participants were women; in the 2007 round, that number had increased to 54 per cent.
- **People joining HR from other areas.** Years of professional experience vs. years in HR indicate that HR professionals are joining HR from other functional areas.
- **China has an emerging HR profession.** 60 per cent of participants have fewer than five years experience in HR.
- **Functional HR to Embedded HR.** There appears to be a trend away from functional HR and into embedded HR (except China, which remains largely functional).

The New HR Competency Model for the 2007 HRCS

Six major categories or domains of HR competencies emerged from the fifth round of the Human Resource Competency Study. We define competencies not just as knowledge, ability and values but also as the ability to use this knowledge. For example, in the past, the domain name was Business Knowledge as knowledge about the business in which an HR professional works. In the current study, we call this domain Business Ally, implying a more active role in applying the knowledge. We

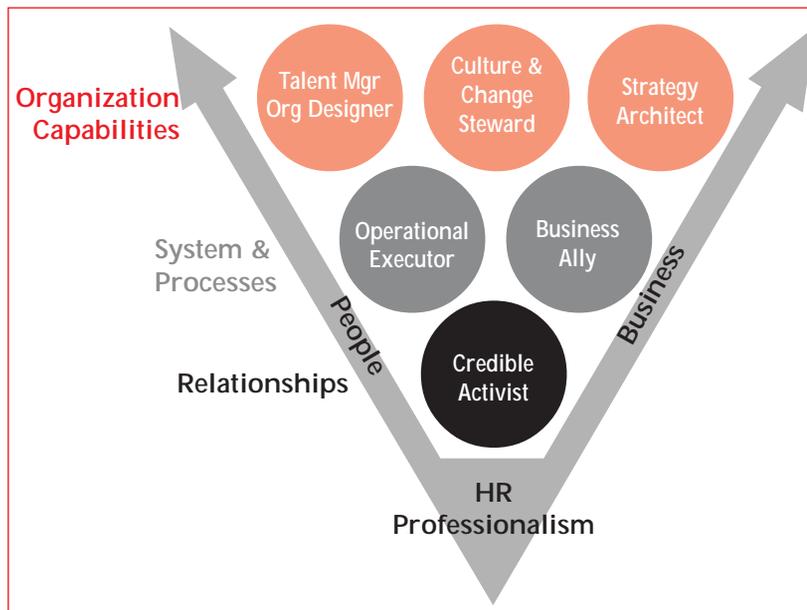
Table 1: Demographics by Region

	US & Canada	Latin America	Europe	China	Australia Asia Pacific	India
# of Respondents	2,773	2,127	1,553	2,110	1,235	263
% of Respondents	28%	21%	15%	21%	12%	3%

see HR professionals as needing to know but, more importantly, needing to do what they know.

The structure of the 2007 HRCS model tells a story. The shape of the model and even the placement of the domains within the competency model tell a story. First and foremost, they are indicative of what the data told us. The model can be discussed in two dimensions: focus, and level of influence.

As shown by the grey arrows,



HR professionals must master both people and business issues. Along the people axis, HR professionals need to communicate care, concern, and compassion for employees. Along the business axis, HR professionals need to meet customer and investor expectations by making sure that strategies are designed and delivered. HR professionals that emphasize the people side at the exclusion of the business side will not be successful. Likewise, HR professionals who focus on the business side without sensitivity to the "human" element will also not succeed.

The research showed a strong impact and connection to both the people and the business. This precipitated the inclusion of both domains to the model. Credible Activist is at the crux. Credibility enables the HR professional to relate to people but being an activist means that the HR professional has a point of view about the business and actively participates. Credible Activist ensures that the HR professionals can build the right relationships with both people and business. Moving up the people axis, HR professionals must master the basic systems and processes related to people. We found these processes in the

Operational Executor role.

Once people systems are mastered, HR professionals can become Talent Managers/Organization Designers who ensure that talent and organization capabilities exist within the organization. Ascending the business axis, HR professionals must master the basic systems and processes related to the business in order to be a Business Ally. They can then focus on being a Strategy Architect by helping to build the strategic capabilities of the organization. The Culture and Change Steward domain acts as the integrator. This capability is the keystone that bridges business demands and employee expectations.

A brief description of each domain follows.

Credible activist

The HR professional is both credible (respected, admired, listened to) and active (offers a point of view, takes a position, challenges assumptions). Some have called this HR with an attitude.

HR professionals who are credible but not activists are admired, but do not have much impact. Those who are activists but not credible may have ideas but will not be

listened to.

Culture and change steward

The HR professional recognizes, articulates and helps shape a company's culture. Culture is a pattern of activities more than a single event. Ideally this culture starts with clarity around external customer expectations (firm identity or brand), and then translates these expectations into internal employee and organization behaviors.

As stewards of culture, HR professionals respect the past culture and also can help to shape a new culture. They coach managers in how their actions reflect and drive culture; they weave the cultural standards into HR practices and processes; and they make culture real to employees. Additionally, successful HR professionals facilitate change in two ways. First, they help make culture happen. Second, they develop disciplines to make change happen throughout the organization. This may include implementation of strategies, projects, or initiatives. They help turn what is known into what is done.

Talent Manager/Organizational Designer

The HR professional masters theory, research, and practice in both talent management and organization design. Talent management focuses on how individuals enter, move up, across, or out of the organization. Organization design focuses on the capabilities an organization has that are embedded in the structure, processes, and policies that shape how an organization works.

HR professionals should make sure that these HR practices are aligned with customer expectations and strategy, integrated with each other, and innovative. HR is not just about talent or organization, but about the two of them together. Good

talent without a supporting organization will not be sustained and a good organization will not fully deliver without good talent.

Strategy architect

The HR professional has a vision for how the organization can win in the future and plays an active part in the establishment of the overall strategy to deliver on this vision. This incorporates recognizing business trends and their impact on the business, being able to forecast potential obstacles to success, and facilitating the process of gaining strategic clarity.

The HR professional also contributes to the building of the overall strategy by linking the internal organization to external customer expectations. This linkage helps make customer-driven business strategies real to the employees of the company.

Operational executor

The HR professional executes the operational aspects of managing people and organizations. Policies need to be drafted, adapted, and implemented. Employees also have many administrative needs (to be paid, relocated, hired, trained and such others) HR professionals ensure that these basic needs are efficiently dealt with through technology, shared services, and/or outsourcing. This operational work of HR ensures credibility if executed flawlessly and grounded in the consistent application of policies.

Business ally

The HR professional contributes to the success of the business. Businesses succeed by setting goals and objectives that allow them to respond to external conditions. HR professionals contribute to the success of a business by knowing the social context or setting in which their business operates. They also know how the business makes money, which we call the

"The HR professional is both credible (respected, admired, listened to) and active (offers a point of view, takes a position, challenges assumptions). Some have called this HR with an attitude".

value chain of the business (who customers are, why they buy the company's products or services). They also have a base understanding of the parts of the business (finance, marketing, R&D, engineering) so that they can help the business organize to create value.

Key findings

In analyzing the data, we spent a lot of time comparing subsets of the data (HR vs. Non-HR, associate rater vs. participant, regions) which helped identify requirements for how HR can add value. For the purposes of this report, initial impressions and findings are divided into three areas: (1) general findings (2) findings that matter to the HR professional and (3) findings that matter to the overall HR function.

General findings

Differences in Perception. In the comparison of several subsets of this dataset, two specific differences became apparent from the factor analysis.

- Customer views for HR. Non-HR associate raters believe that external customers can and should be brought into HR work. HR respondents did not perceive this. This indicates that HR practitioners may still be defining "customers" as employees and line managers and not as the external customers of the firm. HR professionals need to pay more attention to the real external customer and find ways to bring them into the organization. When this factor is regressed against business performance, it is seven per cent higher (27 per cent versus 20 per cent) for non-HR associates than it is for HR participants and associates, meaning that non-HR associates view it as having a stronger effect on the business than do their HR counterparts.

- Designing Rewards Systems. Non-HR associate raters seem to see reward systems (compensation, benefits, performance appraisal and such other) as connected to the HR practices of talent management and organization development. HR associates and participants put reward activities together with operational/ tactical items. This is a fascinating difference in opinion. It may be that HR departments are shifting their more strategic work to talent and organization and compensation is beginning to be more routine and transactional. It may be that compensation and talent management /organization design professionals are becoming separated (compensation people do not attend TMOD conferences, and vice versa). This could be a weakness in building an integrated view of HR practices. Clearly, compensation systems affect or at least reinforce actions of employees, but they may not be as integrated as they could or should be with other HR work.

Emerging markets. The emphasis put on each of the competencies for HR professionals varies by emerging versus traditional markets. In emerging markets (India, China), HR professionals need to pay more attention to the Operational Executor and Business Ally skills, whereas in the mature markets these items are seen as table stakes or tickets of admission to the partner role.

Talent Manager and Organization Designer. In our initial factor analysis, talent and organization items were factored within the same domain, indicating that while they are different, they need to be connected. It is not enough to get good people (ergo a danger of moving to human capital) without organization that

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sustains it. This is a significant shift away from the current trend, where many HR professionals focus extensively on talent management. Talent management without attention to organization capability is insufficient. This idea is reinforced by the impact that the HR department has on business performance.

HR departments account for around 25 per cent of business performance, while HR competencies of individual HR professionals account for about 20 per cent.

Culture Steward. In previous work, culture was subsumed under "strategic contribution." This time it formed a unique domain. Evidently in the last few years HR's ability to define, create, manage, and change culture has become a unique source of competence that HR professionals must demonstrate. Somewhat ironically, this domain is the 2nd highest rated in predicting performance of both HR professional and HR department effectiveness (above Strategy Architect and Talent Manager / Organization Designer). So, HR professionals are being asked to manage culture and they seem to be doing it better than some of the more traditional roles. This may indicate a shift in how HR is viewed.

Findings for the HR professional

Business impact. Based on other research, management has about 50 per cent influence on a firm's performance; the other 50 per cent is outside the control of management (economic conditions, competitors' actions, etc.). HR is a part of the managerial 50 per cent (in addition to choices about strategy, marketing, manufacturing and such others). The overall impact of what HR professionals know and do has increased in terms of its impact on business performance to roughly 20 per cent. So, the competencies of HR professionals account for roughly 20 per

cent of the 50 per cent of managerial impact on business results.

Non-HR respondents want HR professionals to play a more active role. Increasingly, business demands place a higher set of expectations on HR professionals. Non-HR professionals want more from HR professionals than ever before.

Credible Activist. This domain showed the highest importance in predicting the effectiveness of an HR professional. HR professionals must earn their credibility by building relationships of trust, but they then must take an active stance to make a difference in results. Credibility is not enough without action, particularly action within the other five domains.

Culture and Change Steward, Talent Manager/Organization Designer and Strategy Architect. These three domains of HR competence form a collection of things HR professionals should know and do to make a difference. As noted, culture means turning events into patterns. Talent Managers ensure a flow of future talent. Organization Designers make sure that the organization has the capabilities to compete. Strategy Architects pay attention to the business's competitiveness and customers.

Business Ally and Operational Executor. We find that these are table stakes. They are necessary but not sufficient. As mentioned above, in emerging markets (China, India) these are more important for the success of the HR professional than in more mature markets where the managers may assume that HR professionals can do these things.

Findings for the HR department

- HR department focus. HR departments have 25 per cent more impact on the performance of the business than the

competencies of the HR professionals. In previous years, we encouraged building the talent of individual HR professionals; now we need to make sure that the HR department works well as a function.

- Stakeholders. HR departments need to focus on a mix of all stakeholders to have full impact on the business. We assume (did not test) that in previous years, HR primarily focused on employees and line managers, but we found that an equal focus on customers, investors, and communities affects business results. It is not enough to have talented HR people; we need capable HR departments. The old adage "I like my HR person; I hate my HR department" may be out of date. We also found that HR departments should build practices and activities with an eye to employees and investors, but they should involve line managers and customers to make things happen.
- HR organization. When the HR organization is aligned with business strategy and with the business organization, higher business results follow.

Conclusion

The business context and organization capabilities required to succeed have raised the bar on HR professionals. HR professionals who would have succeeded 30, 20 and even 10 years ago would not be as likely to succeed today. HR professionals are expected to play new roles, and to be able to play those roles, they need new competencies. As a result of the Human Resource Competency Study we have a greater understanding of the competencies needed by HR professionals and agendas needed by HR

departments to impact business performance. Moving forward, we plan to continue data collection in India to get a larger and more workable sample. We will also be partnering with an organization in the Middle East to collect data in that region. This year will be spent on continuing the analysis we have begun to better understand the implications of the results of the survey. Our regional partners will likewise be delving into the research to understand the implications for their regions specifically. Future publications and presentations of the results will be directed to both the academic and professional community. 

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Human Resource Transformation

TOWARDS A THREE-DIMENSIONAL PEOPLE STRATEGY

It is universally accepted today that good people management enhances corporate performance. Not so obvious is that successful people strategies are three-dimensional, each dimension requiring an equal amount of attention. When we talk about people strategy, we mean a strategy, with its underpinning policies and processes that an organization develops and implements for managing its people to optimal effect.

...vertical alignment

Over the last decade, people strategy has largely meant having an internally coherent set of "best" HR policies and practices. This endeavour has proven to be both difficult and elusive. As one might expect, there appears to be no one single "ideal type" of people strategy with a set of HR policies and practices that can be adopted off the shelf by organizations seeking to manage their people more strategically.

The reality is that an appropriate people strategy must vary according to organizational circumstances. The key circumstances are business goals and strategies. The argument is that, in order to play a strategic role in the organization, the HR policies and practices that make up an organization's people strategy should reflect, reinforce, and support the organization's business aims and objectives.

