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# OPINION

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# EXPRESS

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A MONTHLY NEWS MAGAZINE

COVER STORY

# MISSILE MAN NO MORE

Great scientist and former President A.P.J. Abdul Kalam died while giving a lecture in Indian Institute of Management, Shillong due to cardiac arrest

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## One of the most loved Indian Prez is no more

India's 11th President APJ Abdul Kalam died on Monday evening at a hospital in Meghalaya, where he had gone to deliver a lecture. He was 83. His body was today flown by an Air Force helicopter to Guwahati in Assam from where it will be taken to Delhi. Prime Minister Narendra Modi will be present at the Delhi airport to receive his body. The former President, who was in office from 2002 to 2007, had collapsed during the lecture at the Indian Institute of Management, Shillong, around 6.30 pm. He was taken to the Bethany hospital. Doctors said he had suffered a massive cardiac arrest. "President Kalam was



brought to the hospital at 7 pm. When he brought in there was no sign of life. He was taken to ICU to try and revive him, which was futile," hospital sources told NDTV. The government has declared a seven-day national mourning as a mark of respect for the former President. Paying a special tribute to Dr Kalam on Monday evening, PM Modi had said, "My mind is filled with so many memories, so many interactions with him, I always marveled at his intellect, learnt so much from him." Home Minister Rajnath Singh tweeted, "Deeply saddened at the sudden demise of the former president of India Dr. APJ Abdul Kalam. He was an inspiration to an entire generation.

Dr Abdul Kalam was an inspiration to many, specially the youth of the country wherein he was considered a demi god and idea role model to be followed. Following quotes are truly inspirational for all of us -

**"If you fail, never give up because FAIL means "First Attempt In Learning".**

**"End is not the end, if fact END means "Effort Never Dies" - If you get No as an answer, remember NO means "Next Opportunity". So Lets be positive."**

**"Dream, dream, dream. Dreams transform into thoughts and thoughts result in action."**

**"If you want to shine like a sun. First burn like a sun."**

Surely the country will miss the great personality and an inspirational human being in the times to come. However, we must draw inspiration from the modest man who served the country till his last breath.

—Prashant Tewari, Editor-in-Chief

## COVER STORY



## INDIAN GENERAL ELECTION, 2014

**MODI LEADS FROM THE FRONT**

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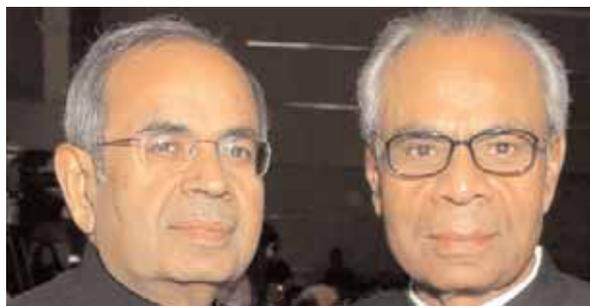
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# TWO FOR JOY



She is just one shot from her dream destination. Ace Indian shuttler Saina Nehwal has jumped one place to a career-best second in the latest international rankings.

"I am very happy to achieve the world number two so soon in my career. The last three wins have really helped me. It is a great feeling but I feel my priority still will be to win more tournaments for India rather than focussing on ranking," Saina said.

"It will be difficult to hold on to the ranking but I hope to continue my hard work and win more titles and become the number one player soon," said the Hyderabad shuttler, who is down with fever and cold.

The 20-year-old Saina made a meteoric rise following her back-to-back title triumphs at the India Open Grand Prix and the Singapore Open Super Series, reaching the world number three last month.

And after the Indian defended her Indonesian Open Super Series crown to complete her hat-trick of titles, it was just a matter of time that she jumped to the second place.

By virtue of the consecutive title wins, Saina now has 64791.2637 points and is just behind Chinese Yihan Wang, while Xin Wang of China is in the third place.

Saina's father Harvir Singh also expressed happiness and hoped her daughter can continue her good work for the country.

"God has been kind. It is a marvellous achievement. I hope she can continue to work hard and win more laurels for the country," Harvir Singh said.

In March, Saina had attained the fifth position after becoming the first Indian woman to reach the semifinals of the prestigious All England Super Series Championships.

However, she dropped to the sixth position in the subsequent weeks.

Saina's next engagement will be in the World badminton Championship in Paris next month, before playing the Commonwealth Games and Asian Games.

In the men's ranking, the Indian trio of Chetan Anand, P Kashyap and Arvind Bhatt were at 15th, 25th and 27th spot respectively, while mixed doubles pair of Jwala Gutta and V Diju were static at the seventh place.

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# ON SHORT

# FUSE

IT WILL TAKE MUCH MORE THAN  
TOKEN ACTS TO DEFUSE THE  
POPULATION BOMB...

# WHY ISN'T EVERYONE AS SCARED AS WE ARE?

**PAUL R. EHRLICH & ANNE H. EHRLICH**

In the early 1930s, when we were born, the world population was just 2 billion; now it is more than two and a half times as large and still growing rapidly. The population of the United States is increasing much more slowly than the world average, but it has more than doubled in only six decades – from 120 million in 1928 to 250 million in 1990. Such a huge population expansion within two or three generations can by itself account for a great many changes in the social and economic institutions of a society. It also is very frightening to those of us who spend our lives trying to keep track of the implications of the population explosion.

This sequel to Paul Ehrlich's 1968 landmark best-seller *The Population Bomb* examines the critical choices we face today and proposes an agenda for the 1990s to avoid global ecocide.

The *Population Explosion* vividly describes how the Earth's population, growing by 95 million people a year, is rapidly depleting the planet's resources, resulting in famine, global warming, acid rain, and other major problems. Paul and Anne Ehrlich also clearly and concisely point to immediate action that will lessen the threat of ruin and begin to build a more peaceful, sane, and secure world.

## A SLOW START

One of the toughest things for a population biologist to reconcile is the contrast between his or her recognition that civilization is in imminent serious jeopardy and the modest level of concern that population issues generate among the public and even among elected officials.

Much of the reason for this discrepancy lies in the slow development of the problem. People aren't scared because they evolved biologically and culturally to respond to short-term "fires" and to tune out long-term "trends" over which they had no control. Only if we do what doesn't come naturally – if we determinedly focus on what seem to be gradual or nearly imperceptible changes – can the outlines of our predicament be perceived clearly enough to be frightening.

Our own species, *Homo sapiens*, evolved a few hundred thousand years ago. Some ten thousand years ago, when agriculture

was invented, probably no more than five million people inhabited Earth – fewer than now live in the San Francisco Bay Area. Even at the time of Christ, two thousand years ago, the entire human population was roughly the size of the population of the United States today; by 1650 there were only 500 million people, and in 1850 only a little over a billion. Since there are now

well past 5 billion people, the vast majority of the population explosion has taken place in less than a tenth of one percent of the history of *Homo sapiens*.

This is a remarkable change in the abundance of a single species. After an unhurried pace of growth over most of our history, expansion of the population accelerated during the Industrial Revolution and really shot up after 1950. Since mid-century, the human population has been growing at annual rates ranging from about 1.7 to 2.1 percent per year, doubling in forty years or less. Some groups have grown significantly faster; the population of the African nation of Kenya<sup>^</sup> was estimated to be increasing by over 4 percent annually during the 1980s – a rate that if continued would double the nation's population in only seventeen years. That rate did continue for

over a decade, and only recently has shown slight signs of slowing. Meanwhile, other nations, such as those of northern Europe, have grown much more slowly in recent decades.

But even the highest growth rates are still slow-motion changes compared to events we easily notice and react to. A car swerving at us on the highway is avoided by actions taking a few

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# DEMOGRAPHIC FACTS

## Ten Most Populous Countries

### 1. China

**Population:** 1,338,612,968 (Excluding Hong Kong, Taiwan, and Macau)

**Percentage of World Population:** 19.6

**Did you know?**

† In 1979, China introduced a one-child policy to curb population growth. About 36 percent of China's population is currently subject to this policy.

† China's biggest cities, Shanghai and Beijing, each count more than 17 million people in their respective municipalities.

† Between 1978 and 2005, China's level of urbanization increased from 17.4 to 41.8 percent. (Photo: Reuters)

### 2. India

**Population:** 1,163,408,098

**Percentage of World Population:** 17.1

**Did you know?**

† India is a remarkably diverse country: It is estimated that only the continent of Africa exceeds the linguistic, cultural, and genetic diversity of India.

† There are more than two thousand ethnic groups in India.

† More than two hundred languages are spoken in India, 22 of them are official languages.

### 3. United States

**Population:** 300,009,000

**Percentage of World Population:**

4.4

**Demographic Facts:**

† Every eight seconds, a baby is born in the U.S. Every twelve seconds, someone dies.

† More than 60 percent of all Americans live in one of the 51 metropolitan areas with a population of more than 1 million people.

† The population growth in the U.S. is among the highest in industrialized countries. In 2050, the U.S. population could reach 439 million.

### 4. Indonesia

**Population:** 230,168,000

**Percentage of World Population:** 3.4

**Did you know?**

† Indonesia's 230 million people live on about 6,000 islands scattered across both sides of the equator.

† Indonesia has the largest Muslim population in the world. About 86 percent of Indonesia's population is Muslim.

† The island of Java is one of the most densely populated areas in the world. More than 107 million people live in an area that is the size of New York State.

### 5. Brazil

**Population:** 191,109,937

**Percentage of World population:** 2.8

**Did you know?**

† The largest cities in Brazil are Sao Paulo (19.6 million people) and Rio de Janeiro (7 million people).

† The ancestors of most Brazilians are indigenous people, Portuguese colonists, and African slaves.

† Today, Brazil has the biggest Japanese (1.6 million people) and Italian populations (25 million people) outside their home

countries.

### 6. Pakistan

**Population:** 176,242,949

**Percentage of World Population:** 2.6

**Did you know?**

† Agriculture and related activities engage 42 percent of the Pakistan workforce.

† Pakistan has a relatively high fertility rate of more than 3 children per woman.

† Pakistan has a very young population: The median age is 20 years. About half of the population are younger than 20 years; only 4 percent are older than 65. (Photo: Reuters)

### 7. Bangladesh

**Population:** 156,050,883

**Percentage of World Population:** 2.3

**Did you know?**

† The country's name derives from the linguistic and ethnic group "Bengali". Ninety-eight per cent of Bangladesh's population are Bengali.

† Thirty-six percent of the population survives on a per capita income below one dollar a day.

† Bangladesh has a very low literacy rate: Only 48 percent of the population older than 15 can read and write.

### 8. Nigeria

**Population:** 148,093,000

**Percentage of World**

**Population:** 2.2

**Did you know?**

† Nigeria has a high population growth rate of 2 percent. About one out of every four Africans is Nigerian.

† Life expectancy in Nigeria is 47 years, the median age is 19 years.

† There are more than 250 ethnic groups and 510 living languages in Nigeria.

### 9. Russia

**Population:** 141,824,280

**Percentage of World Population:** 2.1

**Did you know?**

† Russia ranks 9th in terms of population, but is the largest country by land size with about 17 million square kilometers (6,592,800 sq mi).

† Marriage rates increased from 6,2 marriages per 1,000 people in the year 2000 to 8,9 marriages per 1,000 people in 2007.

† Russia has the biggest gap between male and female life expectancy: While females live 73 years on average, males live only about 59 years. (Photo: Reuters)

### 10. Japan

**Population:** 127,078,679

**Percentage of World Population:** 1.9

**Did you know?**

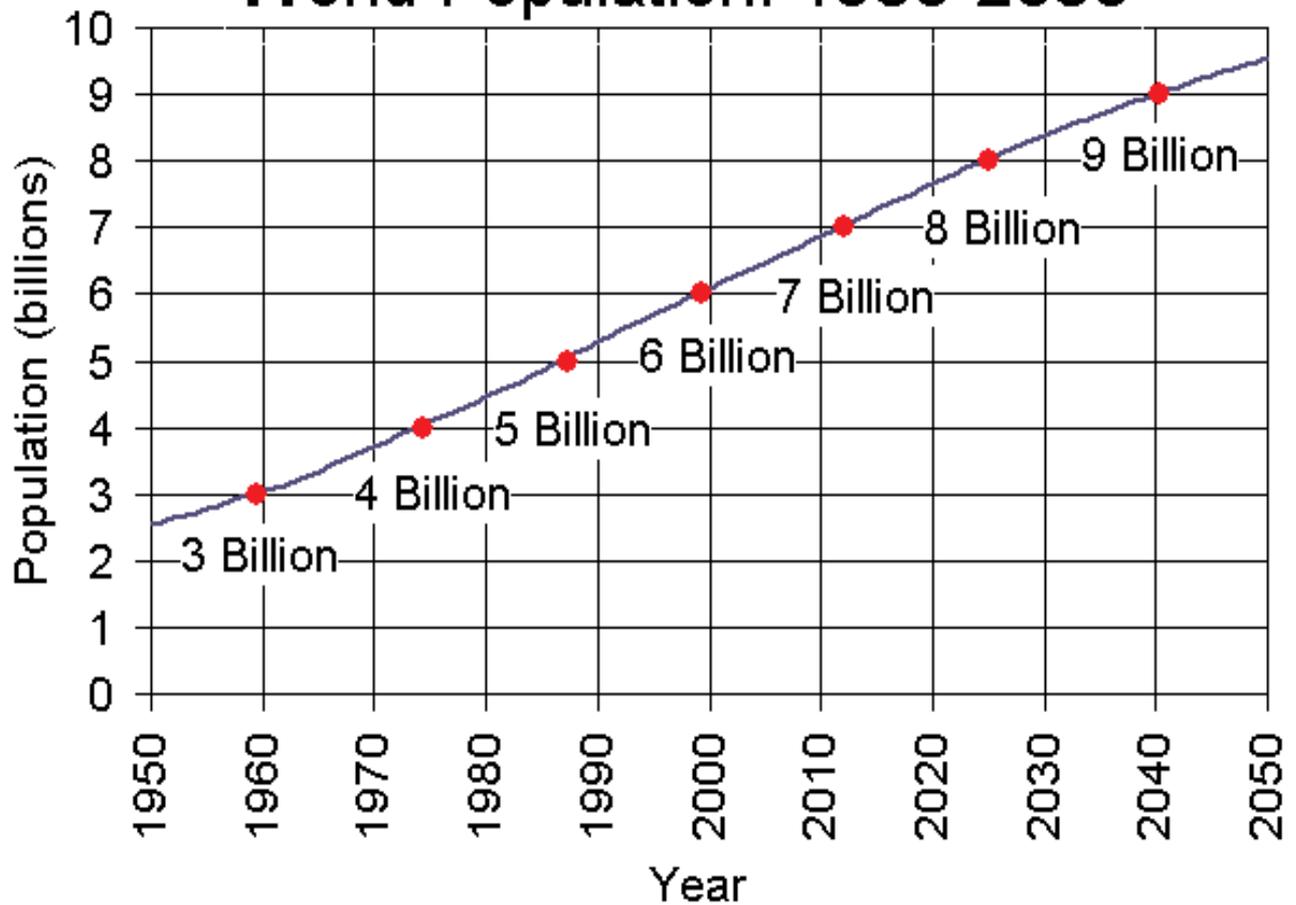
† Japan has a high population density. On average, Japan counts 337 people per square kilometer.

† The average life expectancy in Japan is 82 years, one of the highest in the world. Currently, there are over 35,000 people in Japan who are older than 100.

† Due to low fertility rates, Japan's population could drop to 100 million by 2050; by 2100, this number could fall to 64 million.



## World Population: 1950-2050



Source: U.S. Census Bureau, International Data Base, December 2008 Update.

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tenth of one percent of the history of *Homo sapiens*.

This is a remarkable change in the abundance of a single species. After an unhurried pace of growth over most of our history, expansion of the population accelerated during the Industrial Revolution and really shot up after 1950. Since mid-century, the human population has been growing at annual rates



ranging from about 1.7 to 2.1 percent per year, doubling in forty years or less. Some groups have grown significantly faster; the population of the African nation of Kenya was estimated to be increasing by over 4 percent annually during the 1980s – a rate that if continued would double the nation's population in only seventeen years. That rate did continue for over a decade, and only recently has shown slight signs of slowing. Meanwhile, other nations, such as those of northern Europe, have grown much more slowly in recent decades.

But even the highest growth rates are still slow-motion changes compared to events we easily notice and react to. A car swerving at us on the highway is avoided by actions taking a few seconds. The Alaskan oil spill caused great public indignation, but faded from the media and the consciousness of most people in a few months. America's participation in World War II spanned less than four years. During the last four years, even Kenya's population grew by only about 16 percent – a change hardly perceptible locally, let alone from a distance. In four years, the world population expands only a little more than 7 percent. Who could notice that? Precipitous as the population explosion has been in historical terms, it is occurring at a snail's pace in an individual's perception. It is not an event, it is a trend that must be analyzed in order for its significance to be appreciated.

### EXPONENTIAL GROWTH

The time it takes a population to double in size is a dramatic way to picture rates of population growth, one that most of us

can understand more readily than percentage growth rates. Human populations have often grown in a pattern described as "exponential." Exponential growth occurs in bank accounts when interest is left to accumulate and itself earns interest. Exponential growth occurs in populations because children, the analogue of interest, remain in the population and themselves have children.

A key feature of exponential growth is that it often seems to start slowly and finish fast. A classic example used to illustrate this is the pond weed that doubles each day the amount of pond surface covered and is projected to cover the entire pond in thirty days

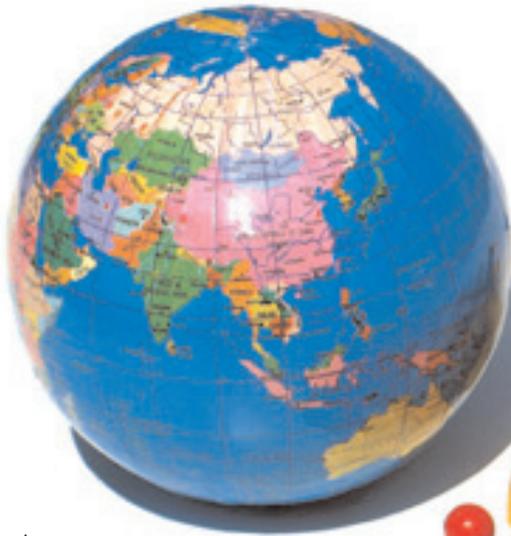
A key feature of exponential growth is that it often seems to start slowly and finish fast. A classic example used to illustrate this is the pond weed that doubles each day the amount of pond surface covered and is projected to cover the entire pond in thirty days. The question is, how much of the pond will be covered in twenty-nine days? The answer, of course, is that just half of the pond will be covered in twenty-nine days. The weed will then double once more and cover the entire pond the next day. As this example indi-

cates, exponential growth contains the potential for big surprises.

The limits to human population growth are more difficult to perceive than those restricting the pond weed's growth. Nonetheless, like the pond weed, human populations grow in a pattern that is essentially exponential, so we must be alert to the treacherous properties of that sort of growth. The key point to remember is that a long history of exponential growth in no way implies a long future of exponential growth. What begins in slow motion may eventually overwhelm us in a flash.

