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MAKING CSD WORK

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United States Environmental Protection Agency

Note: The opinions expressed in this article are Mr. Brown's and don't necessarily reflect the position of the U.S. government.

I. Backwards from Rio

As the United Nations General Assembly Special Session (UNGASS) on the five-year review of Rio came to a close in the early hours of Saturday, June 28, 1997, many weary delegates were wondering whether the spirit of Rio had been mortally wounded. At about 12:20 am, summing up the gloomy mood that had gained momentum during the last week of UNGASS, General Assembly President Razali Ismail reluctantly conceded that this was not the time to paper over the cracks in the celebrated "global partnership" for sustainable development and pretend that things were better than they are. This was a time for a "sober assessment," an "honest acknowledgment that progress to operationalize sustainable development remains insufficient," and an acknowledgment that "enormous difficulties of overcoming short-term and vested interests" were blocking implementation of Agenda 21.

At the very close of UNGASS sometime after 1:00 am, many disheartened delegates were troubled because the UNGASS text had not only failed to make progress on many important issues but on some may have actually weakened Agenda 21 objectives.

Although significant progress in implementation of Agenda 21 had been achieved on few issues since Rio, an acrimonious North-South debate over the content of a political statement in the last few days of UNGASS was viewed by many as another important but failed opportunity to make progress toward a sustainable future. Despite some notable successes since Rio in the creation of over 100 national sustainable development bodies, the initiation of 1800 local Agenda 21s worldwide, and the entry into force of several treaties, disputes between the developed and developing world over such issues of finance, technology transfer, law, and capacity building continued to prevent meaningful international agreement on further action to implement Agenda 21.

Attendees at CSD meetings could see that a handful of nations had taken agenda 21 quite seriously, others had made promising starts, many had never moved far out of the starting blocks, and few of the poorer nations had openly proclaimed that sustained economic growth rather than sustainable development was the national goal they intended to pursue. Of particular concern to many delegates was the collapse in North-South cooperation, a keystone concept in Agenda 21.

Many negotiators had hoped to reinvigorate the spirit of Rio at UNGASS but feared that the CSD had become the hospice for the

goal of international cooperation called for by Agenda 21. Although the CSD had been created to review the implementation of Agenda 21, it too often had become the battleground to re-fight carefully structured Rio compromises between the North and the South.

Although international cooperation on Agenda 21 implementation had stalled since Rio, UN reports prepared in preparation for UNGASS showed that the world had changed dramatically since the Earth Summit. The most momentous development since Rio was the rapid globalization of the economy entailed by astonishing increases in private foreign investment. UN reports prepared for UNGASS concluded that large increases in private sector led growth had become both the source of great hope of many of the world's poorest people and the cause of concern for others.

Because many poor people around the world had seen real increases in their standard of living due to foreign private investment, these large increases in world-wide finance since Rio were seen by many as the best promise to alleviate the suffering of the more than one billion people still living in absolute poverty. Yet, others were concerned about these trends because public foreign aid had actually decreased since Rio and some of the world's poorest people were not benefiting from private sector led growth. Moreover, huge increases in private sector foreign investment worried many because evidence is galloping in that private sector led growth may be exacerbating the global environmental degradation of forests, biodiversity, climate, oceans and fisheries.

Therefore, the gridlock blocking forward movement on the international sustainable development path that was so apparent at UNGASS was seen by many as a truly tragic development because this standoff was neither in the North or South's interest. This is so because evidence has been mounting that future generations in both rich and poor countries alike will suffer from a degraded environment unless Rio's call for new international cooperation on sustainable development is taken seriously.

The conflict between rich and poor nations on the how to move forward will not disappear overnight. Yet, there are reforms in how CSD does its work that should be implemented immediately to move CSD discussions off their unproductive track. These reforms should be enacted even if the political conflict endures, because a better understanding of the issues in contention is likely a precondition for the desperately needed political sea change. As explained in more detail later, significant confusion exists in CSD disputes about the nature of many fundamental CSD issues and the reforms suggested in this article should help to diminish the confusion. Needed reforms include several procedural reforms and changes in substantive focus.

II. Needed Procedural Reforms

Not everything that came out of UNGASS could be construed as a failure. Among other positive developments, UNGASS produced a refocused five-year work plan for CSD that held potential of avoiding abstract debates between the North and the South that had so plagued CSD negotiations. Increasingly unfocused debates over vague terms not tied to any specific problems dominated CSD meetings.

After Rio, other than in informal dialogue sessions, CSD followed a work plan that left little time for meaningful discussion on specific sustainable development problems nor provided an opportunity to review controversial chapters within the context of concrete problems. That is so because under the work plans for CSD-2,-3 and -4, all cross-sectoral issues were reviewed each year and each sectoral issue was reviewed on three year cycles. This meant, for instance, that the very abstract idea of capacity building

would be reviewed each year without being tied to some strategic vision of what types of capacity building were needed to solve concrete sustainable development problems. As a result, the CSD debate over capacity building was virtually guaranteed to be one in which the North and the South would fight over any language that could possibly enlarge or reduce obligations.