A strong linkage is needed between the overall vision of the organization that is held in the minds of senior executives and the aims, objectives and the underlying philosophy of the organization's approach

to managing people. This linkage will ensure that the HR interventions can become a creator and not an inhibitor, of sustained competitive advantage. This link between people strategy and business strategy is termed vertical alignment.

...horizontal alignment

Vertical alignment is a crucial dimension of a people strategy but it is not sufficient. The second dimension is horizontal alignment. This dimension operates at the level of individual HR policy areas. The aim here is the achievement of a coherent and consistent approach to managing people that permeates the entire activities of the HR function and other organizational functional areas, at the policy level. Achieving a high degree of horizontal alignment implies that an organization has embraced the value of developing and articulating clear HR policies that consistently relate to one another. At a more fundamental level, the firm is able to communicate consistent and reinforcing messages to employees.

...action

The third dimension is action or implementation. Much understanding about HRM at the strategic level has tended to assume that the vertical and horizontal dimensions are sufficient. The mere existence of HR policies and a people strategy is believed to be sufficient to ensure action. Yet, translating HR policies into action would appear to be absolutely fundamental to the question of whether an organization is delivering in the area of people management.

"There appears to be no one single "ideal type" of people strategy with a set of HR policies and practices that can be adopted off the shelf by organizations seeking to manage their people more strategically".

This action dimension has two separate but closely interrelated aspects. The first concerns the experiences by employees of HR policies. For example, the policy on appraisal may state that employees have four performance feedback sessions with their manager every year and that they are appraised on five different competencies. If this is, indeed, the experience of employees, then policy has been turned into action.

If, however, employees are rarely party to performance feedback and if, when they are, the manager concentrates on only one criterion, then the organization has failed to put policy into action. The second aspect of the action dimension is subtler and focuses on the behaviours and values of the managers as they are implementing policy. In their attitudes, conversations, and body language, managers send out very clear messages about their attitudes toward and support of the policy.

Delivering business strategy through people is critical to the long-term performance of organizations. At the heart of the delivery is the competence and will to build vertical alignment, to craft horizontal alignment, and to move from rhetoric to the reality of action. The challenge for the HR function is to relentlessly learn how to achieve excellence in all three dimensions of people strategy. **[Sourced from L. Gratton and C. Truss; The three-dimensional people strategy: Putting human resource policies into action.]** 

"Organizations could be viewed as a portfolio of forms and a system of forces".

HR AS THE ORGANIZATIONAL ARCHITECT

Truly creative organizations design structures or forms uniquely suited to their own needs. However, there are some "prescriptions" that HR could consider for managing anomalies and creating more effective organizational designs.

1. In order to understand what makes organizations effective as well as what causes many of their fundamental problems, in regard to organizational design, HR needs to subscribe to both neat "categorizations" and to use these categorizations creatively to build new ones. (Categorizations refer to forms such as entrepreneurial organization, machine organization, professional organization, innovative organization, and so on.) The premise is that an effective organization "gets its act together" – achieves consistency in its internal characteristics, harmony in its processes, and alignment with its context.
2. Organizations could be viewed as a portfolio of forms and a system of forces.
 - The entrepreneurial form represents the force for direction, for people looking up to the apex of authority to know where to go.
 - The machine form represents the force for efficiency, for people to sense some order, and adhere to some work rules and standards to make sure everything comes out as planned.
 - The professional form represents the force for proficiency to let people hone their skills and apply them autonomously.
 - The diversified form represents the force for concentration, for

managers to receive clear product-market mandates and be free to manage them as they see fit, subject only to performance controls.

- The innovative form represents the force for learning, for people to change, adapt, and work together to innovate.
- The ideological form represents the force for cooperation, for people to pull together.
- The political form represents the force for competition that makes people to pull apart.

All serious organizations experience all the seven forces listed above, at one time or another if not all the time. Sometimes one force dominates the behaviour of an organization, then a "Configuration" occurs and a form appears (e.g., manufacturing organizations are machine bureaucracies; consultancy organizations are professional entities)

3. A given configuration attempts to represent harmony, consistency and fit.
 - For an organization that wants to focus on execution excellence, a centralized structure would be more appropriate with formal procedures, sharp divisions of labour, functional groupings and an extensive hierarchy. In addition, these organizations need to emphasize standardization of work, of training and such others.
 - For an organization that wants to focus on product leadership, the organization structure requires to be fluid, organic, and selectively decentralized. Functional experts would be deployed in multi-disciplinary teams of staff, operators, and managers to carry out innovative projects. Coordination

"For a multi-business organization, the corporate structure could be one of three forms: cooperative, competitive or a balanced form".

will be largely achieved by "mutual adjustment", encouraged by liaison personnel, integrating managers, and matrix relationships.

- For an organization that wants to excel in customization, the structure would emphasize partial decentralization, and be dependent on training to standardize the skills of its many operating professionals. The key to functioning is the creation of a system of pigeonholes within which individual professionals work autonomously, subject to controls of the profession. The hierarchy will be minimal, meaning wide spans of control over professional work, and will have a large support staff to support the professionals.
- For a multi-business organization, the corporate structure could be one of three forms: cooperative, competitive or a balanced form.
 - Co-operative forms work best when the organization is pursuing a related, constrained diversification strategy, where the firm's divisions would share one or more corporate strengths to develop economies of scope. These organizations will use centralization, frequent, direct connects between corporate and divisions, liaison managers, matrix relationships, teams and taskforces as integrating mechanisms. Corporate office will emphasize centralized strategic planning, human resources, and marketing to foster cooperation between divisions. R&D will be centralized. Rewards will emphasize overall performance and divisional performance and culture will emphasize co-operative sharing.
 - Competitive forms are for firms

pursuing an unrelated diversification strategy. The corporate focus will be on efficient internal capital allocation. Restructuring, buying and selling businesses will be a normal pursuit. The firm's divisions will enjoy complete independence and will not be sharing any common strength. Integrating devices will be few. Internal competition will be directed towards creating flexibility, challenging the status quo and inertia, and motivating effort. Financial controls will be used to emphasize and support internal competition among divisions. Corporate office will maintain an arms-length relationship with divisions and focus on performance appraisal, resource allocation, and long-range planning. The corporate office will have a small staff. Finance and auditing are the most prominent functions at the corporate level to manage cash flow and assure the accuracy of performance data coming from divisions. Legal affairs are important as the firm acquires or divests assets frequently.

- The balanced forms are normally referred to as "SBU" forms. SBU form firms exhibit fewer links or less constrained links among its divisions. Related diversification strategy is used. Three levels are found in these organizations: Corporate; SBUs; and SBU Divisions. Divisions within each SBU are related in terms of shared products or markets or both and share competencies to develop economies of scope, and possibly scale. Divisions of one SBU will have little in common with divisions of other SBUs. Integration mechanisms within a SBU will be

"The most centralized and the most costly structural form is the cooperative form. The least centralized, with the lowest bureaucratic costs, is the competitive form".

similar to those seen in the co-operative form. Each SBU will function as a profit centre. Financial controls are more important than strategic controls at the corporate level.

Differences in the three major forms of the multi-business structure are seen in the degree of centralization, the focus of the performance appraisal, the horizontal structures (integrating mechanisms), and the incentive compensation structure. The most centralized and the most costly structural form is the cooperative form. The least centralized, with the lowest bureaucratic costs, is the competitive form. The SBU form requires partial centralization and involves some of the mechanisms necessary to implement the relatedness between divisions. Also, the divisional incentive compensation awards are allocated to both the SBU's and corporate performance.

4. Configuration helps an organization know what it must do and how; the structure, the distribution of power, and even the culture are clear. Herein lies its strength. And its debilitating weakness. The fact is that configuration contaminates. Contamination is really just another way of saying that the configurations are not just structures, not even just power systems. They are cultures. Being machinelike or innovative is not just a way of organizing; it's a way of life.
5. No organization can be all things to all people. It is better to select and then concentrate than try to be comprehensive and so end up diffusing efforts. Contamination of innovation is the price paid by the machine organization to be efficient, just as contamination of efficiency is the price paid by the innovative organization in order to concentrate on learning.

However, things could go out of control. The fact seems to be that truly successful configurations exist not in pure form. The other forms or forces may be secondary but their presence is necessary to contain the dominant one. Otherwise the organization risks running out of control.

6. It would be convenient if organizations simply pigeonholed themselves neatly into one category or another. But that does not happen. It would help to understand organizations as combinations of the forces, sometimes as hybrids of the forms. They attend to different forces without letting only one dominate, doing so either in a steady-state balance or else at least in a dynamic equilibrium over time. In some cases, the organization combines different forms that dominate different parts. For example, newspapers must couple machine structure in their printing function with what are probably best described as professional structures in their editorial function.
7. Combinations may not experience contamination - since one strong force can hold another in check - but they instead experience cleavage. That is, they tend to conflict along their natural fault lines, where their strong forces meet. Cleavage is a necessary evil, an expected cost of organizing in combination. It must usually be managed by alleviation more than elimination, or, perhaps better, by its redirection to constructive ends.
8. At times organizations have to convert from one configuration, or combination, to another, usually because of a change in the forces acting upon them - external or internal. For example, the appearance of a new operating technology may require much higher levels of skills and so force a machine

"Organizations need conflict to challenge the insularity of culture but culture constrains the destructiveness of excessive conflict. Conflict and culture should form their own combination and exist in a kind of dynamic tension".

form to become more professional. Or in the case of a consultancy, the tendency to be innovative at the outset may wane over time as the consultants tire of constant change; in their efforts to settle on more standardized applications of their skills, they naturally drive the organization toward the professional form.

9. A culture that is rich and unique and so binds the members tightly to the organization is necessary and represents the force of co-operation. Organizations need conflict to challenge the insularity of culture but culture constrains the destructiveness of excessive conflict. Conflict and culture should form their own combination and exist in a kind of dynamic tension.

Organizational effectiveness in the domain of design and structures depends on a rich understanding of the various design parameters and a propensity to utilize that knowledge in creative ways.

[Sourced from (1) H. Mintzberg; *Mintzberg on Management: Inside Our Strange World of Organizations*. (2) R. Berner; *P&G: New and Improved*. *Business Week* (3) J. L. Lunsford and A. Raghavan; *Wall Street Journal Online*.] [Ω](#)

"HRM must increasingly promote organizational flexibility in order for the firm to achieve a dynamic fit with its environment. In this way, HR systems can help organizations manage change better".

HR MANAGEMENT SYSTEMS FOR FLEXIBILITY

HR systems are designed primarily to fulfill the strategic requirements of an organization for a given period of time. However, today's organizations are faced with a complex and dynamic environment that require them to be "flexible" to adapt to diverse and changing requirements over time. From this perspective, strategic HRM is concerned primarily with developing the organizational capability to adapt to changing environment contingencies. HRM must increasingly promote organizational flexibility in order for the firm to achieve a dynamic fit with its environment. In this way, HR systems can help organizations manage change better.

...flexibility

Flexibility could be categorized as resource flexibility and coordination flexibility. Resource flexibility refers to the extent to which a resource can be applied to a larger range of alternative uses, the costs and difficulty of switching the use of a resource from one alternative use to another, and the time required to switch from one use to another.

Co-ordination flexibility consists of the extent to which the firm can resynthesize the strategy, reconfigure the chain of resources and redeploy the resources. These types of flexibility are particularly applicable for building flexibility in strategic HR.

...in HR systems

The framework proposed here focuses on three points of flexibility: (1) developing HR systems that can be adapted quickly; (2) developing a human capital pool with a broad array of skills; and (3) promoting

behavioural flexibility among employees. 

"Skilled and knowledgeable workers who are not motivated are unlikely to contribute any discretionary effort. Motivated workers who lack skills or knowledge may contribute discretionary effort with little impact on performance".

HR SYSTEM FLEXIBILITY

The resource flexibility of HR systems refers to the extent to which they can be adapted and applied across a variety of situations. This could be done by enhancing the general applicability of the HRM system across jobs and situations with minimal redesign or redevelopment of the system in order to apply it to different situations. For example, a behavioural observation scale used to assess performance is quite rigid in its applicability - limited to evaluating employees in one job or job family and assuming that all employees are required to exhibit the same set of behaviours. Management by objectives, however, is an appraisal technique that better resembles a flexible process. Although some requirements are standardized (e.g., the need for objective criteria), the application of the technique allows for its use across a larger number of jobs and for tailoring a set of evaluation criteria for each individual within a given job or job family.

Secondly, resource flexibility could be achieved by allowing processes for evaluating situations and for developing and applying responses to function in an autonomous and decentralized manner. If a centralized HR function attempts to develop a standard set of HR practices to be rigidly applied across the entire organization, particularly those that possess multiple sites, and possibly even multiple diversified businesses, it is likely that many sites will have practices that do not fit well with their unique situation. Thus, flexibility with regard to HR systems partially may require some decentralization of authority for the development of HR practices in order to allow each operating unit to develop and apply an appropriate system of practices for its unique situation.

The concept of co-ordination flexibility as applied to HR systems addresses the issue

of how quickly the system can be resynthesized, reconfigured, and redeployed. For this to happen, the HR practices within a system require to be loosely coupled together. Tight coupling of practices substantially reduces the ability to change any one of the HR practices in a system.

Political processes often work to inhibit unobstructed change in HR systems. HR systems often come about not from functional or technological requirements, but from such organizational processes as power and influence, conflict and contests for control. Thus, changes in HR practices require battling the internal power structure. Consequently, these limit the coordination flexibility inherent in the firm. This could be countered, partially, by developing feedback systems that provide accurate and timely information, from those impacted by the change, regarding the efficacy of a particular HR practice or system of practices.