The last decade or two has seen a slight slackening in the human population growth rate – a slackening that has been prematurely heralded as an "end to the population explosion." The slowdown has been only from a peak annual growth rate of perhaps 2.1 percent in the early 1960s to about 1.8 percent in 1990. To put this change in perspective, the population's doubling time has been extended from thirty-three years to thirty-nine. Indeed, the world population did double in the thirty-seven years from 1950 to 1987. But even if birthrates continue to fall, the world population will continue to expand (assuming that death rates don't rise), although at a slowly slackening rate, for about another century. Demographers think that growth will not end before the population has reached 10 billion or more.

So, even though birthrates have declined somewhat, Homo sapiens is a long way from ending its population explosion or avoiding its consequences. In fact, the biggest jump, from 5 to 10 billion in well under a century, is still ahead. But this



does not mean that growth couldn't be ended sooner, with a much smaller population size, if we – all of the world's nations – made up our minds to do it. The trouble is, many of the world's leaders and perhaps most of the world's people still don't believe that there are compelling reasons to do so. They are even less aware that if humanity fails to act, nature may end the population explosion for us – in very unpleasant ways – well before 10 billion is reached.

Those unpleasant ways are beginning to be perceptible. Humanity in the 1990s will be confronted by more and more intransigent environmental problems, global problems dwarfing those that worried us in the late 1960s. Perhaps the most serious is that of global warming, a problem caused in large part by population growth and overpopulation. It is not clear whether the severe drought in North America, the Soviet Union, and China in 1988 was the result of the slowly rising surface temperature of Earth, but it is precisely the kind of event that climatological models predict as more and more likely with continued global warming. In addition to more frequent and more severe crop failures, projected consequences of the warming include coastal flooding, desertification, the creation of as many as 300 million environmental refugees, alteration of patterns of disease, water shortages, general stress on natural ecosystems, and synergistic interactions among all these factors.

Continued population growth and the drive for development in already badly overpopulated poor nations will make it exceedingly difficult to slow the greenhouse warming – and impossible to stop or reverse it – in this generation at least. And, even if the warming should miraculously not occur, contrary to accepted projections, human numbers are on a collision course with massive famines anyway.



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## MAKING THE POPULATION CONNECTION

Global warming, acid rain, depletion of the ozone layer, vulnerability to epidemics, and exhaustion of soils and groundwater are all, as we shall see, related to population size.

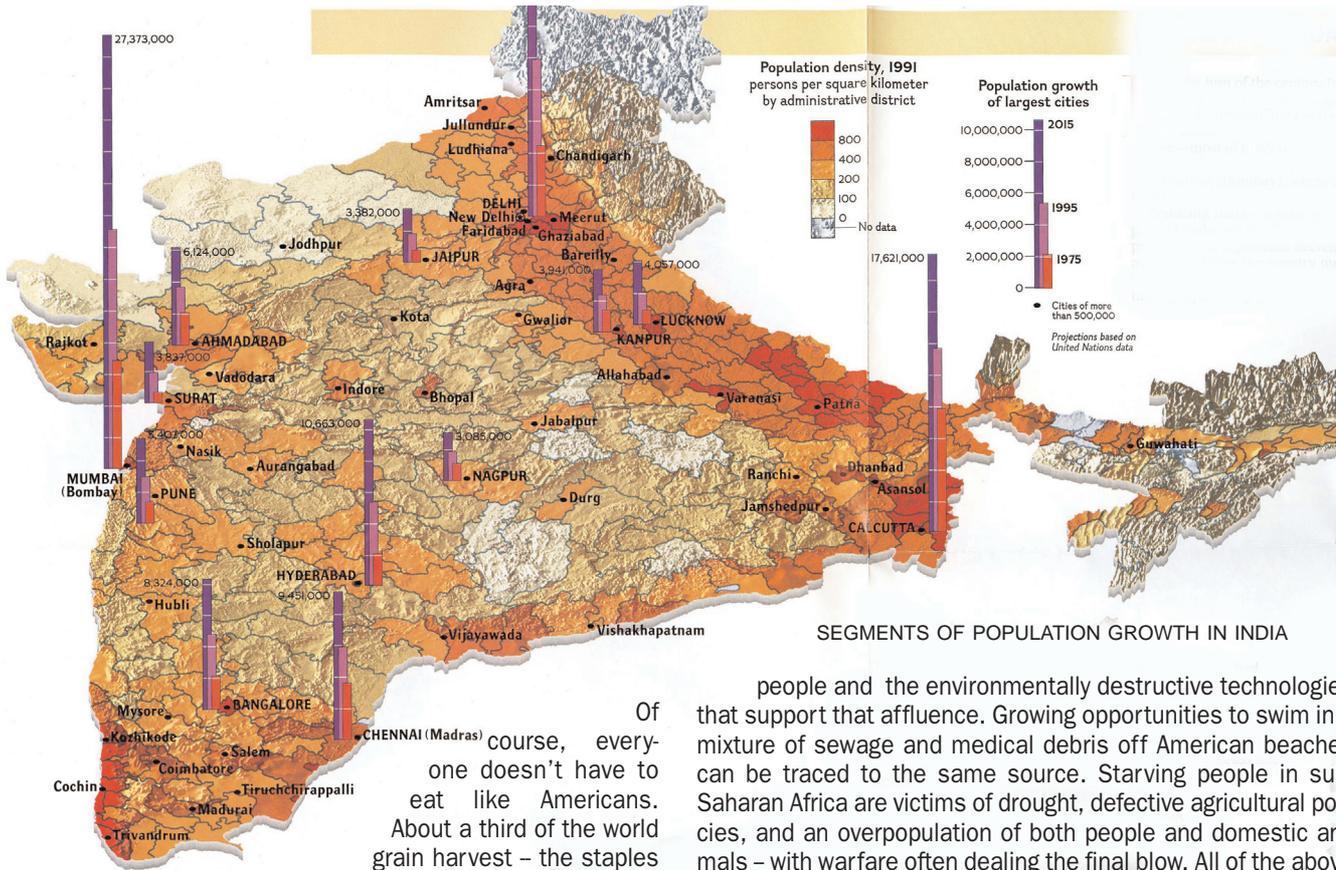
They are also clear and present dangers to the persistence of civilization. Crop failures due to global warming alone might result in the premature deaths of a billion or more people in the next few decades, and the AIDS epidemic could slaughter hundreds of millions. Together these would constitute a harsh "population control" program provided by nature in the face of humanity's refusal to put into place a gentler program of its own.

We shouldn't delude ourselves: the population explosion will come to an end before very long. The only remaining question is whether it will be halted through the humane method of birth control, or by nature wiping out the surplus. We realize that religious and cultural opposition to birth control exists throughout the world; but we believe that people simply don't understand the choice that such opposition implies. Today, anyone opposing birth control is unknowingly voting to have the human population size controlled by a massive increase in early deaths.

Of course, the environmental crisis isn't caused just by expanding human numbers. Burgeoning consumption among the rich and increasing dependence on ecologically unsound technologies to supply that consumption also play major parts. This allows some environmentalists to dodge the population issue by emphasizing the problem of malign technologies. And social commentators can avoid commenting on the problem of too many people by focusing on the serious mal-distribution of affluence.

But scientists studying humanity's deepening predicament recognize that a major factor contributing to it is rapidly worsening overpopulation. The Club of Earth, a group whose members all belong to both the U.S. National Academy of Sciences and the American Academy of Arts and Sciences, released a statement in September 1988 that said in part: Arresting global population growth should be second in importance only to avoiding nuclear war on humanity's agenda. Overpopulation and rapid population growth are intimately connected with most aspects of the current human predicament, including rapid depletion of nonrenewable resources, deterioration of the environment (including rapid climate change), and increasing international tensions.

But even in that narrow context, the assertion is wrong. Suppose food were distributed equally. If everyone in the world ate as Americans do, less than half the present world population could be fed on the record harvests of 1985 and 1986.



SEGMENTS OF POPULATION GROWTH IN INDIA

Of course, everyone doesn't have to eat like Americans. About a third of the world grain harvest – the staples of the human feeding base – is fed to animals to produce eggs, milk, and meat for American-style diets. Wouldn't feeding that grain directly to people solve the problem? If everyone were willing to eat an essentially vegetarian diet, that additional grain would allow perhaps a billion more people to be fed with 1986 production.

Would such radical changes solve the world food problem? Only in the very short term. The additional billion people are slated to be with us by the end of the century. Moreover, by the late 1980s, humanity already seemed to be encountering trouble maintaining the production levels of the mid-1980s, let alone keeping up with population growth. The world grain harvest in 1988 was some 10 percent below that of 1986. And there is little sign that the rich are about to give up eating animal products.

So there is no reasonable way that the hunger problem can be called "only" one of distribution, even though redistribution of food resources would greatly alleviate hunger today. Unfortunately, an important truth, that mal-distribution is a cause of hunger now, has been used as a way to avoid a more important truth – that overpopulation is critical today and may well make the distribution question moot tomorrow.

The food problem, however, attracts little immediate concern among well-fed Americans, who have no reason to be aware of its severity or extent. But other evidence that could make everyone face up to the seriousness of the population dilemma is now all around us, since problems to which overpopulation and population growth make major contributions are worsening at a rapid rate. They often appear on the evening news, although the population connection is almost never made.

Consider the television pictures of barges loaded with garbage wandering like *The Flying Dutchman* across the seas, and news stories about "no room at the dump." They are showing the results of the interaction between too many affluent

people and the environmentally destructive technologies that support that affluence. Growing opportunities to swim in a mixture of sewage and medical debris off American beaches can be traced to the same source. Starving people in sub-Saharan Africa are victims of drought, defective agricultural policies, and an overpopulation of both people and domestic animals – with warfare often dealing the final blow. All of the above are symptoms of humanity's massive and growing negative impact on Earth's life-support systems.

## RECOGNIZING THE POPULATION PROBLEM

The average person, even the average scientist, seldom makes the connection between such seemingly disparate events and the population problem, and thus remains unworried. To a degree, this failure to put the pieces together is due to a taboo against frank discussion of the population crisis in

Many people on the political left are concerned that focusing on overpopulation will divert attention from crucial problems of social justice (which certainly need to be addressed in addition to the population problem). Often those on the political right fear that dealing with overpopulation will encourage abortion...

many quarters, a taboo generated partly by pressures from the Catholic hierarchy and partly by other groups who are afraid that dealing with population issues will produce socially damaging results.

Many people on the political left are concerned that focusing on overpopulation will divert attention from crucial problems of social justice (which certainly need to be addressed in addition to the population problem). Often those on the political right fear that dealing with overpopulation will encourage abortion (it need not) or that halting growth will severely damage the economy (it could, if not handled properly). And people of varied political persuasions who are unfamiliar with the magnitude of the population

problem believe in a variety of farfetched technological fixes – such as colonizing outer space – that they think will allow the need for regulating the size of the human population to be avoided forever.

Even the National Academy of Sciences avoided mentioning controlling human numbers in its advice to President Bush on how to deal with global environmental change. Although Academy members who are familiar with the issue are well aware of the critical population component of that change, it was feared that all of the Academy's advice would be ignored if recommendations were included about a subject taboo in the Bush administration. That strategy might have been correct, considering Bush's expressed views on abortion and considering the administration's weak appointments in many environmentally sensitive positions. After all, the Office of Management and Budget even tried to suppress an expert evaluation of the potential seriousness of global warming by altering the congressional testimony of a top NASA scientist, James Hansen, to conform with the administration's less urgent view of the problem.

All of us naturally lean toward the taboo against dealing with population growth. The roots of our aversion to limiting the size of the human population are as deep and pervasive as the roots of human sexual behavior. Through billions of years of evolution, out reproducing other members of your population was the name of the game. It is the very basis of natural selection, the driving force of the evolutionary process. Nonetheless, the taboo must be uprooted and discarded.

### OVERCOMING THE TABOO

There is no more time to waste; in fact, there wasn't in 1968 when *The Population Bomb* was published. Human inaction has already condemned hundreds of millions more people to premature deaths from hunger and disease. The population connection must be made in the public mind. Action to end the population explosion humanely and start a gradual population decline must become a top item on the human agenda: the human birthrate must be lowered to slightly below the human death rate as soon as possible. There still may be time to limit the scope of the impending catastrophe, but not much time. Ending the population explosion by controlling births is necessarily a slow process. Only nature's cruel way of solving the problem is likely to be swift.

Of course, if we do wake up and succeed in controlling our population size, that will still leave us with all the other thorny problems to solve. Limiting human numbers will not alone end warfare, environmental deterioration, poverty, racism, religious prejudice, or sexism; it will just buy us the opportunity to do so. As the old saying goes, whatever your cause, it's a lost cause without population control.

America and other rich nations have a clear choice today. They can continue to ignore the population problem and their own massive contributions to it. Then they will be trapped in a downward spiral that may well lead to the end of civilization in a few decades. More frequent droughts, more damaged crops and famines, more dying forests, more smog, more international conflicts, more epidemics, more gridlock, more drugs, more crime, more sewage swimming, and other extreme unpleasantness will mark our course. It is a route already traveled by too

many of our less fortunate fellow human beings.

Or we can change our collective minds and take the measures necessary to lower global birthrates dramatically. People can learn to treat growth as the cancer like disease it is and move toward a sustainable society. The rich can make helping the poor an urgent goal, instead of seeking more wealth and useless military advantage over one another. Then humanity might have a chance to manage all those other seemingly intractable problems. It is a challenging prospect, but at least it will give our species a shot at creating a decent future for itself. More immediately and concretely, taking action now will give our children and their children the possibility of decent lives.

All too often, overpopulation is thought of simply as crowding: too many people in a given area, too high a population density. For instance, the deputy editor in chief of *Forbes* magazine pointed out recently, in connection with a plea for more population growth in the United States: "If all the people from China and India lived in the continental U.S. (excluding Alaska), this country would still have a smaller population density than England, Holland, or Belgium."

The appropriate response is "So what?" Density is generally irrelevant to questions of overpopulation. For instance, if brute density were the criterion, one would have to conclude that Africa is "under populated," because it has only 55 people per square mile, while Europe (excluding the USSR) has 261 and Japan 857. A more sophisticated measure would take into consideration the amount of Africa not covered by desert or "impenetrable" forest. This more habitable portion is just a little over half the continent's area, giving an effective population density of 117 per square mile. That's still only about a fifth of that in the United Kingdom. Even by 2020, Africa's effective density is projected to grow to only about that of France today (266), and few people would consider France excessively crowded or overpopulated.

When people think of crowded countries, they usually contemplate places like the Netherlands (1,031 per square mile), Taiwan (1,604), or Hong Kong (14,218). Even those don't necessarily signal overpopulation—after all, the Dutch seem to be thriving, and doesn't Hong Kong have a booming economy and fancy hotels? In short, if density were the standard of overpopulation, few nations (and certainly not Earth itself) would be likely to be considered overpopulated in the near future. The error, we repeat, lies in trying to define overpopulation in terms of density; it has long been recognized that density per se means very little.

The key to understanding overpopulation is not population density but the numbers of people in an area relative to its resources and the capacity of the environment to sustain human activities; that is, to the area's carrying capacity. When is an area overpopulated? When its population can't be maintained without rapidly depleting nonrenewable resources (or converting renewable resources into nonrenewable ones) and without degrading the capacity of the environment to support the population. In short, if the long-term carrying capacity of an area is clearly being degraded by its current human occupants, that area is overpopulated.

By this standard, the entire planet and virtually every nation is already vastly overpopulated. Africa is overpopulated now because, among other indications, its soils and forests are

The key to understanding overpopulation is not population density but the numbers of people in an area relative to its resources and the capacity of the environment to sustain human activities; that is, to the area's carrying capacity. When is an area overpopulated?

rapidly being depleted and that implies that its carrying capacity for human beings will be lower in the future than it is now. The United States is overpopulated because it is depleting its soil and water resources and contributing mightily to the destruction of global environmental systems. Europe, Japan, the Soviet Union, and other rich nations are overpopulated because of their massive contributions to the carbon dioxide buildup in the atmosphere, among many other rea-

sons. Almost all the rich nations are overpopulated because they are rapidly drawing down stocks of resources around the world. They don't live solely on the land in their own nations. . . . they are spending their capital with no thought for the future.

This "carrying-capacity" definition of overpopulation is the one used in this book. It is important to understand that under this definition a condition of overpopulation might be corrected with no

change in the number of people. For instance, the impact of today's 665 million Africans on their resources and environment theoretically might be reduced to the point where the continent would no longer be overpopulated. To see whether this would be possible, population growth would have to be stopped. . . . Similarly, dramatic changes in American lifestyle might suffice to end overpopulation in the United States without a large population reduction.

# Population explosion: Consequences and remedies for India

Diwakar Shetty

India is the second most populous country in the world after China. 16.7 percent of the world population lives in 2.4 percent of the world's land area. Economic development in India has failed to maintain pace with population growth, illiteracy, poverty, high birth rate, low death rate, immigration, early marriage, etc. are the main causes of overpopulation. It leads to various problems like unemployment, migration of people to the towns and cities, etc. The natural resources will soon get exhausted. Terrorism and increase in the rate of crime are also the result of population explosion. Effective steps should be undertaken by the Government to check population. The people and the non-governmental organizations should help the government for the same

Just read below contents.

**Consequences:** The rapid growth of population in India created several problems. The important among them are the following:

**1. Food shortage:** In India food problem is mainly due to the rapid growth of population. It is not possible to increase food supply above a certain level to match the increasing demand. Now this issue controlled level.

**2. Retard economic growth and capital formation:** Increase in population leads to a reduction in per capita income and thereby saving, capital formation and economic growth.

**3. Increase in unemployment and underemployment.** The fast growing population aggravates the problem of unemployment and under employment. The number of unemployed persons increased from 3.3 million at the beginning of Fifth Five year plan rose to 23 million at the beginning of the Eight Five year plan. Unemployment leads to poverty which has been

and population above 60 years, which will retard economic growth.

**5. Other problems:** Rapid growth in population leads to some other socio-economic problems such as housing problems, health, education problem of pollution, fall in standard of living, decline in labour efficiency, sub-division and fragmentation of land etc.

**Remedial measures:** To solve the problem of population explosion the following measures are suggested.

**1. Family planning:** The most important method for reducing the growth of population is family planning. Couples should have children not by chance but by choice. The voluntary methods of family planning are

- a) Moral restraint
- b) The use of birth control methods.

**2. Late marriage:** By increasing the age of marriage. The present age of marriages is 18 for girls and 21 for boys. It must be increased.

**3. Education:** education would induce the people to adopt family planning measures.

**4. Rapid economic development.** Rapid economic development increases the employment opportunity, standard of living and birth rate to fall

**5. Urbanisation:** Almost all facilities medical, health, educational etc. are available in towns that helps to reduce the birth rate.

*(The writer is a noted environmentalist)*



India's most pressing problem. According to an estimate of planning commission the population below the poverty line is less than 20 percent.

**4. Increasing burden of unproductive population:** The high rate of growth of population increase the rate of unproductive population of children below the age of 15

# All set to touch 7 billion

The world population has reached 6.8 billion in 2009.

According to the United Nations the 6 billions figure was reached on October 12, 1999 (celebrated as the Day of 6 Billion). According to the U.S. Census Bureau instead, it was reached on July 22, 1999, at about 3:49 AM GMT. Yet, according to the U.S. Census web site, the date and time of when 6 billion was reached will probably change because the already uncertain estimates are constantly being updated.

How fast is the world population growing?

Population in the world is currently growing at a rate of around 1.15 % per year. The average annual population change is currently estimated at over 77 million.

