

## A weather eye on.....

### **Weather Eye considers the somewhat mitigated success of COP-6 Part 2 and looks forward to the main issues on the agenda for COP-7.**

After the failure to reach agreement on implementation of the Kyoto Protocol in The Hague in November 2000 (see *Tiempo*, Issue 38/39, June 2001), the Sixth Conference of the Parties was resumed in Bonn in July 2001. For the many participants who arrived with few expectations of any substantial progress, the diluted agreements which were finally achieved did provide some sense of success.

Although the four long days of the high-level segment were beset with a series of highs and lows, agreements were reached on a reasonable number of specific issues, with a clear commitment to the Kyoto Protocol eventually emerging.

Representatives from the 180 nation members of the United Nations Framework Convention on Climate Change determined that

the withdrawal of the United States from the implementation of the Kyoto Protocol would not be allowed to undermine the process.

“A triumph for multilateralism over unilateralism” was the verdict of the G-77/China spokesperson after a second all-night session resulted in the critical compromise.

That the global community could negotiate, agree upon and, let us hope, act without the participation of the United States sent a clear message to the Bush Administration. As John Gummer, former UK environment minister, observed: “the rest of the world doesn’t need the United States in quite the same way.”

Nevertheless, Japan, acting upon a strong desire to bring fellow Umbrella Group member, the United States, back into the fold, took a strong stance on many issues that that nation had previously found problematic. Some observers considered that it was only the instruction of the Japanese Prime Minister to his negotiating team to break the deadlock early on Monday morning that rescued the talks. Compromise had to be accepted on all sides.

Robert Watson, Chair of the Intergovernmental Panel on Climate Change, noted that the Bonn agreement was less than hoped for but acknowledged that it would, at least, slow down the rise of emissions. “The fact that all countries of the world, obviously with the exception of the United States, have made a commitment to start to reduce their greenhouse gases is a very, very important first step,” he observed.

Specific agreements reached in Bonn included:

- the establishment of a climate change fund and a fund for developing countries;
- the identification of eligible sink activities (revegetation and management of forests, croplands and grazing lands) and the setting of country quotas;
- rules governing the flexibility mechanisms: the Clean Development Mechanism, joint implementation and emissions trading; and,
- the establishment of a compliance mechanism, with a facilitative branch and an enforcement branch, and penalties.



It was emphasized that the flexibility mechanisms should be supplemental to domestic action and that domestic effort must play a significant role in meeting emissions reductions targets

One of the most difficult issues at the Bonn meeting was how much credit developed countries could receive toward their Kyoto targets through the use of sinks. It was largely the unresolved debate over the role of sinks that resulted in the failure of COP-6 Part I.

Compromise was necessary to ensure that the old allies of the United States in the Umbrella Group, such as Japan, Canada and Australia, remained with the Kyoto Protocol. The European Union gave significant ground. Individual country quotas were set and the outcome meant that sinks could account for half the Kyoto targets, a notable weakening of the treaty. It was agreed that eligible activities would include revegetation and management of forests, croplands and grazing lands.

Though backing down over the sink issue, the European Union insisted successfully that nuclear energy be excluded from the Clean Development Mechanism. Governing rules for the Clean Development Mechanism were adopted and an executive board was set up. The

rules adopted specify that energy efficiency, renewable energy, and forest sink projects can all qualify, but not nuclear facilities.

Another extremely difficult issue was that relating to the proposed compliance mechanism. A compliance committee with facilitative and enforcement branches was established. There was much discussion over penalties for non-compliance. It was finally agreed that for every ton of gas that a country emits over its target, it will be required to reduce an additional 1.3 tons during the Protocol's second commitment period starting in 2013. Additional compliance procedures and mechanisms will be developed after the Protocol enters into force.

Perhaps the most curious aspect of the set of agreements at COP-6 Part II was that the compromise that was reached might well have satisfied the United States had it emerged during the first phase of the COP-6 negotiations in The Hague late last year.

The belief that the Bush Administration's step back would result in a stronger deal was short-lived. In a further irony, the withdrawal of the United States weakened the position of the European Union and G-77/China on issues such as enforcement on which they had previously

been allied. The situation was compounded by the strengthening of the negotiating power of members of the Umbrella Group such as the Russian Federation and Japan resulting from the need to avoid their withdrawal.

There is no evidence of any interest on the part of the United States in rejoining the climate community though its representatives did stand by their commitment not to block the progress of others.

The Kyoto Protocol was salvaged in Bonn and progress on implementation was undoubtedly made. But even before the meeting had ended, it was clear that different interpretations were being placed on some key points such as the legally-binding nature of the compliance regime.

It seems likely that the details of the compliance regime will form a major part of the agenda at COP-7 in Marrakech, perhaps even the grounds for another set of all-night sessions. Nevertheless, there must be considerable pressure on the participants to present a united face after the brinkmanship of Bonn and it may be that a decision is made to side-step controversy this time round.

