

## 'China starting to counter Climate Change'

BOOK REVIEW by Charles Rue JPICoz  
- World Watch Institute, *State of the World 2006: Special Focus, China and India*, 2006, NY: W. Norton, 244 pages.

The World Watch Institute's forte is environmental issues. Its Report on the *State of the World 2006* has a twin focus - the energy crisis in China and the farming crisis in India. Over ten chapters, it explores this focus through other ecological lenses such as the global meat industry, freshwater eco-systems, mercury in the food chain, and alternatives to oil. It puts an eye on the advent of nano-technology as literally a foundational revolution in science. Also, it revisits old social justice chestnuts - natural and man made disasters as peace making opportunities, building a civil society through community participation, trade issues, and the transformation of trans-national corporations.

The authors explain their 2006 emphasis on China and India. The reason given is that these nations are economic giants that are affecting the global ecological system - their air pollution travels the world, their changed status from being self sufficient in oil and gas to become net importers, and their food grain is increasingly being fed to animals.

Both nations are growing in power and their peoples will have even greater impact on the rest of the world in the future. Both nations have made education of the people their prime investment, resulting in vast numbers of graduates from computer engineers to financiers. But China and India's rural poor grow restless to enjoy some quality of life. Farming communities make up more than half the populations of these nations but they cannot all move to the cities. The only solution is in developing ecologically sustainable farming which benefits rural communities.

As part of averting ecological and social disaster for these nations and the globe, leading China economic planners, such as Pan Yue and Zjeng Bijian judge the western model of development as a failure. They want to 'leapfrog' the systems of the western world - factory farming and energy intensive city living.

China's energy use is changing very rapidly. Research into solar, biogas, wind, mini and other alternatives energy sources are coming on line - China already has 75% of the world's solar hot water capacity. An energy efficient integrated bus system, like Brazil's Curitiba model (BRT), has started in Kunming and several mega cities are to follow. Water harvesting in tanks for local use and less thirsty industry is also coming online just as rapidly.

'He who takes no thought about what is distant shall find sorrow near at hand', said Confucius. The western world must accept China and India as pivotal to a global future, and understand that these nations are consciously trying to leapfrog capital intensive western systems of energy and factory farming. This is in spite of starting from a long way back and internal inconsistencies led by wealthy consumers. Importantly, universities in both nations are turning out very clever and capable non-western educated and non-western thinking graduates.

A chapter on meat/cows features in *State of the World 2006* to illumine one inconsistency. It is a challenging chapter for Catholics who used to abstain from meat on Fridays. China now leads the world in meat production and consumption, and the trend is up. India has had a 'white revolution' with soaring milk production. Both trends are signs of wealth and prosperity. However, the changes mean diverting grain away from human food, and increasing health risks by using factory farming. In that system, feed is easily contaminated, disease spreads more easily and antibiotics are widely used. This chapter

argues that globally, the human diet needs a rethink.

Another chapter traces the rise in the production of ethanol and bio-diesel, not only in Brazil but also in China and the USA. It is a mixed message. Environmental impacts are reduced if perennial crops are used. But, dangers to food supply, species diversity, and increases in mono-pests remain. Overall, using this form of energy is better than oil use. For the western world, however, using this type of energy might be a form of denial and delay the introduction of more long-term solutions.

A chapter on *nano technology* is probably the most frightening in the book. It is predicted to be a \$2.6 trillion industry by 2014, 15% of global manufacturing. From its 'little BANG theory', all chemical elements of the Periodic Table are built into new creations from the foundations up. There is no distinction between living and non-living matter. It crosses and blends industry barriers in a new convergence. It uses properties unique at the nano scale – carbon is stronger than steel and six times lighter, aluminium explodes and can become rocket fuel. The benefits could be great – nano constructs could surf the blood stream to eat up cancer cells, but the dangers are also great – self replicating constructs and toxic risks dramatised as 'green goo' taking over the world.

The social impacts of *nano technology* will be immense as workers become redundant and the poor are denied access to the benefits through patenting rights. In a scenario similar to GE patenting monopolies, four corporations control *nano technology*. But remarkably, China may change this. China is at the forefront of *nano technology* through investment in training research scientists over decades and it leads the way in standardising nano processes.

Great danger lies in the fact that *nano technology* has already entered the market place but remains unregulated. A

big part of the problem is the lack of awareness among the public and governments. A thousand products are now in use - sunscreens, tennis rackets, anti-bacterial dressings, stain proof clothes, food additives, agricultural sprays etc – with exponential growth likely. Some positive outcomes could be its use in making cheaper solar cells and better water filters. Downsides include the synthesis of DND, even of diseases like smallpox, and its military uses. The world needs a UN body to track, evaluate, accept and reject the uses of *nano technology*. (c/f ETC website).

The last few chapters of *State of the World 2006* look at the issues of Trade and Sustainable Development, the Greening of Chinese Civil Society, and the Transformation of Corporations. It reports on signs of hope. For example, rulings within the disputes panel of the WTO have tentatively upheld the view that nations can regulate imports because of environmental factors. Issues such as air pollution and the construction of dams on wild rivers in China has led to the rise of NGOs which have gained legal recognition for citizen participation in government. Major corporations are taking social and environmental factors into their future plans, even if their bottom lines are the major consideration.

*State of the World 2006* is an up to date and readily accessible source of statistics that are helpful to any reading of the 'signs of the times'. The book's messages of seeking the good, acting responsibly and with hope, sit easily with Christian mission, and act as a reader on some China realities. This book can be read as a review of Columban Justice and Peace priorities.