Annual growth rate reached its peak in the late 1960s, when it was at 2% and above. The rate of increase has therefore almost halved since its peak of 2.19 percent, which was reached in 1963, to the current 1.15%.

The annual growth rate is currently declining and is projected to continue to decline in the coming years, but the pace of the future change is uncertain (1). Currently, it is estimated that it will become less than 1% by 2020 and less than 0.5% by 2050.

This means that world population will continue to grow into the 21st century, but at a slower rate compared to the recent past. World population has doubled (100% increase) in 40 years from 1959 (3 billion) to 1999 (6 billion). It is now estimated that it will take a further 42 years to increase by another 50%, to become 9 billion by 2042.

United Nations projections indicate that world population will nearly stabilize at just above 10 billion persons after 2200.

## What was the population of the world in the past?

At the dawn of agriculture, about 8000 B.C., the population of the world was approximately 5 million. Over the 8,000-year period up to 1 A.D. it grew to 200 million (some estimate 300 million or even 600, suggesting how imprecise population estimates of early historical periods can be), with a growth rate of under 0.05% per year.

A tremendous change occurred with the industrial revolution: whereas it had taken all of human history until around 1800 for world population to reach one billion, the second billion was achieved in only 130 years (1930), the third billion in less than 30 years (1959), the fourth billion in 15 years

## FACTFILE

Year	Population
1	200 million
1000	275 million
1500	450 million
1650	500 million
1750	700 million
1804	1 billion
1850	1.2 billion
1900	1.6 billion
1927	2 billion
1950	2.55 billion
1955	2.8 billion
1960	3 billion
1965	3.3 billion
1970	3.7 billion
1975	4 billion
1980	4.5 billion
1985	4.85 billion
1990	5.3 billion
1995	5.7 billion
1999	6 billion
2000	6.1 billion
2005	6.45 billion
2006	6.5 billion
2010	6.8 billion
2020	7.6 billion
2030	8.2 billion
2040	8.8 billion
2050	9.2 billion

(1974), and the fifth billion in only 13 years (1987). During the 20th century alone, the population in the world has grown from 1.65 billion to 6 billion.

How many people have ever lived on earth?

It was written during the 1970s that 75% of the people who had ever been born were alive at that moment. This was grossly false.

Assuming that we start counting from about 50,000 B.C., the time when modern Homo sapiens appeared on the earth (and not from 700,000 B.C. when the ancestors of Homo sapiens appeared, or several million years ago when hominids were present), taking into account that all population data are a rough estimate, and assuming a constant growth rate applied to each period up to modern times, it has been estimated that a total of approximately 106 billion people have been born since the dawn of the human race, making the population currently alive roughly 6% of all people who

have ever lived on planet Earth.

Others have estimated the number of human beings who have ever lived to be anywhere from 45 billion to 125 billion, with most estimates falling into

the range of 90 to 110 billion humans.



# Population explosion and prophecy

According to population experts, it took almost 1,900 years for the world to slowly rise from an estimated 250 million at the time of Christ to a billion and a half at the beginning of the 20th century. Then, in the 20th century alone, the earth's population has exploded as it quadrupled in size. It has passed the staggering mark of 6 billion people. In spite of advances in birth control, the world population still rapidly climbs.

A glimpse at the trend shows why many are concerned. According to the United Nations Population Division, it took 123 years to move from 1 billion to 2 billion population. Yet it took only 33 years to reach the 3 billion mark and 14 years to arrive at the 4 billion level. Next it took only 13 years to reach 5 billion, and just 11 years later we crossed the 6 billion mark.

From now on, it is estimated, a billion people will be added every 10 years. Provided this rate of growth—adding some 80 million new people per year—continues, the planet's population will double again in 50 years.

What does this all mean? Is the earth able to sustain this level of population growth without bringing on dire consequences?

## Signs of global environmental fatigue

Already the earth is showing serious consequences from this rapid population increase combined with the excessive consumption of the earth's resources. In 1989 the fishing industry reported a dwindling of fish catches in oceans, and the decline has continued. Diminishing reserves of metals, fossil fuels, forests, arable lands, freshwater and wildlife are facts of life.

Pollution has reached a global scale, with hardly any part of the earth free from contaminated air, water and soil. This is not an extremist view, but what world organizations such as the UN and the Red Cross are regularly reporting.

Perhaps in the United States, Europe and Japan, where funds are available to curb the most damaging effects of the rise in population, there is not so much concern. But these nations comprise only a sixth of the world's inhabitants. The rest of the world is in a far worse condition.

## More famines predicted

The dramatic increase in the world population has placed great strains on the political, military, economic and social systems around the planet. Some relief agencies already consider parts of Africa to be in a chronic state of hunger.

The population explosion is not only a problem of quantity, but of quality—because of varying living standards. While the birth

rate in industrialized countries has plummeted, in backward regions it remains quite high. It is estimated that 95 percent of population growth will occur in the 130 poorest countries. Already a fourth of the earth's inhabitants live on less than a dollar a day. Yet this is where population growth is greatest. Two countries and one region—China (1.3 billion people), India (1.1 billion) and Africa (800 million)—contain half the world's population.

As the population grows, it strains the relations within cities and among nations. More crime, violence and disease will invariably appear as people are increasingly forced to live in cramped and unhealthy quarters. According to 2001 UN statistics, Tokyo was the world's most populous city, with 26 million.

But the UN calculates that in the next 15 years the world's largest cities will be Bombay (Mumbai), India, with 26 million; Lagos, Nigeria, with 23 million; Dhaka, Bangladesh, with 21 million; São Paulo, Brazil, with 20 million; Karachi, Pakistan, and Mexico City with 19 million; and Jakarta, Indonesia, and Calcutta and Delhi, India, with 17 million. Can these nations, many of them impoverished, continue to provide basic services and enforce the peace as their resources dry up?

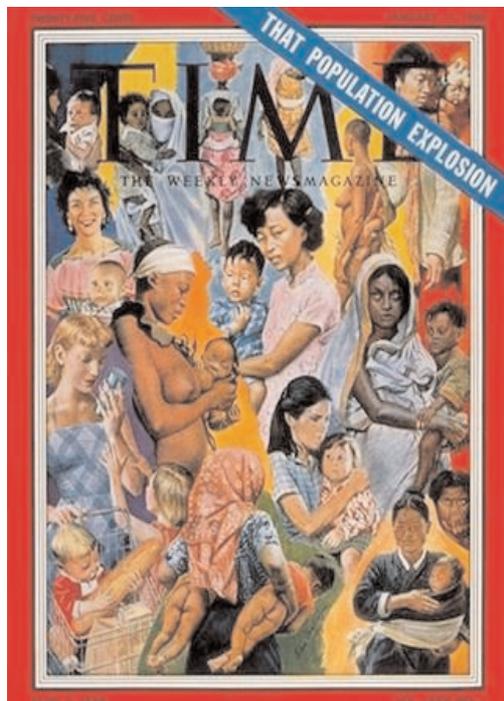
## Prophecy on the march

How is this related to prophecy? First, according to the end-time scenario described in the book of Revelation, a massive army from east of the Euphrates will cross the river and bring a disastrous world war. "And I heard a voice ... saying to the sixth angel who had the trumpet, 'Release the four angels who are bound at the great river Euphrates.'

So the four angels, who had been prepared for the hour and day and month and year, were released to kill a third of mankind. Now the number of the army of the horsemen was two hundred million"

For this prophecy to come to pass, billions of people must exist on the planet for this region to field 200 million able-bodied soldiers. Until the latter part of the 20th century, the nations in this area could not muster even half that number. But now, for the first time in history, they can provide such a massive military force.

Also, as world population multiplied in the 20th century, so did the explosion of knowledge, made possible by improved communications, travel and technology. We can easily see the fulfillment of the prophecy God gave to Daniel: "But you, Daniel, shut up the words, and seal the book until the time of the end; many shall run to and fro, and knowledge shall increase"



**PROPHETIC:** A 'TIME' MAGAZINE COVER ON POPULATION EXPLOSION



WRITING ON THE WALL: GRAFFITI IN BHOPAL SEEKING NOOSE FOR FORMER UC CHIEF ANDERSON

# Will we be able to get Mr Anderson?

Over twenty five years ago, Bhopal was choking on the deadly fumes that had found their way across the city from the Union Carbide Plant. Close to 20,000 people died. And the man the victims blame for the tragedy is Warren Anderson, whose plant was the source of the deadly Methyl Isocyanate gas. He was charged with culpable homicide not amounting to murder. Yet, just four days after the tragedy, Anderson flew out of Bhopal on the official plane of Arjun

Singh. Anderson, now almost 90 years old, was the Chairman and CEO of Union Carbide when the lethal gas leaked on the intervening night of December 2 and 3, 1984.

Anderson is believed to have taken key decisions, including a cost-cutting measure that compromised safety at the gas plant. Security precautions too were inadequate. After the gas leak, Anderson was arrested and then released on bail by the Madhya Pradesh Police on December 7,

1984. He left India immediately after signing a bond of 25,000 rupees and has refused to return ever since.

He has never appeared in court or even been in India to explain what happened. In 1992, Anderson was declared a fugitive by the Bhopal court for failing to appear for hearings. Once he was declared absconding, his case was isolated from the case in which eight Indians then employed by Union Carbide have been convicted now.

## Anderson should stand trial in India: Frank Pallone

Influential New Jersey Congressman Frank Pallone has said former Union Carbide chief Warren Anderson deserves to be extradited from the US and stand trial in India in connection with the Bhopal gas tragedy case.

"All those responsible for this disaster, including the former chairman of Union Carbide Warren Anderson, should stand trial in India and receive punishment that reflects the devastation and pain they have caused for thousands of people," Pallone said in a statement.

"Warren Anderson absolutely deserves to be extradited from the US and punished for the full extent of his crimes. As chairman of Union Carbide at the time of the Bhopal gas disaster, Anderson was ultimately responsible for his company's actions," said Pallone, who is a powerful member of the India Caucus in the Congress.

Noting that this court ruling is long overdue, Pallone said the



executives of Union Carbide and its Indian subsidiary deserve to be criminally prosecuted. "The court's sentence of merely two years for those responsible for the world's worst chemical disaster is outrageous," he said.

Pallone commended the Indian government on swift action to reconstitute the Group of Ministers (GoM) to review the circumstances surrounding the Bhopal disaster and pursue rehabilitation efforts. "As the GoM recommended in 2008, I encourage the Indian government to establish an Empowered Commission on Bhopal which will have adequate authority and funds to ensure that rehabilitation efforts are pursued and care is offered for survivors of the disaster," he added.

The State Department, however, has remained silent on the issue. State Department spokesman P J Crowley had earlier said the US does not comment on extradition related issue. But, he said the United States has an extradition treaty with India.

## 'Rash and negligent', recounts CBI officer

Recent verdict and sentence in the Bhopal Gas tragedy has driven home the unfettered complicity that betrayed the 20,000 people killed in the world's biggest industrial disaster. Activists who've spent years in different courts fighting for justice are finally being joined by Indians everywhere who want to know why they were sold short- for a settlement of 470 million dollars with Union Carbide Corporation (UCC), which caused the tragedy.

Connecting the dots, NDTV is speaking to different bureaucrats, politicians, activists, and investigating officers who handled the trial that led to a nano-punishment on Monday - two years in prison for seven Indian executives of Carbide, who have been granted bail.

Warren Anderson, the American CEO of UCC remains safe in America, having successfully ignored repeated court summons. Anderson was in Bhopal days after the disaster and was accused of culpable homicide not amounting to murder. Despite that, he was provided safe and immediate passage out of the city by the Congress government

That was followed by a series of compromises - financial, moral and legal - in what should have been an unwavering and coherent battle against corporate negligence. In 1987, the CBI charged Anderson and other executives of Carbide with culpable homicide not amounting to murder - which, if proven, can lead to ten years in prison. In 1996, however, the Supreme Court accepted a plea by the accused to reduce the charges against them to criminal negligence, which carries with it a maximum sentence of two years in prison.

**NDTV's Sarah Jacob spoke to Former Joint Director of the CBI, G Ramachandran, one of the key CBI officers involved in the investigation into the case.**

**NDTV:** Mr. Ramachandran, You headed the CBI team that was sent to Bhopal to investigate the cause of the leak. What were the findings of your report?

**Ramachandran:** When we took over, we found out that this plant was not operating effectively. It was not profitable. They were considering shifting it to Hong Kong. Therefore, everything was going to seed, there were minor leakages. Some labor unions protested against the dangers involved. They were ignored. All these evidences were collected -- whether the design was proper etc.

We found that the precautions that were being followed in the Virginia plant -- where everybody was geared to tackle a gas leak (with) very simple things. Everybody had a mask; the masks were to be dipped in water, etc. These were not at all followed in Bhopal. This was our case. Negligence is proved by not keeping sensitive fluid at the right temperature, not training the operators to do what needed to be done. Nobody was attending office. Some fellow was dismissed and nobody replaced him.

The alarm system was turned off because they said that people would think it is a false alarm. We proved negligence but then a controversy arose about whether it was homicide that amounts to murder or just an accident. The judiciary took the view that there was no intention to kill or harm. It was all legal skulduggeries. The law is peculiar.

**NDTV:** Why do you say skulduggery?

**Ramachandran:** Because when you go to the court, it is no longer in the hands of the CBI. People argue. There is a fine difference and it all depends on the capacity of the lawyers. What is homicide, what is negligence? Case law is very difficult to decide.

**NDTV:** Union Carbide initially claimed that it was sabotage. Is that also what your report found?

**Ramachandran:** No. The case was clear negligence Things were allowed to rust, the valves were not working properly. Their case was that it was sabotage.

**NDTV:** But the CBI report said that it was pure negligence?

**Ramachandran:** Yes, a rash and negligent act.



**DEFIANT:** A PROTEST AGAINST THE KILLING OF NAXALS BY SECURITY FORCES

# Coordinated thrust must in operations

C. Pal Singh

**T**he recent killing of 76 CRPF men by Maoists in Chhattisgarh's Dantewada district and 27 CRPF men in Narayanpur district was termed as 'Horrific' incident by the Prime Minister. The Home Minister stated that something must have gone "drastically wrong in the joint operation".

In one of the deadliest and brutal attacks, the Maoist trapped the "area dominating" patrol of CRPF in the forests of Dantewada district (Chhattisgarh) butchering 76 personnel and later in Narayanpur

district (Chhattisgarh) killing 27 CRPF men. The rebels opened heavy bursts of fire from a vantage position on the resting troops and most of them were killed like sitting ducks. The reinforcement party sent to rescue the trapped personnel was also ambushed resulting in further casualties.

Some time back, the Home Minister undertook a comprehensive and critical analysis of the present internal security structure to bring about coordination between the intelligence agencies and enforcement organizations

The new structure devised by the Home

Minister, revolves around the National Counter-Terrorism Centre (NCTC), at the apex. The Home Minister has emphasized that the function of operation would be "the most sensitive and difficult part to bring under the NCTC". He has also mentioned that "without 'operations', NCTC and the new security architecture will be incomplete". However it is not clearly spelled out as to how the operation wing of NCTC shall bring about the coordinated thrust in the operations by different forces deployed on the grounds.

Having led anti-terrorist operations in various states of the country which

remained afflicted with the menace of terrorism at one stage or the other, I have experienced that dilution in the operations take place due to varying and at times ineffectual operational directions and instructions to the officers and men on the ground. Unequivocal instructions, unanimity in the directions and coordination between heterogeneous forces deployed on the ground, are perhaps the most important points to give real thrust to operations on the ground.

This would require a very close study of the rules and regulations operating in various central police forces and the state police, understand the reasons for dichotomous and ineffective directions, and abundant experience and background of operations on the part of the functionary who is entrusted the task

they are deployed for duties. Due to this schism in control and command and the mental uncertainty amongst the officers, the operations suffer badly. The officers prefer to remain lukewarm to satisfy both their own organizational authorities and Operational bosses.

Though the exact ground situation under which a CRPF Patrol party went out for a period of 4 days on "an area dominating patrol" in Chintalnar forest area is not known yet the lukewarm attitude and complacency on the part of officers responsible to depute this party without adequate planning and preparation is quite evident. Any such operation - more so when intelligence regarding movement of armed terrorist in the area was available - should have meant careful planning, forethought and comprehensive strategy.

The lack of coordination can be also clearly discerned from the fact that only one local police constable was accompanying as a scout in the Labyrinthine routes and difficult terrain of dense forest.

Despite availability of excellent and experienced leadership in Punjab, the following extra-ordinary steps had to be taken to ensure operational thrust.

a) The government of India issued instructions authorizing the Director General of Police and other officers of the state to assess and comment on the performance of officers of the central police officers deployed in Punjab.

b) A number of officers from the central police forces were sent on deputation to Punjab police, to induce the officers of central police organization to give their best during operations.

c) Operation orders were issued from time to time according to situation to be complied by forces deployed on anti-terrorist operations in specific areas.

d) The limitations of the inter-district & inter-range state police jurisdiction, was overcome through a scheme - called the sector scheme - whereby the sectors were demarcated all over the state irrespective of the district or range jurisdiction, keeping in view prevailing position of terrorist crime in the sector. The senior most officers of the Central Police forces were made the sector commanders of the sectors and state police officers in the area were directed to coordinate with the sector commanders..

Despite having taken the above measure. Many a times the co ordination was still found lacking.

i) At one stage a senior officer of an elite centre force, issued instructions to all its formations in Punjab, not to allow any interrogation of the apprehended terrorists at their battalion headquarters, contrary to the instructions of the then Director General Police Punjab.



to fit the nuts and bolts in the proposed operation wing of the NCTC.

In the context of dealing with Naxalite terrorism in the worst affected states of the country, lack of coordination, problems of jurisdiction, absence of well defined operational roles, poor demarcation of the area of responsibility of officers and equivocal operational orders can prove disastrous on the ground. Just setting up of a central level Control Room can not meet the practical operational needs.

Forces belonging to different organization in the field- are governed under the rules, regulations and operational procedures of their respective organizations, their command and control structures are different, their performance assessment is reviewed under separate parameters, their career prospects and promotions are governed under different grading procedures. Many a times, the officers on counter terrorist operations on the ground are not able to decide whether they should go by the instructions laid down as per their organizational manuals or should abide by the directions of the state police / operational officers under whose control

In the context of dealing with Naxalite terrorism in the worst affected states of the country, lack of coordination, problems of jurisdiction, absence of well defined operational roles, poor demarcation of the area of responsibility of officers and equivocal operational orders can

# MUSLIM VOTE BANK

## THE MYTH AND FACTS

● Sanjeev Nayar

The 16th Parliament has returned just 23 MPs (members of Parliament) from the Muslim community, the fourth lowest in the history of independent India. Before this, only the first, second and 10th Parliament had less than 23 MPs. The near-dismal performance of most political parties which have thrived on tapping the minority vote bank in the past is more significant than the representation of Muslims in the Lok Sabha.

