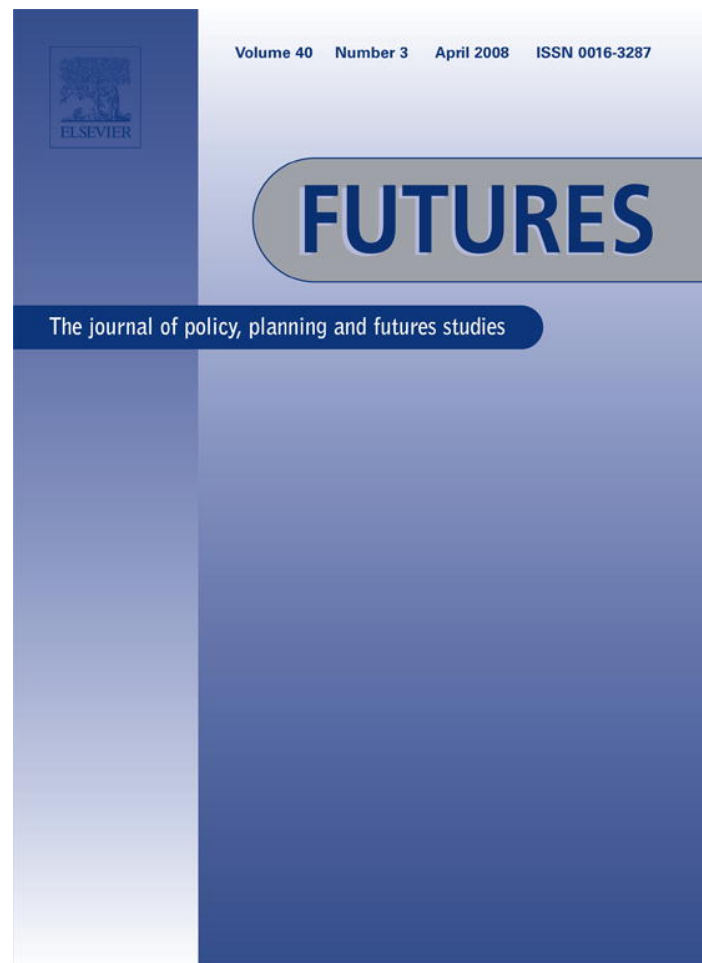


Provided for non-commercial research and education use.  
Not for reproduction, distribution or commercial use.



**This article was published in an Elsevier journal. The attached copy is furnished to the author for non-commercial research and education use, including for instruction at the author's institution, sharing with colleagues and providing to institution administration.**

**Other uses, including reproduction and distribution, or selling or licensing copies, or posting to personal, institutional or third party websites are prohibited.**

**In most cases authors are permitted to post their version of the article (e.g. in Word or Tex form) to their personal website or institutional repository. Authors requiring further information regarding Elsevier's archiving and manuscript policies are encouraged to visit:**

**<http://www.elsevier.com/copyright>**



ELSEVIER

Available online at [www.sciencedirect.com](http://www.sciencedirect.com) ScienceDirect

Futures 40 (2008) 300–304

---

---

**FUTURES**

---

---

[www.elsevier.com/locate/futures](http://www.elsevier.com/locate/futures)

Trajectories

## Asian century, planetary change?

Rakesh Kapoor\*

*Alternative Futures, B-177, East of Kailash, New Delhi 110065, India*

Available online 24 August 2007

---

The beginning of the third millennium seems, coincidentally, to mark the rise of Asia, once again, in human affairs. To look at the future of Asia in the 21st century, and onwards into the third millennium, one needs to look at the numbers. Asia constitutes three-fifths of humanity. The total Asian population has hovered around 60% for the last 250 years and in 2050 it is expected to be 59.5%. Seven of the largest countries by population—China, India, Indonesia, Pakistan, Bangladesh, Russia (only the Asian portion) and Japan—are in Asia and together account for 49.5% of the global population [1]. Asia is remarkable for its history. It has been home to two of the oldest living civilizations of the world, the Chinese and the Indian, and has been the birthplace of all the major religions of the world.