As a result, negotiations not only produced nothing meaningful on these issues but also resulted in the vaguest “weasel” words being inserted again and again when inevitable conflicts arose. As should have been expected, North and South negotiators tried to keep all of their options open and all of their interests protected when the CSD discussed the cross-sectoral issues of finance, technology transfer, capacity building, and sustainable production and consumption patterns.

CSD-2 through 4 agendas also allowed little time for debate and resolution of major substantive issues such as atmosphere and toxic waste. Typically, two days were allocated for major substantive issues such as these. This process also assured the most superficial coverage of complex substantive issues.

At UNGASS a decision was made to re-focus future CSD’s program of work on just a few issues. In 1998, the major issues to be considered at CSD-6 are freshwater and industry with capacity building, education and awareness, science, small island developing states, and technology transfer also being considered. Although, CSD-6 was viewed by many to be a potential turning point for CSD because of the opportunity to have a more focused, less abstract discussion, experience in the recently completed intersessional makes it apparent that further reform is necessary to assure that CSD discussions are focused on moving CSD toward Agenda 21 implementation.

Much of the five-day freshwater discussion during the recent intersessional was consumed by issues already agreed to in Chapter 18 of Agenda 21 and the decision on freshwater agreed to at UNGASS the year before. For example, at the intersessional there was protracted debate on whether water was an economic or social good even though CSD-5 had decided that:

[W]ater is a social and economic good with a vital role in satisfaction of basic human needs, food security, poverty alleviation and protection of ecosystems. Economic valuation of water should be seen within the context of its social and economic implications, reflecting the importance of meeting basic human needs.

Even though all nations had agreed at CSD-5 that CSD-6 should develop a “strategic approach” to for implementation of “strategies” to solve the world’s serious and growing freshwater problems, the lion’s share of the discussion in the recently concluded intersessional was focused on abstract principles rather than concrete implementation steps.

A. Recasting CSD Procedures To Encourage Strategic Implementation

Almost all observers agree that CSD should be focused on implementation of Agenda 21, not re-negotiation of its text. Yet, the existing CSD process is an extraordinarily poor one for moving toward implementation. Although CSD staffs have prepared some excellent reports that should have been used in a more productive manner, negotiations have rarely been focused on steps needed to move toward a strategic implementation of Agenda 21.

A strategic approach to problem solving entails examining problems under consideration in a way that allows for identification of steps that have real potential to change the status quo. To ensure a

strategic approach, CSD preparatory and decision documents should be organized like a strategic plan. A strategic plan should, a minimum, contain the following elements:

(1) **Problem Definition.** The problem definition section should include descriptions of the scale of the problem and its known causes. For global problems such as biodiversity or climate change, that are difficult to succinctly summarize the scale of the problem and its causes, this section should identify the underlying documents that support any abbreviated problem definition. When the scale or causes of a problem are not clearly understood, this should be stated as part of the problem definition.

(2) **Goals and Objectives.** This section should identify the progress that should be made on the problems under consideration.

(3) **Analysis of Who is Working on the Problem.** In addition to recognition of national responsibilities for solving the problem under consideration, this section of the document should identify which international institutions or organizations are working on the problem and the scope of their responsibility.

(4) **Barriers and Opportunities to Making Progress.** This section of the document should identify the barriers and opportunities for making progress on implementation of the Agenda 21 objectives.

(5) **Strategies to Attain Objectives.** This section should identify the specific steps that will be taken by specific actors to solve the problem or reach objectives.

(6) **Description of How Results Will Be Monitored.** This section should specify how and when results of strategies will be evaluated.

B. Disciplined Drafting of CSD Decisions

CSD discussions have often wasted enormous amounts of time reinventing carefully negotiated language in Agenda 21 or prior CSD decisions. Moreover, often negotiators appear to be unaware of prior CSD decisions or the text of Agenda 21 on matters in controversy. As a result, proposals are often made that invite endless discussion of abstract matters that have been carefully worked out in the past and for which no further political progress is likely.

Although nations need to retain the right to reopen issues in Agenda 21 where there are appropriate grounds for doing so, unless negotiators are aware of the text of prior decisions, they are likely to continue to raise issues that often have already been decided after long and painful negotiation.

In addition, without careful reference to prior text, new decisions are likely to create inconsistencies between new and old decisions. CSD should develop a method of easily retrieving CSD decisions by subject matter so that they can quickly be retrieved during negotiations. Unless CSD decisions are capable of being retrieved easily and understood in terms of how they supplement or modify Agenda 21, they will remain unknown and virtually useless.

For these reasons, CSD must insist on more disciplined drafting of new decisions and require that all proposed and final texts: (1) describe how it either amends or adds to Agenda 21 or prior CSD decisions, and (2) is consistent, to the maximum extent possible, with the style and format of Agenda 21.

In a similar fashion, a master index should be prepared of all post-Rio conferences including Stockholm, Beijing, Cairo, and Istanbul. Only those that have participated in these conferences are knowledgeable about what was decided at these conferences at which decisions were made that supplement Agenda 21. The decisions of these conferences are likely to be forgotten unless retrieval by subject matter is made easy. CSD negotiations often get bogged

down on issues about which agreement had been reached in post-Rio sustainable development conferences.