The Congress, which has been the first choice of Muslims across India, is struggling to claim the opposition space. Samajwadi Party's (SP's) Lok Sabha representation is just an exten-

**The Congress, which has been the first choice of Muslims across India, is struggling to claim the opposition space. Samajwadi Party's (SP's) Lok Sabha representation is just an extension of the Yadav clan (Mulayam Singh Yadav accounts for two seats**

sion of the Yadav clan (Mulayam Singh Yadav accounts for two seats, while his daughter-in-law and two nephews make up the rest); Rashtriya Janata Dal (RJD) has only four MPs; Janata Dal (United), or JD(U), barely managed to avoid the embarrassment of drawing blank; and the Left parties are facing an existential crisis. The three regional players with a good number of MPs are Trinamool

Congress, All India Anna Dravida Munnetra Kazhagam and the Biju Janata Dal. Since the Muslim population is not as significant an electoral presence in Tamil Nadu and Odisha, Mamata Banerjee with 34 MPs will be the only party which will potentially continue to use the floor of the Parliament for appeasement politics. Consequently, the minority politics in



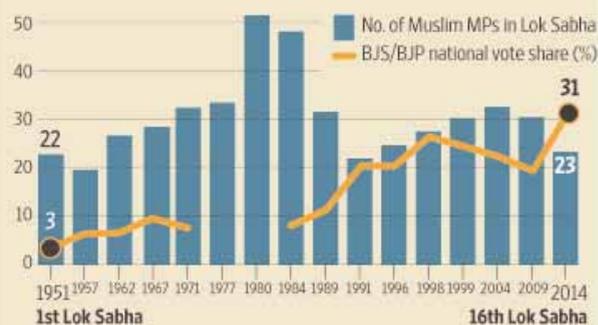
# VOTE DYNAMICS

## Muslim population (%)

	2001	2011	Growth (in percentage points)
<b>INDIA (23 Muslim MPs)</b>	13.4	14.2	<b>0.8</b>
Lakshadweep (1)	95.5	96.2	<b>0.7</b>
Jammu and Kashmir (3)	67.0	68.3	<b>1.3</b>
Assam (1)	30.9	34.2	<b>3.3</b>
West Bengal (8)	25.2	27.0	<b>1.8</b>
Kerala (3)	24.7	26.6	<b>1.9</b>
Uttar Pradesh (1)	18.5	19.3	<b>0.8</b>
Bihar (4)	16.5	16.9	<b>0.4</b>
Jharkhand	13.8	14.5	<b>0.7</b>
Karnataka	12.2	12.9	<b>0.7</b>
Uttarakhand	11.9	13.9	<b>2.0</b>
Delhi	11.7	12.9	<b>1.2</b>
Maharashtra	10.6	11.5	<b>0.9</b>
Andhra Pradesh (1)	9.2	9.6	<b>0.4</b>
Gujarat	9.1	9.7	<b>0.6</b>
Manipur	8.8	8.4	<b>-0.4</b>
Rajasthan	8.5	9.1	<b>0.6</b>
Andaman and Nicobar Islands	8.2	8.4	<b>0.2</b>
Tripura	8.0	8.6	<b>0.6</b>
Daman and Diu	7.8	7.8	<b>0.0</b>
Goa	6.8	8.4	<b>1.6</b>
Madhya Pradesh	6.4	6.6	<b>0.2</b>
Pondicherry	6.1	6.1	<b>0.0</b>
Haryana	5.8	7.0	<b>1.2</b>
Tamil Nadu (1)	5.6	5.9	<b>0.3</b>
Meghalaya	4.3	4.4	<b>0.1</b>
Chandigarh	3.9	4.8	<b>0.9</b>
Dadra and Nagar Haveli	3.0	3.8	<b>0.8</b>
Odisha	2.1	2.2	<b>0.1</b>
Himachal Pradesh	2.0	2.2	<b>0.2</b>
Chhattisgarh	2.0	2.0	<b>0.0</b>
Arunachal Pradesh	1.9	2.0	<b>0.1</b>
Nagaland	1.8	2.5	<b>0.7</b>
Punjab	1.6	1.9	<b>0.3</b>
Sikkim	1.4	1.6	<b>0.2</b>
Mizoram	1.1	1.4	<b>0.3</b>

## No. of Muslims in Lok Sabha since 1951 and growth of BJP/BJS

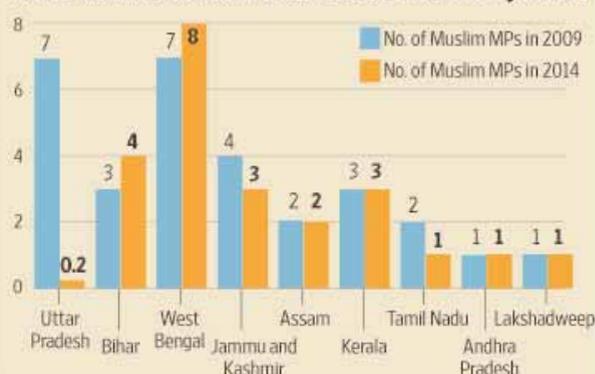
(BJS contested as part of BLD in 1977 and JNP in 1980 before the formation of BJP in 1980)



## No. of Muslim Lok Sabha MPs from UP, Bihar since 1951



## No. of Muslim Lok Sabha MPs in 2014 and 2009 by states



## Results of top 10 Muslim-dominated constituencies in Uttar Pradesh

Constituency	Muslim population (%)	Win	2nd	2014 results				Difference between Muslim population and votes of nearest BJP rival (in %)	
				BJP+	INC+	SP	BSP		Others
Rampur	47.6	BJP	SP	37.5	16.4	35.0	8.5	2.6	<b>-12.6</b>
Moradabad	45.3	BJP	SP	43.0	1.7	35.3	14.3	5.7	<b>-10.0</b>
Nagina (SC)	41.4	BJP	SP	39.0	0.0	29.2	26.1	5.7	<b>-12.2</b>
Sambhal	39.9	BJP	SP	34.1	1.5	33.6	23.9	6.9	<b>-6.3</b>
Saharanpur	36.9	BJP	INC	39.6	34.2	4.4	19.7	2.1	<b>-2.7</b>
Amroha	35.4	BJP	SP	48.3	0.9	33.8	14.9	2.2	<b>-1.6</b>
Bareilly	34.9	BJP	SP	50.9	8.3	27.3	10.4	3.1	<b>-7.7</b>
Bijnor	33.4	BJP	SP	45.9	2.3	26.5	21.7	3.6	<b>-6.9</b>
Kaerana	33.1	BJP	SP	50.6	3.8	29.4	14.3	1.9	<b>-3.7</b>
Muzaffarnagar	32.0	BJP	BSP	59.0	1.2	14.5	22.8	2.5	<b>-9.2</b>

BJP: Bharatiya Janata Party; INC: Indian National Congress; BJS: Bharatiya Jana Sangh; BLD: Bharatiya Lok Dal; JNP: Janata Party

## Results of top 10 Muslim-dominated constituencies in Bihar

Constituency	Muslim population (%)	Win	2nd	2014 results				Difference between Muslim population and votes of nearest BJP rival (in %)
				BJP+	INC+	JD(U)	Others	
Kishanganj	67.1	RJD+ BJP+		32.2	53.1	6.0	8.7	<b>-14.0</b>
Katihar	43.1	RJD+ BJP+		32.4	44.1	10.3	13.2	<b>1.0</b>
Araria	39.8	RJD+ BJP+		26.8	41.8	22.7	8.7	<b>2.0</b>
Madhubani	24.3	BJP+ RJD+		41.6	39.2	6.6	12.6	<b>14.9</b>
Purnia	24.0	JD(U) BJP+		29.7	12.2	41.2	16.9	<b>17.2</b>
Paschim Champaran	22.7	BJP+ JD(U)		44.4	14.6	31.2	9.8	<b>8.5</b>
Sitamarhi	21.3	BJP+ RJD+		45.7	29.2	10.8	14.3	<b>8.0</b>
Valmiki Nagar	20.3	BJP+ RJD+		40.4	27.4	9.1	23.1	<b>7.1</b>
Darbhanga	20.0	BJP+ RJD+		38.0	33.8	12.6	15.6	<b>13.8</b>
Siwan	18.4	BJP+ RJD+		42.2	29.3	9.0	19.6	<b>10.9</b>

Source: Census of India



India is poised to assume a new form and construct; the representation of their interest in Parliament is likely to be more pragmatic than merely emotional.

### The Muslim vote bank

Historically, the social fabric of Muslims in India has always been part of *bhartiyata* for centuries and they were as much integral to Indian society as Hindus. The consideration of Muslims as a distinct political category started at the very introduction of the modern democratic system in the early 20th century. The Indian Councils Act, 1909, commonly known as Morley-Minto reforms, gave the first taste of democracy to India but it also brought in the provision of "separate electorate" for Muslims. Therefore, Britishers should be blamed for giving the first constitutional recognition to Muslims as "vote bank".

In pre-independent India, Muhammad Ali Jinnah used the identity of Muslims to realise his political ends. However, Jinnah was true to his ideolo-

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gy and seriously worked to serve the interest of Muslims, but in modern India, most of the leaders and parties have tended to use Muslims as vote bank and never made any serious effort to help the community on socio-economic issues. History bears testimony to the fact that Muslims have always shown an extreme degree of commit-

ment to a party which they thought would serve their interests but unfortunately never got more than promises and commissions. A large number of religious leaders from the national to the district level are guilty of this practice. Most of the diktats issued during elections are motivated by the interests of individuals rather than the entire community. The outcome of this election suggests that this may have run its course and the Muslims may have the political space to break out of this stereotyping perpetuated by ulterior political motives.

### Failure of appeasement politics

The results of this election indicate that politics of Muslim appeasement has not worked for most of the so-called secular parties because of the following reasons. Firstly, a section of Muslim youth, who represent aspirations of 21st century India, is no more interested in emotional issues—they want employment and development. Parties like SP, Bahujan Samaj Party (BSP) and



RJD were not able to attract such voters because of their dismal governance record. These voters may still not have been attracted to Narendra Modi's good governance agenda but they made their own choices at the local level, which could have been the main reason for the split of Muslim votes in some of the constituencies of western Uttar Pradesh, where Muslims are the dominant community.

Secondly, despite Modi not touching any issue even remotely connected to Hindutva, one cannot deny that communally sensitive states like Uttar Pradesh, Bihar and Assam did see voting along communal lines. The main reason for such behaviour of Hindu voters was the rather overt Muslim appeasement attempted by some political parties. Empirical evidence suggests that this time the economically less well-off Hindus reacted more sharply to the appeasement politics rather than upper- and middle-class Hindus who previously were more sensitive on the subject. Thus, caste and class divisions within Hindu society blurred, and the Hindu vote polarized.

Thirdly, Muslims on their own cannot elect a candidate unless they strike an alliance with at least one of the dominant Hindu castes. Due to the domi-

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nance of governance agenda and soft polarization, such social combinations did not work this time around.

### **The Uttar Pradesh, Bihar story**

Let us now test the above hypothesis in the context of Uttar Pradesh and Bihar, which have been sending the largest contingent of Muslim MPs and are a hotbed of appeasement politics.

Uttar Pradesh, which had sent 19

Muslim MPs in 1980, failed to elect even one in the just-concluded elections. The Muzaffarnagar riot was the final trigger for communal polarization but this process had started immediately after the state government took charge in 2012. The state government's special treatment to Muslims accused of terrorism, dozens of micro-level unreported instances of communal conflicts and instructions to police to go soft on Muslim criminals were strategic moves of the SP to consolidate Muslim votes; but it also stoked a counter polarization of Hindus who have largely been politically secular after the 1998 Lok Sabha polls. The impact of the communal agenda of the SP government was such that even the BSP lost a major part of its core Dalit constituency to the Bharatiya Janata Party (BJP).

The failure of successive SP and BSP governments in governance and hard selling of the Gujarat model along with strategic social engineering by BJP general secretary Amit Shah worked as catalyst in polarization of votes in favour of the BJP. Continuous efforts of SP, BSP and Congress to attract Muslims was so fearsome that in several constituencies otherwise smart Muslim voters failed to vote unitedly resulting in a win for BJP in consti-



cies like Rampur, Moradabad, Saharanpur, Kairana and Sambhal, where Muslims had single-handedly determined electoral outcomes in the recent past.

Though Bihar could still elect four Muslim MPs, the diminished power of Muslim votes is evident from the spectacular performance of the BJP-led National Democratic Alliance (NDA). Closer analysis of voting behaviour suggests that Muslim consolidation in Bihar was far greater than Uttar Pradesh. Both RJD and JD(U) went overboard to appease Muslims but the former emerged as the frontrunner because of its core vote base of 14% Yadavs-aligned with whom Muslims could potentially challenge the upsurge of the BJP.

The impact of Nitish Kumar's prolonged snub to Modi coupled with mishandling of bomb blasts in a BJP rally and the arrest of Yasin Bhatkal were such that his development-oriented image was not sufficient to stop the Hindu vote from shifting to BJP. Significantly, Dalits and most backward castes, who were smartly cultivated by Kumar as his core vote bank, also opted to vote along with upper caste Hindus with whom they have been in a socio-political conflict for a long time.

It may be worthwhile to recall an experience during one of my field visits to assess the communal undercurrent in Bihar. Ramchandra Mandal, belong-

ing to one of the most backward communities, expressed his anger with Kumar for his policy of giving funds for constructing boundaries around Muslim cremation grounds. Mandal complained that the chief minister ensured that Muslims get respectful burial but what about poor Hindus like him.

Thus Bihar contrasts with Uttar Pradesh. In the case of the latter, governance failure reinforced the reaction to the communal agenda whereas in Bihar good governance could not dilute the negative impact of the appeasement policies. However, Muslims in Bihar were smarter voters with BJP losing in four out of the five mostly Muslim-populated constituencies while it won all the top 10 Muslim-dominated constituencies in Uttar Pradesh.

### Need to bridge the trust deficit

With 282 MPs of its own and the unconditional support of another 53 belonging to the NDA, BJP is strongly placed to thwart any attempt of minority appeasement. However, Modi's continuous stress in his speeches that for him all 1.2 billion citizens were Indian and his refusal to view citizens from the prism of religion or caste should give some comfort to the Muslims. Despite continuous attacks by the opposition, Modi, throughout the campaign, refused to deviate from the agenda of development-oriented inclusive political

agenda. Now Modi has to walk the talk.

Already a very strong message has been sent out by inviting Pakistani Prime Minister Nawaz Sharif for the swearing-in ceremony and also by accepting the invitation to visit Pakistan. These developments will certainly go a long way in giving confidence to Indian Muslims, who have strong ties with Pakistan. However, Modi's efforts will not yield any results unless Muslims also stop being defensive and falling into the political trap of being treated as a special category of voters. Since the emergence of the BJP on the national scene, particularly post 1992, Muslims had a single choice: vote to defeat the BJP. Now time has come that Muslims of this country will have to vote like any other Indian on issues beyond religious identity. This is the only way to bridge the trust deficit between them and the ruling establishment.

During the election, the Forum for Muslim Studies and Analysis of Aligarh University had written to the Election Commission demanding de-recognition of the BJP after the Pakistan barb of BJP leader Giriraj Singh. Let us hope that minority appeasement and secularism as political tools cease to exist and we don't again witness ugly scenes of MPs shouting Ya Ali and Jai Shri Ram in the Parliament.

*The author is a psephologist and director of Research and Development Initiative.*

## The Majority Report

# Sordid story of robbing crores of poorest Hindus of scholarships and loans: Ram K. Ohri

**T**he Majority Report is a research study undertaken by two retired IPS officers highlighting the gross discrimination practiced by the UPA government against crores of poorest children of the majority community, namely the Hindus. Will it shock you, dear friends, if we were to inform you that in four out of the five globally recognized major human development indices the Hindus happen to be the most disadvantaged and the poorest religious group in India?

Not many people know that by using the flawed and fabricated findings of Sachar Committee, the former Minister for Minorities Affairs, Shri Salman Khurshid, acting in collusion with the former Prime Minister, robbed the unwashed and unlettered daughters

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**Not many people know that by using the flawed and fabricated findings of Sachar Committee, the former Minister for Minorities Affairs, Shri Salman Khurshid, acting in collusion with the former Prime Minister, robbed the unwashed and unlettered daughters and sons of nearly 34 crore Hindus living below the poverty line**

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and sons of nearly 34 crore Hindus living below the poverty line, mostly in rural areas. The High Level Committee chaired by Justice Sachar was born in sin of grave constitutional impropriety. The task assigned to Justice Sachar had been entrusted in 1992 by the Indian Parliament to the National Minorities Commission by enacting a special law called The Minorities

Commission Act, 1992. All responsibilities for protection of the rights of minorities and ensuring their welfare had been assigned by the Parliament in terms of the aforesaid legislation to the Minorities Commission. Therefore the very act of the Prime Minister constituting a High Level Committee in March 2005, by an executive fiat for one single religious minority was





patently unconstitutional and bad in law. The worst aspect of the sinister move, however, was that Justice Sachar did not inform the P.M. that what was being was a blatant violation of the Constitution. In appointing Sachar Committee the former P.M. also violated the oath of his office.

For decades an unsubstantiated belief has been propagated across the country that economically and educationally the Muslims are more disadvantaged than the Hindus. This falsehood is being unabashedly used by the powerful pro-Muslim votebank lobby to bestow many unmerited benefits and concessions, including nearly twenty million scholarships and concessional educational loans exclusively on the Muslims, Christians and three other minorities. But it was revealed by Salman Khurshid's Press Conference on May 29, 2012, that not one single scholarship was given to the daughter or son of the poorest Hindu. Nor were any cheaper educational or entrepreneurial loans advanced to any Hindu poor, while funds worth several lakh crores were advanced to the children of doubly blessed five minorities, namely the Muslims, the Christians, the Buddhists, the Parsis and the Sikhs.

This strategy of religion-based discrimination was implemented in pursuance of the communally divisive votebank policy enunciated in the Prime Minister's notoriously famous "Muslims First" policy statement made

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on December 9, 2006, by the Prime Minister. Inexplicably the aforesaid policy statement was made by Dr. Manmohan Singh on the birthday of Sonia Gandhi, Chairperson of the United Progressive Alliance. Perhaps thereby hangs a tale of deceit.

The worst aspect of the ongoing discrimination is that crores of poor Hindus belonging to the perennially famished hoi polloi of rural India have been deliberately deprived of any share in the 20 million scholarships awarded to the five minorities, including four economically and educationally better placed communities than the Hindus. These four super-privileged minorities are the Christians, the Parsis, the Buddhists and the Sikhs all of whom happen to be show stealers in literacy average, economic prosperity and education.

The data pertaining to infant and

child mortality, degree of urbanization and life expectancy at birth available in public domain proves that it is the Hindus, not the Muslims, who are the most disadvantaged religious group. Following are the five major globally recognized human development indicators:

- i) Infant Mortality;
- ii) Child Mortality;
- iii) Life Expectancy at Birth;
- iv) Degree of Urbanisation ; and
- v) Literacy.

It was established by the National Family Health Survey -2 of 1998-99 that the Hindus are far behind the Muslims in the first four human development indices, excepting literacy in which Hindus with 65.1 percent literacy are marginally ahead of Muslims who have the literacy average of 59.1 percent. But Justice Sachar did not have the moral courage to identify and write



that one single factor responsible for lower Muslim literacy average was the lower ratio of literacy among Muslim women at a meagre 50.1 percent. It was lower by 3.6 percent than the national average of female literacy at 53.7. Thus, this important cause of lower female literacy among Muslims ignored by Justice Sachar was the dictates of religious leaders restricting education of girls beyond a certain age and insistence on the customary veil.