The current awareness and discussion of the rise of Asia rests primarily on the realization of the massive economic growth of China and India, as witnessed in the last two decades and as projected to continue well into the 21st century. Nobody had expected or imagined this in the middle of the 20th century, when China and India became independent countries, but within a 100 years of their independence, both may well surpass the size of the US economy! According to the economist Arvind Virmani who was heading the Indian Council for Research on International Economic Relations (ICRIER), considering GDP at purchasing power parity (ppp) basis, China will equal the size of the US economy by 2017 and may be double the size of the US economy by 2050! India will equal the size of the US economy by 2040 and may be 30% larger than the US economy in 2050 [2].

These projections appear less surprising when seen in the light of current GDP at ppp basis figures. According to World Bank figures for 2005, USA's GDP (ppp) was 12.4 trillion USD while corresponding figures for China, Japan and India were 8.6, 3.9 and 3.8 trillion, respectively [3]. Even according to more conventional GDP calculations done by Goldman Sachs, based on exchange rates (that reflect a less realistic position than ppp-based calculations), China's GDP will be USD 44 trillion in 2050, while corresponding figures for USA, India and Japan will be USD 35, 28 and 7 trillion, respectively [4]. There may be differences in assumptions, methods of calculation, etc., but there is no denying the fact that both China and India will be economic giants comparable to or larger than the US by 2050. Nor does the Asian story end with China and India. Japan will be the fourth largest economy in 2050 and Indonesia, Russia, Taiwan and South Korea and some other Asian countries too will be among the largest twenty economies of the world.

---

\*Tel.: +91 11 26847668.

E-mail address: [mailboxrk@gmail.com](mailto:mailboxrk@gmail.com)

What is amazing is the pace of Asia's economic development. It took the British 58 years (from 1780), America 47 years (from 1839), and Japan 33 years (from the 1880s) to double their economic output. On the other hand, it took Indonesia 17 years, South Korea 11 years and China 10 years to do the same [5, p. 24].

That the Asian economies, led by China, India and Japan will be pre-eminent in the global arena is very likely, and for those obsessed with economics this is perhaps all that matters. The focus on economic development, however, is only part of what will define the Asian and the global future. The more interesting and important question, from the point of view of the future of humanity, is what "the Asian century" will mean for Asian societies and for the rest of the world?

Japan is already a developed economy, a master of western science and technology and has been so for many years. But many observers have noted that there is little of the Japanese "spirit" left in Japan. Nandy notes, for instance, that the Japanese slogan "Western technology and Japanese spirit" no longer holds true [6, p. 32]. Will the other rising nations of Asia go the same way? Or will Asian leadership be able to show another way, a direction different from that shown by the rapacious Western development paradigm? What will be the ecological state of the planet, what will be the havoc caused by global warming and how will human societies deal with its epochal consequences? What will be the status of conflicts? Will we be able to avert the clash of civilizations and create instead an embrace of civilizations? Will economic advancement bring about political freedom for the many human beings in Asia and elsewhere living under authoritarian regimes?

These are some of the most vital concerns about an Asian-led global future.

### 1. Limits to consumption

During the last century, a much smaller population of the West has created ecological destruction and imbalance around the globe. What will the much larger Asian populations, with rapidly growing economies, urbanization and consumption patterns do to water, air, forests, ecosystems and biodiversity? While Asia is home to 60% of the global population, it has only 30% of the land area. Population density in most Asian countries is high, especially in the whole South Asian region, and in South Korea, Japan and Philippines, besides the city-state of Singapore, and Hong Kong [7]. This imposes a big challenge on Asian nations, even to ensure food security and the adequate provision of water for their populations. For instance, although China's food-grain production is currently comfortable at 484 million tonnes, the fluctuation in grain production during recent years had environmentalists like Lester Brown raising an alarm [8]. China's grain production fell in 4 of the 5 years during 1999–2003—dropping to 322 million tonnes in 2003, after expanding remarkably from 90 million tonnes in 1950 to 392 million tonnes in 1998.