...employee skills flexibility

Resource flexibility in employee skills refers to the number of potential alternative uses to which employee skills can be applied. Employees who possess broad sets of skills enabling them to accomplish a large number of diverse tasks provide operational resource flexibility on a day-to-day basis. Skill-based pay plans provide one way of encouraging the development of such broad skill sets. For the long-term, employees need to be able to learn quickly to perform new tasks. This could be realized by ensuring that employees possess the foundational skills that will enable them to develop broader skills in the future.

Co-ordination flexibility with regard to employee skills refers to how individuals with different skills can be redeployed quickly in the value chain. In this vein, firms could seek a wide range of skills

“When employees perceive HR to be legitimate or credible and relevant, it allows HR policies and practices to stand out in the organization, thereby capturing attention and arousing interest”.

through selecting a large number of individuals possessing a very narrow range of skills and then deploying and redeploying them wherever their skills are needed. Firms could also achieve coordination flexibility of skills using contingent workers. Individuals with a narrow set of skills are hired to complete a specified project. Then, when the project is over, these contingent workers are released and a new set of contingent workers, whose narrow skills meet the needs of a new project, is brought in.

...employee behavioural flexibility

The importance of employee behaviour, as well as its distinctiveness from employee skills, is well understood. Skilled and knowledgeable workers who are not motivated are unlikely to contribute any discretionary effort. Motivated workers who lack skills or knowledge may contribute discretionary effort with little impact on performance.

Organizational flexibility comes to life through employees exhibiting appropriate "behavioural scripts" in given situations. These behavioural scripts consist of sequences of behavioural events expected by an individual and are similar to what are called "routines". HR practices can strongly influence – positively or negatively – the behavioural resource flexibility that exists in a firm. On the one hand, very specific

behavioural appraisal systems, narrow job descriptions, and rigid operating procedures will decrease behavioural flexibility. On the other, developmental experiences or assignments aimed at increasing the behavioural repertoires available to managers will enhance behavioural flexibility. By working in situations unlike their own, managers can face different problems with different solutions, thus increasing their capacity to recognize a greater variety of contingencies and having a greater set of behavioural responses at their disposal.

As behavioural scripts become more homogeneous, a firm's diversity of perspectives is reduced thus reducing the potential for conflict. Because members share the same scripts regarding appropriate responses to similarly perceived situations, these scripts also serve as coordinating mechanisms. However, these positive benefits of increased co-ordination and reduced conflict might be more than offset by the negative side effects of reduced diversity of points of view. Individuals with different scripts bring different interpretational choices and enactment choices. This highlights the need for co-ordination flexibility, which enables the firm to synthesize and deploy the different perspectives in a way that maximizes decision effectiveness.

"Most recently, a trend has developed toward justifying the expenditures for and existence of the HR function. HR departments and programmes have become an element of the firm's profit equation to be minimized as a cost and maximized as a value-adding component of firm strategy".

HR and Flexibility		
HR Component	Resource Flexibility	Coordination Flexibility
Practices or system	Applicability of practices across jobs, etc. Rigidity of application across jobs, etc.	Malleability of practices Speed of feedback on practice impact
Employee skills	Individual skill breadth Ability to acquire new skills	Variety of skills in the workforce Ability to acquire diverse skills from contingent workers
Employee behaviour	Rigidity of script application	Complementarity / conflict between scripts of different groups

“The ultimate goal of strategic HRM is to contribute to organizational performance through increasing the likelihood of goal attainment. For simplicity the goal is often assumed to be financial performance or wealth creation”.

HR can contribute to a firm's competitive advantage by playing an integral role in determining the organization's flexibility. To the extent that bureaucracy and inertia can be minimized, HR systems can be changed quickly to meet the needs of a changing environment. To the extent that the workforce possesses a variety of skills and behavioural repertoires, the firm's flexibility is increased. Thus, HR can play a key role in managing change by seeking to build genuine organizational capabilities that can be applied toward both discovering and implementing a variety of diverse strategic initiatives. **[Sourced from P. M. Wright and S. A. Snell; Toward a Unifying Framework for Exploring Fit and Flexibility in Strategic Human Resource Management]** [Ω](#)

HR: LEGITIMACY AND RELEVANCE

When employees perceive HR to be legitimate or credible and relevant, it allows HR policies and practices to stand out in the organization, thereby capturing attention and arousing interest. In other words, HR is perceived by employees to be distinctive.

...legitimacy

Legitimate authority of the HR system and its staff leads employees to consider submitting to performance expectations as formally sanctioned behaviours. The HR system is most likely to be perceived as an authority situation when the HR function is perceived as a high-status, high-credibility function and activity. This is most likely when HR has significant and visible top management support and can be achieved through investments in HR practices or the HR function, or perhaps by placing the Head of HR in a top-level managerial position.

The success of HR depends largely on top management support, including top managers' beliefs about the importance of people, investment in human resources, and the involvement of HR professionals in the strategic planning process. In such a way, the signal sent from top management is that HR is legitimate or credible.

...relevance

Relevance is a function of perceived goal congruence and perceived power of HR and line managers to help individuals achieve relevant goals.

Individual goals should be fostered to align with those of the organization. Such as alignment has an important consequence for both individual attitudes and behaviours, as well as for effective organizational functioning. The organizational situation must be defined in such a way that individuals are willing to work toward goals that not only allow them to meet their own

needs but, in doing so, also allow the organization to achieve its goals. For example, if the organization has a strategic goal of customer service and an employee values financial gain, then service - based bonuses will heighten relevance and allow both the individual and organization to achieve their goals. Relatedly, the relevant desired behaviours must be specified and obstacles to their performance removed.

HR staff and line managers enacting HR should be perceived as possessing personal capabilities and as those willing to use them to aid goal achievement - separate from the managers' influence based on position power and legitimate authority.

Characteristics of the HR or line manager that bear on this issue include his or her prestige, special knowledge or expertise, representativeness, control of resources, and ability to apply sanctions.

Legitimacy and relevance play important roles in enhancing the distinctiveness of HRM.

...measuring HRM Performance

Human Resource Management is undergoing a rapid evolution. From its initial roots as the function involved in the administrative aspects of hiring, training, and payroll, it has seen stages where union relations, employee satisfaction, and legal compliance have served as dominant areas of emphasis and expertise. Most recently, a trend has developed toward justifying the expenditures for and existence of the HR function. HR departments and programmes have become an element of the firm's profit equation to be minimized as a cost and maximized as a value-adding component of firm strategy.

...strategic HRM and performance

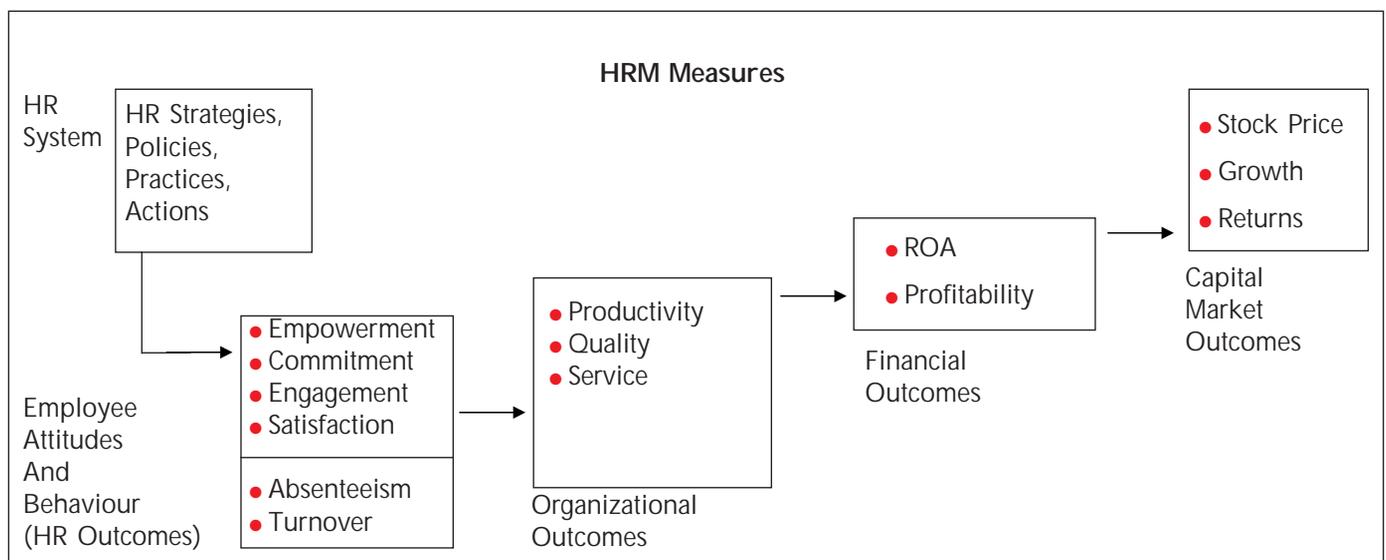
A simple yet powerful definition of strategic HRM is that provided by Wright

and McMahan (1992): "the pattern of planned human resource deployments and activities intended to enable the firm to achieve its goals". Implicit in this definition is that the ultimate goal of strategic HRM is to contribute to organizational performance through increasing the likelihood of goal attainment. For simplicity the goal is often assumed to be financial performance or wealth creation. However, before financial performance can happen there are other outcomes that are required to emerge. One way to understand these performance outcomes is to propose that HR strategies, policies, and actions are most likely to directly impact human resource outcomes of employee attitudes and behaviours, followed by organizational, financial and even capital market outcomes. Implicit in this proposal is the notion that outcomes can be differentiated at hierarchical level, with outcomes at one level contributing to outcomes at the next level. **[Sourced from: D. E Bowen and C. Ostroff; Understanding HRM – Firm Performance Linkages: The Role of the "Strength" of the HRM System.]** 

HR: EFFICIENCY AND EFFECTIVENESS

Defining any performance construct necessarily entails a discussion of both efficiency and effectiveness simultaneously. Efficiency refers to rates of resource usage in achieving objectives and effectiveness means the achievement of objectives. Organizations have different views of performance in part because they view the relative importance of efficiency and effectiveness differently. This means that one simple indicator may not be sufficient

to measure HR in a broad array of organizations on simple efficiency or effectiveness measures as even these are driven in part by organizational objectives. HRM Measurement should concern outcomes of employee attitudes and behaviours and organizational outcomes of productivity, quality, service and such like. And the measurement should take into consideration both efficiency and effectiveness dimensions.



[Sourced from: (1) E. W. Rogers and P. M. Wright; Measuring Organizational Performance in Strategic Human Resource Management: Looking Beyond the Lamppost. (2) P. M. Wright and G. C. McMahan; Theoretical Perspectives for Strategic Human Resource Management] Ω



SECTION VI

Social Enterprise: Time for the 'Inclusivity' Quotient

"They are called social entrepreneurs and if you have not heard the phrase yet, you are missing one of the hottest movements". – U.S. News and World Report

All entrepreneurs are touched by the circumstances around themselves; almost all are inspired by some ideas triggered off by something special in their circumstances. In some there is a spark of an innovative thought that comes to fruition through the corporate or business route. For others, it takes the societal route, assuming a near visionary stature and is associated with a passion and compassion that is powerful enough to move mountains. The former is often rewarded by immense global recognition and wealth. For the latter it is the satisfaction of achieving what their hearts and minds set out to achieve – never mind the near absence of any recognition save in the souls of their beneficiaries.

Says Nicholas Kristof writing in the New York Times: "It is one of the most hopeful and helpful trends around. These folks are not famous but they are showing that what it really takes to change the world is not so much wealth or power as creativity, determination and passion". The Ashoka Foundation has listed some historical examples of leading social entrepreneurs that is educative:

- Susan B. Anthony (U.S.): Fought for Women's Rights in the United States, including the right to control property and helped spearhead adoption of the 19th amendment.
- Vinoba Bhave (India): Founder and leader of the 'Bhoodan' Movement, he

caused the redistribution of more than 7,000,000 acres of land to aid India's untouchables and landless.

- Dr Maria Montessori (Italy): Developed the Montessori approach to early childhood education.
- Florence Nightingale (U.K.): Founder of modern nursing, she established the first school for nurses and fought to improve hospital conditions.
- Margaret Sanger (U.S.): Founder of the Planned Parenthood Federation of America, she led the movement for family planning efforts around the world.
- John Muir (U.S.): Naturalist and conservationist, he established the National Park System and helped found The Sierra Club.
- Jean Monnet (France): Responsible for the reconstruction of the French economy following World War II, including the establishment of the European Coal and Steel Community (ECSC). The ECSC and the European Common Market were direct precursors of the European Union.

One might add the name of Muhammad Yunus. His Grameen Bank has revolutionized economics in Bangladesh by offering "microloans", empowering the impoverished to attain economic self-sufficiency through self-employment. This model has been replicated in 58 countries

"Whether they are working on a local or international scale, social entrepreneurs share a commitment to pioneering innovation that reshape society and benefit humanity. Quite simply, they are solution-minded pragmatists who are not afraid to tackle some of the world's biggest problems".
– **Skoll Foundation**
<http://www.skollfoundation.org/aboutsocialentrepreneurship/index.asp>

"Non-profits have to recognize that they are businesses, not just causes. There is a way to combine the very best of the not-for-profit, philanthropic world with the very best of the for-profit, enterprising world. This hybrid is the wave of the future for both profit and nonprofit companies." – Genius at Work, an interview with **Bill Strickland**, CEO of the Manchester Craftsmen's Guild and the Bidwell Training Center Inc.

around the world. Not that all social entrepreneurs agree to being described as such. Arvind Kejriwal objects to the corporate straight-jacket inherent in the connotation and with justification. The important thing is the common thread that runs through such people.

