ENVIRONMENT AND SUSTAINABLE DEVELOPMENT


While small island developing states (SIDS) are micro-contributors to anthropogenic climate change, they are among the most vulnerable to its impacts, with some islands even facing the possibility of extinction. Recognising their vital stake in an effective climate regime, small island states formed a negotiating group, the Alliance of Small Island States (AOSIS), to represent their interests in the international climate negotiations. Given their limited power, however, to what extent, and by what means, did AOSIS impact the climate regime? Assuming that both the process and outcome of negotiations depend largely on power, this article argues that low-power parties can nonetheless exert influence in international negotiations by ‘borrowing’ power, that is, by drawing on external power sources. A framework for analysis is thus developed and used to assess AOSIS’s negotiating strategies and respective successes in the climate change regime from 1990 to 1997. As the analysis reveals, AOSIS made use of external sources of power over this period, and shaped the negotiations to a remarkable degree, much more so than the a priori power distribution would predict.


After mulling over whether China and India should divide hydrocarbon reserves among themselves, the Government of India has told its energy majors to sign up more contracts no matter what. But Delhi is in a bind. To compete with China’s oil giants, India’s energy firms will have to bulk up. If they do, they risk triggering a new round of resource contestation India cannot win – or can it?

This paper argues that poverty assessments that use standard money-metric indicators of poverty overlook the welfare of communities highly vulnerable to weather-related extremes, and that an assessment of vulnerability to climate change should be an integral part of poverty assessment. Using Ghana as a case study, this paper evaluates to what extent the standard money-metric measures of poverty represent the welfare of those households vulnerable to weather-related extremes. In addition, the paper illustrates the importance of mainstreaming climate change into development strategies, highlights the importance of integrating vulnerability assessments and stresses the need for developing adaptation strategies for poverty alleviation.


The fundamental idea of this article is that the enormity and nature of the challenges created by climate change are redefining the understanding and definition of international security. The threats posed by climate change have become considered security threats, especially since 2007. I also argue that an international norm concerning climate change started emerging and became consolidated around the same time. The norm building process occurred due to three elements: a basic international legal regime, constituted since the 1992 United Nations Framework Convention on Climate Change (UNFCCC), its 1997 Kyoto Protocol (followed by ratification by the majority of states), and the 2009 political framework set out by the Copenhagen Accord. All this was guided by authoritative scientific evidence throughout. The consolidation of an international norm concerning climate change demonstrates that norm internalization processes in treaties do not automatically result in successful norm crystallization. It took a dramatic shift of position in the domestic arena in the United
States and other recalcitrant states for the international norm to consolidate. This shift of mood was multilayered: i.e. it included the participation of many actors in society, especially local and state governments, as well as the private sector. Most importantly, the security aspects of climate change became known and this dimension of the debate gained enormous prominence.


Both the Chinese government and the Tibetans are in agreement over the impending issues relating to the adverse impact of climate change on Tibet while the India-specific data on glacier melt is as yet inconclusive. There is, however, a difference of perception in Sino-Tibetan discourse over the capitalist model of economic development being undertaken by China which is at variance with the cultural practices of Tibetans, formed and regulated as they are with the Buddhist values of oneness with nature. Nomadism is also fundamental to the preservation of the ecology of Tibet. The Chinese policy of encouraging non-Tibetan influx of population, greater than the sustainable carrying capacity of Tibet, is enhancing the danger of an ecological meltdown. Due to ecological interconnectedness and interdependence, the article argues that Tibet, the water tower of Asia, should be preserved as a regional if not a global common for the sake of south Asian security.


When the dust settles after the Cancun climate change conference of the United Nations, a careful analysis will find that the adoption of the “Cancun Agreements” may have given the multilateral climate system a shot in the arm, but that the meeting also failed to save the planet from climate change and helped pass the burden of climate mitigation onto developing countries. Instead of being strengthened, the international climate regime was weakened by
the now serious threat to close the legally binding and top-down Kyoto Protocol system and to replace it with a voluntary pledge system.


The article develops the basis for managing cities sustainably by examining two inter-related phenomena associated with urbanization—its role as the driver of the global economy and its impact on the global environment. It focuses at the ‘mezo’ level—the level of sub-national economies and regional-level physical systems (e.g., water basins) and institutional systems (including local and metro government agencies). It describes the key elements of an urban economic system which support (i) its role in inclusive economic growth and (ii) a systemic approach to decreasing its environmental impact. Examples of good practice are provided, mainly from Asia where the pressure of urbanization is greatest in population terms. The article concludes by suggesting ways of strengthening these elements and suggesting new partnerships among donors, banks and local governments and communities to do this.


Asia’s economic development successes will create new policy areas to address, as the advances made through globalisation create greater climate change challenges, particularly the impact on urban health. Poverty eradication and higher standards of living both increase demand on resources. Globalisation increases inequalities and those who are currently the losers will carry the greatest burden of the costs in the form of the negative effects of climate change and the humanitarian crises that will ensue. Of four major climate change challenges affecting the environment and health, two—urban air pollution and waste management—can be mitigated by policy change and technological innovation if sufficient resources are allocated. Because of the urban bias in the
development process, these challenges will probably register on policy makers’ agenda. The second two major challenges—floods and drought—are less amenable to policy and technological solutions: many humanitarian emergency challenges lie ahead. This article describes the widely varying impact of both globalisation and climate change across Asia. The greatest losers are those who flee one marginal location, the arid inland areas, only to settle in another marginal location in the flood prone coastal slums. Effective preparation is required, and an effective response when subsequent humanitarian crises occur.