China is home to 20 of the world's 30 most smog-choked cities. The country also faces serious pollution of its soil. The problem threatens China's food safety, people's health and the sustainable development of agriculture. According to a Chinese government report, "it is estimated that nationwide 12 million tonnes of grain are polluted by heavy metals that have found their way into soil each year" [9]. Other reports mention that according to studies 70% of the water in the country's seven major river systems is unsuitable for human contact, let alone human consumption, and 300,000 people die prematurely in China every year from respiratory illnesses due to air pollution [10]. The negative environmental impact of China's growth is being felt by other countries too. Green groups have recently slammed Chinese banks for increasing investments in environmentally hazardous and controversial projects both in developing nations around the world and at home. Examples of projects abroad include logging activities in Suriname and Indonesia, a dam in Sudan that will displace 50,000 people when it straddles the Nile river and a potentially polluting nickel mine in Papua New Guinea [11].

To some extent ecological destruction can be prevented or mitigated with better resource efficiencies, better technologies, greater use of renewable energy sources and better environmental management policies. Ultimately, however, there are limits to the earth's carrying capacity. The crucial question for the large and growing Asian nations will be lifestyles and consumption patterns. The extent and manner of consumption will be crucial in determining the extent to which Asian and global ecology can be saved from destruction. A word about the often-criticized value of "consumerism" that is intrinsic to globally pervasive capitalism. It is not just "consumerism"—in the sense of the perpetual creation of new and unnecessary wants—that is destructive of global ecology. Even simple changes in consumption patterns—besides the extravagant and

luxury consumption by the wealthy elite—of large populations pose a challenge. Examples of this include higher consumption of energy, including fossil fuels, greater consumption of meat and poultry, requiring much higher grain production levels and consumption of packaged products leading to more solid waste.

It is ironical, too, that while Asia rises, the Asian tiger—a magnificent symbol of biodiversity as well as of ecosystem health—is close to extinction!

Besides these more conventional environmental worries, the biggest and intractable new threat in the next few decades is global warming. At present the per capita emissions from China, India as well as other Asian countries are low. At present China, India and the rest of the South Asian and South-east Asian countries together, with nearly 50% of the world population, account for only 12.2% of all greenhouse gas emissions and global warming (excluding Japan, which contributes 3.7%), while the United States alone contributes 30.3% and Europe contributes 27.7% [12, pp. 250–251]. However, with high anticipated rates of growth, the share of Asian countries to overall greenhouse gas emissions and global warming will rise substantially and China, India and the other large Asian economies will together become very significant contributors to global warming. Again, the irony is that the low lying, thickly populated coastal regions in Asia will be among the worst sufferers resulting from the deluge. The melting of the Himalayan glaciers within the next three to four decades may spell unmitigated disaster for South Asia.

The key point that Asia has to remember is that it cannot afford to behave as irresponsibly and rapaciously in the consumption and destruction of natural resources as the developed nations of the West have done during the last century. All the large global corporations are gleefully eyeing the large and growing markets in Asia. But if a major ecological breakdown is to be averted, Asian countries will have to do a lot of careful thinking, wise planning and innovation to influence consumption patterns carefully to minimize irreversible environmental damage. The traditions of frugality, simplicity and community that are still alive in the Asian heritage will be important resources to draw upon for this purpose.

## 2. Live and let live

Along with a rapacious destruction of the environment, a defining feature of the twentieth century was the violence of war and the nuclear bomb. The 21st century began with the violence of terrorism: the unprecedented violence of 9/11 symbolizing hatred and the mindless urge to kill in the name of religion. What does this portend for the Asian century?

The roots of 9/11 are complex, but they lie as much in the irresponsible exercise of American hegemonic power, in Iraq and elsewhere, as in the mindlessly violent methods of the terrorists. One can hope quite reasonably that an economically advanced and powerful Asia will be able to rein-in the irresponsible exercise of US hegemony. But even more than countervailing power it will be essential that Asia leads the world in facilitating an “embrace of civilizations”. This will require that the Asian people and the Asian nation-states, in the true spirit of their religions, decide to live and let live with mutual respect. The challenge is the recovery of authentic religiosity itself, as against religion as dogma, ritual and herd mentality, all of which are used to whip up religious frenzy by the religious extremists. The challenge is to overcome religious hatred and to cultivate a spirit of tolerance, if not mutual respect.

