BOOK REVIEWS

Adapt or Die: The Science, Politics and Economics of Climate change.

Edited by Kendra Okonski, Profile Books Limited, London, 2003

**A Review by Geoffrey Imende*

Cynics have stated that part of the vision behind the Kyoto Protocol 1997 portends for developing countries in the 21st century what apartheid bore for South Africa in the 20th Century. The threats to humanity that come with an increase in global temperatures include rising sea levels, changes in agricultural production, severe weather events such as hurricanes, the spread of diseases such as malaria and environmental effects such as the loss of biodiversity. Environmentalists have used these eventualities as justification to advocate for the reduction of global trade, consumption of vital resources such as energy, and most dramatically, suggesting that third world countries should not pursue the same course of development as the developed countries. The suggested alternative is alleged to be environmentally friendly yet more expensive. All these are being pursued under the Kyoto Protocol, The Protocol, said to be the 'insurance policy' for humanity, has been largely driven by the assumption that the impacts of global warming, if unmitigated, will pose threats to humanity and to the environment.

Adapt or Die is a collection of articles from 13 eminent authors on the science,

politics and economics of climate change. The editor, Kendra Okonski, is the director of Sustainable Development for International Policy Network [London]. She holds an economics degree from Hillsdale College.

Adapt or Die pursues an alternative debate platform from that applied in the Kyoto Protocol. According to Philip Scott, a Professor Emeritus of Biogeography in the University of London, Kent, it confronts the most tenacious myths of the new millennium, namely the dangerously mistaken belief that the correct approach to climate change is to try to manage climate itself. The spirit of the book is implied from its title: Adapt or Die. In her Introduction to the book, Kendra Okonski states that 'humanity has, over the past 12,000 years, adapted to changing circumstances, and there is no reason to believe that such adaptation will not continue'. The challenge, according to her, is to create an environment in which * adaptation can flourish without being stifled.

The book evaluates strategies to mitigate global warming and its potential consequences and compares these with strate-

Book Reviews

gies focused on adaptation. The conclusion arrived at by the authors is that we should prioritize our efforts and resources based on a cost benefit analysis before pursuing a particular course of action.

The book has been structured in a manner that makes it easy for the reader to grasp the issues raised. It proceeds with a foreword and introduction that give a concise insight at the contents thereof. The substantive sections of the book are divided into four parts.

Part one of the book, titled, 'Possible Impacts of Climate Change' analyses the negative impacts of global warming that have been propounded as its consequences. The purport of this section is to question the 'hyped' negative impacts of global warming that have been proposed by environmentalists and policy makers as a justification for taking unprecedented measures to avert or reduce global warming.

Dr. Paul Reiter delves into the question of whether global warming would bring back mosquito – borne diseases to Europe as has been argued by alarmist environmentalists. He proceeds by first assessing the myth of the causes and consequences of global warming. He incisively notes at page 23 that:

The principal greenhouse gas is water vapour—about 2% in volume—but public attention is mainly focused on carbon dioxide, a gas that is the ultimate source of carbon for nearly all plant life on the planet.

He then proceeds to analyze the life cycle of the mosquito and the effect that temperature has on it. He looks at life in Ancient Greece and Rome, the Dark and Middle Ages and finds that from ancient history, the spread of malaria was, contrary to public opinion, at its most during the cold spells in the climate. This leads him to the conclusion, at page 30, that:

The decline of malaria in all these countries cannot be attributed to climate change, for it occurred during the warming phase..

According to Reiter, changes in lifestyles and living conditions were the most important factors in the elimination of malaria from Europe. He therefore questions environmental activists propositions, such as those by the World Wildlife Fund, for drastic environmental controls requiring the expenditure of colossal sums of money to curb the return of malaria in Europe due to global warming.

Dominic Standish, in Chapter 2, looks at the impact of the application of the precautionary principle to challenge the implementation of project MOSE intended to control the 'sinking' of the City of Venice. The project legally recognized in 1973, but has yet to be implemented todate, proposes a system of 79 mobile barriers that would block the high tides that cause flooding. He concludes that the application of the precautionary principle has been [ab]used by environmentalists to prevent the 'adaptation' by the people of Venice to the threat posed by the increase in sea levels that threatens the existence of the city.