Unfortunately most Hindus, including their spiritual gurus, telemedia analysts, self-anointed intellectuals and political leaders belong to the prosperous fraternity and well-to-do middle class. Their children do not need free scholarships. No wonder they have thus remained indifferent to the pathetic economic condition of the poorest Hindu masses, especially those trapped in the terminally ill rural areas? These busy-bodies strutting across the political and spiritual universe have never cared to know that in four, out of the five globally recognised human development indices, the majority community is lagging behind the Muslims, the Christians, the Buddhists, the Parsis and the Sikhs? That explains how the children of 34-35 crore poorest Hindus were led to slaughter on the alter of Sachar Report!

The daughters and sons of nearly 340 million poorest Hindus were robbed in broad daylight of their rightful share in 20 million scholarships by the ruling politicians in an ugly bid to promote the 'exclusive development' of five minority communities. And lo and behold this deprivation of the poorest Hindu children was done in the garb of 'inclusive development'!

The ongoing discriminatory policy against the majority religious group, mostly the rural Hindus, was launched by the Prime Minister with great fanfare in June, 2006, in the garb of Prime Minister's New 15 Points Programme for Welfare of Minorities. Through a sleight of hand the poorest Hindu children were deprived of any share in twenty million scholarships showered on Muslim, Christians, Buddhists, Parsis and the Sikhs.

The most shocking aspect of this biggest post-independence scam is that the Christians, Buddhists, Parsis and the Sikhs are the real show-stealers in literacy and education - way ahead of the Hindus.

A careful examination of Sachar Report reveals a series of ugly tricks devised to trample upon the Right to Equality of the eighty percent citizens of India on the ground of religion. Apparently the poorest students

belonging to the majority community are being denied proportionate share in millions of scholarships and financial largesse worth thousands of crores because they happen to belong to the politically-pariahed religious group, the Hindus.

No Hindu or non-Hindu political leader showed the guts to question this implementation of 'exclusive minority development' programme tom-tomed as 'inclusive growth'. Enumerated below are two prominent instances of fudging of facts by Justice Sachar in his report.

1. Justice Sachar deliberately refused to consider the documented fact that according to the National Family Health Surveys Nos. 1 (1992-93) and 2 (1998-1999) the Muslims were better placed than Hindus in four major human development indicators, namely the Infant Mortality, Child Mortality, degree of Urbanisation and Life Expectancy at Birth. After admitting this important fact on pages 37-38 of his report that in infant and child mortality and life expectancy at birth the Muslims were better placed, Justice Sachar took recourse to suppressio veri, suggestio fallaci, by attributing it to the highly inventive argument that it could be due to better child feeding practices prevalent among Muslims.



Instead of candidly admitting that the Muslims were better fed and had access to better medical care the retired Chief Justice decided to weave the yarn of 'better child feeding' practices among Muslims. Could there be a worse example of falsification of the data available in public domain?

2. Another instance of suppressio veri, suggestio falsi is the horrid description of the plight of Muslim women on page 13 (Chapter 2) which was false beyond belief. Astoundingly the retired Chief Justice Sachar wrote about the plight of Muslim women thus:

"Everything beyond the walls of the ghetto is seen as unsafe and hostile - markets, roads, lanes and public transport, schools and hospitals, Police Stations and government offices."

Can any Indian honestly believe that the Muslim women are treated so shabbily in India? Many more instances of fudging of facts can be cited from the report of Justice Sachar. These are being left out because of shortage of space.

To sum up, a systematic and rational analysis of the comparative scores of the Hindus and the Muslims in various human development indices reveals that in the first four globally recognised economic development indicators the Hindus are lagging far behind the Muslims and four other religious minorities, namely the Christians, the Buddhists, the Parsis and the Sikhs. This truth was established four times by

four different studies, though Justice Sachar ignored the documented truth for reasons best known to him.

The first well-documented rebuttal of the flawed findings of Justice

Sachar came on September 2, 2006, when a paper was circulated by Prof. Sanjay Kumar of the Centre of Studies for Developing Studies, New Delhi, in a seminar organized at the prestigious Indian Institute of Public Administration. The research of Prof. Sanjay Kumar presented in a packed hall of distinguished scholars in the auditorium of the I.I.P.A. revealed that there was highly any difference in the economic and educational status of the Hindus and the Muslims.

The in-depth research based on a survey by the Centre for Developing

Societies, New Delhi, further highlighted that the proportion of 'the very poor' Indians was higher among the Hindus than among the Muslims. The survey conducted in the year 2004 showed that the percentage of 'very poor' Hindus was 31 percent while the percentage of the 'very poor' among Muslims was only 24 percent. Thus, on the basis of the CDS survey the percentage of the 'very poor' people among the Hindus was nearly 25 percent higher than among the Muslims! It was a very significant finding of Prof. Sanjay Kumar, based on a survey comprising 27,000 random samples.

Mysteriously this important finding

was ignored by Justice Sachar despite a clear directive in the Prime Minister's Notification dated March 9, 2005. to Justice Sachar's High Level Committee to "obtain relevant information from Departments/ agencies of the Central & State Governments and also conduct an intensive literature survey to identify the published data, articles, and research on relative social, economic and educational status of Muslims in India at the State, regional and district levels" to address the problems faced by Muslims. More importantly, Prof. Sanjay Kumar's research paper highlighting his important findings was duly sent to Justice Sachar by our Thinktank, Patriots' Forum'. But the former Chief Justice of Delhi High Court chose to ignore the truth altogether for reasons best known to him and his team mates.

The second rebuttal of Justice Sachar's fabricated findings came in October, 2010, when the National Health Survey- 3 (2005-2006) revealed a high quantum jump of 5.4 years from 62.6 years in the life expectancy of Muslims within a short span of 7 years, i.e., between 1998 and 2005. The advantage which Muslims had over their Hindu counterparts in life expectancy at birth was barely 1.2 years in 1998-1999, but it grew to 3 years in 2005-2006, as revealed by the National Family Health Survey -3.

And the master mystery of all mys-



Amaresh Pandey) presented a research paper re-confirming that there had been far greater poverty reduction among the Muslims than among the Hindus between 2004-2005 to 2009-2010.

Despite these five research-based rebuttals of Sachar Report the multi-dimensional discrimination against the unwashed daughters and sons of the poorest Hindus, living below the poverty line has continued at fast pace - perhaps in deference to the policy announcement made by the Prime Minister in December, 2006, on Sonia Gandhi's birthday.

It is, however, for the self-anointed Hindu secularists to analyse and explain why no poorest of the poor Hindu child was considered eligible for even one single scholarship out of twenty million freeships showered by Salman Khurshid on the privileged children of Muslim and Christian parents. According to a half page advertisement published in *The Pioneer*, New Delhi, on February 15, 2014, "over Rs. 1,95,000 crore of bank credit was showered on 5 minorities". In sharp contrast, not one rupee worth bank credit was made available to anyone of the 35 crores Hindus living below the poverty line.

Most importantly, Prof. Suresh Tendulkar's research had revealed that in 2009 approximately 37.2 percent Indians were living below the poverty line. It meant that roughly the unwashed children of 34-35 crore Hindu les miserables were debarred from applying for scholarships and educational loans in an unethical bid to consolidate a votebank of five minorities. Such a policy of robbing the poorest on the ground of religion by recourse to a sleight of hand has no parallel in the history of any democratic country. Only a legal eagle like Salman Khurshid, aided by Justice Sachar, could do it with remarkable dexterity and finesse!

Now time has come for Shri Salman Khurshid and the former Prime minister to explain to 34 crore poor Hindus living below the poverty line, mostly in rural areas, why their hungry, emaciated and unlettered children were robbed of the rightful share in 20 million scholarships and educational loans totaling several lakh crore rupees?

Time has also come for the unlettered masses to seek identification of those public figures and government functionaries for deliberately cheating the poorest citizens of their right to equality.

teries was that the results of the National Family Health Survey of 2005-2006 were released in October, 2010 - i.e. after a long delay of 4 years! It needs to be investigated why in this age of super technology the findings of NFHS Survey-3 conducted in 2005-2006 were not made public. This inordinate delay was responsible for facilitating implementation of Sachar Committee's recommendations favouring the Muslim community. The discriminatory largesse of 20 million scholarships and cheaper educational and entrepreneurial loans of several lakh crore rupees was showered on Muslims, along with 4 minorities in gross violation of the Right to Equality enshrined in the Constitution.

The third rebuttal of Justice Sachar's fudged facts was made public in the findings of Rajesh Shukla, a Senior Fellow of the National Council of Applied Economic Research published in the *EconomicTimes*, New Delhi, on April 5, 2007, re-confirming that there was hardly any difference in the economic status of the Hindus and Muslims. Among other things Rajesh

Shukla's survey disclosed that the Sikh community were 'the Sardars in Prosperity', with Christians closely following behind them.

The fourth rebuttal of Justice Sachar's findings came on February 24, 2011, in the reply to a Parliament Question answered by Vincent H. Pala, the Minister of State for Minorities in Lok Sabha admitting that the central government had no data pertaining to the number of persons living below the poverty line according to religious denominations. If as late as the year 2011 the government had no data about the number of Muslims and Hindus living below the poverty line, why were the fudged findings of Justice Sachar accepted and implemented several years ago?

The fifth demolition of the lies propagated by Sachar Committee came on October 24-25, 2011, when in a Seminar jointly organized by the United Nations Development Programme and India's Planning Commission at Claridge's Hotel, two scholars of the Jawaharlal Nehru University (Sukhdeo Thorat and

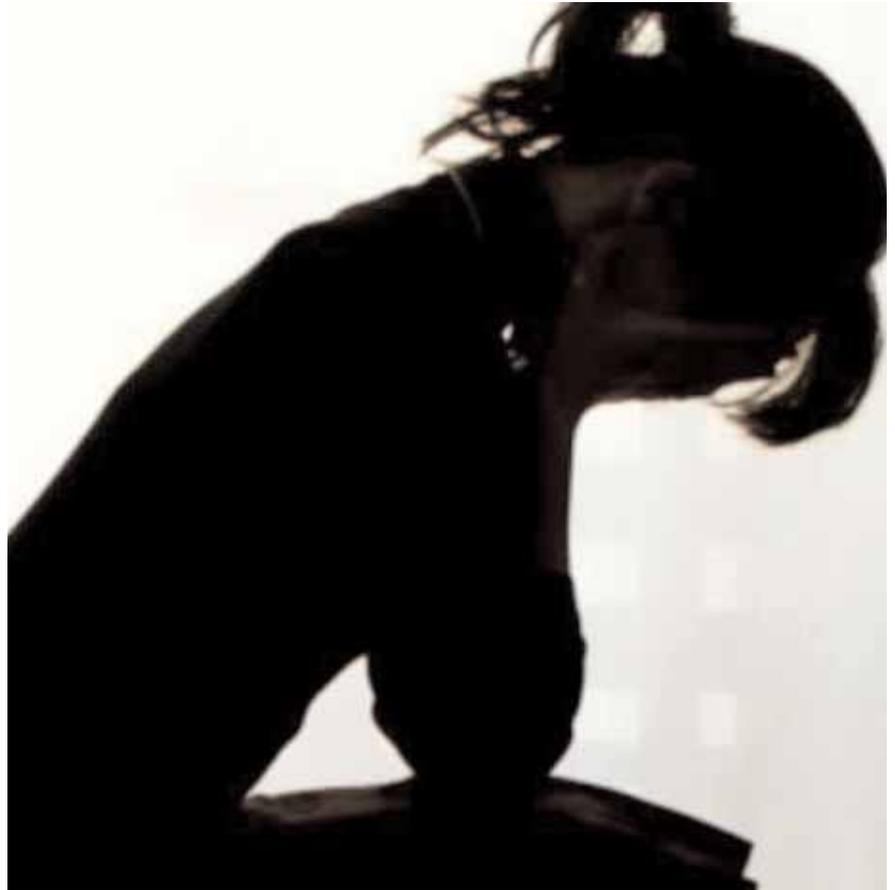
# Why this focus on 'rapes in India' by world media?

Judging from media reports, India has a BIG problem with rape. No other country seems to come even close. All over the globe "another rape in India" is reported ever so often. On my last visit to Germany, I jolted when on 27. December 2013 the most popular TV news ended with "another gang rape in India". It was one of only five topics of the 15 minutes broadcast.

Even my sister wondered how a gang rape in India made it to the main news in Germany. That same day in a conservative estimate, over a thousand rapes would have been committed all over the world. In the USA some 200, in South Africa some 170. In the western cities, the statistics show a high percentage, much higher than in India. Many of those rapes would have been gang rapes. In many cases, the girl or woman would have been killed. Behind each of those statistical figures are painful, heartrending stories. If we knew what is happening at this very moment on this earth - how much pain humans inflict on other humans and on animals - we could not bear it. With so much crime happening everywhere, why is India being singled out and shamed with "another gang rape", when it actually has only a fraction of the crimes other countries have in relative numbers? In absolute numbers of course it would be no surprise if India with her huge population of four times the size of the United States were number one apart from China. Even then it is not number one. USA is.

The deluge of rape reports on India started with the shameful gang rape of a young woman, Jyoti, in a bus in Delhi on December 16th, 2012. Jyoti died. The six culprits were convicted. One committed either suicide (official version) or was killed by prison inmates. Four got death sentence. The sixth was a minor, six months short of his 18th birthday. He got away with 3 years in a reprimand home. As he allegedly was the most brutal of all and responsible for the death of Jyoti, efforts are on to try him as an adult.

This gang rape received unprecedented publicity. It reached national and local news all over the globe. It



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reached even a friend in Slovenia, who is usually oblivious of what is happening. Why was it broadcasted all over with such intensity? Was it because Indians protested in a big way and demanded harsh punishment? Those protests should have actually gone in favour of India, as they made clear that Indians consider rape as completely

against their culture. But the opposite happened:

Ever since that December 2012, news on India have centered almost exclusively on "another rape" and even on the "rape culture of India". One year later, the tragic story of Jyoti was again splashed over half a page in a local Nuremberg newspaper, and in its year-



end- review, the Spiegel magazine did not feature anything about India, not even the Uttarakhand disaster with over 7000 dead, but - a group of victims of sexual abuse learning martial arts in Lucknow, ready to take on anyone who molests women. Obviously it was implied that such molesters are lurking at every corner.

India does have a problem with rape. Other countries also have this problem. Yet the exclusive focus by the world media on "rapes in India" is not justified and raises suspicion of an agenda behind it. Articles appeared now, often written by Indians with Hindu names, that Indian (read Hindu) culture is to be blamed for the rapes, because it does not consider women as 'autonomous entities', which probably means that they can't do what they want. The Washington Post proclaimed that sexual violence was endemic in India. The Reuters Trust Law group named India one of the worst countries in the world for women. A Harvard committee crafted strategies for 'adolescent education' to change the Indian mindset about gender. It was getting a bit much. Don't westerners look at their own record - past and present - and compare it with that of India? Are they not ashamed?

Anyone who cares to find out will easily discover that rape is not in the culture of India, and women have a

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good, even respected position compared to other cultures or countries. This position may not be in tune with the view of feminists, but are feminists the measure of all things? Do those feminists believe that village women in India want to be like them? In my view, those feminists look pitiable in the eyes of those often very strong village women who see Sita as their ideal. The main anguish of those women is poverty, not gender roles.

To blame Hindu culture is preposterous to say the least. In fact, if Hindu culture would have prevailed and Christianity and Islam had never appeared on the scene, the world would be a better place. Christians and Muslims have traditionally used rape as a tool of war. For them, the 'other' was

never worthy of any consideration and could be brutally raped and killed never mind if they were civilians. The Geneva Convention's purpose is to stop this barbaric behaviour. Hindus never needed a Geneva Convention. They also fought wars, but they did not brutalize women or the civilian population.

The campaign to paint India blacker than it is sadly has worked. It is now a 'fact' for most foreigners (and for the convinced Indians) that Indian women have to live terrible lives, more terrible than anywhere else. No disagreeing possible. Everyone will shout you down with plenty of horrific examples. Yes, there are plenty of horrific examples and one needs to find out the reasons and find remedies. But individual criminals do not define a country, even less,



if other countries have more of them. So why is India beaten with "another gang rape" again and again? Is the purpose to spoil the image of India? And if so, why?

In recent times, Indians have clearly made a mark. There is tremendous talent in the country. It is acknowledged that Indians have brains. This expresses itself in a new found confidence. 'Western values' are more likely to be scrutinized now and the ancient Hindu tradition is seeing a renaissance. The 'established opinion' that Christianity and Islam are any time better than Hinduism is being challenged. Modern western values are also more likely to be scrutinized and the west does not like it. The established opinions have power and this power seems to be used to malign India in a most unfair manner.

Rape is a delicate subject and whoever tries to place it into perspective is likely to get slaps from all sides, not least from the women's groups. Not many will dare to state, that India has a problem, but not a bigger one than other countries, and does not need interference from the west in handling it. In fact, India has a great advantage. The family system is generally still strong especially among the masses who have escaped English education. Celibacy before marriage is still valued and not ridiculed. Romantic love is still seen for what it is - a temporary emotion and not a solid basis for a lifelong companionship. Compromise among

family members and even sacrifice are not yet condemned as restricting individual freedom. Sita is still an ideal for most Hindu women. Bhakti, love for God, can still be expressed.

The fact that these values are still strong is not appreciated by western opinion makers. Those values are considered out of sync with the Zeitgeist. They pose a challenge to the western lifestyle which is being pushed into India. 'Modern, western values' mean for example (I learned this from an article in a German magazine) to live in rainbow or patchwork families, those families will either have homos as 'parents' or children from different partners as the parents would have had several live-in relationships earlier. It is supposed to be a great learning experience for everyone. A book will soon be out in Germany that examines whether homo marriages make better 'parents' than the traditional man-woman combination. It is overlooked, that homo 'parents' can't produce children together. But then, who needs children in the west?

Traditional Indian society is clearly out of sync with this modern lifestyle and to portray it in a poor light, "another rape" makes headlines every other day. Care is taken that only rapes committed by men with Hindu names reach the limelight and are discussed on TV. India has some 200 million Muslims and some 50 million Christians and they also commit rapes and very cruel

ones, as well. For example the minor in the rape case of Jyothi is a Muslim. This news, however, did not make it to the mainstream media. There seems to be communalism in regard to broadcasting crimes, and maybe even in registering them. This makes sense, if the objective is to demean Hindu culture and thereby propel it to reform and open up. It is expected to leave those old fashioned family values behind, to have condom vending machines in colleges, to consider free sex as normal. What better start than to talk of rape? It prepares the ground for allowing westerners to prepare the syllabus for 'adolescent education'. And once the youth is convinced, the 'backward' Hindu society will be a thing of the past.

This prospect would be a horror for the Indian masses from all religions. Hindu society is indeed rigid in certain aspects and has much scope to improve, but its values are still highly preferable to western, modern 'values'. One just needs to look at western societies to realise that the modern life style is a failed model. It has already regrettable fallout: many youngsters are without direction because of too much freedom. They long for clear rules and turn to fundamentalist, evangelical churches. Hindu Dharma would be the better option. But they are not likely to get to know about it in an unbiased manner.

