

---

---

## in this issue

### forum:

North-South dialogue, *Peter Zhou*

1

### profile:

New educational centre for the Pacific, *Kanayathu Koshy*

9

### project:

Scientific education in the Pacific, *Than Aung*

16

### feature:

Small islands and the IPCC, *John Hay*

19

### conferences:

Details of international conferences

23

### news:

- The IPCC Third Assessment: Impacts
- A weather eye on.....
- Tuna fisheries in the Pacific

25

39

42

# Editorial

We present a special double issue of *Tiempo* to coincide with the Seventh Conference of the Parties which will be held in Marrakech, Morocco, 29th October to the 9th November 2001.

In our main article, Peter Zhou discusses two important underlying issues that must be inherent in the debate if the climate treaty is to have any meaningful success. He analyses the issues of equity and environmental and economic sustainability and contends that they should be a prerequisite in any North-South dialogue.

Kanayathu Koshy reports on an important new educational centre with the aim of capacity building for the South Pacific region. The Pacific Centre for Environment and Sustainable Development in Suva, Fiji, will act to improve and strengthen all levels of environmental education and, at the same time, strengthen the awareness and technical capacity of human resources within the region.

Another recent initiative in the South Pacific is part of a new, worldwide ocean observing system. Than Aung describes the unique Argo initiative which aims to improve scientists' knowledge of how the ocean and atmosphere interact. The educational nature of this five-year project is highlighted with the involvement of secondary school students.

John Hay presents a small islands perspective on the Third Assessment Report of the Intergovernmental Panel on Climate Change. His article is followed by the second in our series of selected excerpts from the IPCC's 2001 Third Assessment Report, this time covering climate impacts.

Finally, we report on the outcome of the resumed Sixth Conference of the Parties in July 2001, anticipating issues to be discussed in Marrakech, and summarize a recently-released report on the economic impacts of climate change on tuna fisheries for two Pacific nations.

Cover photo: University of the South Pacific

# North-South dialogue

**THE** climate change debate under the United Nations Framework Convention on Climate Change is one of the biggest challenges that is facing the world today. Resources and time are increasingly being channelled into negotiations for various national, regional and global rights and responsibilities in the battle against the threat of global warming and climate change.

The debate has, however, evolved over time, from a scientific view of a changing climate system to a 'ball game' of economics. With this evolution comes the influence on how businesses will be conducted and how that will affect livelihoods of communities in the various parts of the world.

If climate change is to affect natural resource availability, so responsibility to alleviate the negative impacts and how the scarce resources will be shared and distributed will become the cornerstone of the climate negotiations as this issue impinges on equity and sustainable development aspects of the world at large. Such



*Peter Zhou discusses equity and sustainable development perceptions from a Southern Africa aspect.*

negotiations should take account of regional disparities in lifestyles, economic development status and the possible impacts of climate change.

This article analyses the issues of equity and sustainable development in the context of the North-South dialogue in the climate treaty process.

## Conceptual framework

Equity is being considered here in the context of equal opportunities for economic development for the North and the South. This equity should be an overriding factor in balancing out the right to reduce or avoid

emissions and the responsibility to 'clean up their act.' Those who have benefited economically from past pollution, therefore, have a larger responsibility to 'clean up.'

Both environmental and economic sustainability are considered. Environmental sustainability is based on the premise that continued emissions

will, in the long run, be a disadvantage to both the North and South so there will be no winners in that respect. There is, therefore, no point in withholding financial and technological resources, now more available in the North than the South, in the hope of the North remaining the economic winner.

There is also an economic sustainability to this. If Southern growth is suffocated by the economic dominance of the North and current unsustainable practices, eventually, the South will fail as a trading partner, which will in turn affect Northern economies. The only way forward is for the North and the South to be honest with each other under the modalities of

the Framework Convention so as to ensure both equity and sustainable development for both.

### **The climate treaty and the north-south political economy**

In order to meet the goals of equity and sustainable development, both the North and the South should have a clear understanding, from a geographic, cultural, social-structural and intergenerational perspective, of their rights and responsibilities within the climate treaty process.

