

New World Politics Research Paper: Danielle Smith

QUESTION: “Should Southern nations sacrifice opportunities for development to address a problem primarily caused by industrial nations? How do proposed climate change solutions address equity concerns”

Equity and efficiency are critical in addressing climate change as the global action necessary places an additional burden on the poorest of the poor in Southern Nations. Climate change activities have the potential to create significant international and intergenerational implications for equity and sustainable development. Impoverished countries do not produce the bulk of greenhouse gases and given their struggle to develop they should not be asked to sacrifice the scarce opportunities they have for development for a problem primarily caused by the Northern nations. The Kyoto Protocol's Clean Development Mechanism (CDM) exposes both the benefits and inherent contradictions mitigation and adaptation activities for climate change entail in relation to Southern Nations. The global environmental problem of climate change can not be addressed ‘unless we also take on the entrenched structure of global poverty’ (Hossay, P 2006, p192).

Climate change is a long-term problem that involves complex interactions between climatic, environmental, economic, political, institutional and technological pressures. Projected climate change is not confined to national borders rather it is likely to affect all nations and their natural resources jeopardising future developments across the globe. Evidence demonstrates that the need to decrease green house gases (GHGs) is ‘not a luxury but a necessity’ as the survival of the human race is potentially under threat (Ravindranath 2002, p 232).

Development in the environmental sense ‘has become a more recent concern’ founded upon the realisation that human welfare in the long-term depends on a stable climate and the sustained ecological use of resources (Ravindranath 2002, p 277). The natural carbon cycle has been disturbed not only by fossil fuel emission, but also by changes in land use,

land-use-change and forestry. Southern Nations depend to a large extent on forest activities and the availability and use of fossil fuels for their development. Greenhouse gases particularly CO₂ emissions are traditionally seen as an inevitable by-product of their development. Arguably Southern Nations should not have to sacrifice all their opportunities for development however in relation to climate change the kind of development that has taken place in wealthy countries cannot be duplicated in the impoverished world without grave environmental consequences. It is estimated that by 2020, CO₂ emissions from developing countries 'could be higher than those of industrialised countries' (Oberthur 1999, p 27). Thus climate change embodied in the emission reduction problem needs to be addressed with equity and efficiency. Arguably environmental policies 'need to move away from a strictly sectorial approach' to incorporate broader social (equity), economic and environmental considerations (Ravindranath 2002, p225).

For even the lowest global mean temperature increase the global economic impacts are likely to be negative for many Southern nations. Climate change will 'exacerbate inequities in health status and access to adequate food, clean water and other resources' (Ravindranath 2002, p 3). In addition Southern nations are least able to handle the massive dislocations that come with natural disasters as a result of climate change. The East African El Nino phenomenon in 1997 provided a tragic illustration of how limited economic and administrative resources mean that poor nations are least able to handle massive dislocations that come with 'natural disasters'. Natural disasters caused from climate change can set the development of Southern nations back by decades.

Globally the effects and the ability to handle climate change are unequally distributed. Climate change seems to impose greater risks and damage on poorer regions and Southern nations. Inequities are exacerbated within rural communities as forest dwellers and dry land farmers' very survival is dependant upon the environment. In addition many Southern nations in low lying areas are facing ecological disasters of biblical proportions. The Alliance of Small Island States (AOSIS) argue that they are the most vulnerable to the impacts of climate change. Predicted sea level changes threaten the very existence of many islands while for others climate change could result in storm frequencies and intensity and flooding. The Minister of Tuvalu in 1990 emphasised the gravity of climate change upon island nations proclaiming "our survival is at stake" (Oberthur 1999, pg 25).

Not only are the effects and ability to adapt to climate change unequally distributed but the responsibility for the climate change problem is even more unequally distributed. The fossil fuel use by the world's poor on a per capita basis is almost negligible thus in relation to climate change the innocent are suffering the effects of something from which they drew little or no benefit. Southern nations remain far behind the industrialised world in terms of emissions per person. Data collected in 2001 revealed that the industrial world cumulatively contributed towards 63% of the world's CO₂ emissions (Ravindranath 2002, pg 233). In other words three fourths of the world's population living in developing countries account for less than one third of global CO₂ emissions. India's Centre for Science and Environment pointed out that even when the poor nations emit as much as the wealthy nations, 20% of the world's population will still be responsible for 50% of its carbon (Dunn 1998). Considering that carbon dioxide burned remains in the atmosphere for over 100 years, equity demands that the damage the Northern nations have done in the past be accounted for.