The costs/benefit analysis of the Kyoto Protocol is, perhaps, one of the most revolutionary revelations that this book brings forth. Indur Golkany makes a telling analysis of the impact of global warming. He notes that despite any warming, by virtually any climate-sensitive measure of human well being, human welfare has improved over the last century. For instance, he comes to the conclusion that with the Kvoto Protocol in place, the population at risk of contracting malaria would only reduce by the year 2080 by a meager 0.3% compared to a 'non-Kyoto' period over the 1990 levels. In so far as food production is concerned, he concludes, at pages 63 and 64 that:

...In the absence of global warming, global cereal production would increase by 123% in the 2080s. Such an increase is only plausible provided agricultural technology continues to enhance productivity, sufficient investments are made in the agricultural sector and related infrastructure, and trade continues to move food from surplus areas to deficit areas.

During global warming, agricultural production may decline in poor countries but may increase in wealthy counties. Thus, downturns in economic growth, slower technological change, or less voluntary trade of food supplies are more likely to create a future food crisis than any potential global warming.

The question therefore is whether it is prudent to invest all these resources to implement the Kyoto Protocol when there are more pressing issues such as improving the economic well being of the poor countries to enable them increase their resilience and capacity to withstand adversity. In other words, help third world countries develop a capacity to adapt.

In Part two of the book, the strategies for adapting to change are canvassed. Martin Agerup looks into the science behind the concept of global warming. He assesses the effects to the global temperature from increases of various greenhouse gases in the atmosphere. He concludes that although water vapour is the most important greenhouse gas, it is the least understood by scientists in so far as its impact thereof is concerned. The Intergovernmental Panel on Climate Change, the 'think tank' behind Kyoto Protocol, uses computer models to predict the impact that the GHGs have on the atmospheric temperature. However, the IPCC has conceded that:

Probably the greatest uncertainty in future projections of climate arises from clouds and their interactions with radiation....

This is based on the understanding that water vapour has both positive and negative feedbacks to the atmospheric temperature. The models however only apply its positive feedback thereby exaggerating the effects on global temperature. He therefore argues that there has been an abuse of the models to create an alarming projection. In the European Union alone, the cost of Kyoto Protocol would be between 940 million and 2.6 billion

Book Reviews

Euros. Agerup argues that the fallacy of this is that the focus is on the Annex 1 countries of the Protocol that have emission targets to meet, yet, the portion of emission from non – annex 1 countries, developing countries, is growing by the day from countries such as China, Russia, and India. This would wipe out any benefits from the perceived reduction in emissions from the annex 1 countries.

Though this argument is compelling, it is untenable, in my view, to the extent that it ignores the development of environmental principles such as the precautionary principle. Principle 15 of the Rio Declaration, 2002, requires States to protect the environment according to their capacities. It states that:

Where there are threats of possible irreversible damage [to the environment], lack of scientific certainty should not be used as a reason *for not taking measures* to prevent environmental degradation

Therefore, though there may be uncertainties as to the explicit effects of water vapour to the atmospheric temperature, this is no excuse for not taking precautionary measures in view of the impending threats to the environment. It is further arguable that adaptation occurs over time yet the principle presupposes a proactive approach in view of impending threats to the environment.

Barun Mitra tackles the issue of sustainable energy for the poor. He specifically focuses on the Indian energy sector. He

finds that the reliance on traditional energy sources such as cow dung, firewood and kerosene has the most devastating effects to the environment compared to industrial pollution. He argues that the solution to this problem is not the reduction in energy consumption, but the increase. This he says would;

..lead to more energy efficiency, which will lead to environmental benefits and sustainable energy consumption.

He argues for the address of the energy problems of the poor people in the rural areas. He concludes that;

The Clean Development Mechanism, part of the Kyoto Protocol, ... is motivated by the wrong goal – one of limiting rather than making energy available, affordable and clean for everyone – it is likely to hinder rather than promote sustainable development.