Confronted with enormous problems, they were not thwarted by them but converted them into opportunities to deliver solutions that not only worked then and there but were replicable models for enduring change in different situations and locales. They are people who have creatively impacted on lives of the dispossessed to build avenues for economic independence and its other benefits; people whom the rest of the world had pushed into hopeless lives.

The seven stories provided here afford a glimpse into the scope and impact of social entrepreneurship. Apart from their compassion and passion, they demonstrate all the other qualities of corporate entrepreneurs. They are all **ambitious** about their commitment and leave no stone unturned when it comes to accomplishing their missions. They are just as keenly focused as any other **bottomline driven** individual: only their bottom lines are drawn at a societal level. They are **highly intelligent** people and perfectly aware of the world and its ways: they understand the need to **network, strategize and market their ideas** to bring about comprehensive change where it is needed the most. They necessarily have to be **more innovative** because they have chosen the most difficult workspace with extremely limited resources.

They also happen to be the genuine

leaders in a world where equity and inclusivity are the most difficult goals to attain. Yet, there are few pan Indian contests to discover them or to train them even though social entrepreneurship is increasingly being recognized as a part of management science.

Clearly, the writing is on the wall. Without getting the global order into a state of economic equilibrium, the future of markets is jeopardized and it is social enterprise that will help the world take steps, howsoever tiny, to set the balance right. Such people are the providers of the global inclusivity quotient. **Ω**

No Room for Broken Hearts

THE bottom of the pyramid has always been reserved for the non-corporate or a tired and disinterested bureaucrat because 'scraping the bottom of the barrel' never makes for good bottomline sense. Not so any longer for India's social entrepreneurs. Making a veritable 'opportunity' of India's burgeoning population, they have used the benefits of scale that the country provides to drive down costs and deliver services – especially in the areas of healthcare and insurance – in an unprecedented manner. No one believed even a few years ago that it was possible for a non-state organization to harness this base as a sustainable market that would bring profits to the social entrepreneurs and make dramatic changes to the lives of the participants. Devi Shetty was an exception.

...paradigms of cardiac concern are changing

Having arrived on the Calcutta medical scene to head B. M. Birla Hospital's cardiac care facilities in 1989 – a enthusiastic young doctor from Guy's Hospital, United Kingdom – Devi Shetty won the hearts and minds of the citizenry and patients from the city and even neighbouring countries in south-east Asia with the freshness of his approach to patients: Complete transparency in addressing their problems; complete attention to medical details; complete attention to the quality of health delivery that set a benchmark in excellence vis-à-vis cardiac care in the city. That was to be the beginning of a far greater mission: to translate all that he had

achieved for paying patients of Calcutta, across the length and breadth of India, by empowering people from all strata of society to access the best of cardiac care through an enabling insurance scheme.

...with foundations laid for affordable cardiac care

Devi Shetty moved to Bangalore to start his own Manipal Heart Foundation at Manipal Hospital, Bangalore. Then, in 2002, he founded Narayana Hrudayalaya, a multi-specialty hospital in Bommasandra on the outskirts of Bangalore, committed to reaching out and bringing "world class health care services, education and training to the community around us". Shetty's Hrudayalaya also has cardiology, neurosurgery, paediatric surgery, haematology and transplant services and nephrology. A state-of-the-art trauma hospital (Sparsh) and an ophthalmology hospital, Narayana Nethralaya, mark the beginning of the Narayana Health City. The health city will also house a center for neurosciences, a children's hospital, a cancer research centre and general hospital.

...enter Yashasvini

It was not cardiac or health care delivery to the wealthy that was the challenge for Devi Shetty; it was cardiac care for the indigent and ignorant. It was this mission that needed funding – and funding by the beneficiaries themselves – and there lay the rub. That was when Devi Shetty brought about a marriage of the health and insurance sectors and proceeded to sell the idea to the Karnataka government.

Awards

- Schwab Foundation's award in 2005
- Padma Shri for Medicine in 2004
- Dr B C Roy award in 2003
- Sir M. Visvesvaraya Memorial Award in 2003
- Ernst & Young – Entrepreneur Of The Year in 2003
- Rajyotsava award in 2002
- Karnataka Ratna award in 2001

Shetty firsts:

- He was the first heart surgeon in India to venture into neo-natal open-heart surgery.
- He performed the world's first open-heart surgery to close a hole in the heart with the help of a microchip camera.
- He used an artificial heart for the first time in India and performed the first surgery here using the blood vessels of the stomach to bypass the blocked arteries of the heart.
- He performed Asia's first dynamic cardiomyoplasty operation.
- He reduced the cost of heart operations. The package pricing system devised by him has made heart surgery affordable to the common man.

Yashasvini, as he had conceived of it, could emerge as the world's cheapest and the most comprehensive health insurance scheme.

- At Rs 5 per month, Yashasvini, designed by Shetty and the Government of Karnataka for the poor farmers of the state, made the impossible possible. Millions joined the Yashasvini movement to benefit from state-of-the-art cardiac care, virtually for free.
- Courtesy the scheme, one can undergo an open-heart surgery for Rs 60 in a reputed cardiology hospital in Bangalore.
- Ask 19 year-old N. D. Prasanna Kumar, a milk supplier from Karnataka's Tumkur district, who had an open-heart surgery at the Narayana Hrudayalaya, paying Rs 60. For him it was a "rebirth".
- Yashasvini, the country's first health insurance scheme for farmers in the rural sector, represents a unique public-private partnership to reach quality healthcare to its farmers by leveraging on the co-operative movement.
- More than three million people have insured themselves under Yashasvini

...enter long distance cardiac care

The programme then went about spreading cardiac literacy. Hrudaya Post was launched in the state to help heart patients in villages scan and send their medical reports for consultation with the superspeciality Narayana Hrudayalaya, from a neighbourhood post office. The important thing was the partnership concept that Shetty was weaving into his mission.

Hrudaya Post was in partnership with the postal department, never known for demonstrating such a spirit of enterprise. Devi Shetty had managed to bring it on board. Karnataka's Chief Post Master General, Meera Datta, said during the launch of the programme that, for starters, 'Hrudaya Post' would be introduced in 25 district post offices and then across all the post offices in Karnataka. They would have a computer each dedicated to this purpose.

- The postal department charges Rs 100 for scanning and sending the report to the hospital.
- An additional Rs 25 is charged for those asking for door step delivery of the report.
- Once the postal department scans and uploads a report to Narayana Hrudayalaya, the hospital studies it and, within 24 hours, sends a detailed report back to the sender. This saves the rural poor both time and money in travelling for a preliminary check up.
- The service of studying and advice to patients by the hospital, including issuing a prescription, is free of cost.
- Apart from advising patients on the treatment, the hospital also helps in finding the finances for the needy.
- The linking of the post offices to the hospital meets the needs of heart patients even in small towns and villages to get excellent medical advice at their door step.
- 99 per cent of heart patients do not need surgery and can be cured with medicine. More than 30 surgeons and 200 personnel of Narayana Hrudayalaya work 24 hours on this project.

- More than 22,000 people have been treated over the past five years since the introduction of telemedicine in association with Indian Satellite Research Organization.

...with a special place for children in his heart

No under 12 is charged a fee by Devi Shetty, who has started a **Kiddies Heart Foundation**. It takes two people to cure a two-day-old baby's heart. "We have the doctor. We do not have the resources", says Dr Shetty. India conducts the largest number of heart operations on children in the world because India produces the largest number of children with heart disease in the world. One out of 100 children born anywhere in the world is born with a heart disease. "I operate free but the associated costs are still high, so we have started many programmes", says Dr Shetty.

Over the last five years, Narayana Hrudayalaya has performed 25,000 heart surgeries; one tenth of the heart surgeries performed on children in the world are conducted here; many for free. If NH has information of a child in need of such a surgery, it takes it in, irrespective of its economic background.

Devi Shetty takes special pride in his ability to build up teams of auxiliary staff at a time attrition rates are globally high. He is happy to maintain a surplus staff bank, lend their services, scale up the numbers and train auxiliary staff for the entire world – be it Afghanistan or Arabia. Doctors are not in short supply, he believes; support staff is as important a force behind cardiac healing as it is scarce. This is yet another opportunity for investment in training that will eliminate

shortage of this critical service provider.

Devi Shetty is not happy just enabling farmers to access comprehensive cardiac treatment, including surgery, for a monthly Rs 5. He argues for a system to link this with the removal of all barriers to business and overseas universities from investing in health and health education.

Devi Shetty offers 25 per cent of the beds for the rich and 75 per cent he leaves for the poor. Since Rs 65,000 (for a heart operation) is not what many can afford, he organizes various funding schemes. "There are a good number of people with money with the intention to help but do not know who requires it. We do that intermediary job. We are the intermediaries between those who need and those who have", he says.

Asking people to donate Rs 1.5 lakhs for an operation may make them balk, so Shetty says he would operate for free and asks for funds for 'other' costs. "This has worked. A lot of people have given money". That is the art of combining first class service with a deeply felt need, devising sustainable financing and manpower systems and combining it with effective communication to make magic in the field of healthcare delivery. 

The Postal Department and Superspeciality Hospital Narayana Hrudayalaya have joined hands to offer 'Hrudaya Post'. Under the 'Hrudaya Post scheme, first of its kind in the history of health care, heart patients in small towns and villages can go to any post office and send their entire medical reports by scanning and uploading them to Narayana Hrudayalaya.

Counting Colours in the "Rainbow"

"Our aim is not to show the world the state of the present; it is to show the world what we can make of the future". – Loreto Sealdah students associated with the Rainbow Home Project

YANA Bey captures the magical moment. It is dusk at Sealdah's Loreto Convent; outside the compound is the hullabaloo of the megapolis of Kolkata, in a very mixed neighbourhood¹. Office goers and residents jostle for space in the crowded streets with autorickshaws and other modes of transportation.

Inside the compound, sitting on durries, "little girls as well as teenagers are hard at work over their homework". Natalie, a young Englishwoman, is focused on teaching Maya, all of seven and with all the peskiness of a seven-year old. Then walks in the lady behind this massive mission of providing education and shelter to countless girls of Kolkata; who has so effectively used children as agents of

"Loreto Sealdah enabled me to learn empathy through my body – through real experience and it was an incredibly empowering process".
– ex-student, Sharmistha Sarkar.

change – transforming the lives of the underprivileged children and enriching the lives of the privileged.

Meet Sister Cyril Mooney, 71, of the Institute of the Blessed Virgin Mary; Padma Shri awardee for social service as she walks into the beautiful set that she has designed: of the young helping the younger; of the privileged helping the needy. Loreto,

Sealdah's Rainbow Home Project, has been providing education and shelter to 247 homeless girls who would otherwise have been lost to the wiles of the street. It is the regular student who subsidizes their costs as the schools makes over its facilities for them to use after regular school hours.

The classrooms are converted into living quarters – as they neatly line the desks against the walls – and make themselves at home; the older girls cooking and serving the young. The next day, the classroom is restored to its original state as its users quickly shower, get dressed and go off to their own schools.

"We can transform society if we make our children agents of human change. If we involve them emotionally, they become committed to social change", says Sister Cyril, who has impacted on the lives of several lakh girls who have gone through her many programmes focused on changing the quality of their lives.

Phase I: The vision and mission

The Irish born nun who came to India more than 50 years ago, was the "third and youngest child of a farmer-turned-building site worker in Bray, County Wicklow, Ireland". Her early life inspiration was her mother who never turned the poor away without food or clothes even though the family itself was not well to do but adequately fed, courtesy its own farm

Padma Shri Sister Cyril has received the UNESCO International Award, the NOMA Award for spreading literacy among the poorest (1994), the Telegraph Award for Social Service (seven times), the Hall of Fame (2005), the Telegraph Award for creative excellence (2000), International Christian Stewardship Award Toronto (2002), CINI – Friend of CINI Award, Ladies Study Circle – 'Woman of the Year', and the Alexander Award for Excellence in Science. In 2004, she became the first Loreto nun to speak at the United Nations – on empowerment of girls through education.

"Give what you have received freely and the reward is hundred-fold". – Sister Cyril on being asked to give a message after the Padma Shri was announced

1. Somewhere Over the Rainbow, Yana Bey <http://www.boloji.com/wfs5/wfs872.htm>

The Problem:

Of the 121 million children of primary school age in the country, more than 36 million are out of school and only half of those officially enrolled actually complete fifth grade. The situation is even more acute in rural India, particularly the more remote areas, where basic services in healthcare, schooling and roads are non-existent.

products.

Phase II: Walking the talk

It was while teaching at Loreto Convent, Lucknow, also doing her PhD in Zoology in 1964, that Sister Cyril was struck by the poverty outside the school. She got the residents together to work on a social programme for teaching the slum children. It was the principle of empathy that she instilled in her young students from schools and colleges, as she took them out for village outreach programmes every Saturday and to the slums in the evening to identify and teach children who did not go to school.

Taking her reformatory mission further, she tried to get the domestic workers out of the clutches of the local money lenders. The major work, however, started only after she came to Kolkata in 1973. By then Sister Cyril had built a substantial network to be able to host an exposition on Social Justice in 1975 at the Loreto House.

Phase III: Showcasing the problems

She showcased the stratification in society and the chasm between the rich and poor: in their earnings, health, housing and educational facilities. More importantly, she talked of bridging the gap through innovative social reform, primarily based on education of the masses. As Principal of Loreto, Sealdah in 1979, she got a free hand to work with children and chose those just outside her school; on the pavement. Thus began the Rainbow project in 1985.

Phase IV: The Rainbow days...

More tragedy was to follow when a nine year old girl was raped outside her school and the good nun realized that girls need not spend the nights out in the open. She

would open her classrooms for them in the evening. Some 600 children find shelter in four Loreto Schools in Kolkata today even as her school makes itself affordable to children from all segments of society. Half of its 1,400 students are from indigent families. Meanwhile, Sister Cyril is trying to inspire other principals to follow suit.