Roberts (2001) contends that underdevelopment is largely the historical product of past and continuing economic and political relations. An examination of the climate change debate requires the 'survival emission' of Southern nations to be contrasts against the 'luxury emissions' of Northern nations (Oberthur 1999, p 27). In the debate relating to emissions reductions obligations the 'survival' and 'luxury' emissions contrast was effectively articulated by China's lead negotiator who said, 'in the developed world only two people ride in a car, and yet you want us to give up riding on a bus' (Roberts, 2001 pg 506). The greenhouse gases emitted from Southern nations are on the whole emitted from necessity or as a result of poor infrastructure or outdated practices. For example many of the world's poor continue to gather firewood or animal waste for fuel which when burnt adds new carbon to the biosphere. In the reduction of emissions debate to ask Southern nations to stop development at a level Northern nation would never consider returning to is hypocritical.

The internationally accepted principle of common but differentiated responsibility has been translated into the Kyoto Protocol. The Kyoto Protocol is the international legal instrument that reduces and regulates climate change and fossil fuel emissions. Entering into force in 2005 the Protocol establishes individual legally binding limits on CO₂ and

greenhouse gas emissions to industrialised Annex 1 nations and organises a world market for exchanging quotas. The need for differentiation between Southern and Northern nations and the moral responsibility of the world's wealthy to assist the world improvised was acknowledged in the Kyoto Protocol through the specific targets listed in Annex B and in the 'joint fulfilment' mechanisms. The absence of binding targets for Southern nations recognised that it would be unfair to expect developing nations to take on the burden of emissions reduction during their nascent phase of economic development. It has been argued that the Kyoto Protocol is a significant first step where the issues of equity, differential responsibility and burden sharing are addressed (Ravindranath 2002, pg 229).

Provisions for Southern countries for the adaptation to and compensation for climate change projects are visible in the Kyoto Protocol's Clean Development Mechanisms. The Clean Development Mechanism (CDM) under article 12 of the Protocol is a device that permits the transfer of 'certified emission reductions' from energy or forestry activities. Under the CDM obligations of Annex 1 countries are met through projects that help in the sequestration of carbon dioxide in Non-Annex 1 countries. Once emission reductions from projects are quantified, measured and verified by environmental auditors they can be credited towards the emission targets of the Annex 1 investor country. The objective of Clean Development Mechanism is to help the South further its development goals in a less carbon intensive fashion, while offering the North some flexibility in meeting its Kyoto commitments (Roberts 2001, pg 507)

There are many opportunities for CDM projects to contribute to the sustainable development of Southern nations. The most effective CDM activities are those that enhance the productivity and resilience of existing land use practices and provide additional income for the rural poor. The Guaraquecaba Climate Action Project in Brazil is a public, private and NGO partnership formed to take advantages of the CDM's potential opportunities (Orlando 2002, pg 17). The project seeks to restore 21 000 hectares of partially degraded and deforested tropical rainforest. With a collaborative investment of US 18.4million dollars the project is 'expected to sequester approximately

8.4 million metric tonnes of CO₂ over the next 40 years' (Orlando 2002, pg 17). Direct economic benefits for members of the Guaraquecaba region include infrastructure

development and maintenance, the attraction of capital flows, technology transfers and carbon monitoring. In addition the project will include local air pollution, biodiversity conservation and watershed protection benefits. A mutually advantageous situation does exist as the CDM incorporates the participation of Southern nations while providing financial opportunities to Northern nations (Guesnerie 2006, pg 73).

Mechanisms embedded in the Kyoto Protocol arguably disvalue autonomy into dependency. According to Santos (2003), understanding what is happening in the underdeveloped countries can only be ascertained when examined in the context that Southern nations develop within a 'framework of a process of dependant production and reproduction' (pg 285). Under the CDM industrialised countries are likely to assist the developing countries in their efforts to shift towards a sustainable development path through the transfers of ESTs and capacity building activities. However the transfer of technologies could replicate existing dependency patterns of past foreign direct investment and subsequent profit repatriation schemes (Willis 2005, pg 164).

The regulated global climate change regime created under the Kyoto Protocol impacts on the ability of Southern nations to develop their own national strategies. Many developing countries may need assistance to develop environmental policies and establish institutions to execute and monitor the Protocol's strategies. Consequently their capacity to develop national rather than foreign environmental policies and their national means for controlling various CDM project activities is seriously restricted. At the ninth Conference of the Parties (COP) to the Kyoto Protocol meeting held in 2003 it was decided that the impact assessment and evaluation of proposed projects under the CDM will only be undertaken in accordance with the procedures required by the host party. Proposed CDM projects potentially entail various social, environmental and economic risks. For example the economic inducement to employ carbon sinks created by the CDM could promote the replacement of native forest ecosystems with industrial tree plantations. It is pivotal that Southern nations evaluate the need and role of global institution in promoting both mitigation and adaptation programs to ensure that their sovereignty is not infringed upon and that their development is not retarded. It may be difficult for Southern nations to oppose CDM projects because of the financial interest carrying out an activity in their jurisdiction entails (Roussequx 2005, pg 8).