*By Maria Wirth*

# Sindhu and Sarasvati: Battle for Akhand Bharat

● Vijaya Rajiva

The Sindhu and Sarasvati rivers were at the centre of Rig Vedic consciousness, closely followed by the Iravati (Ravi), Sutudri (Sutlej), Vipasa (Beas), Chandrabhaga (Chenab), Vitasta (Jhelum). Hence the reference to the land as Sapta Sindhu (seven rivers). The Sarasvati, mentioned some seventy times in the Rig Veda, dried up in post-Vedic times and was rediscovered in the last four decades through satellite imagery which spotted its paleo channels. This was a landmark breakthrough and provided Indic scholars the basis for challenging much of the traditional history of India as written by Western scholars and their followers in India.

As the Vedic peoples moved eastwards from the Punjab/Haryana region (where the Rig Veda was composed), they discovered new territories and rivers. Hence, the stotram for the water purification ceremony from the

Puranas:

Gange cha yamune chaiva Godavari Sarasvati Narmada Sindhu Kaveri Jalasmin sammidham Kuru O ye Rivers Gange, Yamune, Godavari, Sarasvati, Narmada, Sindhu and Kaveri! Reside together here in this water

There is a close bond between Sindhu and Sarasvati in Rig Vedic consciousness and the phrase 'akhand bharat' (undivided Bharat). Eminent historian and archaeologist Shivaji Singh has spelled this out in his definition of the word 'aryam' as characterising akhand bharat. Quoting the famous line from the Rig Veda, *Krinvanto visvam aryam* (Make the world aryam), he explains that aryam is that mindset, world view, attitude, which works for the spiritual and material welfare of humankind (Vedic Culture and its Continuity, 2010).

Elaborating, he points out that the word 'aryam' has nothing to do with the racist use of the word 'aryan' by Western scholarship, nor is it a linguis-

tic construct. The battle for akhand bharat is thus a battle for the definition of sacred geography (the land from the Himalaya and the northwest to Kanyakumari in the south and from Dwaraka in the west to undivided Bengal in the east) but also the more universal meaning of aryam.

The question arises as to whether the sacred geography of akhand bharat is closely linked to the sanctity of the Sindhu and the Sarasvati and the meaning of aryam, and if so, why and how.

## The Meaning of Aryam or Aryattva

One of the clearest explanations of this ideal of Aryam is provided by Shivaji Singh: "The essence of Vedic culture lies in its perception of Aryattva, a virtue the achievement of which is considered to be necessary for civilised living. The slogan *Krinvanto visvam aryam* (Rig Veda 9.63.5) is an appeal to the divine almighty power to help





achieve this ideal. Unfortunately, however, many historians have misunderstood this Aryattva".

Scholars have often confused the Vedic Aryans with Indo Aryans, forgetting that the two concepts are different. 'Arya' being the self-designation of the Vedic people, 'Vedic Aryan' represents a historical reality. As against this, the term 'Indo-Aryan' is a linguistic construct denoting speakers of a sub-group of languages within the Indo-Iranian branch of the Indo-European family, and being a construct, its validity is subject to verification.

Although language and culture are intimately connected, Arya does not denote a speaker of a particular language. In the Vedic view, a person speaking a Dravidian language is Arya if he possesses the virtue called Aryattva... (p10). Arya is defined one who is noble and refined in ideas and action, and these depend on a "world view characterised by a belief in certain concepts like Rta, Satya, Tapas, Yajna, Brahma etc." (p10)

Aryattva is a blending of virtues that lead to the highest material and spiritual achievement. Rta simply means the order and harmony of the universe which the Rig Vedic Rishis saw in their physical environment, Nature. Yajna, the ritual of the fire, homa, is not only a tribute to the fire Deva, Agni, but embodies the orderly working of the universe reflected in Vedic astronomy. The intricate celestial relationships that the

Rishis actually observed with the naked eye are clearly explained by BN Narahari Achar in 'Sarasvati River and Chronology: Simulations using Planetarium Software' (cited in Vedic River Sarasvati and Hindu Civilisation, 2008, ed. S Kalyanaraman).

Satya (usually translated as Truth) represents the mirroring of the cosmic order in society and the individual's alignment with this cosmic order. Likewise, Tapas or self-discipline (austerity) was practiced by the Rishis for the welfare of society and therefore the universal application of this to individuals who embody Aryam/Aryattva.

These ideals of virtuous living came to the consciousness of Vedic Rishis as they saw the heavens, the earth around them, the rivers, forests and lakes and all living creatures. Aryam was a holistic ideal which passed into Hindu consciousness and society as Dharma. A recent contemporary explanation of Dharma and Rta is provided by Shrinivas Tilak, A Reawakening to a secular Hindu nation (p13-16, 2008).

Dharma in Tilak's interpretation (though not explicitly stated by him) is related to Aryam/ aryattva which is the social derivative of Rta as the Vedic seers envisioned it. Tilak provides a very lucid explanation of other aspects of Dharma.

The Vedic peoples engaged in international trade and were familiar with maritime travel and also engaged in the intellectual fields of mathematics and

astronomy. The ideal of Aryam came to them on the banks of the Sindhu and Sarasvati. This was the basis of their spiritual bond with the two rivers.

## Sacred Geography

Sindhu and Sarasvati were not only rivers that provided the livelihood of the Vedic peoples. In a previous article, the writer spoke of the role of the Sarasvati as the giver of 'light' ('Sarasvati and the Resurgence of Hinduism', Haindava Keralam, 08/05/2013). In the Rig Veda, Sarasvati is not only a river but the giver of 'light'. Western scholars have traditionally dismissed the presence of the Goddesses (hereafter referred to as Devas and Devis) in the Rig Veda and downplayed their importance.

Nevertheless, for a correct reading we have to see Sarasvati not only as a river Devi giving abundance and plenty to the Rig Vedic peoples, but also as the giver of 'light.' The very first book of the Rig Veda says : '...Sarasvati, the mighty flood, she with light illumines, She brightens every pious thought' (Book 1, Hymn 3, Line 12, Griffith translation). The 'light' here refers to intellection and devotion and explains the origin of Sarasvati as patron of learning, knowledge, music, arts, etc. Book 1 is the work of Sage Agastya, also known for his famous Sarasvati Sthotram (Ya kundendu tushaara, haara dhavala...) where he hails the Devi as the source of knowledge.



The ten books of the Rig Veda contain seventy references to Sarasvati. Of these, two are directly addressed to her, as one who gives prosperity and plenty. She is the mighty river that flows from the mountains to the sea. She is life giving water. There are some references to her as the origin of holy thoughts, but none as clear cut as the reference to the giver of 'light' by Agastya.

Hence, one can infer that the Rig Veda signalled the importance of knowledge. This fits in with NS Rajaram's thesis that Vedic Mathematics was central to the civilisation and that the geometric/algebraic notions of the period influenced Old Babylonia and Egypt and thence the Greek philosopher Pythagoras whose theorem is well known to most readers (See 'The Origins of Indo-Europeans' and 'The Third Wave', Folks Magazine, Dec. 2012, Feb, March 2013).

Pythagoras (570 BC-495 BC) always wanted to visit India. There is a missing period of ten years in his life and scholars have speculated that he may have come to India during that time. He had, of course, visited Egypt and Babylonia. If he did come to India, it is reasonable to assume that he learned his Mathematics directly from India and not through Old Babylonia and Egypt.

It is not accidental that Sarasvati is deified as the source of 'light.' Rajaram points out that the mathematical for-

mulae used for the bricks for the Vedic fire altar were borrowed by the Harappan civilisation (via the Sulba Sutras) whose peoples lived on the banks of the Sarasvati and Sindhu.

The Sindhu has been mentioned in the Rig Veda more than a dozen times, the most arresting being in Book X, where the power and might of the river are invoked. It would seem that this aspect overawed the Vedic peoples.

### Verses from the Rig Veda make this abundantly clear:

1) The singer, O ye Waters in Vivasvan's place, shall tell your grandeur forth that is beyond compare. The Rivers have come forward triply, seven and seven. Sindhu in might surpasses all the streams that flow.

2) Varuna cut the channels for thy forward course, O Sindhu, when thou rannest on to win the race. Thou speedest over precipitous ridges of the earth, when thou art Lord and Leader of these moving floods.

3) His roar is lifted up to heaven above the earth: he puts forth endless vigour with a flash of light. Like floods of rain that fall in thunder from the cloud, so Sindhu rushes on bellowing like a bull.

4) Like mothers to their calves, like milch kine with their milk, so, Sindhu, unto thee the roaring rivers run. Thou leadest as a warrior king thine army's wings what time thou comest in the van

of these swift streams.

(Rig Veda, Griffiths translation, Book 10.75.1-4)

Shivaji Singh says the Sindhu's contribution to the Indian ethos is tremendous. The Rig Veda highly adores Sindhu for its benefactions, and the reverence for the river has continued down the ages. The water purifying mantra (ganga cha yamune chaiva...) still repeated at the very beginning of Hindu religious performances, stands witness to the fact that Sindhu has traditionally been considered as one of the seven most important rivers of the sub-continent. Changes and modifications in political boundaries cannot alter this fact. Culture is far

more durable than Politics (email communication).

### Sacred Space and Akhand Bharat

Akhand Bharat, then, in which Sindhu and Sarasvati are integral parts, is a sacred space unique to the sub-continent. Here live the Devas and Devatas that the Rig Vedic Rishis sighted and were commemorated by them in the Rig Veda. As time went by, some of the names changed and more names were added to the Hindu pantheon. They still continue to inhabit the land mass from the Himalaya to Cape Comorin and from west to east.

In a discussion of rashtra as a culturally nuanced space, Shrinivas Tilak observes: "As a culturally integrated unity, the idea of rashtra inevitably developed a nuanced network of ideology, outlook and traditions inspired and informed by the particular geo-morphological features of the Indian land-mass." (Rewakening to a secular Hindu nation, p.20)

This culturally integrated unity which Hindus call the motherland was given several thousand years ago by the Rishis of the Rig Veda who first lived on the banks of the Sindhu and the Sarasvati.

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# Nationalisation of **illicit wealth** held by Indians abroad

**P**ostcolonial loot of the nation's wealth has reached serious proportions endangering the sovereignty and integrity of the nation. Stashing away Rs. 25 lakh crores of Indian wealth abroad – as reported by Director, CBI in his public speech on 13 Feb. 2012 – has created a situation of unprecedented financial instability in the country, apart from the dangers of associated terror financing.

If the rot is not stemmed immediately, with effective action by Indian Parliament, the already impoverished state of people below poverty line in the nation will seriously worsen further, which may result in a peoples' revolt of the type witnessed recently in Egypt against Mubarak and in Libya against Gadhafi (both of whom had stashed away their nations' wealth abroad).

The forthcoming 2012 Budget session should provide for focused attention of the Parliament on the serious

financial situation the nation faces, caused by the announcement by a responsible official of the Govt. of India, Director CBI – that 500 billion dollars (or Rs. 25 lakh crores at the rate of Rs. 50 per dollar) of Indian wealth has been stashed away abroad. Full text of his speech is in Annex B.

Rs. 25 lakh crores is a large sum of money. This is about 14 times the 2G scam which is estimated to be about Rs. 1.76 lakh crores.

If this sum of Rs. 25 lakh crores is brought into the nation's financial system, there can be a big boost to the poverty eradication programs of the country.

There are 6,38,596 villages in the country in 640 districts (2011 census). If this amount is distributed to these 640 districts equally, each district will get Rs. 3,906 crores for strengthening the Panchayati Raj institutions at the corporation, municipality, village levels

for projects such as maintenance of village roads, village irrigation tanks, to finance primary health care and to provide for teachers in all schools. The funds can also be used to strengthen national security along the international borders and to forge an Indian Ocean Community as a developmental, an economic multiplier engine to finance Trans-Asian Railway and Trans-Asian Highway Projects and implement the amended Law of the Sea extending territorial waters to 200 nautical miles (as against the present 20 nautical miles from the shoreline).

The following demands should be made in the Parliament in the context of the serious financial emergency-type situation (Article 360) which has arisen in the country:

Declaration of Politically Exposed Persons' responsibility to strengthen the nation's financial system

Ban on participatory notes which





facilitates the hawala routes mentioned by Director CBI for the post-colonial loot of the nation's wealth

Nationalisation of illicit wealth stashed away abroad consistent with the suggestion made by Senior Advocate Fali Nariman in his Rajya Sabha speech (Annex A)

Short of a Proclamation of Financial Emergency, there can be an orderly process to recover the illicit wealth stashed away abroad. Two months' notice can be given to owners of such assets to bring the monies into the nation's financial system, failing which, the assets should be deemed to be national property and transferred into the Consolidated Fund of India.

RBI restrictions on the definition of PEPs to Accounts of Politically Exposed Persons (PEPs) resident outside India should be revised and uniform standards should be announced to apply to both foreign and domestic PEPs. Individuals covered under Definition of Politically Exposed Persons (PEPs) for due diligence of 'Know Your Customer' Guidelines and Anti-Money Laundering (AML) regulations to include both domestic and foreign PEPs and their close associates and family members.

Definition of PEPs should be extended to cover all citizens of India who are individuals (and their associates) who are or have been entrusted with

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### **Nationalisation of illicit wealth stashed away abroad consistent with the suggestion made by Senior Advocate Fali Nariman in his Rajya Sabha speech (Annex A)**

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prominent public functions e.g., Heads of States or of Governments, senior politicians, senior government/judicial/military officers, senior executives of state-owned corporations, important political party officials, etc. This definition should govern the financial transactions to be reported by financial institutions under the KYC (Know-Your-Customer) Guidelines.

India should reconsider the special diplomatic and financial status given to tax haven countries such as Mauritius (which accounts for nearly 50% of foreign fund flows into the country). Financial sanctions can be imposed in addition to specific measures. For e.g., Tax haven countries should be asked to enact on the lines of the Restitution of Illicit Assets Act (2010) of Swiss Federation to assist in the restitution of illicit assets as was done recently for such assets of Mubarak, Gaddafi and

earlier for the assets of Ferdinand Marcos of the Philippines.

There is need for a global approach to combat high-level, large-scale public corruption. "Public corruption erodes democracy, rule of law, and economic well-being by undermining public financial management and accountability, discouraging foreign investment and stifling economic growth and sustainable development...Corruption by senior officials in executive, judicial, legislative, or other official positions in government can destabilize whole societies and destroy the aspirations of their people for a better way of life." See <http://georgewbush-whitehouse.archives.gov/news/releases/2006/08/20060810-1.html> A PM should announce a similar national strategy to international efforts against kleptocracy which, like terrorism, is a threat to the governments and citizens alike.

FIU of RBI should report to other financial sentinels of the nation, all suspicious financial transactions. It is unclear if FIU has done such reporting on transactions which have come to light in the context of the 2G scam - transactions involving, DB realty, Kusegaon, Cineyug and Kalaingar TV. Director, CBI in his speech to the First Global Programme on Anti-Corruption and Asset Recovery in Delhi said on 13



February 2012: "In some of the recent important cases being investigated by CBI such as 2G/CWG/ and Madhu Koda, we find that money is taken to Dubai/Singapore/Mauritius from where it goes to Switzerland and then British Virgin Island/Caymen Islands and other such tax havens. For the criminals all it involves is setting up of a few shell companies and then making layered transfers from one account to another in a matter of hours as there are no boundaries in banking transactions. For the investigators, however, each layer has to be peeled by sending an L.R. through judicial channels, and obtaining information from each leg of the transaction can take in many cases several years."

FIU, RBI, Finance Ministry should provide information on: 1) the list of Banks which provided information these transactions to the FIU; 2) investigations conducted by specific agencies; and 3) details - including dates - of follow-up action.

Government should ban the Participatory Notes and institute an immediate probe on its original ownership, as suggested by the Tarapore Committee. Participatory Notes, routing hawala transactions is a major con-

tributory cause of galloping inflation affecting the common man and further impoverishing people. National Security Adviser had warned against the terror link in stock exchange manipulation through this mechanism.

An ordinance should be issued to nationalise all foreign accounts held by Indian citizens. On the lines of the Banking nationalisation Act of 1969, an ordinance to nationalise illicit wealth held by Indian citizens and entities in tax havens on the following lines:

Title. Nationalisation of Illicit wealth held in tax havens.

An act to provide for the acquisition of the foreign currency accounts held outside India in order to serve better the needs of development of the economy in conformity with national policy and objectives and for matters connected therewith or incidental thereto, with particular reference to Article 39 of the Constitution.

39. Certain principles of policy to be followed by the State: The State shall, in particular, direct its policy towards securing... (c) that the operation of the economic system does not result in the concentration of wealth and means of production to the common detriment...

1. Short title. This Act may be called the Foreign Accounts (Nationalisation) Act, 2011 .

2. Declaration as to the Policy of the State. It is hereby declared that this Act is for giving effect to the policy of the State towards securing the principles specified in clause (c) of article 39 of the Constitution.

Explanation.-In this section, "State" has the same meaning as in article 12 of the Constitution.

3. The acquisition is intended to enable foreign countries to reconstitute the illicit wealth to the Consolidated Fund of India.

4. A custodian will be appointed with immediate effect to release the accounts held by Indian citizens and entities which do not constitute illicit or stolen wealth - if the concerned account holders provide documents to substantiate to the satisfaction of the Custodian that the amounts held in the concerned accounts do not constitute illicit or stolen wealth..

The draft can be amplified further by legal experts by adding the usual sections such as Definitions and juridical requirements.

*Kalyanaraman*

# GOLD DRIVES OUR TRADITIONAL ECONOMY, MUST NOT BE CURBED

• Prof Vaidyanathan •

India is one of the largest buyers of gold in the world. More than 90 per cent of this is for jeweler purposes. Table 1 gives the purchase of gold for jewellery by different countries. Indian demand is around 25 per cent of global consumption. Recently, the attraction of smuggling has come down due to liberalised import policy. Incidentally, domestic production of gold is very negligible, running into a few tonnes. The purchases made in Saudi Arabia and Gulf states is also mostly by people of Indian origin and to that extent the demand by 'Indians' is much larger. What is bought in Gulf states this year by the NRIs (non-resident Indians) will reach here may be in a year or so.

At an average price of, say, Rs 30000 for 10 grams, we can estimate that more than Rs 258000 crore has been spent in buying gold last year by Indian households, which is much larger than the aggregate capital raised from the stock market. The purchase of gold by households is not treated as savings in our statistics. It is treated, as consumption by a household which is curious as households treat purchase of gold as 'investments' whatever the economists in the Government may think. The 'experts' are more or less unanimous that households, particularly women, are doing 'unproductive' investments in gold jewellery. They would rather households invested in Government bonds which can be used to pay salaries for Government employees (the most 'productive' activity).