The CSD should also not renegotiate decisions arrived at in other international fora. CSD has often allowed itself to become the battle ground for wars that have been concluded agreeably in other venues. One recent example was a protracted CSD debate on the science of climate change that took place about six months after the IPCC report on this issue was concluded.

To implement these recommendations in CSD negotiations, the CSD Secretariat should prepare a report before each CSD meeting that identifies relevant CSD decisions, relevant text from post-Rio conferences and other international fora along with a set of instructions that stipulate that new proposals should identify how it amends other relevant text.

C. Create Informal Dialogue Sessions Between Adverse Parties

CSD has often devoted part of its annual agenda to informal dialogue sessions at which major groups or nations report progress on implementing Agenda 21. Negotiations on CSD decisions, however, have usually been conducted in formal negotiations from the beginning. While many observers see the discussions in the informal dialogue sessions to be of considerable value, the negotiations on the way forward have too frequently bogged down in fights over abstract language.

Any negotiation process should provide opportunity for the parties to exchange ideas, concerns, and understanding of issues under consideration in a safe setting. Successful negotiators search for solutions where all parties benefit. To structure universally acceptable solutions, opportunities for sharing of concerns and interests must be built into the negotiation process. Existing CSD procedures provide little opportunity for frank and focused sharing of concerns between conflicting parties.

A great deal of CSD's problem in creating focused discussions on concrete issues is endemic to any multilateral institution where parties often negotiate in blocks of nations to make the negotiation manageable. The more parties to a negotiation, the more challenging is the task of structuring discussions to maximize the potential of reaching concrete substantive conclusions. With over a hundred parties to most CSD discussions, who usually negotiate in blocks of nations, CSD will continue to provide only limited opportunities for frank interchanges on issues under discussion.

Yet, the CSD must and can do better in providing more opportunity for informal interchanges on real issues of concern and thereby improve the chances for more meaningful decisions. To accomplish this, the CSD should build into its process more informal dialogue sessions between conflicting parties. Parties to these sessions should be strongly encouraged by CSD, to express as concretely as possible, concerns and barriers to progress.

Moreover, because CSD is understood to be in the implementation phase of Agenda 21, opportunities for honest sharing of barriers and problems that are thwarting implementation must be built into CSD discussions. Although current CSD procedures provide some opportunity to share successful case studies, there is virtually no opportunity to describe barriers to progress. If open discussion about barriers to progress is to be built into the CSD process, it is imperative that these discussions take place informally. It is also imperative that in such discussions, nations are prepared to speak authoritatively about what the real barriers to progress are.

To accomplish the objective of providing opportunity for informal discussion among conflicting parties, the chair of the proceed-

ings could appoint informal groups comprised of adverse parties and other interested parties to identify barriers to and opportunities for moving forward. These informal groups should then report back to larger negotiating groups.

III. Substantive Reform

Implementation of the procedural reforms mentioned above should eventually lead to a shift in the subject matter discussed in CSD meetings. That is, for instance, a move toward more of a strategic approach to solving existing problems should lead to a more focused discussion of causes of existing problems and potential solutions. In addition to these procedural reforms, there are a number of changes in CSD substantive focus that are important to make CSD a relevant player on the world stage.

A. Expand Finance Focus to Include Both Private Sector Led Finance and ODA on Specific Issues

CSD discussions on finance should be expanded to examine the appropriate role of both public and private sector finance of sustainable development. This needs to be done because CSD has often become mired in outdated rhetoric about financing sustainable development. That is, the CSD has usually been stranded on the sand bar of official direct assistance (ODA) and has ignored the growing role and questions associated with the sustainability of private sector led growth.

In CSD negotiations, the South usually refuses to agree on new proposals unless the North agrees to provide new and additional financial resources. In these negotiations, the South argues that the developed world has failed to live up to the provision at Section 33.13 of Agenda 21 which states:

Developed countries reaffirm their commitments to reach the accepted United Nations target of 0.7% of GNP for ODA and to the extent they have not achieved this target, agree to augment their aid programs in order to reach that target as soon as possible and to ensure prompt and effective implementation of Agenda 21. (This provision was never agreed to by the United States in Rio.)

In the CSD discussions on finance, the North takes the position that ODA is less important than it was in Rio because private sector led finance is now dwarfing ODA and that those nations that have created attractive foreign investment environments are prospering. The North also argues that each nation has responsibility for national implementation of Agenda 21 without regard to the availability of ODA. The North further claims that much of the failure to implement Agenda 21 since Rio can be traced to failures of nations to enact the government reforms called for by Agenda 21 on transparency, participation, and accountability.

Because the amount of private sector led capital flowing to the developing world rose from \$44 billion per year at the beginning of the decade to over \$244 billion in 1996, many observers see private sector led capital to be the real engine of change in the developing world. Yet, North-South disagreements over ODA are the largest barrier to progress in implementation of Agenda 21 at CSD. As a result CSD negotiations are often deadlocked with impasses usually being broken at the last minute on the last day of negotiations with the insertion of weasel words such as "where appropriate" or "nations are invited to." As a result no meaningful agreements are reached.