The marginalisation of social concerns to climate change activities in light of their

financial interests is demonstrated via the Carbom Sequestration project in Uganda. The project design involves the leasing by two Norwegian companies for nominal rent from government authorities several thousand hectares of government-controlled forest located at the Bukaleba Forestry Reserve in the Iganga District of Uganda. Commercial interests dominate the project design as under proposed carbon emission trading schemes 'the companies have the potential to earn up to US 27 million dollars from the sale of carbon credits' (Orlando 2002, pg 22). The projects benefits are heavily weighed in favour of the investment companies considering Uganda will 'only be able to earn US 570 000 a year from land rents' (Orlando 2002, pg 22). Furthermore significant socio-economic costs are borne by the 8 000 local people who are displaced by the project as the Norwegian companies consider those living and farming inside the reserve as illegal intruders.

Santo's (2003) dependency structure can be applied to climate change solutions as development of parts of the system can occur at the expense of other parts. Metropolises tend to develop and the satellites tend to underdevelop because the satellites while 'being centres of intercourse are also centres of exploitation' (Frank 1989, pg 3). The CDM's main objective of generating carbon sequestration credits creates negative externalities for Southern nations. The possibility for CDM projects to impede upon the local livelihoods is demonstrated via the CDM project in Uganda. In the Ugandan project none of the commercial benefits normally associated with forest plantations such as the provision of timber for housing, import substitution and jobs will accrue to the local economy if the timber is used for carbon credits rather than being harvested (Orlando 2002, 22). The likelihood of abuse of CDM project's serves to maintain the monopolistic structure and exploitative relationship between the North and South inherent in the global system.

The Clean Development Mechanism's ultimate objective to sequester a maximum amount of carbon and the objective to foster sustainable development are two diverse and often incompatible objectives. Project activities initiated under the CDM, enable the industrialised world to reduce their emissions through seizing low cost opportunities in other nations. Therefore the host country is most likely to be at risk, especially where institutional capacity is low, environmental regulations lax and access to capital and resources poor (Ravindranath 2002, p243). Southern nations with attractive conditions considerably reduce the abatement costs of climate change for Northern countries. The

current situation created by the Kyoto Protocol has meant that the environment and economies of Southern Nations have become the 'mere regions of the global economy' as productive forces have 'expanded far beyond the boundaries of the nation-state' (Cox 2002, p64). In addition there are concerns that Northern assistance under the CDM would be concentrated in a few countries most notably India and China, leaving the majority of Southern nations to meet their reduction targets without foreign help (Willis 2005, pg 164). Therefore the establishment of CDM activities will not only take advantage of the vulnerabilities of Southern nations but the positive externalities will only benefit a narrow selection of developing countries.

There is a close coupling between the economic advancement of a nation and environmental concerns. Southern nations do not have the technical, financial and institutional resources to affect climate change mitigation as they are preoccupied with more pressing concerns. The limited resources of Southern nations are absorbed by their survival needs and are directed towards addressing malnutrition, drinking water supplies, education, urbanisation and the difficulties in maintaining the economy. The associated cost in reducing climate change is rapidly increasing while the marginal benefit is relatively constant. In relation to climate change mitigation the 'less developed' countries are especially vulnerable because a 'larger share of their economies is in climate sensitive sectors and their adaptive capacity is low due to limited human, financial and natural resources and institutional and technological' capacities (Ravindranath 2002, pg 249). Therefore the global action necessary for addressing climate change places an additional burden on the poor in Southern nations.

Developing economies are much more dependant on agriculture and other aspects of nature resource flows than developed economies (Oberthur 1999, pg 28). Changes in changes in land use, land-use-change and forestry are significant driving forces behind development. Southern nations are susceptible to being pressured to preserve forests bearing in mind that the emissions from deforestation alone are responsible for 'about one quarter of global emissions' (Streck 2006, pg 862). In order to counterbalance the excessive emissions of the wealthy international political pressure is imposed upon Southern nations to reduce deforestation. Such pressure limits the potential resources of Southern nations and hinders their opportunities to development.