Many of the Asian countries have mixed multi-religious populations. If Asia is truly to lead the world and to continue on the path of economic prosperity, then it is imperative that Asia learns the spirit of co-existence. As Sulak Sivaraksa says, each religion has a tribal and a universalistic aspect. And at the base of all religions is universal god or universal love that is not tribal. Arguing against the clash of civilizations thesis, Wendell Bell echoes this sentiment. “There is no clash of civilizations. Most of the people of the world of whatever society, culture, civilization, or religion, whether they are Muslims, Hindus, Jews, Christians, Confucians, Buddhists, atheists, or something else, want to live—and allow other people to live—in peace and harmony. Moreover, many are learning that all of us in the human community are inescapably bound together. More and more, whatever affects one, sooner or later affects all” [13].

If the West subjugated, exploited and colonized its other, then the biggest challenge before the Asian nations is to perceive and live with “the other” in a more humane, genuinely respectful way. “The other” includes not just the religious communities, ethnic groups or races within one’s own societies, or one’s neighbors or old enemies; it also means for the Asian societies the West!

In fact, listening to thoughtful voices from Asia makes us realize that this will not be a small challenge. Sivaraksa says, for instance that the Japanese have been too inward looking and self-obsessed. “The Japanese are much more ruthless than the Northern Europeans, who, although deprived of Christianity, still have Christian ethics. Although belief in the spiritual dimension has disappeared from Christianity, this ethical dimension—that we must also care for the rest of the world—remains. They are poor and inferior but we must care for them. The Japanese never care beyond the Japanese islands” [6, p. 67].

The co-existence of cultures and communities in Asia is going to be even more important because the extent of migration within Asian countries or within the countries of the South is going to increase substantially in this century. A crucial question will be whether these migrants will be accorded the human dignity due to them? Some of the Asian countries are notorious for their track record in this matter.

Japan, being the only highly developed nation in Asia, presents another dilemma. It has been a deeply isolationist and exclusivist society, although it has permitted greater in-migration in recent years. An interesting aspect of Japan in the 21st century is going to be the very high use of robots in manufacturing as well in other fields. In 1990 itself, it possessed 65–70% of the world’s industrial robots! [14, p. 88]. In more and more sectors such as looking after the aged Japan is developing robots to substitute for human beings in a big way. And there are also robo-pets! This suggests another direction—away from human co-existence—in which future societies with a population deficit may move.

### 3. Freedom from tyranny

In a number of the Asian countries, beginning with China itself, people live under authoritarian if not outright tyrannical regimes. This is either due to military rule, as in Myanmar and Pakistan, or dictatorial rule by a communist political party, as in China and North Korea. Then there are the Islamic theocratic states such as Iran and Saudi Arabia.

Can we hope that with economic advancement there will be greater political freedom in Asia? If the situation does not improve in the near future, Asia may be host to almost 2 billion people living without political and religious freedom. It is true, as Mahbubani argues convincingly, that the Western emphasis on the universality of human rights and liberal democracy has been applied in a hypocritical and pragmatic way, depending upon the interests of the western countries, while the Western nations are not prepared to give the same leeway to the Asians and other countries to shape their own paths to the future [5]. But it is also true that in the long run at least the quest for genuine political and religious freedom has to be acknowledged as valid. The “rise” of Asia will have little meaning if well over a third of its population continues to be oppressed under authoritarian regimes.

The agenda for democracy and freedom does not have to stop here. In socialist democracies such as India and Sri Lanka, there is complete political and associational freedom, but power and privilege continues to be in the hands of the small English-speaking economic and political elite. The agenda has to give a much more real and deeper meaning to democracy through decentralized structures of governance and ways to encourage much greater direct involvement of citizens in the processes of governance.

With reference to the Islamic states, Chandra Muzaffar argues that although most of them declare that they are based on the Koran, the Sunna and so on, they have not lived up to Islamic political ideals. According to him “if you look at Islam in terms of its philosophy, the nature of Koranic revelation, there are very clear, lucid political values. The tragedy is that Muslims up to now have not been able to use those values to develop an alternative political culture. Contemporary Muslims have been obsessed much more with capturing state power rather than evolving an alternative Islamic political culture” [15, p. 109].

### 4. Rediscovery of roots

The last and extremely significant question for Asians in the 21st century will be the rediscovery of their roots. In the many colonized societies of Asia, the process of decolonization has made little progress. This could have happened otherwise, but the fact that it did not is, at the same time, not very surprising. The newly independent countries were extremely poor, and in the formative phase of their existence were busy in stabilizing their systems of governance, institutions and dealing with various crises such as the oil shocks of the

1970s. The visionaries in these societies always knew the value of their tradition, but in general these societies needed to reach a certain level of economic development before they could get the cultural self-confidence to rediscover or begin to realize the value of their traditions. At the beginning of the 21st century, this time has now come.