Since then it has been a series of solutions to intractable problems: Barefoot Teachers Training, Hidden Domestic Child Labour Programme, Rainbow Educational Programme, Child-To-Child Village Programme, Shikshalaya Prakalpa (training 1,400 teachers to teach 26,000 deprived children in the slums of Kolkata), with some 60 NGOs, Value Education (as a part of the school curriculum), which has evolved into a course on Human Rights Education and introduced in about 50 Government Schools and many Secondary Schools in West Bengal.

It is Sister Cyril's Rainbow Children though who win hearts and minds as they sit with their more privileged sisters in their hand-me-downs but receive first class education from the regular Loreto students. It is not a one-way teaching though for, possibly, taking home a greater lesson are the privileged children who are enveloped in a world of oneness; a world without

The education she imparts is based on the most modern methodologies: child-centric, activity-based and holistic. Her tools – created from leaves, twigs, natural dyes and fruit husks – are imaginative, innovative and, most important, effective, as the lively responses and enthusiasm of her little students demonstrate. – Dr Arundhati Ray

"Our school environment allows empathy to develop naturally and consistently by providing opportunities for children of very different backgrounds to interact as peers". -- Sister Cyril.

borders; where love and compassion go hand in hand with commitment and care. Care and compassion are important for the young teachers have to nurture their younger wards not only in academics but have to nurse them back to mental health: some of them come from traumatized circumstances with their childhoods in a shambles, when they come under the

Loreto, Sealdah's Resource Centre for Social Transformation, helps more than 4,50,000 poor people through projects involving micro-credit, old-age support, medical treatment, slum and rural teacher training, challenged children, child labour and the building of secondary schools. The parents of regular school children support this movement in which the very young are started off in the English medium and the older children – who find getting into the English medium difficult – are encouraged to study in the vernacular medium.

Rainbow influence.

For them Sister Cyril's education system is child focused and simple, keeping in mind the demands of sustainability as well as the circumstances in rural or urban surroundings of the child; it is as cost effective as it is impactful learning -both for the teacher and the taught because it is essentially education without barriers.

Phase V: Action philosophy

... 'empathy'

"If we want our school to nurture relationships that transcend the barriers of caste, creed and economic status, we have to enable and nurture empathy. A child

does not 'learn' empathy through the intellect: she or he learns it through hands-on experience, the senses and exposure to situations". Sister Cyril ensures that the teachers undergo workshops and orientations so they too are sensitized to the school's overall purpose. As the children progress through school, they are constantly exposed to experiences that reinforce the values of tolerance and inclusiveness, sharpen their emotional intelligence and make them more aware.

... 'equality'

The Rural Child-to-Child Programme bridges the urban rural divide. Every week, 150 Loreto Sealdah students (Classes 5 to 10) visit rural areas to tutor village children in their own age group. There are around 2,600 village student participants who get to mingle with their city counterparts as both groups reach out to each other in the spirit of give and take, friendship and youthful joy and laughter.

... 'social entrepreneurship'

As the Loreto Sealdah children go out in groups to identify and work with child labour and spend time with them in the spirit of camaraderie bringing to their lives the lost "companionship that returns them their childhood, even if momentarily". For Sister Cyril, that is "what this disenfranchised group needs the most and this is what the students provide" even as the privileged students get sensitized to the world of the dispossessed that they would never have come across. All this is a "part and parcel of the experience of being a Loreto Sealdah student" in Sister Cyril's world; experience that helps every child reach out to the depths of her own heart and harmonize her learnings with what is being taught through the three 'R's.

"Our kids are, on the whole, more mature than their peers in other schools. They are much more sensitive to the needs and feelings of others and able to be self-reflexive. They are less judgmental, more accepting".

– **Nomita Sarkar**, former Vice-Principal and a teacher at Loreto Sealdah for 35 years

"Tutoring takes place during school hours on school premises... there are about 250 Rainbow kids but the number of participating students fluctuates each year. All students in classes 5 to 10 (fifth to tenth grades) spend 90 minutes each week, individually tutoring these children. This sustained interaction nurtures their ability to empathize by stretching their capacity to be patient, to listen, to interpret non-verbal cues". – **Dr Arundhati Ray**

"Working with this group, made me realize the crucial need for teachers with the know-how to impart effective education in remote areas of the country where even the most basic amenities – schools, roads, hospitals, running water, electricity – are undreamed of luxuries." – **Sister Cyril**

There is also a weekly value education class that is a part of the entire curriculum, from class 1 to 12. It helps the child realize its own position of privilege and to open her heart to another that is not so blessed and offer her a place in her own special world.

...and teaching the teacher

Teachers are the most important asset in India and the most scarce as well. Sister Cyril's Barefoot Training Programme was a response to a felt need in the adivasi community of West Bengal's Midnapur district that wanted education effective for their unique environment.' The good nun devised special teaching aids, arranged for practical lessons and helped them develop their own teaching aids. One was a series of stencils to teach the alphabet and vocabulary skills using the Bengali alphabet to teach the local Santhal language. "Thus, while learning would be in the native tongue, the familiarity with the Bengali script would ensure an easy transition to post-primary studies at Bengali-medium government schools", writes Dr Arundhati Ray.²

This pedagogic decision reflected a tenet that remains fundamental to the programme: primary learning is most effective when children are introduced to formal learning in their mother tongue. Moreover, since many of the Barefoot teachers work among indigenous minorities, this method ensures that the languages of these groups continue to be living traditions and not submerged by mainstream lingua franca. These teachers are supplementing India's scarce teaching resource with a perfectly evolved and competent system.

...the take out for India Inc

As India Inc celebrates its triumphs across the world and its managers command any salary that they want, perhaps more than a thought needs to be spared for efforts that will one day lead to many, many such managers from the grassroots of Indian society, who will command not just salaries but the admiration of the world in having prompted and managed change where change was most needed and coming out on top. The Rainbow project shows the way. As a student participant has said: "Our Rainbow project is not just a step ahead – it is a revolution!"^Ω

Why barefoot? Because the system has been shorn of all luxuries...people need only feet to walk; shoes are a luxury, explains Sister Cyril. We offer short-term courses stripped of all extraneous theory..."

2. <http://proxied.changemakers.net/journal/00august/ray.cfm>

For Your Information...

"In electing Arvind Kejriwal to receive the 2006 Ramon Magsaysay Award for Emergent Leadership, the board of trustees recognizes his activating India's right-to-information movement at the grassroots, empowering New Delhi's poorest citizens to fight corruption by holding government answerable to the people", The 2006 Ramon Magsaysay Award for Emergent Leadership citation for Arvind Kejriwal, August 31, 2006

Satyendra Dubey perished fighting corruption – singlehandedly. Arvind Kejriwal – following in the footsteps of Mahatma Gandhi and the leadership of Aruna Roy – evoked the power of the masses to bring to shame his own service – the Indian Revenue Service – and brought about transparency in the Income-Tax office.

A mechanical engineer from IIT Kharagpur and then a member of the Indian Revenue Service, Arvind Kejriwal saw the sleazy innards of the tax system and decided it was time to attack it with a crusader's zeal. Then, along with Aruna Roy, he spearheaded the successful campaign for the Right to Information Act that was passed in 2005. Since then, he has been driving an RTI awareness campaign across India and bringing about change in the circumstances of the most indigent – empowering them to ask questions around their welfare and get answers that often enough lead to redressal of critical grievances.

...*parivartan* means change

It was a problem for every Indian; it was ingrained in the very being of India but Kejriwal chose to take it on head on. The Magsaysay citation tells his story: "As a tax officer with the Indian Revenue Service, Arvind Kejriwal became aware of the many powers that tax officials held over private citizens and how easily these

powers could be abused. Indeed, at the tax department, one expected to pay bribes as a matter of course. With a few kindred spirits, Kejriwal began to strategize about how to bring an end to this. In 2000, he founded Parivartan, meaning 'change'. Parivartan appealed to the tax commissioner to make the tax department more transparent and less capricious. When this failed, it filed Public Interest Litigation directing the department to implement a five-point transparency plan. Eventually, Parivartan held a nonviolent protest, or *satyagraha*, outside the chief commissioner's office. Threat of another protest with the press on hand convinced the tax chief to implement the reforms".

...change for transparency

"Meanwhile, on leave from his job, Kejriwal stationed himself with other Parivartan members outside the electricity department. There they exhorted visitors not to pay bribes and offered to facilitate their dealings with the department for free. Since then, Parivartan has settled 2,500 grievances with the electricity department on behalf of individuals. Some 700 more have benefited from the group's "Don't pay bribes!" campaign at the tax department".

...securing the Right to Information

Kejriwal then went to work with the Delhi Right to Information Act of 2001, which granted every citizen the right to inspect

"The brazen corruption of the high and the mighty may grab headlines, but for ordinary people it is the ubiquity of everyday corruption that weighs heaviest. And that demoralizes. Arvind Kejriwal, founder of India's Parivartan, understands this, which is why his campaign for change begins with the small things". – **The Magsaysay Award citation**

Awards

- 2004 Ashoka Fellow
- 2005 Satyendra Dubey Award for his campaign for bringing transparency in Government
- 2006 Ramon Magsaysay Award for Emergent Leadership.
- 2006 Indian of the Year in Public Service

government documents.

1. Kejriwal put the new law to use in Sundernagari, a New Delhi slum where Parivartan was working among the poor.
2. The group obtained official reports on all recent public works projects in the area and led residents in a "social audit" of 68 projects, stirring the community to action with neighbourhood meetings and street plays.
3. The group then organized a large public hearing, where the residents presented their findings and exposed misappropriation in 64 of the projects representing embezzlement to the tune of Rs 7 million.
4. In Sundernagari, local committees monitor public works projects block by block and no project may begin until the details of the contract have been made public.
5. Kejriwal had got democracy working in Sundarnagari.

...and getting people's power working

Kejriwal is clear in his strategy: to get people power to work in favour of the people; to get services that have been paid for by the tax payers; to convince the weakest that he is equal in the eyes of the law provided he accessed it and Kejriwal helps him do just that. The change may be taking roots slowly but it is as sure as sure can be. Kejriwal is leveraging headline grabbing stories of people bringing about a difference in their own lives, to motivate others to achieve the same by engaging with the government; knowing what is being planned, when and where and what is being spent on which project and then

ensuring that the money has gone where it was supposed to go.

...in a mass movement for transparency and accountability

Parivartan, says Kejriwal, is not a non-governmental organization but a "movement of the people for the reinforcement of democratic values", to bring about transparency and accountability in the governmental system. The RTI Act provides the launching pad for the second phase of the movement to motivate citizens to demand information and accountability from public institutions. Elsewhere, Kejriwal uses his own resources to dig up data, organize *jan sunwais* and public audits. It is a mass movement with folk culture interspersed along the way: songs, skits and slogans attract people to the movement who share experiences about flawed public services, corruption and the misuse of resources.

Armed with information, people are encouraged and assisted to file FIRs or demand records to establish guilt and organize *dharnas* that do not spare even the most entrenched public bureaucracies.

"I think the most important change is the shift in attitude from 'nothing will change; this is India,' to 'yes, we can change things if we try enough.' With each passing day, people are getting more and more cynical and giving up on the government and I feel we have been able to prove to them that everything is not lost and we can bring about a change if we try. Believe me, the RTI is a powerful tool of democracy that can give us our right to information. I think this power will go a long way in making democracy a transparent system. The attitude and the cynicism was the most difficult hurdle to overcome but I feel we

have been able to bring about a change in the thought process of the common people", says Kejriwal.

...fighting subversive networks of the powers that be

Arvind Kejriwal¹ refers to the systematic subversion of institutions by the network of elites that erases the constitutionally installed line segregating the legislature from the executive. In India, "a legislator is expected to provide solutions to every problem. He is expected to call the local government officials and order them to rectify the problem" even though this means interfering "in the day to day functioning of the Executive". Unless the legislator allows the executive to function in terms of the law of the land, one cannot even begin to make a dent on bureaucratic indifference that has held the country back; given rise to a situation where, for instance (in Rajasthan) Rs 600 crores spent on drought relief find their way into official pockets.

The idea is to bring about change and take the message all over the country. In Gujarat, the *adivasis* of Panchmahals brought the *taluka* boss on his knees using the RTI Act. The deputy *mamlatdar* who had cussedly refused to deal with ration card issues for these below-the-poverty-line families on any day except Saturday and that too in a state in which the government works on every alternate Saturday – was forced not only to deal with such issues everyday but the *adivasis* managed to put the fear of a loss of job in the heart of the guilty officer who had introduced the 'Saturday only' clause. The office of the *mamlatdar* has since started functioning like a public office and

Aslambhai the man who took the fight to the administration realized that he had an instrument that could change the power equations in favour of the dispossessed.

Kejriwal also takes issue with the question of privatization of governance in the name of privatization of services. The privatization of sanitary facilities in Delhi would ensure that garbage would be efficiently collected; or so people thought. When quite the opposite happened, the ladies of the area asked to see the contract between the municipality and the private service provider. The shocking revelation was that not only had the MCD privatized the work, it had privatized the supervision as well and could not punish the service provider whose performance would be evaluated by another "independent consultant", also a contractor. The point Kejriwal makes is that good services are a matter of good governance and not a private party versus a government party issue.

...and the culture of secrecy

It needs to be reiterated that there are inherent difficulties in making the act work. Even Canada, which has given leadership to the right to information movement and has had legislation in place for more than two decades, suffers from the "culture of secrecy" in public life. The Justice John Gomery Commission in Canada that went into the "...veil of secrecy surrounding the administration of the Sponsorship Programme..." found an "absence of transparency in the contracting process; [...] There was an atmosphere of secrecy and only the inner circle was informed of decisions"².