Apart from realizing rights and responsibilities (including burden sharing), there should also be the recognition of the strengths and weaknesses, losses/liabilities and gains/opportunities, and the existing and needed capacity in North-South cooperation on the climate change agenda.

Polluting the environment has never been any region's or any nation's right but every country does have the right to develop and improve the standard of living of its people. The past of the North has been that of a polluting development path. Although probably not deliberate, the pollution resulting from this path has reaped for the North large economic rewards, at the same time causing the threat of

global warming and climate change. This, rightly so, would place responsibility to 'clean up' on the shoulders of the North. This circumstance, however, in no way gives any right to the South to also pollute in an endeavour to achieve the same level of development as that of the North, a suggestion inherent in some of the arguments advanced by Southern commentators and negotiators.

There can be no question that both Northern and Southern Parties have a responsibility to protect the climate system for present and future beneficiaries worldwide. Responsibility is, however, based on their common and differentiated responsibilities and respective capabilities.

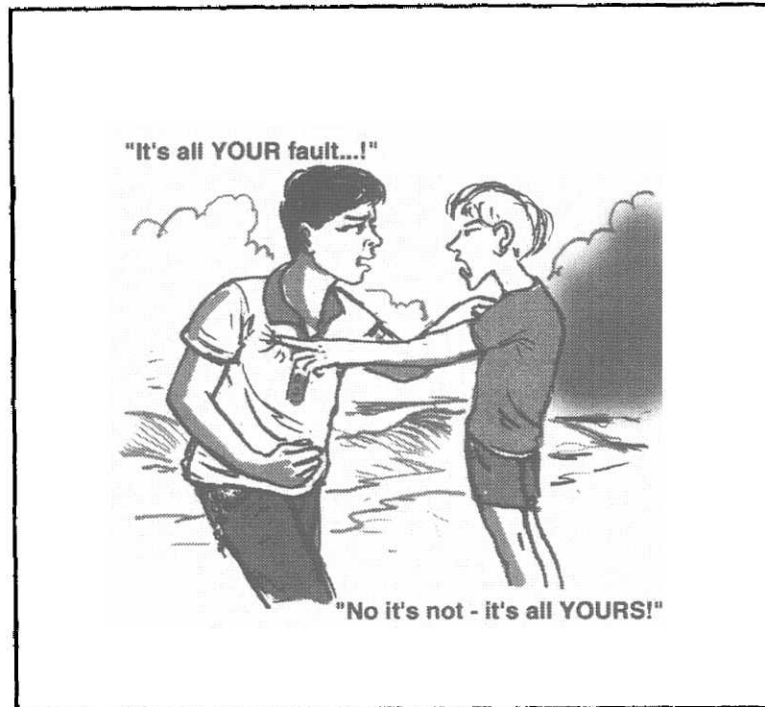
As the North has improved its financial resources in the polluting past, then it does make sense that the North shares its resources with the South in the course of searching for a cleaner development path in the future. This has been provided for to some extent in the context of financial and technological resource transfers from North to South under the Framework Convention. The financial resources so far committed, however, have not made any visible contribution to sustainable development in the South.

Although North-South negotiations gave rise to the Kyoto Protocol, nearly four years after it was agreed upon little or no financial and technology transfers to the South have been visible.

The negotiation process has also become a matter of strengths and weaknesses.

The North, with its more sophisticated negotiation skills, is obviously avoiding or postponing paying for its polluting past. The North quite possibly believes that by withholding the resources intended to assist the South shift to cleaner development, it would be in an even stronger position to remain the economic winner. At present, the South has not demonstrated much strength in pushing the North to take responsibility to 'clean up' the environment, which includes taking responsibility for and acting on its own recent commitment to reduce the rate of greenhouse gas emissions.

The South has more immediate problems in the need to improve the poor living conditions of its people. The South is affected by high poverty and debt levels, disease and severely limited access to the essentials necessary for development such as energy, water and sanitation. In the absence of financial and



technological resources, the poor Southern economies will trudge along on their unsustainable development path as a means of survival.

