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Deadlock in The Hague, but hopes remain for spring climate deal

David Dickson, The Hague

Supporters of an international agreement to combat global warming are optimistic that more talks next spring could achieve a breakthrough on the role of carbon 'sinks' — the issue that last weekend sank the latest round of climate-change negotiations in The Hague.

Disagreement centred on whether countries' carbon emissions should take account of the contribution of biomass — such as forests and farm crops — in absorbing carbon from the atmosphere.

The meeting had been held to reach agreement on methods of attaining the carbon-emission reductions agreed three years ago in Kyoto, Japan. The Kyoto meeting had led to a consensus that in principle countries would aim to reduce their carbon emission to 5% below their 1990 level by the year 2012, although no major industrialized country has yet ratified this commitment.

Last weekend's breakdown occurred when several European countries rejected a last-minute deal under which the United

Time out: Jan Pronk (above) could not reconcile Jürgen Trittin and Dominique Voynet (right) to the UK-US deal.

States would have agreed to scale back earlier demands to use calculations involving carbon sinks to achieve its Kyoto target.

The breakdown was widely condemned by environmental groups and some scientists, who had been expecting a firm, practical commitment to emerge from the meeting, attended by 7,000 participants from some

180 countries. Many blamed it on a lack of willingness by political leaders, particularly those in the United States, to take the tough measures needed to reduce global warming.

But several people close to the negotiations say that the gap between the two sides is not large. This was particularly true after the US delegation had backed off from trying to

Wellcome Trust funds bid to unravel zebrafish genome

Declan Butler, Paris

The UK Wellcome Trust is set to fund an effort, costing £5 million (US\$7 million) in the first year, to sequence the genome of the zebrafish (*Danio rerio*) at the Sanger Centre near Cambridge. All the data will be made freely available in the public domain.

Stars with stripes: zebrafish are the focus of a genome sequencing initiative in Britain.

The zebrafish is a model organism for the study of vertebrate development. The fish also has transparent embryos, allowing developmental abnormalities to be spotted by eye. The female lays 200–300 eggs each week — enough for the identification of candidate genes and positional cloning, and the embryos mature within a couple of months. Millions of fish can also be bred in a small space.

The project emerged from discussions last year between John Sulston, then director of the Sanger Centre, and Christiane Nüsslein-Volhard, of the Max Planck Institute for Developmental Biology. Nüsslein-Volhard recently launched a complementary, \$10 million project called the Tübingen 2000 Screen, which should allow point mutagenesis of the entire zebrafish genome to yield embryos with developmental abnormalities. The

US National Institutes of Health may spend US\$5 million on a similar screening project.

Fish genomes have long regions of 'synteny', where the order of the genes is similar to that found in humans, says Leonard Zon, a zebrafish researcher at the Children's Hospital of Boston. "This will allow genome 'ping-ponging,'" he says. "If a zebrafish mutant falls in a region of synteny, the [corresponding] local region of the human genome can be searched."

The zebrafish genome has about 1.7 billion base-pairs. The full sequence and the massive mutant screen should allow every developmental gene to be isolated, from which the mutated genes can then be cloned. Many of the genes isolated will be relevant to human systems, so that research on zebrafish mutants will assist the annotation of the human genome.

US delegate Frank Loy agreed to compromise.

This move was reported by the *Washington Post* as having followed a late-night conversation between President Bill Clinton and British Prime Minister Tony Blair, and formed the basis of a compromise agreement thrashed out between Blair's deputy, John Prescott, and the US delegation led by Frank Loy.

But some European countries rejected the agreement. Particularly strong opponents were the environment ministers of France and Germany, Dominique Voynet and Jürgen Trittin, respectively, who are both members of their countries' Green parties. Voynet said that Britain had "conceded too much to America".

Supporters of the US-UK compromise blamed the failure to bridge the negotiating gap on the inability of government officials, exhausted after two weeks of talks and two all-night negotiating sessions, to calculate its technical implications accurately.

Jan Pronk, the Dutch environment minister and chairman of the conference, said that the key political issues — including rules for counting emissions from carbon sinks — "could not be resolved in the time available".