The information commissioners, and their decisions have played a pivotal role in watering down the right to information. If RTI is working today, it is despite these Information Commissioners. If information is obtained under the Act, it is obtained at the very first instance from those PIOs who still consider the threat of a penalty to be tangible. – **Arvind Kejriwal**, May 2, 2007, One Year of Unfreedom

1. RIGHT TO INFORMATION ACT: Behind the Veil of Transparency by Aditi Roy Ghatak, The Statesman

In a message to IIT Kharagpur students Kejriwal says: "A long time ago I did join the bandwagon of those who thought that nothing good can happen here. But you see when people are together working for a cause, things can change for the better. I'd simply like to say, 'shake off any cynicism that you may have and believe in change and better systems within the democracy. If you feel helpless, don't! The power is within you to bring a change. You don't have to go abroad to get better things; if we all work together we can do great things here in India".

...supplementing representative democracy with direct democracy

The third point that Kejriwal makes is around larger municipalities where it is impossible to debate investments in public utilities (it is easier in smaller bodies like the Panchayats), and there is little chance of even well intentioned councilors being able to do what the public wants. The way out is to have an honestly elected Resident Welfare Association to supervise investments; meet and discuss issues regularly and run itself professionally. "Representative democracy has failed us. Only direct democracy can provide solutions to people's problems", Kejriwal says.

Yet, his accomplishments have been accompanied by severe frustrations: "the entire system that has been created under the RTI Act seeks to silence the people, and deny them information, while protecting guilty officers. My expectations are far from having been realized"³. The right to information relies on two very important nerve centres: (i) the process of filing the RTI application and (ii) the Information Commissions". The former can be time consuming and frustrating – even in Bihar where filing of applications can be done telephonically – while the "information Commissions instead of extending their protection to the people, are inclined to favour the guilty officials and protect them. This is why, when it comes to enforcing the right to information, the information commissions are the weakest link".

Amidst the many frustrations en route to such direct democracy comes hope in the

shape of the success that Dhananjay Tripathi had when he asked the registrar of the Banaras Hindu University about details of the inquiry report into the events that led to the death of Yogesh Roy. This was the much talked about case of 2005 that the university was bent on stonewalling. The successful perusal of the RTI Act led to the Central Information Commission fining the Banaras Hindu University Registrar Rs 25,000.

Yogesh Roy must be smiling somewhere.👁

2. A Question of Asking the Question, Aditi Roy Ghatak, The Statesman
3. <http://www.indiatogether.org/2007/may/rti-unfree.htm>

Pragya Means Wisdom

HERE is only one thing as monumental and gorgeous as the magnificent expanse of the Himalayas: the depths of penury in which the inhabitants of the region live. Notwithstanding the natural resources and astounding beauty, these mountain people have been given a bypass by the advances made by India. Deprived of development and infrastructure they have been pushed into a state of abject dispossession.

...a vision is born

Gargi Banerjee and Sunil Pillai, both from XLRI (Jamshedpur), began their lives in the corporate world till they went on a path-changing motor cycle expedition across the length of the Indian Himalayas in 1990. From Itanagar (Arunachal) in the east to Leh (Kashmir) in the west, they saw "the severe deprivation of the indigenous communities, the enormous and yet fast depleting natural wealth, the tremendously rich but eroding culture and traditional knowledge". They also realized the "conservation and development needs and the neglect".

Thus was born the vision of Pragya, the path to sustainable development by applying modern, technical and managerial knowledge to development issues and needs, blending it with the ancient wisdom of the mountains.

Over the years, Pragya has stepped into uncharted areas, not only inspiring the local people to address their own issues but also drawing the country's and even the world's attention to the issues of the Himalayan region and its peoples. Serving

in these challenging environments of the Himalayan altitude, Pragya's projects were necessarily creative and its solutions innovative and beyond the commonplace.

- Pragya was among the pioneers of medicinal plants cultivation in the country
- It set up the first co-operative of Himalayan medicinal plants growers
- It installed the first-ever, Solar Wind Hybrid System at an altitude of 14,000 feet in the Lossar village of Lahaul and Spiti, showing the way for electrification of remote, Himalayan villages
- It established a snow reservoir in Spiti where micro snow harvesting systems are being installed as well, to address the crisis of desertification and receding glaciers in the area.
- It established ethnobotanic centres and rural museums in the Himalayas that help draw a greater share of the tourism revenues to the local communities, while also preserving the traditional cultures
- It is establishing a network of village education facilities and district level resource centres to address the education and information needs

"The enthusiasm and energy of the team coupled with their ingenuity of thought and devotion to their cause mean solutions come thick and fast. Pragya is well suited to its environment. Like the mountains, the range of personalities and skills is wide; like the air, members' qualities are rare and like the altitude, the quality of management is high..." – **Vidhi Tambiah**, Associate Director, World Economic Forum.

<i>'Core Team of Experts'</i>	Drawn from various disciplines and interest fields, the team that designs and manages the Pragya projects
<i>'Project Team Member'</i>	Project-specific staff, typically belonging to the region in which the project is located, who provide local inputs and facilitation
<i>'Expert Associates'</i>	External specialists who provide expert assistance for Pragya projects and supplement the Pragya competencies
<i>'Community Associates'</i>	Key influencers from the project area who provide local-level assistance for the implementation of Pragya projects
<i>'Project Support & Administration'</i>	A committed team of people who smoothen the way for the core team to carry out its responsibilities

"Pragya is a well-respected Indian NGO in the field of conservation with an international reputation for its work to date in this specific area. No other NGO is active in this comprehensive way at this altitude.... The project team is well qualified and very professional. There is a strong impression of interest and commitment to the project. The management of the project is clear, helpful and straightforward with ... a detailed project planning and monitoring structure in place which can quickly identify where problems are emerging and either resolve them or vary the plan accordingly." – **Mary Hall, Monitor**, European Commission

of remote and excluded communities in the Himalayas

- Pragya conducted the first scientific survey of medicinal plants of the high altitudes
- It also conducted the first assessment of the status of education in the high altitudes.

...and treated with best management practices

These have not been easy achievements. Says Gargi: "In the organization's growth from a five-member team to a 65 member team and its transformation from a one-district, one-project entity to a multi-project organization with seven offices across 12 districts covering the entire high-altitude Himalayas, Sunil has played manager of efficiencies.

He has adapted management systems from the corporate world and applied them to the development sector with considerable success. He has helped steer the organization through the multiple, sensitive stakeholder relationships that an NGO has – several indigenous communities, six state governments, national ministries and the police and army (Pragya works in all border states!). "He has also helped create effective grassroots institutions and developed capacities of local NGOs in the mountain regions towards enhancing voluntarism in these difficult regions", says Gargi.

...taking light to an area of darkness

Pragya is a non-profit, development organization, headquartered in Gurgaon, with offices in Leh (J&K); in Keylong, Kaza, and Recong Peo (Himachal Pradesh); in Joshimath (Uttaranchal); in Gangtok (Sikkim) and in Tawang (Arunachal

Pradesh). Through these, Pragya services the complete high altitude belt (above 8,000ft.) of the Indian Himalayas, the only organization to have this exclusive and comprehensive focus on the high-altitude Himalayas.

Pragya turned its professional attention to shaping and enabling holistic, sustainable development "with focus on vulnerable and neglected communities and ecosystems". It based its solutions on integral research studies that it internalizes and disseminates to the host communities and the world at large.

...to empower stakeholders

The mission: catalyzing and empowering stakeholders to enable change. The strategy: to follow a holistic approach in addressing biodiversity conservation, water management, rural electrification, livelihoods development, culture preservation, wasteland development, in remote high altitude villages. Pragya started three broad thematic areas: Natural Resource Management, Social Development and Heritage Management and Appropriate Technologies.

Louisa Mitchell, Director, Whitley Fund for Nature says: "The first thing that struck me about Pragya ...is its exceptional management and organization structure. It has a physical presence on the ground and is operating solely in the very high altitude areas. I was overwhelmed by the difficulty of the task but equally impressed by how Pragya has started to tackle it.... The basic questions are always: is the organization dealing with critical issues, is it addressing them practically, is it getting results".

...taking the learner-influencer-practitioner route

Taking on an unfamiliar terrain, what Pragya did was to weave together a group of learner-influencer-practitioners with a "commitment" to contribute to real development. Every member is conceptually strong in his/her mother-science, has wide-ranging experience in various sectors and is trained to deal with the special needs of the Himalayan communities.

...and working as a modern management team

What was the need as analyzed by the young team? "Although the storehouse of much of the world's diversity and many life-giving resources – freshwater, fuelwood, timber, minerals, hydropower, fodder, resins, plant fibres, medicines – mountain regions are grossly undervalued and deprived and increasingly under ecological threat". Deforestation is threatening rare and endemic species even while droughts and floods ravage the mountains. The regions have been deprived of development attention and "their communities remain among the poorest in the world, the valleys they inhabit the least developed in terms of basic infrastructure and facilities. At the same time, the unique cultures of mountain lands, the source of support for these communities, are threatened by the winds of change and impacts of modernization", says Gargi.

...addressing the loss of Himalayan biodiversity

A large scale removal of mountain herbs and plants of medicinal value, thanks to the increasing demands of the international medical and perfume industries, have threatened the 10,000 species of plants. A tenth of these are harvested indiscriminately without regard to

regeneration of species. Government plantations of non-native tree species are further damaging traditional habitats and none of the benefits of commercialization flow back into local homes.

...with its medicinal plants conservation initiative

Pragya is promoting the cultivation of high-value herbal species as alternate cash crops by local communities, thus enhancing farmer incomes, while also encouraging community stewardship for protecting the plants in the wild. More than 300 farmers across the high-altitude belt are cultivating medicinal plants as a result of this initiative.

Pragya's efforts are establishing the cultivation of medicinal plants of the Himalayas as a viable alternative to their collection from the wild. Several farmers in the Himalayas have successfully established microplantations of medicinal plants and have begun reaping revenues from their harvests of *Dactylorhiza hatagirea* and *Aconitum heterophyllum*. The first Medplants Growers Co-operative in the Himalayas, established by Pragya, is a vibrant 165-member body actively promoting medplants cultivation within Lahaul valley and the marketing of its produce in far markets like Delhi.

...making an impact with its culture and education initiatives

Pragya's commitment to the preservation of the rich Himalayan cultures facing the onslaught of urban ways of life has seen it focus on reviving the use of the traditional language and art as the fundamental vehicles for the local culture. It operates several classes on tribal languages and arts and crafts in which community members from ages six to 60 participate and organizes local crafts sales outlets. Pragya

Pragya won the International Energy Globe Award 2005 for its "MV Power: Renewables based Common Energy Facilities for Remote Mountain Villages in the Cold Deserts of the Indian Himalayas". This "World Award for Sustainability" is presented to the best-implemented projects from around the world, "which contribute to the protection of the four basic elements of life, air, water, wind and earth, thereby providing valuable assistance in the preservation of our planet".

The first-ever Solar-Wind Hybrid System at the altitude of 14,000 feet in Lossar village of Lahaul & Spiti has a capacity of 2.1 kW, comprising 14 solar PV panels, generating 1.0 kW and a windmill generating 1.1 kW and can supply power for 4 hrs/day for two days when there is no power generation.

The SWHS lights a rural library serving 60 households and a weaving centre used by 16 women to weave local carpets and shawls to sell to summer visitors and thus earn from it. The SWHS is ensuring continuous power supply to this remote village where this was perhaps a luxury and inspiring many a young mind – one has even written a poem on this most loved "Pawan Chakki" (Wind-mill) of Lossarites.

The Pragma project on "Conservation & Sustainable Utilisation of Medicinal & Aromatic Plants" was awarded the **2000 Whitley Award**, considered the Oscar of international conservation awards, by the Whitley Foundation for Nature Conservation in collaboration with the Royal Geographical Society, London. This was the first year that an Indian organization had won this international recognition.

"Such effective intervention will reduce the habitat destruction and mismanagement of this area of rich biodiversity, which is placing local traditional health and environmental systems at risk and will ensure the rights of the indigenous people over their natural and cultural heritage", said The Whitley Foundation, 2000.

Edward Whitley, Whitley Foundation, London, said: "We were impressed by the way Gargi has been working on a project of the greatest urgency, in inhospitable terrain, working with local people in a way that will ensure nature conservation strengthens the local economy rather than weakens it".

has set up a network of ecomuseums and constituted community-based Heritage Conservation Councils for the governance and preservation of the local heritage.

The feedback from a comprehensive research on the educational status of the region high altitudes has been given to the policymakers. Supplementary facilities such as rural libraries and education resource centres are being established to break the insulation and exclusion of the high altitude communities. Curricula are being adapted to local cultures and needs and vocational training is being provided to bridge the education-occupation gap. "We appreciate your efforts on mobilizing and educating the local communities of the Himalayan region, on studying the critically endangered species in the region and facilitating the establishment of some plantations of medicinal and aromatic plants. We are proud of our association with Pragma...", said Mr Arun Pandhi, Programmes Manager, Sir Ratan Tata Trust

...and developing local technopreneurs

With climate change and receding glaciers, the cold desert communities have been increasingly affected by desertification. Pragma is working on adapting irrigation technologies and reclamation of wastelands in the cold deserts of Lahaul and Spiti and Ladakh. As a pilot, a snow reservoir has been established in Spiti and snow fences are being experimented with as micro snow harvesting structures. Recognizing that the distance of technology suppliers and service providers from the high altitude regions are a barrier to technology, Pragma is developing a cadre of local youth as rural technopreneurs for the Himalayas.