If the global climate does drastically change and destroys economies, what good has been the protection of resources? When the 150-odd countries agreed to sign and ratify the

Convention, this indicated a common purpose to save our planet from a disaster. The question now is what has become of that common purpose?

If the climate treaty process is to succeed, the main thrust of all negotiations should first be to save this planet where all peoples have a right to exist. While the Framework Convention has so

far achieved some degree of global cooperation, what is sadly lacking is a growing harmony between the North and the South in trying to advance positive climate change and socio-economic objectives. Failure to take advantage of the skills and abilities of all the people of our world today may result in larger losses to all living on the planet Earth in the future.

### **Stakes in the negotiating process**

The biggest challenge facing the North is meeting the greenhouse gas reduction targets as stipulated in the Kyoto Protocol. The Northern strategy so far has been a continual process of delaying tactics. The North is now insisting on bringing in some of the Southern nations in the 'clean-up' process, which was never a precondition at the ratification of the Convention.

Many in the Northern electorate have also influenced political decisions on the subject by refusing to change their lifestyles. At the same time that some nations are actually trying to decarbonize their heavily fossil fuel-based economies, the United States is negotiating for lower oil prices and has publicly withdrawn its commitment to the Kyoto Protocol, all merely in order to maintain a lifestyle of over-consumption.

The stakes for the South are the policies and measures in order to achieve equity and sustainable development at the same time as ensuring that the impacts of climate change will not further degrade already weak economies.

In the debate, the South has been lured by the promise of resource transfers from the North so as to chart a sustainable development path and

possibly create more opportunities for improving the livelihood of its people. The flexibility mechanisms, such as the Clean Development Mechanism (CDM), are only 'dangled carrots' since there are no real tools for its implementation in place to ensure that CDM projects will in reality deliver any sustainable development to the South.

Set against this is the challenge for the South to not emerge, yet again, the loser in this economic game.

Unfortunately, competition by individual countries in trying to attract investment may well sacrifice the collective effort to attain equitable and sustainable development for the entire Southern region. The South should not feel desperate to attract foreign, Northern investors but should utilize its strength in numbers and not underestimate the value of the many natural resources supplied by Southern nations to fuel Northern economies.

Southern nations should also remember that they can make demands. The North cannot implement the Framework Convention without the participation of the South. Development in the North, to a large extent, depends on the South with the greatest market for those technologies developed in the North.

Rather than spend valuable resources in a fight over continued economic domination by the North, all nations should work together to forge a business partnership through global cooperation.

Expecting play to be fair on the climate treaty field may be naïve on the part of the South. Market mechanisms seem to be the determining factors in this ball game which has been converted into an arena of business opportunities and is merely viewed in terms of economic losses and gains.

Southern nations are finding themselves in a relatively weak position when debating with experienced Northern negotiators and investors. The thrust for the South should, therefore, be on strengthening and mobilizing their existing and developing competitive capacities for gainful negotiations in the climate treaty process. A similar approach to strengthening competitive capacities is also required for dealing with natural, human and social capital/resource management.

### **Global equity and sustainable development**

Equity is generally viewed, in the context of nation states or of groups of individuals, in terms of differing welfare standards. At the

nation states level, equity could also mean equitable sharing of natural resources such as water, land and air. This would imply that nations are able to alleviate any global resource shortage by a redistribution of that resource without endangering the physical capacity of the environment.

Following the IPCC Third Assessment Report, three socio-ecological classes of people in the world and their characteristics are presented in Table 1.

These are the 'over-consumers', the 'sustainers' and the 'excluded'. The excluded group is so-called because it is generally excluded in the planning of international agreements. There is also an exclusive focus in the negotiations on the relationships between states and those classes involved in industrial societies and modern technology. The climate agreement has neglected discussions on the poor and vulnerable groups, who reside mainly in the South. If equity is to be achieved in these agreements, then there should be a greater effort to protect the livelihoods of these poor groups, poor groups which are not only defined by nation but also globally.