Instead of almost exclusive focus on ODA, the CSD should examine the appropriate role of both ODA and private sector led finance.

Most observers agree that private sector led finance will not solve all problems because markets fail to internalize externalities, produce public goods, and deal with questions of mal-distribution. Markets alone will not make long term social investments in education, infrastructure, and research and development needed for national progress. Therefore nations must create policy frameworks to keep private sector led growth on a sustainable development path, invest in social capital, and provide a safety-net for the left-out. To create these frameworks, developing nations may need significant initial assistance from the developed world because, for instance, environmental law regimes may be prohibitively expensive for and technically beyond the ability of many nations.

Although many in the North believe that private sector led growth will eventually create sufficient national wealth to provide the tax base needed to finance the policy frameworks, even if this true, such prosperity may not kick in until long after significant global environmental damage has occurred. Moreover, even if the developing world had sufficient resources to finance policy frameworks, because poor nations' economic comparative advantage is often derived from low wage costs, it may not be in the South's economic interest to create expensive policy frameworks.

In addition, private sector investment is still not reaching many of the least developed nations. For these countries ODA may be a precondition to achieving sustainable development objectives particularly in regard to the Agenda 21 call for reduction of poverty.

Moreover, Northern financial support of Southern sustainable development efforts has sometimes been provided in response to the argument that greater pollution pressures on global environmental problems originate in the North. When such arguments can be made, the North has agreed to finance Southern compliance with environmental programs on several issues including ozone depletion and other programs financed by the Global Environment Facility. Therefore, the more focused finance discussions are on specific problems, the more likely there is potential for overcoming North-South gridlock on finance. Because, North-South equities change from problem to problem, it is imperative that North-South discussions on financing sustainable development focus on concrete issues.

The South has been quite understandably nervous about relinquishing any claim to the 0.7% GNP for ODA contained in Agenda 21 for they fear the North will establish a set of constraints on development that will freeze the South in place developmentally. Yet without diminishing its position on the importance of ODA, the South should support a more focused and expanded analysis of the potential of the private sector to finance sustainable development because such analysis is likely to more clearly identify the continuing and legitimate needs for ODA.

In summary, the role of private sector finance in international affairs has become too important of a global force to ignore its existence. The CSD must expand its focus on finance to include private sector finance but focus on specific problems, if CSD is to be an important player in world affairs. In looking at these issues, CSD can not do the necessary analytical work alone. It must rely on other UN and Bretton Woods institutions along with finance experts and NGOs to prepare for negotiations.

B. Transform Discussions on the Cross-Sectoral Issues of Technology Transfer, Capacity Building, and Sustainable Production and Consumption So That They Are Focused on Specific Needs and Problems

Like the discussions on finance, CSD discussions on the cross sectoral issues of capacity building, technology transfer, and sus-

tainable production and consumption patterns are plagued by serious North-South conflict. If progress is to be made on these issues, the CSD must restructure discussions of these issues to focus on concrete problems.

The deplorable quality of CSD debate on the issue of technology transfer is a dramatic example of the need for the CSD to change course. CSD discussions on technology transfer are usually triggered in reaction to Southern insistence that the North agree to new obligations to transfer technology when the North makes specific environmental proposals. Northern nations often respond to these requests by stating that governments do not have control over the intellectual property rights to most environmental technologies and therefore governments can't promise to transfer technologies that they have no control over. The debate on technology transfer rarely goes much further. In the three years that this writer has been following this issue, he has never heard mention of any one specific technology needed by the South that it can't obtain. As a result, most parties don't seem to even know what this dispute is about and don't engage intellectually. It is apparent that the North and the South continue to talk past each other on the issue of technology transfer. If progress is to be made on this issue, the CSD must insist that discussions on technology transfer identify specific technologies needed to solve particular problems.

These technology transfer debates often display additional confusion between Agenda 21 Chapter 34's call for technology transfer and capacity building. For instance, during a debate at CSD-5 in 1997, one diplomat stated that what his country meant by technology transfer was assistance in operating and maintaining a particular technology. Yet, many participants would categorize such a need under the concept of capacity building, a CSD subject which also rarely grounded in specifics.

Debates on Agenda 21's call for elimination of unsustainable production and consumption patterns are also conducted at a level that make contact with the ground very unlikely. Last year at CSD-5, the European Union came closest to initiating a meaningful debate about this issue with a call for all nations to reduce materials and energy use by a factor of 4 and 10. However, even this more specific approach left many nations shaking their heads. They wondered whether there was a need to reduce all energy and materials use to these targets yet there was never any substantive discussion that could clear up the confusion. Some nations were baffled because it was not clear on what factual premises such reduction targets were based. Putting all forms of energy and types of materials under the same reduction targets seemed to be counter intuitive. For example, it makes no sense to call for the same reduction in solar energy and fossil fuels use. In a similar vein, if houses were made out of sand, there is no obvious need to reduce materials used in constructing houses by a factor of 10.