India’s annually renewable water resources are finite, subject to uncertain climatic variability. These resources have to be systematically monitored and managed to meet the legitimate needs of a diverse society. Ideally, a unifying national water policy to enable rational water management will give consideration to scientific knowledge of the nature of the resource within the set of human values to which India’s democracy is committed.


Energy efficiency and energy conservation are the cornerstones of win-win strategies for reducing emissions while fostering economic development. Renewable energies can technically contribute to practically all sectors of energy demand, that is, fuel for transportation, electricity, low temperature heat for space heating and hot water and, to a limited degree, to high temperature process heat. However, costs and variability are the two major security concerns regarding renewable energies. An improvement of energy security by using renewable energies is possible but it causes additional costs. However, a sufficiently widespread variety of energy sources implies the acceptance of a certain spread of costs in any case. This means that efforts to improve energy security do not come for free. More secure energy systems require higher costs and thus, higher energy prices.

The Kyoto Protocol, with its crucial distinction between developed and developing countries, was critically wounded in Copenhagen and has virtually been buried at Cancun. It may be predicted with some confidence that the Kyoto Protocol will be replaced at the next climate change conference in Durban by a single framework for all categories of nations. Binding and stiff emission reduction targets for developed countries, decided on the basis of the science and the sustainable upper limit for atmospheric greenhouse gas concentrations, now appear set to be replaced by a bottom-up pledge-and-review process with potentially dangerous outcomes for global climate.


Climate finance or additional resources for developing countries to fight global warming was an integral element of the Copenhagen Accord drawn up at the climate summit in December 2009. But preparatory meetings for the next round of climate negotiations indicate that the sinners of climate change have already begun to backtrack.


The eradication of poverty and prosperity depend upon the economic development of a nation which in turn is dependent on an adequate and continuous supply of energy sources. Hence, energy is the lifeline of economic development. The rise of South Asia in general and India in particular as a force on the economic scene is now widely acknowledged. India’s growing population and expanding economy with the shift in focus from agriculture to the manufacturing and services sectors have led to an increase in energy intensity which has resulted in an unprecedented
demand for energy sources. Though India is diverse in its energy endowments and requirements, its need for clean and stable supplies of energy at sustainable prices will rise in tandem with its development graph. According to projections, India’s primary energy demand is expected to grow from 570 million tonnes of oil equivalent (m toe) to over 1200 m toe by 2030. Moreover, its declining oil reserves, uncertainty over its future oil supply, fluctuations in global oil prices and the growing concerns over climate change have further increased its apprehensions with regard to energy security.


With the first commitment period of the Kyoto Protocol expiring in 2012, time seems to be running out for a new successor agreement. The Protocol remains the most comprehensive attempt to negotiate binding limits on anthropogenic green-house gas (GHG) emissions. The long-term challenge, defined by the United Nations Framework Convention on Climate Change (UNFCCC), is to stabilise GHG concentration in the atmosphere at levels that would prevent interference with the climate system. There are, however, economic and social realities that drive anthropogenic GHG emissions. States face serious challenges of balancing economic growth on the one hand, and sustainability of natural resources and energy choices on the other. This dilemma has for long defined and continues to underline the climate change debate. This article chronicles the process of climate change negotiations and examines the political dead-locks through scientific uncertainties, lack of trust-building, inadequate leadership and political regrouping.


The politics of nuclear energy arises because certain nations—specifically the United States and its Western allies—want to restrict the flow of nuclear technology on the premise that such access will ease the development of nuclear weapons. Reactor produced
plutonium is unsuitable for the development of nuclear weapons. Only once in 1965 was a nuclear explosive device tested based on plutonium derived from reactors. The presence of the isotope Pu-240 in weapons grade Pu-239 in reactors makes the yield uncertain. Yet the myth is sustained. The NPT was built as an edifice to implement inequity. It defines nuclear weapons states (NWSs) as those that have tested any kind of nuclear device before January 1, 1967. The US, Russia, China, the UK and France are thus NWSs. Hence their accession to the NPT does not prevent them from retaining their nuclear weapons. All the other states—the non-nuclear weapons states (NNWSs)—who have signed the NPT forewear nuclear weapons. India, Israel and Pakistan are the class of states that remain outside the NPT and have developed nuclear weapons. Iran and North Korea are examples of states that have signed the NPT but have developed the technology—enrichment and reprocessing—that can lead to nuclear weapons.


The notification of Mudumalai Sanctuary in Tamil Nadu as a tiger reserve in 2007 has resulted in a contested politics between activists, non-governmental organisations and conservationists with regard to the future of protected area management. This paper presents an account of how these actors positioned themselves around not only the creation of the tiger reserve, but also the proposed elephant corridor and the Forest Rights Act of 2006. It suggests that due process of law has not been followed adequately and that sufficient scientific evidence has not been presented in the public domain as required. The Forest Rights Act is seen to offer an opportunity to democratise the management of natural resources with all its social and ecological complexities and provide the necessary checks and balances to bring about conservation based strongly on scientific evidence.