But why do households invest in gold? It is not for the return but for security. Gold is the major social security for large number of Indian households which do not have any social security at all. The OASIS (Dave Committee) report indicates that nearly 90 per cent of the India's workforce, particularly the self-employed, is not covered by any retirement scheme that enables savings for economic security during old age. Transfer of ownership is also very easy. In the case of gold ornaments one can say that possession is ownership. In other words, if a mother removes her chain and gives it to her



**Gold: Consumer Demand 1995-2012**

Countries	1995	2000	2005	2009	2010	2011	2012
India	477	855	722	579	1006	986	864
Greater China	427	329	293	472	667	821	817
Japan	272	98	74	-9	-19	-30	7.6
Indonesia	119	107	81	35	48	55	52
Vietnam	36	60	61	73	81	101	77
Middle East	365	498	388	246	234	188	178
Turkey	139	207	248	107	111	143	119
USA	315	396	377	265	235	200	162
Italy	110	78	71*	41	35	28	24
U.K	46	65	59*	32	27	23	21
<b>Total—Including others</b>	<b>2864.5</b>	<b>3287.9</b>	<b>3091.9</b>	<b>2503.1</b>	<b>3217</b>	<b>3487</b>	<b>3163</b>
<b>Gold price (\$/oz)</b>	<b>384.1</b>	<b>279.1</b>	<b>444.5</b>	<b>972.3</b>	<b>1224.5</b>	<b>1571.5</b>	<b>1669.0</b>

Note: 1 Tonne = 32,151 ounces of fine gold. \* Jewellery only.  
Source: World Gold Council—Gold Demand Trends various issues

@Prof.Vaidyanathan, IIM, 2013

One of the major reasons for the increased demand for gold more in the form of Coins and bars is the scarcity of credit from banking sector for small and tiny businesses. Actually coins and bars constituted more than 300 tonnes out of 864 tonnes consumed in 2012. As of today Gold alone is acceptable collateral for these enterprises for getting credit from money lenders.

daughter then it belongs to the latter by tradition. One can get loan against gold by pledging it with a moneylender any time of the day or night, seven days of the week.

In other words, gold represents the most liquid form of asset in India. One can also say that gold is the most politically correct metal which can be owned. In traditional Indian families, sometimes, shares or fixed deposits are disposed without the knowledge of the housewife. But gold is always sold with the concurrence of the housewife. The so-called superstition pertaining to not removing the Mangal Sutra till the death of the husband is an insurance protection to the woman against rapacious relatives and children. It is assumed that the gold ornaments will work as social security for her in case of major emergency or after the death of the head of the household.

More importantly, gold is used as collateral in small businesses like retail trade and transport restaurant's etc. the role of gold is not that of an idle asset as assumed by our central banker and Government economists. We find that the credit availability to small entrepreneurs in construction/trade/restaurant's etc. has declined over period of time and more money goes to only big businesses See Table-2. Actually small businesses are engines of our growth

One of the major reasons for the increased demand for gold more in the form of Coins and bars is the scarcity of credit from banking sector for small and tiny businesses. Actually coins and bars constituted more than 300 tonnes out of 864 tonnes consumed in 2012. As of today Gold alone is acceptable collateral

## Distribution of Outstanding Bank Credit by Categories[%]

Category	March 1990	March 1996	March 2004	March 2008	March 2009	March 2010	March 2011
Household sector (1)	58.3	51.1	47.6	36.6	32.8	32.8	36.3
Private Corporate sector (2)	31.3	38.6	38.0	46.7	48.2	48.6	44.0
Public sector (3)	10.2	10.3	14.3	16.7	19.0	18.6	19.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100

Note: (1) Household sector includes Partnership, Proprietorship concerns, joint families, associations, clubs, Societies, trusts, groups and individuals for all accounts.

(2) Private Corporate sector includes private sector and cooperative sector including those mentioned in (1)

(3) Public Sector, that is all Government services, includes year sector undistributed

Source: Estimated from table -1.1.3, Outstanding Credit of Scheduled Commercial Banks according to Organisation, Basic statistical returns, Various years, RBI



for these enterprises for getting credit from money lenders.

Unfortunately the role of gold as a social security and collateral for business is not understood by our Government economists and central bankers. On the one side, credit availability from organised banking sector to small and tiny businesses is declining and on the other hand every effort is made by RBI to make gold costlier and scarce for these tiny entrepreneurs. The increase in demand for gold and the resultant crisis in the current account

deficit are linked to denial of credit to the growth engines in service and manufacturing sector. These are mostly proprietorship and partnership firm's whose only collateral to money lenders is in the form of Gold ornaments or coins and bar.

Further curbs on availability of gold will only encourage D company to become active in the smuggling of gold and do we want it again?

*Author is Professor IIMB- Views expressed here are personal*

# Freeing temples from state control - Subramanian Swamy

**W**hy only Hindu religious affairs need to be managed by the government. The obvious question, why should a 'secular, socialist' government control only Hindu places of worship, but not Muslim and Christian religious institutions.

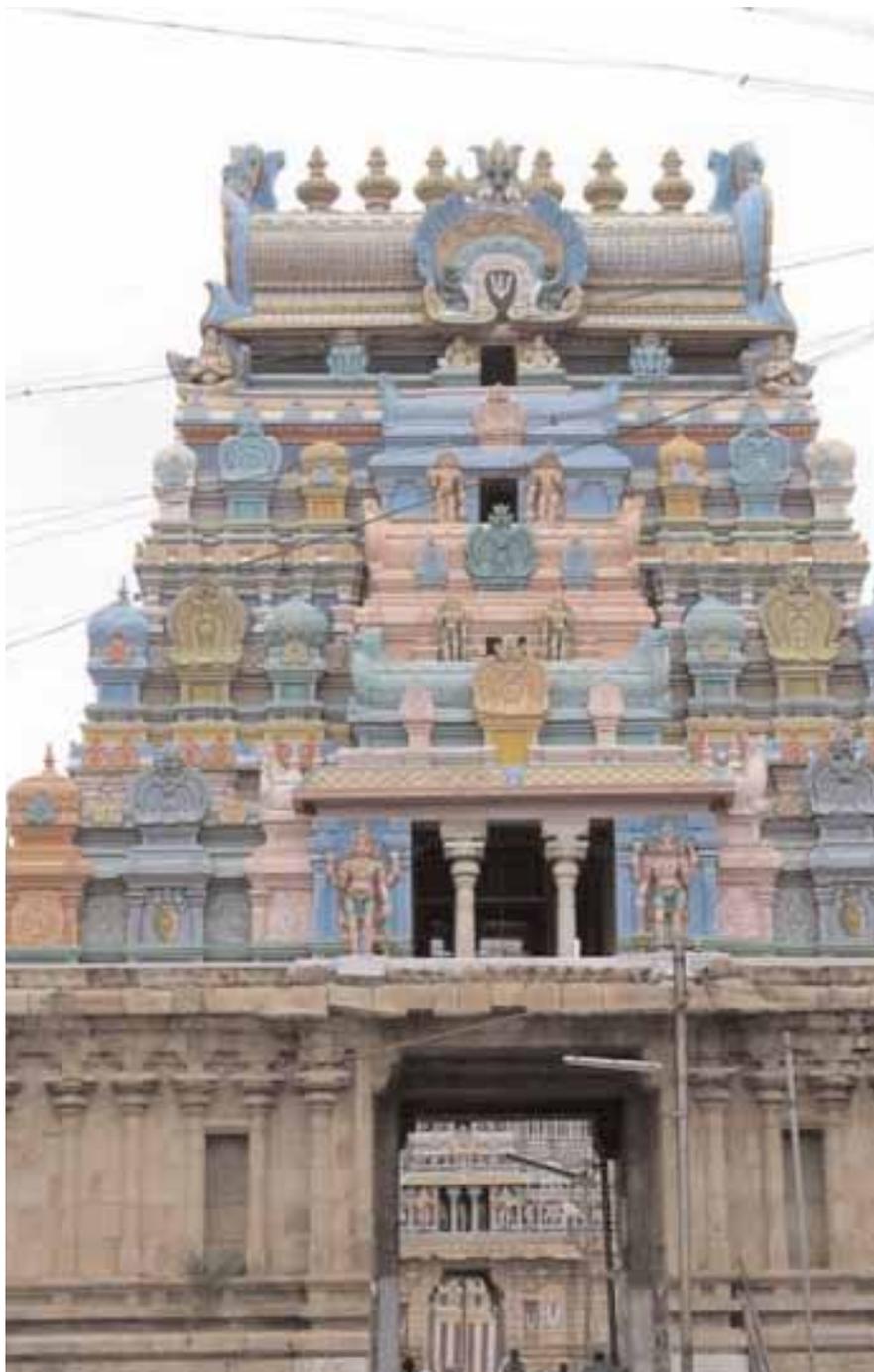
In fact, what is scandalous is the corruption after takeover of temples by the Tamil Nadu officials, MLAs and Ministers by looting the temple wealth, lands, and jewels, and the reckless diversion of donations of devotees to non-religious purposes.

**Temple properties:** Tamil Nadu temples, under Hindu Religious & Charitable Endowments Department, has control over more than 4.7 lakh acres of agricultural land, 2.6 crore square feet of buildings and 29 crore square feet of urban sites of temples. By any reasonable measure, the income from these properties should be in thousand of crores of rupees. The government, however, collects a mere Rs.36 crore in rent against a 'demand' of mere Rs.304 crore - around 12 per cent realisation.

The HR & CE takes away annually around Rs.89 crore from the temples as administrative fee. The expenditure of the department including salaries is only Rs.49 crore. Why does the government overcharge the temples- literally scourging the deities - for a sub standard service?

Recently the government started covering the floor of Tiruvotriyur temple with marble, a stone never used in south Indian temples. The original floor was of ancient granite slabs with historical inscriptions. There are several initiatives for 'renovation' of temples - the bureaucrats rarely consult archaeologists or heritage experts. Without knowledge, experience, competence or appreciation and with great insensitivity they use inappropriate chemicals on ancient murals, insert concrete/cement structures, use ceramic tiles to 'embellish' sanctum sanctorum and construct 'offices' within temple premises. Ancient monuments 300 to 1000 plus years old are never 'renovated', only 'restored', a distinction that escapes the babus.

There are several large temples in



Tamil Nadu under government control for several decades. If the Supreme Court judgment is applied, then the government is in illegal, unethical and unfair control of these temples. apart from being answerable for innumerable acts of dereliction of duty, defiling of temples that has resulted in loss of several thousands of crores of rupees to

the temples and to their antiquity. That is my next move - to liberate all Hindu temples presently in government control on expired GOs. In the future we need to bring some mosques and churches to rectify the mismanagement going on in these places. Then the secularism of India's intellectuals will be truly tested.

# Women, Foreigners Can Help Japan Globalize: Sinha

● SANJEEV SINHA

Japan has long had a conveniently homogenous, organized and large consumer market, which is why the country has tended to be less inclined to interact globally except through limited, though large, channels of exports and financing.

Now Japanese companies face increasing competition from multinational firms that enjoy global advantages. Globalization is thus a pressing challenge for Japan. Perhaps its biggest task is to develop globally minded personnel, which means fostering diversity and inclusion (D&I), something at which homogenous Japan has not traditionally excelled. Globalization also requires entrepreneurship and dynamism, while Japan tends to place an extremely high value on organization and institutions.

I serve on the board of NPO GEWEL, which promotes D&I, and especially entrepreneurship, among women and foreigners in Japan.

Japanese women tend to be more globally minded than the men in many ways: More women than men study foreign languages in Japan, and they are more frequent overseas travelers. Many women are also more open-minded toward foreign cultures. And people who come to Japan themselves tend to be globalist and entrepreneurial, having taken a risk by leaving home.

Evidently, given those broad traits, women and foreigners in Japan could be an effective platform for globalization for companies here. Unfortunately, they also face various obstacles in starting new businesses.

Women trying to start a company in Japan are often asked what their husbands do for a living when trying to obtain financing. In the corporate world, the glass ceiling for Japanese women tends to be particularly thick. Foreigners face similar difficulties raising funds, in addition to linguistic and cultural challenges breaking into Japan's clubby business circles.

At a recent forum organized by GEWEL on the topic, we had the Development Bank of Japan give a presentation on its Women



Entrepreneurs' Business Plan Contest. The DBJ last year set up a Women Entrepreneurs Center that awarded 10 million yen to the person with the winning business plan, which was for a logistics business specializing in agricultural products. At the forum, the Japan Finance Corporation also spoke of its financing facilities for entrepreneurs and how they are available to all, including women and foreigners. Kansai University Professor Masumi Shiraishi spoke of the difficulties female entrepreneurs face in society, but also discussed the advantages women have in the form of better insights into human and societal needs.

Today I had a meeting with a bilingual woman who holds an executive post at the Ministry of Economy Trade and Industry and is working on promoting Japanese industry overseas. She was excited to learn that India's new

ambassador to Japan is a woman. A senior official at the male-dominated ministry recently told me that these days, nearly one out of three of the ministry's new hires is a woman, a very welcome change as globalization is its main challenge.

Another colleague of mine at GEWEL, a woman who serves on the board at a Japanese corporation, points out how the company's international department now has many women and foreigners, consistent with the many requests I get from Japanese companies looking for foreign human resources.

Given that Japan is seriously considering the need for major change, I hope the country makes full use of the strengths of women and foreigners to meet the demands of the time.

*(President, Sun and Sands Group)*

# WHY WOMEN IN CHINA DO NOT GET BREAST CANCER

● Prof. Jane Plant, PhD, CBE

I had no alternative but to die or to try to find a cure for myself. I am a scientist - surely there was a rational explanation for this cruel illness that affects one in 12 women in the UK ?

I had suffered the loss of one breast, and undergone radiotherapy. I was now receiving painful chemotherapy, and had been seen by some of the country's most eminent specialists. But, deep down, I felt certain I was facing death. I had a loving husband, a beautiful home and two young children to care for. I desperately wanted to live.

Fortunately, this desire drove me to unearth the facts, some of which were known only to a handful of scientists at the time.

Anyone who has come into contact with breast cancer will know that certain risk factors - such as increasing age, early onset of womanhood, late

onset of menopause and a family history of breast cancer - are completely out of our control. But there are many risk factors, which we can control easily.

These "controllable" risk factors readily translate into simple changes that we can all make in our day-to-day lives to help prevent or treat breast cancer. My message is that even advanced breast cancer can be overcome because I have done it.

The first clue to understanding what was promoting my breast cancer came when my husband Peter, who was also a scientist, arrived back from working in China while I was being plugged in for a chemotherapy session.

He had brought with him cards and letters, as well as some amazing herbal suppositories, sent by my friends and science colleagues in China .

The suppositories were sent to me as a cure for breast cancer. Despite the awfulness of the situation, we both had

a good belly laugh, and I remember saying that this was the treatment for breast cancer in China , then it was little wonder that Chinese women avoided getting the disease.

Those words echoed in my mind. Why didn't Chinese women in China get breast cancer? I had collaborated once with Chinese colleagues on a study of links between soil chemistry and disease, and I remembered some of the statistics.

The disease was virtually non-existent throughout the whole country. Only one in 10,000 women in China will die from it, compared to that terrible figure of one in 12 in Britain and the even grimmer average of one in 10 across most Western countries. It is not just a matter of China being a more rural country, with less urban pollution. In highly urbanized Hong Kong , the rate rises to 34 women in every 10,000 but still puts the West to shame.



The Japanese cities of Hiroshima and Nagasaki have similar rates. And remember, both cities were attacked with nuclear weapons, so in addition to the usual pollution-related cancers, one would also expect to find some radiation-related cases, too.

The conclusion we can draw from these statistics strikes you with some force. If a Western woman were to move to industrialized, irradiated Hiroshima, she would slash her risk of contracting breast cancer by half. Obviously this is absurd. It seemed obvious to me that some lifestyle factor not related to pollution, urbanization or the environment is seriously increasing the Western woman's chance of contracting breast cancer.

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I then discovered that whatever causes the huge differences in breast cancer rates between oriental and Western countries, it isn't genetic.

Scientific research showed that when Chinese or Japanese people move to the West, within one or two generations their rates of breast cancer approach those of their host community.

The same thing happens when oriental people adopt a completely Western lifestyle in Hong Kong. In fact, the slang name for breast cancer in China translates as 'Rich Woman's Disease'. This is because, in China, only the better off can afford to eat what is termed 'Hong Kong food'.

The Chinese describe all Western



food, including everything from ice cream and chocolate bars to spaghetti and feta cheese, as "Hong Kong food", because of its availability in the former British colony and its scarcity, in the past, in mainland China.

So it made perfect sense to me that whatever was causing my breast cancer and the shockingly high incidence in this country generally, it was almost certainly something to do with our better-off, middle-class, Western lifestyle.

There is an important point for men here, too. I have observed in my research that much of the data about prostate cancer leads to similar conclusions.

According to figures from the World Health Organization, the number of men contracting prostate cancer in rural China is negligible, only 0.5 men in every 100,000. In England, Scotland and Wales, however, this figure is 70 times higher. Like breast cancer, it is a middle-class disease that primarily attacks the wealthier and higher socio-economic groups, those that can afford to eat rich foods.

I remember saying to my husband, "Come on Peter, you have just come back from China. What is it about the Chinese way of life that is so different?"

Why don't they get breast cancer? We decided to utilize our joint scientific backgrounds and approach it logically.

We examined scientific data that pointed us in the general direction of fats in diets.

Researchers had discovered in the 1980s that only 14% of calories in the

average Chinese diet were from fat, compared to almost 36% in the West.

But the diet I had been living on for years before I contracted breast cancer was very low in fat and high in fibre.

Besides, I knew as a scientist that fat intake in adults has not been shown to increase risk for breast cancer in most investigations that have followed large groups of women for up to a dozen years.

Then one day something rather special happened. Peter and I have worked together so closely over the years that I am not sure which one of us first said: "The Chinese don't eat dairy produce!" It is hard to explain to a non-scientist the sudden mental and emotional 'buzz' you get when you know you have had an important insight. It's as if you have had a lot of pieces of a jigsaw in your mind, and suddenly, in a few seconds, they all fall into place and the whole picture is clear.

Suddenly I recalled how many Chinese people were physically unable to tolerate milk, how the Chinese people I had worked with had always said that milk was only for babies, and how one of my close friends, who is of Chinese origin, always politely turned down the cheese course at dinner parties.

I knew of no Chinese people who lived a traditional Chinese life who ever used cow or other dairy food to feed their babies. The tradition was to use a wet nurse but never, ever, dairy prod-

ucts.

Culturally, the Chinese find our Western preoccupation with milk and milk products very strange. I remember entertaining a large delegation of Chinese scientists shortly after the ending of the Cultural Revolution in the 1980s.

On advice from the Foreign Office, we had asked the caterer to provide a pudding that contained a lot of ice cream. After inquiring what the pudding consisted of, all of the Chinese, including their interpreter, politely but firmly refused to eat it, and they could not be persuaded to change their minds.

At the time we were all delighted and ate extra portions!

Milk, I discovered, is one of the most common causes of food allergies. Over 70% of the world's population are unable to digest the milk sugar, lactose, which has led nutritionists to believe that this is the normal condition for adults, not some sort of deficiency. Perhaps nature is trying to tell us that we are eating the wrong food.

Before I had breast cancer for the first time, I had eaten a lot of dairy produce, such as skimmed milk, low-fat cheese and yogurt. I had used it as my main source of protein. I also ate cheap but lean minced beef, which I now realized was probably often ground-up dairy cow.

In order to cope with the chemotherapy I received for my fifth case of cancer, I had been eating organic yogurts as a way of helping my digestive tract to recover and repopulate my gut with 'good' bacteria.

Recently, I discovered that way back in 1989 yogurt had been implicated in ovarian cancer. Dr Daniel Cramer of Harvard University studied hundreds of women with ovarian cancer, and had them record in detail what they normally ate. Wish I'd been made aware of his findings when he had first discovered them.

Following Peter's and my insight into the Chinese diet, I decided to give up not just yogurt but all dairy produce immediately. Cheese, butter, milk and yogurt and anything else that contained dairy produce - it went down the sink or in the rubbish.