...constantly promoting R&D for a

better Himalayan life

Research on regional technology constraints has helped Pragma guide policy formulation for the region. Its developmental issues range from the role of civil society to microenterprise development to common property resource management. The Pragma Applied Research Team has developed cultivation protocols for 10 undomesticated medicinal species and trained several Himalayan farmers in these. Pragma has also established the first Tissue Culture Laboratory for high altitude medicinal plants. A pioneering and mammoth exercise has been carried out to survey the herbal wealth of high altitude Himalayas, mapping 2,383 species to enable scientific conservation planning. The comprehensive study of the status of education in the Himalayas has helped it sensitize the NCERT and other state agencies to the special needs of the Himalayan region.

So the work continues... contributing to making the lot of the mountain communities a happier one, economically and culturally satisfying, secure and in harmony with their natural environment along with the benefits of modern technology. 

Serving Sight: the Aravind Story

GLOBALLY, 45 million people; in India around nine million are "needlessly" blind; needless because timely detection and treatment could have spared them the trauma. Enter Dr G. Venkataswamy, formerly of the Government Medical College, Madurai, with an 11-bed Aravind Eye Hospital in 1976 and developing the facility into the world's "largest and most productive" eye care centre.

His secret:

- Adopting a compassionate business strategy
- Taking his service to the doorsteps of rural India
- Increasing his catchment area
- Introducing technology at all levels
- Optimizing resource use and improving surgery time to drive down costs
- Using his low-cost yet world class service with stunning effect.

"Vaulting barriers of distance, poverty and ignorance", the Aravind Eye Hospital has developed a self-sustaining system even with two thirds of the patients receiving free surgery. Dr Venkataswamy has leveraged a highly committed hospital staff to accomplish a seemingly miraculous feat: between April 2006 and March 2007, more than 2.3 million out patients were treated and more than 270,444 surgeries were performed (including those done in his Managed Eye Hospitals).

Compassion pays its way

Dr Venkataswamy does not need to depend on donations or favours. He uses the scale of his operations to drive perfection and low costs as the Aravind Eye Care System has grown to five

hospitals with 2,850 beds that perform some 200,000 surgeries a year. Having penetrated the wall of blindness, the system is evolving as a manufacturing centre for ophthalmic products, an international research foundation and a resource training centre that is revolutionizing hundreds of eye care programmes globally.

Pure management, one might say for the business model is based on being not just inclusive and affordable but top of the class in terms of productivity, quality, scalability and transferability in a world where final cost of the service is related to satisfying a demand and the demand is virtually infinite in India. Dr Venkataswamy has focused on volume even as he has delivered value through efficient systems, information technology and education across the cross section of his patient constituencies.

...thanks to optimal resource allocation

Optimal allocation of resources – manpower included – supported by innovation in delivery has helped usher in this eyesight revolution. "We were convinced that the fundamental thing was to attract patients and so we pioneered the screening eye camp approach. Traditionally, eye camps used to be places where surgery was done in a makeshift theatre. People had to travel long distances to get there; many factors were sub-optimal and, therefore the overall efficiency was not very good", says Dr Venkataswamy¹.

What Aravind did then was to streamline the processes and the scheduling (after studying the flow of patients) and adjusted its internal systems accordingly. This helped

"For every thousand surgeries we do in a year, about 300 come under the pay segment. That is 10 times what an average private practitioner may do. Our cost is much lower than a private practitioner's. To put it simplistically, we are, to a large extent, helped by the inefficiency of the private sector. – Dr G. Venkataswamy

"We have a doctor in Madurai who is an expert at squint surgery. Madurai is now the Orbis centre for training in children's eye surgery, where groups of doctors, anaesthetists and technicians are sent for training. Doctors have the opportunity to make a name for themselves in specialized areas and people come from all over the country to consult them. – Dr G. Venkataswamy

in minimizing the waiting time and maximizing the actual operating time. Effective resource planning ensured that surgeons did not waste time because surgery time holds the key to the productivity of the operations. "We never have to postpone a surgery because we have run out of supplies", says Dr Venkataswamy. Nor does the hospital make any compromises on safety – for paying or non-paying patients.

...including zero waste of surgeon's hours

Manpower allocation is equally professional and effective with each surgeon working on two operation tables alternately; the teams of paramedics and junior doctors washing the eye, putting the suture, giving the injection and so on. The surgeon does his part and moves on to the next table as is the global practice. "At the Heart Centre in Houston, for instance, the chief cardio surgeon does only the critical aspects of the surgery, and in this way they do five or six heart surgeries a day or more", points out Dr Venkataswamy.

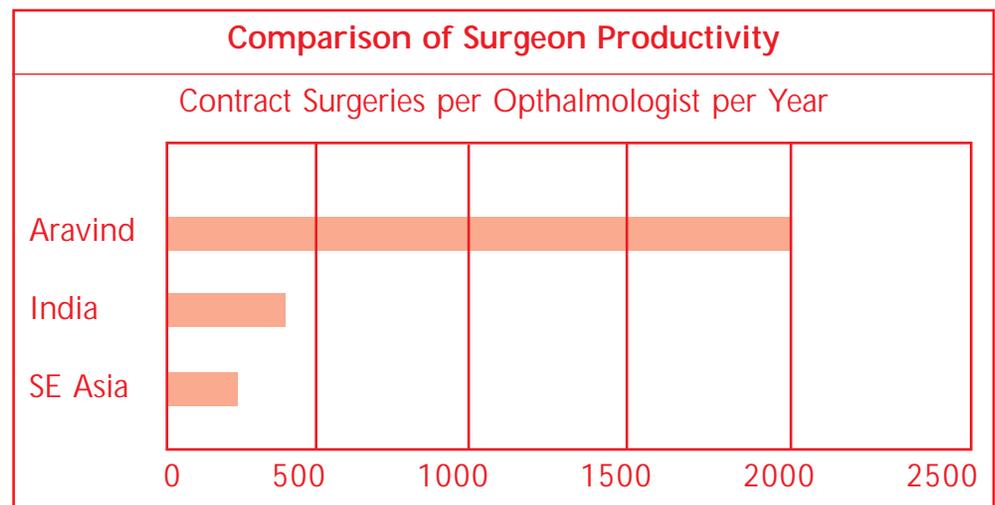
...and excellent standards in infection control

Infection rates are low at Aravind. Last year it was about four per 10,000 cases at Aravind while the U.K.'s published rate was six per 10,000. The secret lies in a close outcome monitoring system, especially for cataract surgery. Every case sheet on discharge is fed into the computer and analyzed with a scorecard for the doctors and matters are openly discussed in monthly meetings and a consensus taken on different procedures. "This constant updation helps especially because the hospital follows up on every camp patient and around 90 per cent of the patients come back for follow up". Discussions are held at locations and now via video conferencing on a revised format. Patients are made to understand that the review is a part of the treatment.

...in an overall culture of excellence

The culture of commitment is supplemented by a culture of leadership on the one hand and one of learning on the other. "I think we are still a learning organization; we have an openness to change and we have been able to develop a kind of atmosphere where people can talk about quality without feeling under

1. This article has quoted extensively from Compassionate, High Quality Health Care at Low Cost: The Aravind Model. Janat Shah and L S Murty in conversation with Dr G. Venkataswamy and R. D. Thulasiraj.



pressure", says Dr Venkataswamy.

There is also the belief that something more could be done: when children who prescribed glasses did not wear them, for instance. Aravind changed its school screening cycle by training the teachers in the first screening and went back after three months to check if the children were wearing the glasses. "If they are not, we try to find out if there is something we can do differently to improve compliance. So that is our mindset, to keep on improving processes".

There is also the culture of transparency and every patient is told what exactly is wrong, what can be done and what cannot be done and at what cost. Sometimes, the cost exceeds the original fixed quote but the hospital does not charge extra.

...focused on quality of the recruits

The paramedics are very important and are chosen carefully. They are usually girls from villages who have a certain amount of curiosity and a capacity for hard work. "We interview the parents also and look for commitment, so that we can be sure they will stay on. Most of them continue with us even after they get married because they are respected in the community", says Dr Venkataswamy.

...developed centres of excellence

Coimbatore is coming up as an eye cancer facility and the doctor in charge received training in New York. Tirunelveli specializes in glaucoma. Doctors are allowed to choose specializations. Madurai is especially good for paediatrics, with a senior doctor who has trained many people, while Coimbatore has developed into a good centre for handling premature babies with eye problems (RaP) since the city has excellent facilities for the care of premature

babies.

...integrated backward into manufacturing

Aravind then entered into manufacturing of intraocular lenses. After the advent of the provenly superior though expensive IOL surgery, Aravind found itself having to import lenses and unable to offer them free. Even at a reduced price (from Rs 1,800 to Rs 1,000) it was beyond the reach of the poor. Aravind realized that the high cost was due to the manufacturers focusing on shape or colour for niche markets rather than the functionality of the lens. It avoided the trap and made affordable lenses.

Aravind then developed a manual sutureless cataract surgery (sans instrumentation) with a certain kind of wound construction that does not need stitches: it closes on its own. This has helped surgeons perform as many as 10 to 12 surgeries per hour.

...also helped global eye care

Aravind is training African hospitals to have a sustained management capacity and is working with the Rotary, Lions and mission hospitals. "Today, there are 40 to 50 hospitals, which have exceeded 5,000 surgeries; some of them have done even 10,000 surgeries and they are able to retain their doctors. We want these to develop into institutions of excellence in each area, which in turn can train people, not only in the technical aspects but also the management aspects", says Dr Venkataswamy. Aravind has trained thousands of people all over India, including over 1,000 doctors in IOL microsurgery.

Eye care has some unique characteristics

The suture is a monopoly, even now, of Johnson & Johnson. At one time the suture cost, at Rs 250, became more than the lens' cost. But now that we do not need any sutures in eye surgery. We are trying to see if we can use that technology for cardiovascular surgeries. I think, we are the only ones, apart from the multinationals, to have the knowhow for micro needles. – Dr G. Venkataswamy

"World experts, including those at WHO, said IOL surgery could not be done in a developing country; that it was too costly and it would be difficult for doctors to learn the new techniques and do such large volumes. The government was also against it and felt that Aravind was derailing the eye care programme by working at a tangent. It was difficult for us to argue with them. So we just quietly went ahead and did it".

– Dr G. Venkataswamy

that make it possible to transfer the model directly. India's high volume of 20 per cent of the population needing glasses – one per cent has cataract – means large markets but the intervention is one-time in nature and low cost as well. Eye problems have no economic bias and the focus is as much on prevention as on cure. "Our model is curative and, I think, there are certain disease entities that would fit this".

Aravind is also setting up kiosks in villages primarily to identify rural needs and is compiling the eye care data as a one-time job, much like a census.

What, in essence, Aravind has accomplished is converting India's vast problem into a service opportunity that doubles up as a paying proposition. It feeds on India's growing population, inadequate infrastructure, low per capita income, aging population, disease and illiteracy and converts them into avenues to serve the people.

The Schwab Foundation for Social Entrepreneurship, paying its tribute to the feat, says: The hospital is an international resource and training centre that is revolutionizing hundreds of eye care programmes in developing countries. With less than one per cent of the country's ophthalmic manpower, Aravind performs about five per cent of all cataract surgeries in India. Since its inception, Aravind has performed more than two million surgeries and handled over 16 million outpatients. Aravind follows the principle that large volume and high quality services result in sustainability and lower costs. By linking higher payment for well-to-do patients to lesser charges for the poor, it has become fully self-sustaining without "any deficiency in the quality of care received by poor patients...Aravind is able to provide free

eye care to two-thirds of its patients".

So voluminous has been the scale of its treatment that Aravind Eyecare has been compared to Big Mac, courtesy the "millions and millions served" slogan that the Wall Street Journal, applied to Dr Govindappa Venkataswamy. The revolution in eye care by applying profitable, assembly-line techniques to simple surgeries is nothing short of a McSurgery approach!^Ω

Cataract Surgeries per Million

States	No. of Contact Surgeries per Million of Population
India	
Andhra Pradesh	5,703
Bihar	1,010
Gujarat	8,532
Jammu & Kashmir	984
Madhya Pradesh	3,711
Nagaland	196
Pondicherry	9,868
Punjab	5,300
Tamil Nadu	7,136
Uttar Pradesh	3,269
West Bengal	3,016
Some Developing Countries	
India	3,250
Tanzania	329
Bangladesh	500
Nepal	900
Thailand	1,667
Some Developed Countries	
USA	5,000
UK	4,500
Australia	6,500

Shanmugappa: Portering Core Competencies

"I was happy and privileged to sit by his side to understand more about his dreams. India needs many leaders like Shanmugappa" - APJ Abdul Kalam (February 25, 2007; addressing college students in Belgaum, Karnataka)

For Shanmugappa, a failed 10th standard student from the Pudupet school of Natrampalli Taluk in North Arcot, Tamil Nadu, it could have been the end of the road. For G. R. Shanmugappa, now the head of a Rs 72-crore enterprise, life had just begun. Armed with the Rs 2 that his father (a betel nut vendor) gave him, he took a lorry to Krishnagiri and then walked to Bangalore to start working life as a porter at the Bangalore Railway Station. At the goods shed, where he worked, Shanmugappa's core competencies were loading and unloading.

Today, it is a sleek fleet of his milk tankers that distributes milk to different parts of Karnataka. Operations are trend-setting in terms of professionalism and polish, as clients sit up and applaud the man behind the GRS group. The once entrepreneurial porter at Bangalore's Railway Station now runs a multi-service company from packing to transportation and provides leadership to the country's transport industry as vice-president of the powerful All India Motor Transport Congress and President of Karnataka State Lorry Owner's Association.