The issue of unsustainable production and consumption must be grounded in factual analyses if it is to be taken seriously. Analytical tools are starting to emerge that will help make better sense of this issue. For instance, the World Resources Institute has recently produced an analysis of worldwide energy and materials flows, an analysis that has potential to make better sense of this issue. CSD must ground future discussions on consumption and production on a factual basis following the strategic approach to problem solving mentioned above, if progress is to be made.

IV. Conclusion

Largely because of North-South gridlock at CSD, some observers argue that the CSD "talk-shop" should be avoided as a waste of time.

Yet there are no alternative institutions that can achieve crucial CSD objectives including review of national compliance with Agenda 21. No other institution is examining the linkages among worldwide environmental, economic, and social trends nor attempting to determine what course corrections are needed at the global scale to achieve interrelated environmental, economic, and social goals. If CSD did not exist, its key functions would have been reassigned.

In addition CSD's broad purposes, many of CSD's specific programs are particularly valuable including CSD attempts to define sustainable development indicators that are usable as measures of progress by all nations, an important step in making sense of global scale problems.

The CSD is also unique in its involvement of NGOs and other stakeholders in international affairs and in its attempts to establish norms of behavior for all governments and the private sector throughout the world. We must find a way of reforming CSD before abandoning it. What is the alternative?

Mr. Brown is Program Manager for United Nations Organizations in the Office of International Activities at the United States Environmental Protection Agency. Before assuming his current responsibilities, Mr. Brown worked in a number of senior environmental policy positions for the States of New Jersey and Pennsylvania. He has also worked as an environmental lawyer and engineer, and taught philosophy, environmental law and sustainable development. He is interested in and written and lectured extensively on the interrelation between environmental science, law, economics, and ethics. The opinions expressed in this article are Mr. Brown's and do not necessarily reflect the opinions of the US government.

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/INTERGOVERNMENTAL FORUM ON CHEMICAL SAFETY (IFCS)

*by J.R. Hickman
President, IFCS*

Introduction

Chemicals are an essential requirement of modern society but their use can pose appreciable risks to human health and the environment. These risks must be reduced and managed throughout the world in the most cost-effective and sustainable manner.

The concept of the Intergovernmental Forum on Chemical Safety (IFCS or Forum) arose during the preparations for the United Nations Conference on Environment and Development (UNCED); and was refined and developed by a meeting of government-designated experts held in London in 1991. This meeting proposed that an intergovernmental forum on chemical risk assessment and management be established to promote the environmentally sound management of chemicals.

The 1992 UNCED reaffirmed this recommendation in Chapter 19 of Agenda 21 which led, in turn, to the first meeting of the Forum in 1994 and the adoption of Terms of Reference and Priorities for Action.

Purpose and Aims

The Forum is a non-institutional "arrangement" whereby representatives of governments, international and intergovernmental organizations and a wide range of NGOs from industry, labour scientific and environmental organizations meet to consider all aspects of the assessment and management of chemical risks, building on Chapter 19 of Agenda 21.

The purpose of the Forum is to provide policy guidance with emphasis on regional and sub-regional cooperation, to develop strategies in a coordinated and integrated manner, to foster understanding of issues and to promote the required policy support to discharge these functions.

The goal is to seek consensus among the participants on the development of strategies for the implementation of Chapter 19, Agenda 21 (Environmentally Sound Management of Toxic Chemicals Including Prevention of Illegal International Trade in Toxic and Dangerous Products), and undertake periodic review of such strategies.

The functions of the Forum include the identification of priorities for all aspects of chemical safety, both health and environmental, and the promotion of co-ordinating mechanisms at the national and international level. The Priorities for Action, adopted in 1994, identified some 43 specific recommendations, many with target dates, for the realization of the environmentally sound management of chemicals. Governments carry the primary responsibility in implementing these recommendations but there is no question that the

close collaboration of international bodies and NGOs is essential to the success of the process.

The Forum serves to bring the element of global accountability to bear on all parties in achieving the environmentally sound management of chemicals. By clearly delineating the goals and target dates, the level of achievement by governments in particular, is made visible and is reinforced if the targets are pragmatic and attainable. Such clarity works for the public good

Strengths of the Forum

The non-institutional nature of the Forum and its general and comprehensive terms of reference provide a flexibility and adaptability not often found in international organizations. Although voting is formally restricted to governments, in practice the emphasis on full participation of all partners has led to a consensus mode of operation. The transparency of the working procedures and the need for the full participation of all partners has resulted in a unique approach in dealing with global chemical safety issues. The views of all stakeholders are canvassed and heeded. Subcommittees, with representatives of governments and NGOs, are formed to draft text for consideration and negotiation by all participants. This gives great weight to the conclusions and recommendations made by the Forum.

Industry representatives saw the Forum as desirable and necessary in that it provided a unique opportunity at that time for direct industry input and participation in developing international policy. Since the formation of the Forum, other international organizations such as the OECD and UNEP, have adopted more transparent processes, perhaps encouraged by the Forum's example. Industry also saw the IFCS playing an important role in sorting out and managing a multitude of international activities related to chemicals management, and in so doing, prevent duplication and overlap during the implementation of Chapter 19 of Agenda 21.