It is surprising how many products, including commercial soups, biscuits and cakes, contain some form of dairy produce. Even many proprietary brands of margarine marketed as soya, sunflower or olive oil spreads can contain dairy produce

I therefore became an avid reader of



the small print on food labels.

Up to this point, I had been steadfastly measuring the progress of my fifth cancerous lump with callipers and plotting the results. Despite all the encouraging comments and positive feedback from my doctors and nurses, my own precise observations told me the bitter truth.

My first chemotherapy sessions had produced no effect - the lump was still the same size.

Then I eliminated dairy products. Within days, the lump started to shrink

About two weeks after my second chemotherapy session and one week after giving up dairy produce, the lump in my neck started to itch. Then it began to soften and to reduce in size. The line on the graph, which had shown no change, was now pointing downwards as the tumour got smaller and smaller.

And, very significantly, I noted that instead of declining exponentially (a graceful curve) as cancer is meant to do, the tumour's decrease in size was plotted on a straight line heading off the bottom of the graph, indicating a cure, not suppression (or remission) of the tumour.

One Saturday afternoon after about six weeks of excluding all dairy produce from my diet, I practised an hour of meditation then felt for what was left of the lump. I couldn't find it. Yet I was very experienced at detecting cancerous lumps - I had discovered all five cancers on my own. I went downstairs and asked my husband to feel my neck. He

could not find any trace of the lump either.

On the following Thursday I was due to be seen by my cancer specialist at Charing Cross Hospital in London. He examined me thoroughly, especially my neck where the tumour had been. He was initially bemused and then delighted as he said, "I cannot find it." None of my doctors, it appeared, had expected someone with my type and stage of cancer (which had clearly spread to the lymph system) to survive, let alone be so hale and hearty.

My specialist was as overjoyed as I was. When I first discussed my ideas with him he was understandably sceptical. But I understand that he now uses maps showing cancer mortality in China in his lectures, and recommends a non-dairy diet to his cancer patients.

I now believe that the link between dairy produce and breast cancer is similar to the link between smoking and lung cancer. I believe that identifying the link between breast cancer and dairy produce, and then developing a diet specifically targeted at maintaining the health of my breast and hormone system, cured me.

It was difficult for me, as it may be for you, to accept that a substance as 'natural' as milk might have such ominous health implications. But I am a living proof that it works and, starting from tomorrow, I shall reveal the secrets of my revolutionary action plan.

*Extracted from Your Life in Your Hands, by Professor Jane Plant*

# TWO INDIAN AMERICANS WIN GUGGENHEIM AWARDS

For Ashvin Vishwanath, a professor of physics at the University of California at Berkeley, winning a 2014 Guggenheim Fellowship represents more than just a validation of his research.

As would be expected, the Indian American physics professor was very happy about winning the prestigious award, announced April 10 along with 176 other fellowships by the John Simon Guggenheim Memorial Foundation.

"On the practical side, this will allow me to devote a semester entirely to research," he told India-West. "But what is special about the Guggenheim is that it is awarded to individuals working across a wide range of human endeavors, and for the first time I find myself grouped not just with other scientists, but, for example, with writers and filmmakers whose day-to-day work could not be more different from my own." "But I find myself thinking," he added reflectively, "that although we are trying to understand and express very different things, maybe deep down our goals are not that different. Perhaps emphasizing this unity within the diversity of human endeavors was one of the objectives of the foundation."

The South Asian Guggenheim Fellows named in the U.S. and Canada this year certainly showcase the overall diversity of grantees honored in the creative arts, humanities, social and natural sciences.

In addition to Vishwanath, South Asian winners of grants of various amounts include British Indian novelist Hari Kunzru of Brooklyn, N.Y.; Bangladeshi American filmmaker and visual artist Naeem Mohaiemen of Brooklyn, N.Y.; Sri Lankan-born science writer Ray Jayawardhana of Toronto, Canada; and Indian American mathematics professor Kiran Sridhara Kedlaya of the University of California at San Diego.

The son of a Kashmiri Pandit father and a British Anglican Christian mother, Kunzru has written four novels, a collection of short stories and does travel

writing for U.K. newspapers such as The Guardian and The Daily Telegraph.

His fourth novel, "Gods Without Men," a mysterious metaphysical story set in California's Mojave Desert at Pinnacle Rocks National Park, was well-received by critics.

He told India-West, "I feel honored to be named a Guggenheim Fellow. As the foundation puts it, this is a 'mid career' award, and it feels like a staging post, a recognition that the work I've done so far is of value, and that I have the potential to do more and better in the future." He added, "For me, as a writer who moved from the U.K. to the U.S. six years ago, it's a particular validation - I feel that my work, which has lately centered around understanding American history and culture, is considered worthwhile by the intellectual community here."

Kunzru studied English at Wadham College, Oxford, and then received an M.A. in philosophy and literature from the University of Warwick, U.K. His wife is novelist Katie Kitamura. From 1999-2004 he was music editor of "Wallpaper" magazine and since 1995 he has been a contributing editor to "Mute," a culture and technology magazine.

Mohaiemen, a graduate of Oberlin College in 1993 with a B.A. in economics and a concentration in history, describes himself on Twitter as "a writer and visual artist, working in New York and Dhaka, researching borders, wars and belonging through essays, photography and film."

He directed "Muslims or Heretics," a documentary about struggles between moderate and radical Islamists in Bangladesh; directed and co-produced "Rumble in Mumbai," a documentary on globalization; and directed "United Red Army, The Young Man Was, Part 1," about the 1977 hijacking of Japan Airlines Flight 472 by the Japanese Red Army.

He also co-founded Visible Collective, a collective of New York-based artists and lawyers investigating security panic. Visible's work has been

exhibited internationally, including at the 2006 Whitney Biennial of American Art.

Asked to comment on receiving the fellowship, he told India-West, "While marking the specific (geographic, and otherwise) context of the research many of us are doing, it's necessary to also note the wider interpretative possibilities. 'If you consider the recent scholarship on Haiti's slave rebellion as the inspiration for 'universal history,' I would argue that Bangladesh's trajectory before and after 1947 (as East Bengal, East Pakistan and finally Bangladesh) can be a template for understanding the conditions, and possibilities, of post-liberation disenchantment."

Kedlaya, holder of the Stefan E. Warschawski Endowed Chair at U.C.-San Diego, has a B.A. in mathematics and physics from Harvard University, an M.A. in mathematics from Princeton University and a doctorate in mathematics from MIT.

After receiving his Ph.D., he held postdoctoral posts at the Mathematical Sciences Research Institute at U.C.-Berkeley and the Institute for Advanced Study in Princeton and taught at MIT.

The Indian American mathematics professor is known for his work related to arithmetic algebraic geometry and number theory, especially p-adic cohomology, p-adic Hodge theory and computational number theory.

The author of 49 research papers, Kedlaya is a winner of National Science Foundation five-year Presidential Early Career Award for Scientists and Engineers and Sloan Research and Clay Liffoff fellowships.

Vishwanath, who lives in Berkeley with his wife, Rashmi, and their two young sons, told India-West that he grew up in Bangalore, where his parents still live. He attended IIT-Kanpur, "which has a world class physics program," he said. "Our entire class consisted of only about 10 students a year, and we got a lot of attention from the many strong physicists on the faculty. We were a small minority in many ways

- not just that we were in a science department in what was predominantly an engineering institute, but also that we had decided to pursue a subject that we were passionate about, when the norm was to pick an engineering major dictated by one's entrance exam rank.

The Indian American received a Ph.D. from Princeton, did postdoctoral work as a fellow at MIT and has taught physics at U.C.-Berkeley since 2004.

"My work centers on understanding phenomena such as superconductivity, magnetism and other remarkable properties of matter, starting from basic theories like quantum mechanics," he explained. "Historically, my area of inquiry, which is called condensed matter physics, has also led to numerous important applications, such as the transistor, magnetic memories and magnetic resonance imaging, which have automatically emerged as we deepened our understanding of fundamental principles." He added. "I am a theorist - which means I have trouble explaining to people exactly how I do my research. Most of my work gets done with pencil and paper, sometimes with a computer but always with a lot of talking with my collaborators."

"The goal of my Guggenheim project is to move towards a physical realization of interesting states of matter that have been predicted in my recent theoretical work. One of them is termed a 'Weyl semimetal,' which can be thought of as a three-dimensional analog of grapheme," he said.

Grapheme is a super strong, light crystalline form of carbon.

## **NEW YORK CITY COUNCIL CONFIRMS MEERA JOSHI AS HEAD OF NYC TAXI COMMISSION**

The New York City Council has confirmed Mayor Bill de Blasio's nominee to head the agency that oversees taxis and car services.

Meera Joshi was unanimously confirmed April 10 to serve as chairwoman and CEO of the Taxi and Limousine Commission. Joshi has worked in city government for more than a decade. The Indian American served most recently as general counsel to the taxi commission.

Mayor De Blasio announced her nomination in March, saying she oversaw initiatives that brought better service to thousands of taxi riders.

She also prosecuted financial injus-

tices against victimized taxi drivers.

## **FOUR PIOs RECEIVE SOROS FELLOWSHIPS FOR NEW AMERICANS**

Four Indian-Americans are among recipients of this year's Paul and Doris Soros Fellowships for New Americans. Each year, the fellowships honor and support the graduate education of 30 New Americans, permanent residents or naturalized citizens if born abroad; otherwise children of naturalized citizen parents.

Arnav Chhabra, Sundeep Iyer, Ramya Parameswaran and Sana Raoof were selected from more than 1,200 applicants, and will each receive tuition and stipend assistance of up to \$90,000 in support of graduate education, according to the fellowship website.

Also selected is Indonesia-born Salmah Y. Rizvi, the daughter of a Pakistani father and Guyanese mother and will use the award to support work toward a JD at the New York University School of Law.

Chhabra's fellowship will support work toward a PhD in medical engineering and medical physics. Coming to the U.S. as a teenager, Chhabra began working as a researcher at the MD Anderson Cancer Center in Houston, Texas in high school.

His work there was so impressive that he was asked to lead a project investigating chemotherapy resistance, and in 2009, he was first author on a paper in the *Anticancer Research Journal*, according to his bio data on the fellowship website.

Chhabra's interest in medical technology led him to the Mechanical Engineering program at the University of Texas-Austin, where he investigated nerve regeneration and biomedical polymers. After achieving a perfect 4.0 GPA, he began a PhD in medical engineering at Harvard Medical School and MIT.

In graduate school, Chhabra is creating an on chip model of the liver which will replicate the pathophysiology of human livers, thereby enabling a noninvasive study of liver function. He is concurrently funded by the National Science Foundation.

Iyer, who will use his fellowship toward a JD, was born in New Jersey. After graduating from Harvard, Iyer worked for the Brennan Center for Justice at NYU Law School, a non-partisan think-tank where he directed statis-

tical research to evaluate democratic reforms, his bio data on the fellowship website says.

His research was used in several federal voter rights cases, and his work has been cited in *The New York Times*, *Washington Post*, *Politico* and *National Review*. In 2011, he founded the Statistical Reform in Redistricting Project, whose data have been used by the Sunlight Foundation and Georgia's Legislative Black Caucus.

Currently Iyer is studying for a JD at Yale Law School. By integrating academic research with real-world litigation, Iyer hopes to become an effective voice in safeguarding democracy, the website said.

Parameswaran, who grew up in the Bay Area in California, will use her fellowship to support work toward an MD and PhD in biophysical science. A gifted violinist and Bharatha Nataym dancer, Parameswaran got her first exposure to scientific innovation during a summer internship at NASA while in high school, her bio data says. A few years later, as an undergraduate at Stanford University, her study of cancer in genetically engineered mice earned her the Firestone Medal, given to Stanford University's top undergraduate theses.

Her love for science and her concern for women's health issues influenced Parameswaran's decision to pursue a dual career as a research scientist and practicing physician. Now an MD/PhD student at the University of Chicago, she combines her research in nanoscale biomaterials that can interface with immune cells, with time spent volunteering at the Maria Shelter for women and children on Chicago's South Side.

Raoof, who ran track at school and university in a boy's uniform, will use her fellowship to support work toward an MD and a PhD in molecular oncology. The daughter of Indian immigrants, Raoof was raised on Long Island, N.Y. After studying knot theory at MIT, she won the Intel International Science and Engineering Fair in 2008 and the Taiwan International Science Fair in 2009, her bio data says. Hoping to teach kids the chemistry of smoking versus running, Raoof created a class, *BreatheStrong*, in 2010, and also became editor-in-chief of the *Harvard Science Review* and the youngest keynote speaker for the American Mathematical Society. Her published thesis, which used statistical mechanics to model protein interactions, illuminated the process of antibody optimization.

# IF WE NEED OUR INDIAN GIRLS TO SHINE, GIVE THEM RESPECT AND POWER: RUHANI

**R**uhani is a model and fashion guru. She completed degree in fashion and textile designing followed by a course in CAD (computer aided designing). Has studied and experienced manufacturing and buying of textiles, printing, pattern making, handcrafting, dyeing, exports and imports of garments and home furnishings. She also worked as exports manager and buyer for international firm Maria Gulf Trading Co. in Dubai.

As a model she started walking the ramp and did photo shoots during her college days. After winning Mrs. India Queen pageant in Dec 2013, she walked for top Indian designers at Kingfisher Ultra in Kolkata 2014, Walked the red carpet with actor Irrfan Khan at 8th Asian Film Award held in Macau. She walked as show stopper in Runway 2014 in Colombo, Sri Lanka for top designers. Has been doing photo shoots for brands and boutiques and working with fashion photographers for concept shoots in India, Sri Lanka and Hong Kong. She is not a presenter. Her vision as a fashion model is to provide global recognition to Asian talent through participation as Asian fashion model, promote cultural diversity, encourage women participation and spread awareness of Asian talent across the world.

**1. Ruhani is an actor, model, presenter & fashion guru, explain your modeling & fashion background and vision for future? And presenter means you are hoisting events, launches etc?**

Ans: Vision as a fashion guru is to help people develop the confidence to dress with style and individuality and feel good in their own skin. Create an understanding on what to wear and what not to wear in order to enhance the personal power. Teaching how to shop along with what styles, colors, fabrics, cuts and brands work best for them.

**2. Mainstream films from Hollywood & Bollywood always attracts global talent, you have an ambition to explore**



**the option, if offered?**

Ans: Not at all. Have already refused offers in the past.

**3. You are born in India but settled in Hongkong, share your memories about the old days in India and the new lifestyle in HK? Share details of " Make Me A Star " concept?**

Ans: Have lots of memories of good old days in India. Life was more basic and simple but fun. Family get together and festival celebrations were memorable with close knit families and friends. Friendship was easy and long term. Traveling in trains was more fun

than traveling in flights.

Life in HongKong is more luxurious and convenient. Time and professionalism has value. Life has value. Working in HongKong is more disciplined. Socializing is global which helps you interact with people from different parts of world and culture and helps you have a better understanding at work and maintaining relationships. Life is certainly busier in HongKong than in India. Infrastructure and public transport is much better and saves a lot of time.

In addition, one gets more independent approach toward decision making.



"Make Me A Star " does Image Consultancy, Ward robe make over and Personality Development.

- Help you develop the confidence to dress with style and individuality
- Analyze your wardrobe and help you choose the right outfit and discard the outfits not appropriate for your body type, skin type and personal style
- Help you coordinate entire seasons wardrobe with accessories keeping in mind the budget, personal style and needs
- Go shopping with you to help you shop more Quality clothing rather than Quantity, making you aware of what is a Capsule Wardrobe
- Help you buy the essential must have depending on your personal style

and body type

- Create an understanding on what to wear and what not to wear in order to enhance the personal power. Teaching you how-to shop along with what styles, colors, fabrics, cuts and brands work best for you

**4. You are fashion & textile graduate, how the studies have helped you in shaping your career in entertainment industry?**

Ans: Studies are the foundation of my career. As a model, my studies helped me groom and present myself to outer world of fashion industry in a strong impressive way. With understanding of fashion and textiles it's much easier to understand designer's

requirement to showcase their collections on ramp and in print media.

As a fashion guru, it's the basic knowledge of fashion and textiles that helped me understand fashion to enhance personalities. Designing taught me the differences and strengths of fashion to work with every individual as per their own persona.

**5. As a liberated soul and educated girl, how do you think we can change the life of millions of girls in Indian conservative society? There are sever cases human right violations and submission of basic rights to the female population in the region, how this issue can be addressed for the welfare of humanity?**

Ans: The only way to change life of girl child or women in India is to have women and men both respect womanhood. Its not just the men who need to change their outlook towards women but women themselves need to realize their own importance and start treating themselves as humans and not slaves. Women need to learn to stand up to their own rights and emerge as strong fighters. This all comes with proper education and strong respectful foundation.

If we need our Indian girls to shine, give them respect...power they already have within.

**6. Returning to the fashion industry, how the famous artists are accepted in the mainstream society? The icons are remunerated in parity of the quality work if we compare it with western societies?**

Ans: Famous artists are considered by the mainstream society as role models and larger than life icons. Unfortunately, unlike the western society, in Indian society they are remunerated more on the basis of their popularity and their larger than life image rather than on their quality of work.

**7. Ruhani is living for making change via art & fashion or vice versa?**

Ans: Ruhani is certainly living for making change through her art and fashion. Her personal goal is to lead by an example as a woman of substance and to teach other women that we are perfect, just as we are. That none of us need to fit in prescribed mold to find our value. Lets be woman of substance, honor our nature and claim our wholeness.

*By Ruhi Shukla*



## Strategic Location

- Located in the Rajpuri Creek on the West Coast of India
- Advantageously positioned along International Shipping Routes
- 42 Nautical miles South of Mumbai
- 160 kms from Mumbai by road
- 42 kms off NH 17 and the Rail Network
- Identified node on DMIC & DFC

### Immediate Hinterland

Roha, Khopoli, Mahad, Patalganga, Nagothane, Navi Mumbai, Mumbai, Thane-Belapur, Nasik, Pune

### Secondary Hinterland

Goa, Madhya Pradesh, Gujarat and the land locked States of North India

## Connectivity

### By Road

Northern Shore SH 96, SH 92 and SH 90  
Southern Shore SH 97 and SH 98

### By Rail

Connectivity - Northern and Southern bank  
Proposed Alignment: Agardanda - Indapur - Mangaon

## Development Potential & Planned Facility

### Phase I - 5 Berths :

- 4 Multipurpose Berths, 1 Ro Ro Terminal
- Capacity to handle 30 million tonnes
- Dedicated Approach Channel with a depth of 14.5 m chart datum
- Extensive land bank for development
- Waterfront encompassing Northern and Southern Banks

## SEZ & FTWZ

Port based multi-product SEZ inclusive of FTWZ  
Dedicated world-class infrastructure for warehousing & logistics  
State of the art cargo handling equipment transportation & support infrastructure facilities

## Cargo Potential

- Containers
- Steel
- Automobiles / Automobile Components
- LNG
- POL
- Minerals
- Coal
- Chemicals
- Fertilizers
- Cement
- Iron Ore
- Edible Oil, etc...

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Gateway To Maharashtra



# PENTA T-Pad<sup>®</sup>

## Tablet PC(s)

Penta T-Pad Tablet PC(s), multi-functional devices that appeal to different consumers in different ways

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Web.: [www.pantel.in](http://www.pantel.in) email: [info@pantel.in](mailto:info@pantel.in)



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