A role model for entrepreneurship

Shanmugappa's story – as a role model for entrepreneurship – is one that the former Indian President, Dr APJ Abdul Kalam, never tires of recounting: The first

six years of Shanmugappa's life were spent on understanding the transport industry even as he explored other channels of enterprise that were opened up to him in the course of his work and that would transform him from a porter to a professional; a leader of enterprises. Reeling off his curriculum vitae, the former President says: "In the year 1971, after failing in the 10th class, he moved over to Bangalore where he worked as a porter in Bangalore Railway Station. In 1972, he joined Sasikala Transport Company..." He was a worker there for a year and then served with the Brooke Bond India factory at Whitefield, again as a worker. It was Brooke Bond that opened his eyes to the prospects of commerce even as he busied himself learning the ropes of the transport industry, working with Ramani Rangarao of Vijayawada (transporters) between 1975 and 1977 and loading and moving coffee trucks to different places in the country.

...who transformed himself on the job

"During this seven-year period, with his hard work and dedication he was able to save a modest Rs 4,000. With that money he bought an old van in 1978 and started running the van with the help of Basavaraj, his brother who was a driver and he himself became a cleaner. With the savings generated by running the van

The first six years of Shanmugappa's life were spent on understanding the transport industry even as he explored other channels of enterprise that were opened up to him in the course of his work and that would transform him from a porter to a professional; a leader of enterprises.

"In terms of hygienic practices, salaries, employee welfare and in all other respects, the employees are treated at par with those working with Unilever – and the productivity is higher here".

he purchased an old Ashok Leyland truck in 1979. From 1980 to 1986, he kept on purchasing one or two trucks every year. All these days, he continued his work in Ramani Rangarao Transport Office". Within a decade and a half of failing his Class X examination, Shanmugappa was ready for the third phase of his career. He was ready with his big investment plans.

...to become an entrepreneur

A manager in Hindustan Lever gave him the opportunity to blend tea as an outsourced manufacturer. Today, Shanmugappa's company blends and packs 10 tonnes of coffee every day, employing over 600 people. In 1999, he entered the pre-mixed coffee business in small quantities of 100-200 kg per day and then expanded operations to a daily production of 10 tonnes pre-mixed coffee and eight tonnes of pre-mixed tea, employing more than 700 people. He leveraged his core competency and built around it without going to any management institute and raised professional aspirations of those around him: some of his class mates and his brother, Basavaraj, who is also an industrialist.

...whose systems have the Unilever benchmark

"In terms of hygienic practices, salaries, employee welfare and in all other respects, the employees are treated at par with those working with Unilever – and the productivity is higher here", says Shanmugappa. However, he believes that "insecurity is the route to excellence" and makes no bones about it. The millionaire wears his uniform at work as he works hand in hand at the blending facility and drives the truck when needed.

...as he pursued excellence

Given the quality of sophistication in the transport industry, Shanmugappa realized that his operations would have to be raised to international standards, especially if he was to handle milk production and transportation. He was already a big truck fleet owner but it was the quality of transportation that would be of the essence. Dr Kalam says: "In 2003, he bought 100 trucks to hire to mines, transport coffee and sub contract to Larsen & Toubro. Thus he became a fleet owner. In 2004, he converted the trucks into a milk transporting fleet for the milk dairy. In 2005, he visited Australia with his son who was an MBA student there to explore the establishment of a milk dairy as a joint venture with an Australian firm capable of handling nine lakh litres of milk per day".

...and went in for forward integration

Shanmugappa then established a factory to make 100 tonnes of corrugated boxes per month for packaging pre-mixed coffee and pre-mixed tea, "employing around 1,200 persons for running the trucks and also running the pre-mixed coffee and tea operations", says Dr Kalam.

...his economic theory is interesting

Shanmugappa's economic theory is interesting: Truckers and their supply chain are not only the backbone of the India, they also contribute handsomely to the Indian economy (second only to agriculture). Yet they have to depend on private financing to buy trucks. Government-run financial institutions put in less than a fourth of what is required. Shanmugappa seeks recognition and

professionalization of this unorganized sector of truckers and the streamlining of the delivery mechanisms; ridding it of its culture of bribes and diesel theft. This is a credit-worthy business run by much-neglected wealth creators. Truckers are starved of other facilities as well. There are only five government-run driver training schools in India. The need is for at least 500 of them because only such schools will usher in better safety awareness, fewer accidents and safer driving.

...so is his HR commitment

Not many may choose to learn from a self-made entrepreneur who does not have the imprimatur of a national school of economics or a PhD or a business school but Shanmugappa has his own HR development strategy that extends beyond the truckers. As he had explained to Dr Kalam: 78 truckers die of accidents and natural causes everyday; their families become destitutes; their widows take to prostitution. Through the former President, he had an insurance scheme instituted for truckers that requires truck owners to pay an annual premium of Rs 375 per annum per head and, in the event of death of the driver, the family gets Rs 1.5 lakhs. Shanmugappa has schemes to support the widows to stand on their own feet. He is equally concerned that many of these drivers are affected by AIDS and that government funding to combat AIDS does not reach those really affected. That is his next mission.

...seeking inspiration from Ramakrishna Mission

"Arise and awake", the Ramakrishna Mission slogan is what inspired the young man who translated it into a

mission statement. "When Bangalore was sleeping, I was awake", says the man who works 20 hours a day; working at his enterprise or pursuing his anti-corruption agenda through his magazines "Federation Times" and "Motor Transport", in Kannada and English, which expose corrupt officials. At other times he seeks to inspire Indian youth to value India's hard-earned freedom and educate themselves. The son of the man who could not afford to study has an MBA from Australia.

...and leading his industry

Having satisfied his entrepreneurial spirit, Shanmugappa took on the mantle of industry leadership. Who else could be better positioned to do so than the man with first hand knowledge of the workings of the transportation industry – from the lowly porter, driver or cleaner to a single truck owner to fleet management? Shanmugappa leads from the front now; representing industry; negotiating on its behalf.

Says Dr Kalam: "Through this example, we can see how enthusiasm, hard work with devotion and above all, the will to succeed made Shanmugappa, a successful entrepreneur. Indeed, he is a role model for any level of society. On his invitation, I inaugurated the Motor Transportation Congress, of which he had become the Chairman; I was happy and privileged to sit by his side, to understand further about his dreams. India needs many Shanmugappa-like leaders".

Bangalore's unsung hero has the best of bards singing for him! 

There are only five government-run driver training schools in India. The need is for at least 500 of them because only such schools will usher in better safety awareness, fewer accidents and safer driving.

Achyuta Samanta: Bridging the Chasm

There are two distinct pictures of Orissa. India's richest state; endowed with amazing mineral reserves. Orissa, among India's poorest states, where starvation deaths make regular headlines; where tribal exploitation provides for a tragic waste of human resource. Meet Achyuta Samanta the human bridge between the two worlds.

Kalarabanka could just be another nondescript village mired in poverty and deprivation. That was not to be though for in Kalarabanka was born Achyuta Samanta. What his childhood inspiration was is not known. However, as the child Achyuta sat baby-sitting his little sister, because his widowed mother had to be away selling coconuts and vegetables in the local market, he must have been moved by the realization that there were many more such children like himself and his sister who needed nurturing.

...youthful vision

The young mind must have been driven by some such awakening, "a divine intervention" as he described it later in life, as he walked six kilometers to his school or, as he grew up, cycled down to the Jagatsinghpur College. Unknown to himself, he had given himself both a vision statement and a mission statement. Somewhere along the line, he had taught himself the strategy to make them realities.

Thus even while other unfortunate children around him languished, Achyuta completed college and secured a Master's in Chemistry from Utkal University, Bhubaneswar. A comfortable lecturer's position awaited him at a city college but

that had nothing to do with his childhood realization: education for all, even for those from the lowest rungs of society, to be followed by Higher Education. True, there was no funding but lack of money would hardly stop the passionate young man from Kalarabanka.

...towards world class education

The Kalinga Institute of Industrial Technology (recently ranked 37th by a survey of around 500 Indian universities conducted by Outlook) was the fruit of such passion. The seed was sown in a one room rented space where he set up an ITI with a dozen students in 1993. The seed money was no more than Rs 5,000. The transformation within a decade and three years to a modern university imparting education over 10 campuses, covering 250,000 sq. ft. built up area or more, sprawled over 250 acres of prime land, is nothing short of a miracle. Samanta acquired the sick units of the Chandaka Industrial Estate at market price and turned the region into a first class educational hub.

The ITI started offering diplomas and then came the B.Tech courses followed by MCA offerings and even PhDs in various streams of Engineering. Then, came the law school fashioned on the lines of the National Law School, followed by a medical and a dental college offering MBBS and BDS courses. Expanding its academic reach further was an International Public School, a post-graduate degree in Bio-Technology, an MBA course and one in rural management. Today, KIIT is India's fastest-growing university with 9,000 students in its Wi-Fi, eco-friendly campuses at Bhubaneswar, Delhi, Bangalore and Pune – the only

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Kalinga Institute of Social Science students also have five per cent of the seats at KIIT reserved for them. So inspirational has the programme been that the visiting Chancellor of the Penn State University agreed to support the SC students by reserving seats for five of them in his university, giving the tribal children an opportunity to move from Patia to Pennsylvania.

institution in the country to run courses from ITI to the Ph.D level under one umbrella; a record registered by the Limca Book of Records.

The investment of Rs 5,000 has increased to Rs 1,000 crores with an annual turnover of Rs 150 crores but that is not the story. Samanta's vision transformed the academic landscape of Orissa and then turned its sights on rejuvenating the state employment scenario. Samanta introduced the KIIT Public Service Commission for unemployed youth, who are trained in various skills with the Commission facilitating their entry into the world of the employed as he has changed the employment situation in the neighbouring areas of his campus.

... for all, the tribals included

Even more inspiring is his work in the tribal belt; some totally emaciated like the Juangas, who went virtually without food. For them, Samanta started projects to transform them from "food gatherers to food producers". The first step would be education and better resource management. He adopted a block in the Keonjhar district and set up a residential school exclusively for the tribal children. Then through continuous persuasion and motivation he made the tribals send their children to the school. From 100 children at Patia, where the Kalinga Institute of Social Science came up, the rolls increased to 5,000, mainly from 55 primitive tribes. The children receive food, accommodation, clothes, education, health care and all basic necessities free of cost.

Samanta now plans to turn it into a residential university exclusively for the tribal children and model it on the lines of Santiniketan, where children could study from KG to PG (Kindergarten to Post Graduate) and get all the exposure that

they would need to become worthy citizens of India. He further guarantees employment after education – either as self-employed people or through vocational training leading to jobs. Amazingly, Samanta has done it without financial support or assistance from the government.

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...moving mountains

Samanta continues to move mountains with his writing, through his interactions with the many distinguished personalities who visit his campus. He showcases Orissa's amazing handicrafts for them; he sponsors tourism promotion; he supports cultural activity and helps conserve places of worship and festivals like the Rathayatra; he encourages literature through his family magazine, Kadambini; he has entered film-making with the internationally acclaimed, Kathanataara. The focus is always on critical social problems, gender issues, education...

Samanta likes to dream; more importantly, he believes in making his dreams come true – one that bridges the chasm between the fortune's blessed and the fortune shrugged. 

Some Interesting Insights...

Visionary companies last hundreds of years. They display a powerful drive for progress that enables them to change and adapt without compromising their cherished core ideas. They 'thrive' with 'meaning'. – **Arie De Geus, The Living Company** 

"Business is a stakeholder in globalization and bears a heavy responsibility to contribute to the stability of the global system. And one of the ways it can meet that responsibility is to do what business does best: innovate, invest and grow – grow knowledge, build infrastructure, and create surpluses." – **Klaus M Schwab, President, World Economic Forum, Geneva** 

"Every business issue (problem and opportunity) is a symptom of a deeper human or organizational issue: Sales are down; profitability declined; product quality is down; or the company has lost touch with the customer – whatever the symptom is, there is a human or organizational solution at its core. If sales are off – ask what is it about our people who are doing market research, developing products or selling products that is not meeting the customers needs.

"When product quality is down – that is a very serious symptom, perhaps of an organizational process that is not right, or an indication that skills of people need to be developed. If we are losing market share, we should ask whether we have the executive talent needed to understand the customer and the competition.

"A good HR manager develops the innate ability to see the human resources implications in every business issue. Pick any front page business issue in a business journal, it might be viewed as a symptom with a clear human and/or organizational root to solution". – **Ralph Christensen, Roadmap to Strategic HR** 

"Today's corporations have become the principal repositories of much of society's scarcest resources and knowledge. They are the creators of substantial amounts of social capital through their role as forums for human interaction and

personal fulfillment, and through their vital contributions to the development of people.

"As those who shape and guide these great institutions, managers have an awesome responsibility but also a great privilege. In a way few others do, they are in a position to make a major difference in society. In talking with hundreds of managers, we strongly sensed that while many of them were frustrated and even confused, the vast majority of them at all levels were convinced that the changes they were helping to make would have a highly positive impact on their customers, employees and society at large". – **Sumantra Ghosal, The Individualized Corporation** 

"Management is, above all else, about achieving results through people. Not that there is no value to crunching numbers, analyzing trends, or restructuring activities. But these traditional responsibilities have, for too long, distracted managers from their most basic and most valuable role-being able to attract, motivate, develop and retain individuals with scarce and valuable knowledge and skills.

"It is a role that is at the same time, both enormously simple and incredibly difficult. It is that task that is central to the creation and management of the Individualized Corporation, the organization that is defining the next generation of management challenges". – **Sumantra Ghosal, The Individualized Corporation** 

"Speed, Connectivity and Intangibles are the Trinity of the New Age. Speed: Every aspect of business and the connected organization operates and changes in real time. Connectivity: Everything is electronically connected to everything else – products, people, companies, countries, everything. Intangibles: Every Offer has both tangible and intangible economic value. The intangible is growing faster". – **Stan Davis and Christopher Meyer, BLUR** 