This approach is in complete accord with the basic principle of partnership that was imbued in the spirit of Agenda 21, and particularly developed in Chapter 27. An essential element in the Forum's working mechanism is the full recognition of the role of all sectors of society -- governments, social partners, industry, scientific organizations and environmental, public interest and labour groups -- in promoting the sound management of chemical risks.

Achievements

At its first meeting, the Forum adopted detailed recommendations on Priorities for Action for the effective implementation of national and international efforts in the six Programme Areas of Chapter 19 of Agenda 21. At its second meeting, in February 1997, the Forum took stock of its accomplishments and noted where progress had been slow or non-existent on the recommendations, charting its direction for the next three years.

In general, the level of achievement has been most encouraging. The targets for the assessment of chemicals are being met, the global system for the harmonization and classification of chemicals is progressing well, a number of new initiatives are improving information exchange on chemicals, the Forum has had appreciable influence on a number of risk reduction activities and has promoted the development of comprehensive national profiles which strengthen the management capacity of countries.

Much remains to be done, however, in implementing the Chapter 19 mandate. Scarce resources will require the prioritization of activ-

ities related to the mandate of IFCS, and demonstrate a sound decision-making ability to coordinate effectively, prioritize and make choices on which issues should be addressed by the Forum. The most important of these priorities include capacity building, which is of direct interest to the CSD, and product stewardship.

IFCS Structure

Forum II elected the current Bureau officers, who will hold office until their successors are elected at the next session of the Forum:

President: Canada

Vice Presidents: Argentina, Hungary, Mali, and Korea

Past President: Sweden

The Intersessional Group (ISG) consists of the Officers of the Forum and not more than 26 Government participants as follows:

Africa: Angola, Cameroon, Kenya, Mali (Vice President), Morocco, Niger

Asia: India, Islamic Republic of Iran, Japan, Republic of Korea (Vice President), Malaysia, Syrian Arab Republic and Thailand

Central & Eastern Europe: Hungary (Vice President), Lithuania, Russia, and Slovak Republic

Latin America and the Caribbean: Argentina (Vice President), Brazil, Costa Rica, Mexico and Trinidad and Tobago

Western European and others: Australia, Canada (President), France, Germany, the Netherlands, Sweden, Switzerland, the UK and the US.

National Focal Points

National Focal Points are the backbone of the IFCS organization. It is through them that information on Forum activities is channeled. Focal points provide the Forum with information and progress reports on national priorities and activities. As of 1 March 1998, over 70 countries had designated their National Focal Points and nominations are still coming in.

Importance Attached to IFCS by Participants

The Forum Standing Committee (FSC) met in Yokohama, Japan, from 13-14 October 1997 to begin the work of planning and preparing for ISG-3 which will be held from 1 - 4 December 1998 in Yokohama, Japan. The importance attached to IFCS by participants is obvious from the attendance; all but one country and all NGO and IGO participants were in attendance despite the distance and high costs involved.

The Forum has proven its special role in a highly visible fashion with its work on persistent organic pollutants (POPs). The Forum developed, with the Inter-Organization Programme for the Sound Management of Chemicals (IOMC) member organizations, at the request of the UNEP Governing Council, an assessment of 12 specified POPs and provided recommendations on international action including a legally binding international instrument on POPs. Although few resources were available, the Forum was able to meet the UNEP request in little over a year and laid the groundwork for the POPs convention. A more traditional approach would have taken both more time and more money.

Mr. J.R. Hickman, IFCS President, will be making a presentation during the Industry Segment at CSD-6 in which further examples of value added and benefits to countries will be given.

SUSTAINABLE DEVELOPMENT

G-8 ENVIRONMENT MINISTERS MEETING: Meeting at Leeds Castle in England from 4 - 5 April 1998, environment ministers from the Group of Eight (G-8)—Britain, Canada, France, Germany, Italy, Japan, Russia and the US—stated they would make immediate cuts to greenhouse gas emissions and launch a coordinated fight against eco-criminals trafficking in endangered species and hazardous chemicals. The meeting was organized primarily to discuss ways to meet the emission reduction targets of six greenhouse gases by 2008-2012 as pledged in the Kyoto Protocol. In the statement, the environment ministers recognized that a “strong, efficient and effective compliance regime” should be put in place to back Kyoto's legally-binding targets. The statement said international issues such as the trade of emission quota limits, joint implementation and clean development will be backed by domestic action. To that end, the ministers said that their nations must pursue immediately significant domestic reductions in greenhouse gas emissions and noted their awareness of their responsibility to take the lead in combating climate change, which they characterized as the major environmental threat facing global development, health and prosperity.

UK Environment Minister Michael Michael said the Kyoto Protocol would have an impact on employment, but noted there would be a positive gain especially in the transport and energy industries. He added that the success of the Protocol rested on three key issues: legal rules enforcing the changes; an open trading system of quotas; and the voluntary participation of developing countries such as China, India, Korea and Mexico at the fourth or fifth meeting of the Conference of the Parties. He said the EU's target of reducing its emissions by eight percent by the deadline in the Kyoto Protocol was achievable. He said the contribution of individual EU countries to that target will be discussed in June.