As Kishore Mahbubani writes, “A new discourse will begin between East and West when Asian societies start to successfully develop again” [5, p. 15]. However, Mahbubani is careful in asserting that all the blame for the problems of the Asian societies should not be laid at the door of the West. Along with a rediscovery of their traditions, Asian societies also need to introspect why they succumbed so easily to the onslaught from tiny European nations. A full and honest examination of this question, like the full excavation and revitalization of traditional knowledge, is still due.

The problem of carrying out this task is indeed that most of the Asian societies are already “westernized” in significant ways. Nevertheless, large sections of the population of these nations are not westernized or only superficially westernized, and one would also think that values internalized over millennia may not mutate so easily over a period of two or three centuries. For instance, most of the Asian societies retain much stronger emphasis than the west on values such as attachment to the family and the community, respect for authority and the elderly, frugality and living in harmony with nature. The new internet and communication technologies (ICTs) and the related onslaught of western—especially North American—“soft power” are contributing to the erosion of these values and to the rise of a perverse individualism, that privileges both individual success and individualized relationships, often mediated through the new ICTs. Yet, if the Asian societies continue to stick to their traditional values, they can save themselves from the predicament that America finds itself in today due to the tearing down of social institutions that restrained the individual. “The results have been disastrous. Since 1960, the US population has increased 41% while violent crime has risen 560%, single-mother births by 419%, divorce rates by 300%, and the percentage of children living in single-parent homes by 300%” [5, p. 99].

The point of the Asian century is not that Asia will lead by virtue of the numbers and the economic clout it will have. The point and the challenge is *how* Asia will lead? Will it be able to show another direction for global development—a direction that will celebrate the diversity of cultures and increase the chances of peaceful co-existence among the community of nations? Will it lead in a way that will be morally superior, spiritually more meaningful, ecologically sustainable, more respectful of “the other” and more humane than the west?

## References

- [1] <[www.en.wikipedia.org/wiki/Human\\_population](http://www.en.wikipedia.org/wiki/Human_population)>.
- [2] A. Virmani, *A Tripolar World: India, China and US*, ICRIER, New Delhi, 2005.
- [3] <[www.en.wikipedia.org/wiki/List\\_of\\_countries\\_by\\_GDP\\_\(PPP\)](http://www.en.wikipedia.org/wiki/List_of_countries_by_GDP_(PPP))>.
- [4] <[www.theodora.com/wfb](http://www.theodora.com/wfb)>.
- [5] K. Mahbubani, *Can Asians Think? Understanding the Divide between East and West*, Penguin Books, New Delhi, 2004.
- [6] P. Hutauwatr, R. Manivannan, *The Asian Future: Dialogues for Change*, vol. 1, Zed Books, London, 2005.
- [7] <[www.en.wikipedia.org/wiki/Population\\_density](http://www.en.wikipedia.org/wiki/Population_density)>.
- [8] L. Brown, China's Shrinking Grain Harvest, 12 March 2004, <[www.theglobalist.com/DBweb/StoryId.aspx?StoryId=3827](http://www.theglobalist.com/DBweb/StoryId.aspx?StoryId=3827)>.
- [9] <[www.enn.com/today.html?id=10889](http://www.enn.com/today.html?id=10889)>.
- [10] Asian Affairs, Pollution: The Price of Success, *Asian Affairs*, April 2005, pp. 12–13.
- [11] <[www.enn.com/today.html?id=12748](http://www.enn.com/today.html?id=12748)>.
- [12] A. Gore, *An Inconvenient Truth: The Planetary Emergency of Global Warming and What We Can Do About It*, Rodale, New York, 2006.
- [13] W. Bell, The Clash of Civilisations and Universal Human Values, *Journal of Futures Studies* 6 (3) (2002) 1–20.
- [14] P. Kennedy, *Preparing for the Twenty-first Century*, Harper Collins, London, 1993.
- [15] P. Hutauwatr, R. Manivannan, *The Asian Future: Dialogues for Change*, vol. 2, Zed Books, London, 2005.