Equity is, in more real terms, linked to issues such as human-related security and freedom,

*Table 1: Global socio-ecological groups. Source: IPCC Third Assessment Report, 2001.*

<b>Over-consumers (1.1 billion)*</b>	<b>Sustainers (3.3 billion)*</b>	<b>Excluded (1.1 billion)*</b>
> US\$ 7 500/head	US\$ 700-7500/head	< US\$ 700/head
Travel by car or air	Travel by bicycle or public transport	Travel by foot or donkey
Eat high fat, high calorie, meat based diets	Eat diets of grain, vegetables and some meat	Eat nutritionally inadequate diets
Drink bottled water * soft drinks	Drink clean water and some tea and coffee.	Drink contaminated water
Use throw away products – generate substantial waste	Use unpackaged goods and recycled wastes	Use local biomass and produce negligible waste
Live in spacious climate controlled houses	Live in modest vented multiple family houses	Live in rudimentary shelters or on the open
Maintain image conscious wardrobe	Wear functional clothing	Wear second hand clothing or scraps

\* These figures have now increased to total up to 6 billion.

food security, energy security and health for all. This definition relates to current circumstance as well as to opportunities for future generations.

Food security will be directly affected by climate change. Achieving food security is also a function of the capacity of those who till the land, their knowledge and technologies used.

## Sustainable development

*The objectives of sustainable development according to the World Commission on Environment and Development that reported in 1987 are:*

- *reviving growth;*
- *changing the quality of growth;*
- *meeting essential needs for jobs, food security, energy, water and sanitation; \**
- *ensuring a sustainable level of population;*
- *conserving and enhancing the resource base;*
- *reorienting technology and managing risk;*
- *merging environment and economics in decision making;*
- *reorienting international economic relations, and,*
- *making development more participatory.*

*\* links with equity concept*

Energy security entails the continued availability of safe, clean and efficient sources of energy. It is no secret that our dependence on fossil fuels is the major cause of greenhouse gas emissions into our atmosphere. The current popular idea is to shift to renewable sources and/or use technologies that can reduce the global demand for fossil fuels.

In both the North and South, there has been an obvious lack of any concerted and strong leadership in any form of sustainable energy development: renewable energy technologies, energy efficiency and energy conservation. There is a great need to place emphasis on sustainable energy development and social development, together in terms of creating jobs, cleaning-up the environment and solving the particular ills of society such as poverty.

One-third of the world's population, residing mainly in rural areas of the South, have dim prospects of having access to electricity. Their prospects may become dimmer under the present fossil-energy agenda as the world now focuses on reducing the demand for carbon-intensive fuels. Alternative clean energy sources are still expensive and of limited capacity. These two billion people, the excluded, are not the greatest threat to the well-

being of the global climate system but their lifestyle is a threat to their own survival as the local environment is degraded. They can, however, contribute meaningfully to the global economy if their economic status were to be upgraded. In contrast, the over-consumers have an 'over-access' to the world's resources and yet do not pay the cost of the environmental damage they cause through over-consumption.

Ensuring the equitable distribution of resources can be the only solution to adverse global environmental changes. The interconnections between poverty and adverse environmental change are such that insecurity at the individual level inevitably grows to insecurity at the global level.

Sustainable development is best represented by conditions listed in the box on this page. As indicated, there is an obvious linkage between equity and sustainable development. Policies and strategies for environment and sustainable development should result in *equity-led growth*. Otherwise, strategies which fail to improve the lives and livelihoods of the poor majority cannot be socially or politically sustainable. This is clearly stated in, for example, statements on policy and strategy for the environment and sustainable development of the Southern

African Development Community countries. Such a prerequisite is more critical in the South because that is where the need to upgrade the economic status of communities is greater.

Moreover, we have to consider environmental welfare, where natural resources are to be used equitably both geographically and for present and future generations. Availability of natural resources in their useful condition such as clean water and well-managed waste streams like sanitation are part of the sustainable development equation.

The irrational utilization of natural resources, driven by the desire for quick economic gains and compounded by increasing populations, has caused most of the environmental damage. The agrarian economies of the South are the most vulnerable to such environmental damage in the process of meeting their immediate needs. Another difficulty to overcome is the insatiable consumption levels of the North which consumes more fossil fuel and forestry products compared to the South.