Andrew Kenny, in Chapter 6 of the book, looks at the Clean Development Mechanism and what it portends for third world countries. He argues that the CDM is akin to religion used by missionaries to make the colonization pill more palatable. CDM will allow rich countries to meet their own emissions cuts by reducing emissions in poor countries. It provides that:

If a rich country pays a poor country to reduce emissions by one ton, the rich country can claim that ton as credit towards meeting its own Kyoto targets.

He therefore argues, and truly so, that this is a *carte blanche* to allow rich countries

to choose projects based on their ideologies, interests and needs than of the poor recipient. This calls for the rethinking of the CDM policy so as to enable poor countries get technologies beneficial to them. Kenny ought to make propositions to enable poor countries play a more defined role in the programme.

Part three of the book looks at the economic consequences of climate change policy. Julian Morris looks at the problems likely to be faced in the implementation of the Kyoto Protocol. Morris argues that to achieve greater results from any environmental treaty or policy, trade measures such as sanctions and tariffs are rarely the best way to do this. The argument is made that due to this conclusion. the Kyoto Protocol should not adopt such measures to ensure compliance. The creation of enforceable private proprietary rights in the item sought to be conserved is the most efficient and effective way to achieve its conservation. It is arguable whether this concept can work in an issue such as climate change.

Martin Livermore addresses the threat posed by Kyotonomics on business. He looks at the economic implications of enforcement of the Protocol in Europe. He finds that businesses will carry most of the burden of its implementation, which will be passed down to consumers. The beneficiaries in the whole scenario are the large multinational businesses capable of influencing the policies at the international level. The small businesses are likely to lose any competitive edge vis-à-

vis the multinationals. He argues that businesses have the capacity to adapt to the exigencies of time to be more efficient and produce environmentally friendly products. They should therefore be allowed to economically adapt to the climate change issue rather than be forced to. This argument is, in my view, too capitalist to be applied in a 'precautionary' world.

Part four of the book looks at the concept of bootleggers, Baptists and the global warming battle. Bruce Yandle and Stuart Buck investigate the reasons behind the withdrawal by the United States from the Protocol. This they claim is due to the bias that the Protocol has for Europe vis-à-vis the US and the impacts that the Protocol would have to the US economy. They also look at the economic theory of regulation. This theory concerns the separate interest groups behind the Protocol, or any other regulatory regime. For Kyoto, these would be the environmentalists, the politicians and the multinational companies. Their varying interest in the climate change debate has a direct effect on the policies adopted. Therefore, it is argued that due to the varying and selfish interests by these groups, the policy behind Kyoto Protocol is not what is most cost effective with the greatest environmental benefits. Again, this argument fails to consider the precautionary approach as it fails to give a proactive alternative.

In Chapter 10, Benny Peiser looks at whether climate change is what it is posed to be; the genesis of an apocalypse. He

Book Reviews

looks at reasons behind past societies' collapse. He looks at the reasons behind the collapse of the Roman and Akkadian Empires and the Mayan civilization. He concludes that:

Contrary to popular belief, the biggest climatic risk to the stability of complex societies is not global warming, but global cooling, and the potential risks this would pose or agricultural on food production.

He therefore proposes that we adapt to the threat of climate change just like olden societies adapted to threats to their existence leading to discoveries such as fire and the agrarian revolution.

Carlo Stagnaro, in Chapter 11, investigates the political economy of climate change. In looking at the costs of the Protocol, he states:

If the countries listed in the Protocol's annex 1 fully accepted and enforced its requests, the warming would be minimally mitigated, that is, by only 3 - 10% in one-century period.

....Kyoto will do little to help the earth's climate, 'with a temperature increase by 2100 of around 0.15 degrees less than if nothing had been done', and this would occur six years later – in 2100 rather than in 2094.

He proposes that we should prioritize climate change, amongst other policy priorities. This conclusion is also untenable in view of the precautionary principle despite the uncertainties inherent in the climate change policies.

Finally, Kendra Okonski, the editor, looks at the scope covered by the book. She wraps the whole debate covered in the book and puts forward proposed alternatives to Kyoto.

Adapt of Die introduces a revolutionary alternative to challenge the Kyoto Protocol. Definitely a must read!

LLB Hons, Moi University, Bar candidate at Mohammed and Muigai Advocates.