The Kyoto Protocol offers clear opportunities to improve forest management, sequester greenhouse gases and enhance biodiversity. However at the ninth Conference of the parties in 2003, 'human-induced activities' activities eligible to acquire carbon credits under the CDM was limited to reforestation and afforestation activities. Arguably the Protocol has not reached its potential because it fails to give carbon credits for the conservation or sustainable management of standing forests. The CDM and its associated schemes bias in favour of emissions reductions through afforestation and reforestation effectively means that Southern nations are pressured into conserving forests without financial compensation. Reducing the rate of deforestation and forest management is the only effective way to reduce carbon losses from forest ecosystems. For emission reduction activities to be successful there must be a conviction that participation in the fight against climate change can be made attractive to Southern nations (Guesnerie 2006, pg 74). Thus an 'incentive framework which rewards forestry conservation, sustainable forest management and afforestation' needs to be established for developing countries because they act as stewards of many of the earth's biological resources (Streck 2006, pg 862).

In addressing the climate change problem Southern nations lack political unity because their concerns are diverse and often conflicting. Aware of their limited weight acting in isolation, Southern nations attempted to develop common positions in the framework of the 'Group of 77' (G-77) (Oberthur 1999, p 24). G-77 consists of 140 developing countries and China and encompasses disparate interests with respect to climate change based on varying cultural, political and economic conditions. On account of their diversity countries have taken different positions on many emissions-related issues. They have been drawn between the twin objectives of sticking to G-77 solidarity and pursuing their national interest (Oberthur 1999, p 277). A small number of Southern nations such as Argentina have succumbed to pressure from Northern nations to undertake voluntary commitments. American attempts to find some allies among the poor nations has been labelled a 'classic tactic of British colonialism – divide and rule' (Roberts 2001, pg 506). The concept of development employed by politicians in Northern nations frequently has 'acquired a violent colonising power' (Esteva 1997, p 9).

The 'Group of 77' do share a common concern, namely that the industrialised nations greenhouse gas reduction commitments could lead to inequitable obligations for themselves in the future. Centuries of imperialism and exploitation practiced by Northern

nations have caused countries previously under the colonial yoke to be wary 'as they fear that multinationals might use climate change to dominate their small and fragile economies' (Ravindranath 2002, p 7). Furthermore considering that the environmental agenda established under the Kyoto Protocol was set by the developed wealthy nations, Southern nations have a reason for suspicion. Specifically Southern nations fear being pressured into accepting voluntary commitments by industrialised countries using 'levers such as bilateral development, aid and trade' (Oberthur. 1999, pg 230). Additionally the transfer of technology from Northern nations to Southern nations could provide another sphere of achieving 'what the powerful want to impose' upon the South (Esteva, G. 1997 p8).

The evocation of responsibility from both the biggest polluters and the richest countries does not seem out of place however the moral argument does not take into account economic issues such as costs and willingness to pay. In relation to America, 'it does not appear unreasonable to ask the biggest polluter to reduce 7% of its emissions' (Guesnerie 2006, pg 75). However the US administration has neither signed nor implemented the Kyoto Protocol. The US refused to sign Kyoto based on ironic claims about the inequity of differentiated responsibility and outlandishly demanded 'meaningful commitments' from developing countries to limit their emissions. Robert C Byrd declared on the Senate floor that 'I do not think that the Senate should support a treaty that requires...only developed countries to endure the economic costs of reducing emissions, while developing countries are free to pollute the atmosphere, and, in so doing, siphon off American industries' (Roberts 2001, pg504). According to Robert's (2001) World-system Theory, the position taken by America is merely an effort by the privileged economic groups at the top of the world inequality system to 'defend their position on top against those at the bottom of the pyramid' (pg 505). The the US administration's call for 'meaningful commitments' from developing countries can be interpreted as an 'a device designed to obscure America's economic objectives in the larger capitalist system' and a cover for neo-colonialism (Cox, M. 2002, p69). Arguably the equity utopia implicit in the Kyoto Protocol contributed in setting a standard too high for the US and beyond 'what is politically realistic' (Guesnerie 2006, pg 81). Future dialogues between Southern and Northern nations require America as their non-participation has reduced the demand and effectiveness of the Kyoto Protocol.

In conclusion 'equity is not simply a concern' of the Southern nations 'but is of prime importance' taking into consideration the historic responsibility in the disturbance of the climate system, that the impacts of climate change fall disproportionately upon Southern nations and the cost involved in mitigating climate change (Oberthur 1999, pg 236).

There is demand for an intensified North-South dialogue addressing the equitable allocation of future emission allowances bearing in mind variable population sizes, geographical and climate conditions, strength of the economy and size of the country.

The fundamental conflict of interests between rich and poor continues to block real progress. Environmental policies such as the Clean Development Mechanism need to move away from a strictly carbon sequestration approach based on financial incentives to include broader social, equity, and environmental considerations. Southern nations need to contribute towards the abatement of climate change however they should not be required to sacrifice all opportunities for development.

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