The ministers also pledged to end ecological crime through better-coordinated policies in the eight member countries. Penalties and checks against the illegal trade in protected animals have increased in the EU and the US. The Conference on International Trade in Endangered Species (CITES), will also be strengthened under the aegis of UNEP. The ministers stated that international environmental agreements will have no effect unless they are effectively enforced and expressed grave concern about the growing evidence of violations of international environmental agreements, and particularly the involvement of international organized crime. According to CITES officials, trade in endangered wildlife is worth about US\$5 billion dollars a year. After drugs and traffic in arms, this trade is the most important activity of international criminal groups. UK Deputy Prime Minister John Prescott told the meeting that when that figure was added to trade in toxic waste and radioactive material, the total was US\$33 billion dollars. Smuggling in ozone-depleting gases such as chlorofluorocarbon (CFC) was of particular concern in the latter categories.

OECD ENVIRONMENT MINISTERS MEETING: OECD environment ministers, at their meeting in Paris on 2-3 April 1998, reaffirmed the leadership role and special responsibilities of OECD countries in the worldwide pursuit of sustainable development, in accordance with Agenda 21, as elaborated at the UN General Assembly Special Session (UNGASS) in June 1997. Ministers acknowledged the OECD's unique capabilities to contribute to these objectives through: development of analytical tools and strategies; promotion of the integration of economic, social and environmental policies; objective assessment of progress through peer reviews of environmental performance; and outreach. They welcomed the Secretary-General's commitment to make sustainable development a key strategic priority for the OECD, and his proposals in response to the November 1997 Report of the High-Level Advisory Group on the Environment. They stressed the crucial importance of strong environmental policies in the implementation of sustainable development, and expressed the hope that other ministers would integrate environmental concerns into their policies, while committing themselves to the integration of social and economic concerns into environmental policies. Ministers challenged their colleagues to work towards sustainable economic growth that enhances human and environmental, as well as economic, capital.

Ministers considered that economic globalization, when combined with sound environmental and social policies, can provide a positive impetus to sustainable development. The process of globalization provides an opportunity for all countries to be active participants in the world economy and thus has the potential to promote human well-being and environmental sustainability. They stated that in the absence of a strong environmental dimension in national policies and international cooperation, the benefits of globalization can be undercut by the health impacts of pollution, irreversible damage to global climate system, loss of biodiversity, increased degradation and loss of agricultural lands and fisheries, and the overuse of other natural resources. Ministers reaffirmed their commitment to the overall aim of making environmental, social, investment and trade policies mutually supportive so as to achieve sustainable development.

Ministers agree on the following goals as an expression of their commitment to action to implement sustainable development:

I - To promote strong national policies and effective regulatory structures on the protection of the natural environment and human health.

II - To promote an integrated policy approach which encourages coherence among economic, environmental and social policies, by:

a) promoting sustainable consumption and production patterns, through regulatory, economic, and social instruments, especially education and information, whilst giving particular attention to the global dimensions;

b) promoting other innovative approaches, such as eco-efficiency, aiming to achieve substantial improvements in resource productivity, for example by a factor of 4 and eventually of 10;

c) ensuring that prices of natural resources as far as possible reflect the true environmental and social costs of production, consumption and scarcity, in particular by gradually phasing-out environmentally damaging subsidies and tax breaks, and, as far as possible, by the “greening” of tax systems, through integrating environmental concerns into their design;

d) associating Ministerial colleagues in other key policy sectors, such as transport, energy, industry, trade, tourism, agriculture, fish-

eries and freshwater management, in integrating the environmental dimension into sectoral policies;

e) showing leadership by improving the environmental performance of governments' own operations, procurement and investment policies, and decision-making processes.

III. To strengthen international cooperation in meeting global and regional environmental commitments by:

a) giving a high priority to ratifying, implementing and establishing the incentives that ensure effective compliance with, and seeking synergies among, global and regional environmental conventions;

b) giving particular priority to the ratification and implementation of the Kyoto Protocol, in a way that:

- minimizes the socio-economic costs in developed and developing countries alike, and paves the way for further progress in limiting global emissions, by adopting effective national response policies and measures, and improving co-operation, with developing countries and with countries in transition to a market economy; and,

- recognizes that all OECD countries, on the basis of their differentiated responsibilities, need to play their part in combating climate change by implementing national strategies, including measures such as clear targets and regulatory and economic measures;

c) reaffirming their commitment to establish effective management systems for hazardous chemicals, *inter alia* through the signature, ratification and early implementation of the Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (PIC), and the phasing out of certain Persistent Organic Pollutants (POPs) through a global POPs convention, for which negotiations have been initiated by UNEP;

d) actively engaging non-Member countries in dialogue, shared analysis and the development of strategies for implementing sustainable development, building on the approach developed in the Environmental Action Programme for Central and Eastern Europe;

e) reaffirming the UNGASS commitments, and recognizing the need to increase the volume of development assistance and calling for the mobilization of private and public, domestic and external financial resources to enhance environmental investments, capacity building and the diffusion of environmentally-sound technology;