Environmental groups oppose any allowance for sinks in emissions calculations. Greenpeace described earlier proposals from Pronk, which would have allowed the United States to include 50 million tonnes of sinks a year in its calculations, as a "free gift" that would allow emissions to continue growing.

But there are signs that the inclusion of sinks could increase the chances of the Kyoto agreement being ratified in the US Senate. US farmers' groups this month came out in favour of an international agreement on carbon sequestration.

"This is a critical shift which greatly improves the chances that the Senate will ratify the Kyoto Protocol," says Philip Clapp, president of the National Environmental Trust, a Washington-based advocacy group.

Margot Wallström, the European Union's environment commissioner, said that the experience of the UN Convention on Biological Diversity, which was agreed only at the second attempt, "shows that a temporary setback can lead to a better result in the end". ■

include reforestation efforts in the developing world in its calculations, and had cut its demands for the maximum domestic allowance for carbon sinks from 300 million to 75 million tonnes a year.

Argentinian researchers fight government plans for reform

Xavier Bosch

Argentinian scientists, already facing financial constraints caused by the country's international debt crisis, are rebelling over the government's plan to reform the National Council for Science and Technology (CONICET).

One of Latin America's most prestigious research agencies, CONICET employs 3,500 of Argentina's best researchers. Earlier this year, the Argentinian cabinet approved a plan by the science and technology ministry to boost links between CONICET and the country's universities.

But senior Argentinian scientists have attacked the plan as financially motivated and detrimental to CONICET's hard-won scientific reputation.

Under the plan, all new members of CONICET would join at the same rank and would receive a \$1,000 supplement to any university salary. They would compete with each other for university promotions, but if any of the new researchers failed to make the grade after four years, they would lose their CONICET membership.

Evaluation of the researchers' work would be carried out jointly by the universities, CONICET and the National Agency for the Promotion of Science and Technology. The status of current CONICET members would be unchanged by the reforms, although they could opt to join the new system.

The reforms will give more opportunity to young researchers and increase their mobility, says Dante Caputo, secretary of science and technology. He believes that CONICET has become too bureaucratic, and that

careers are blocked by its hierarchical structure, which divides researchers into five ranks based on seniority.

In a statement, the directors of some of the agency's research centres admitted that "young people have almost no possibility of entering CONICET". The average age of a CONICET researcher is 50, a problem the directors blamed on low public investment.

Armando Parodi, scientific director of the Biotechnology Research Institute at San Martin University near Buenos Aires, says that CONICET promotions are evaluated seriously and based on academic merit. He says that Caputo's plan would destroy the agency's career structure, and that it was drawn up without consulting researchers.

Parodi adds that the plan is supported by the administrators of the country's big universities, who he believes want to get their hands on CONICET's funds and its influence on academics. He says that the government's argument for better interaction does not stand up, as three-quarters of CONICET researchers already teach in universities.

Young scientists will benefit, says Dante Caputo.

José Viramonte, director of CONICET's Geonorte Earth sciences institute in Buenos Aires, says that the plan has been devised by Argentina's "bureaucratic establishment" to extend its power.

"Unlike the universities, CONICET has kept its distance from electoral commitments and cronyism," he says. ■

German universities used forced labour

Christina Hohmann, Munich

Academic institutions in Germany used thousands of forced labourers during the Second World War, according to evidence emerging from some universities and the Max Planck Society.

Victims of the practice, and in some cases their relatives, are eligible for compensation from a DM10 billion (US\$4.3 billion) fund created last year by German industry and government. But time is hardly on their side: only about 2.4 million of the estimated 11.3 million forced labourers who worked in Germany between 1939 and 1945 are thought to be still alive.

Discussions in the press about large-scale forced labour in industry have tended

to overshadow the actions of universities, which were also major employers at the time. But some universities have searched their archives for evidence of culpability.

The University of Tübingen, for example, has admitted that it used 150 forced labourers, 120 of whom were eastern European women working in kitchens or as nurses in the university clinic. The men, mostly prisoners of war, worked as handymen or gardeners.

The University of Heidelberg's records from 1944 list 23 'eastern workers', as well as 17 Russian civilians, seven French workers and one Croatian. The University of Stuttgart's list of alien workers and prisoners of war, drawn up in 1946 at the