A new culture of optimizing, and not maximizing, resource consumption is needed.

The tendency is that equity and sustainable development are perceived in isolation from

other economic development reforms. The South is struggling to surface within changing international trade and debt policies. These aspects, together with ongoing economic reforms, are affecting the levels of desired equity and sustainable development that could be achieved in the South under any climate convention policy.

Climate policy must include ordinary issues of development such as technology, trade, social policies and good governance so as to embody real socio-economic objectives. It would be much better to transform the flexibility mechanisms of the Kyoto Protocol to the UN Framework Convention on Climate Change from being instruments of emissions accounting to being direct instruments of sustainable development.

#### **Necessary steps**

The responsibility of both the North and the South is to make the right decisions for present and future generations. Implementation of international agreements such as the climate treaty can be constrained by different interpretations, institutional capacities, information flow and the various influences on decision making.

There is a need for continued dialogue amongst and between environmental agencies and development assistance agencies as well as the sharing of experiences on a South-South and South-North axis.

The South has for a long time been solely represented by top official-level decision makers who lack information and preparedness to confront their Northern counterparts. Strengthening of social organizations within Southern governments is required.

The issues of environment and development should be addressed at disaggregated levels, from national to community, to household and individual, so as to meet the immediate needs of the poor. It is high time the communities themselves had a voice or a strong advocacy in the decisions that affect them under the Framework Convention. Compared to those in the South, civil societies in the North are much more aware of their rights. A similar level of awareness and empowerment is needed in the South. It is the responsibility of the South to reach out to the disadvantaged groups in their own communities and countries.

Concepts of equity and sustainable development should be promoted beyond the already-converted to a much broader audience

if it is to succeed. Any arguments presented in support of equity and sustainable development should be made relevant and attractive to those economic/political institutions which have the power to induce change.

Environmentalists have for too long dwelt on the issue of greenhouse gas reduction alone and many of their arguments lack necessary social, economic and political dimensions. Too many are unwilling to compromise their environmental goals.

At present, we are diverting valuable capital, technology, labour and materials from welfare problems in order to combat environmental impacts. Yet a real synergism exists between addressing both greenhouse gas reduction and socio-economic development.

The critical issue is how to balance population, environmental capacity and the natural resource base. This involves examining our lifestyles. It involves sharing development opportunities and benefits with the poor majority. This must include addressing the needs of those women and children, the disadvantaged, among the most vulnerable social groups.

The pace and scale of change as well as opportunities for success in achieving equity-

driven sustainable development will be far greater if there is an expanded and integrated process of North-South cooperation.

### Conclusions

Economic development and greenhouse gas reduction are not sustainable ends in themselves unless they engender policies that contribute to a larger integrated societal objective which enhances human welfare, human freedom and which protects the entire global environment. The battle should not, therefore, focus on who emerges the winner in this process, but should focus on providing for all social-ecological groups at the same time as saving that environment which provides the resources for development.

Within the North-South dialogue, the intent is that the North should own up to their responsibilities and should find cost-effective means of implementing any reductions strategy.

The South should rank their national developmental priorities so that the climate treaty process can address these priorities in the context of both equity and sustainable development. We cannot deny that without equitable international economic arrangements, most developing countries have limited scope


and little hope for achieving any economic, social and environmental sustainability.

Both the North and the South have their own bargaining powers.

The North has the financial resources which they can use for shifting to cleaner development and also adapting to the impacts of climate change when they occur.

The South, in turn, has substantial natural resources and has for a long time been selling those resources to the North without, or with very little, value added. In agreements such as the UN Framework Convention on Climate Change, the South should also use its market potential as a bargaining tool. The North cannot fail to realize that if the South develops to its full potential then it will have a much better business partner.

It is high time that the North and the South become true partners in both development and environmental management. Both human and natural resources are wasted in sustaining the dominance of the North against the South.

 **Peter Zhou is Director and Consultant of the Energy, Environment, Computer and Geophysical Applications Group (EECG) in Gaborone, Botswana.**