The Kyoto Protocol remains alive, and a framework for ratification has been achieved, but the agreement remains in intensive care.

## CONTACT ADDRESSES

*Than Aung, Department of Physics, University of the South Pacific, PO Box 1168, Suva, Fiji. Fax: +679-308972. Email: aung\_1@usp.ac.fj. Web: www.usp.ac.fj.*

*Center for International Climate and Environmental Research (CICERO), PB 1129 Blindern, N-0318 Oslo, Norway. Fax: +47-22-858751. Email: admin@cicero.uio.no. Web: www.cicero.uio.no.*

*John Hay, International Global Change Institute, University of Waikato, Private Bag 3105, Hamilton, New Zealand. Fax: +64-7-8384289. Email: j.hay@waikato.ac.nz. Web: www.waikato.ac.nz/igci/*

*IPCC Secretariat, c/o World Meteorological Organization, PO Box 2300, CH-1211 Geneva 2, Switzerland. Web: www.ipcc.ch.*

*Kanayathu Koshy, Pacific Centre for Environment and Sustainable Development, PO Box 1168, University of the South Pacific, Suva, Fiji. Fax: +679-302548. Email: koshy\_k@usp.ac.fj. Web: www.usp.ac.fj.*

*Lawrence Moore, 356 Fulham Palace Road, London SW6 6JH, UK. Fax: 44-20-77368058. Email: lawrence@gaunt.demon.co.uk. Web: www.earthrod.co.uk.*

*UN Framework Convention on Climate Change Secretariat, PO Box 260 124, D-53153 Bonn, Germany. Fax: +49-228-8151999. Email: secretariat@unfccc.int. Web: www.unfccc.int.*

*Peter Zhou, EECG Consultants (Pty) Ltd., PO Box 402339, Gaborone, Botswana. Fax: +267-326575. Email: pzhou@global.bw.*

# Tuna fisheries in the Pacific

**A recent report has documented the potential economic consequences of climate change for the tuna fishing industry in the Fiji Islands and Kiribati.**

There are relatively strong indications that tuna is adaptable to changes in climate, following their ideal temperature and moving from place to place.

Asbjørn Aaheim and Linda Sygna of the Norwegian Center for International Climate and Environmental Research, CICERO, draw on the past impact of El Niño as an analogue for longer-term climate effects and conclude that climate change may result in a decline in the total tuna stock and a migration westwards.

These changes will lead to various impacts on the catch in the different countries. The results of the study suggest that the total catch for Fiji may decrease under climate change

because there is a weak tendency towards smaller catches under El Niño.

For Kiribati, the opposite seems to be the case. The catch of yellowfin and skipjack seem to respond positively to El Niño. Kiribati may, therefore, gain slightly from long-term climate change if the spatial distribution of tuna is considered in isolation.

Any decline in the upwelling in the central and eastern equatorial Pacific may, however, lead to a general reduction in the total abundance of tuna. Hence, Fiji may actually be affected negatively by climate change, while Kiribati remains more or less unaffected, if the total catch is measured.

The price of the fish in the export market may change as a result. An upward trend in both demand and catches has been accompanied by a decline in real prices. Any future reduction in catch may result in an increase in prices, or at least a stabilization of real prices.

Experience from other regions suggests that international fisheries adapt very slowly to new situations. Perhaps the greatest danger will be associated with any trend towards increased environmental variability as the need to compensate for a drop in catch in one period leads to overfishing in the next. This may lead to a rapid extinction of the stocks.

Based on a simple macroeconomic model, the resulting effects for the national economy in general may diverge substantially from the expected. This applies, in particular, if national economies are inflexible with the population reliant on subsistence production, as is the case for many developing countries.

---

**Further information:** The report "Economic Impacts of Climate Change on Tuna Fisheries in Fiji Islands and Kiribati" (Report 2000.4) can be obtained from CICERO at the address on the previous page.



---

ISSN 0962 - 7030. **Published** by the University of East Anglia (UEA, Norwich, United Kingdom), the Stockholm Environment Institute (SEI, Stockholm, Sweden, and SEI-York, York, United Kingdom) and the International Institute for Environment and Development (IIED, London, United Kingdom) with financial support from the Swedish International Development Cooperation Agency. **Editorial team:** Sarah Granich, Mick Kelly and Richard Sandbrook. **Editorial office:** TIEMPO, Attn: Mick Kelly, School of Environmental Sciences, University of East Anglia, Norwich NR4 7TJ, UK; tel: 44-1603-592722; fax: 44-1603-507784, email: m.kelly@uea.ac.uk; web: <http://www.cru.uea.ac.uk/tiempo/>. **Design and production manager:** Ian Brooke. **Printed** by Gallpen Colourprint, Norwich. **Distributed** free on request.