f) promoting efforts to ensure that environmental concerns are effectively integrated into the multilateral trading system, and recognising, where they are necessary, the use of trade measures taken in the framework of Multilateral Environmental Agreements (MEAs) as an important policy tool;

g) promoting efforts to ensure that environmental concerns are effectively integrated into the proposed Multilateral Agreement on Investment (MAI) in a way that supports sustainable development, and so as not to limit the capacity to make and implement national and international environmental policies;

h) furthering harmonization efforts among OECD countries on the implementation of OECD instruments on the Mutual Acceptance of Data, the management of chemicals and pesticides, the management of recyclable materials, and the development of testing and assessment methods for endocrine disrupters; and furthering cooperation on pollutant release and transfer registers (PRTRs), the development of inherently safer chemicals, and on the assessment of products derived through modern biotechnology;

i) giving particular focus to key cross-sectoral issues and the strategic directions for environmentally sustainable transport developed at the OECD Vancouver Conference and the UN Economic Com-

mission for Europe's November 1997 Conference on Transport and the Environment in Vienna;

IV. To strongly support participation, transparency, information and accountability in environmental policy-making by public authorities at all levels, *inter alia*, by:

a) supporting or facilitating participation of key stakeholders in civil society in the development, implementation and monitoring of environmental policies, and in particular to engage in an intensive dialogue with the business community, trade unions and environmental citizens' organizations on the future of environmental policy-making in a globalizing economy;

b) ensuring that, within the context of national law, and recognizing the importance of protecting confidential business information, the public has ready access to environmental data and that citizens and organizations whose interests are affected have the ability, through administrative or judicial procedures, to challenge acts or omissions by private persons and public authorities which contravene provisions of national law relating to the environment;

c) monitoring and adoption of environmental accounting, leading to better qualitative and quantitative environmental reporting by public authorities and private firms, on a voluntary basis, which is essential for a better democratic debate on environmental concerns;

d) taking note of the forthcoming UN/ECE Resolution on the adoption of the Convention on Access to Environmental Information and Public Participation in Environmental Decision-making and Access to Justice, at the Ministerial Conference in Aarhus, Denmark, in June 1998;

e) implementing the principles in the OECD Council Recommendation on Environmental Information, which ministers endorsed.

Regarding a role for OECD, Ministers stressed the importance of maintaining a strong environmental component as an integral part of the new OECD vision for sustainable development. In pursuit of their shared goals, and recognizing the new challenges and opportunities that globalization poses for governments and the international community, ministers highlighted the following priority areas for OECD work, which they recommended be reflected in the overall programme of work determined by the OECD Council:

a) deepen the analysis of the impact on the environment of globalization, especially of trade and investment by:

- deepening work on integrating environmental concerns into key economic sectors, such as agriculture and fisheries, transport, energy, and into trade, investment and fiscal policy, at Secretariat level and through co-operative arrangements among OECD committees;

- analyzing the potential impacts of the proposed MAI on the capacity to implement environmental policies and Multilateral Environmental Agreements, and urge OECD to encourage dialogue and find concrete means of promoting closer cooperation between EPOC and the MAI Negotiating Group;

- strengthening the environmental component of the OECD's Guidelines for Multinational Enterprises;

- continuing the efforts in the Export Credits and Credit Guarantees Group to develop approaches for taking environmental factors into account when providing official export credit support;

- expanding the testing and conducting of safety assessments of high production volume chemicals in an efficient way; and promoting the management of risks identified in these assessments, giving priority to the detection of endocrine disrupting effects;

b) support national and international efforts to implement the Kyoto Protocol, including through the Annex I Expert Group and the Climate Technology Initiative (CTI), by examining the economic, social and environmental implications of climate response strategies, policies, measures, and flexibility mechanisms;

c) analyze further the economic and environmental implications of the implementation of the CBD, as well as other multilateral environmental conventions, *inter alia* the Convention to Combat Desertification;

d) develop effective policy approaches for improving resource efficiency;

e) develop and adopt a comprehensive set of robust indicators to measure progress towards sustainable development, in concert with sustainable development indicator initiatives of other international agencies, to be used in country reviews and outlook reports, including the second cycle of environmental performance reviews;

f) continue to study the feasibility of introducing regulatory or fiscal measures in high growth transport sectors, such as aviation, in collaboration with ICAO and other competent bodies;

g) further develop work on environmentally sustainable transport (EST), including guidelines for implementing EST principles, and paying particular attention to the recommendations of the Vienna Declaration on Transport and the Environment.

Regarding a strategy for 2000 and beyond, Ministers invited the OECD to develop a new environmental strategy for the next decade and agreed to review it when they meet in 2001 to prepare for the "Earth Summit +10" in 2002. The Strategy should help to ensure excellence in the OECD's contribution to the implementation of sustainable development in the next century. For more information contact the OECD; Internet: <http://www.oecd.org/>

G-8 ENERGY MINISTERS MEETING: Energy ministers from the Group of Eight (G-8) met in Moscow on 1 April 1998, in accordance with an agreement made at the Denver Summit to hold an Energy Ministerial before the G-8 Birmingham Summit. Following opening remarks by co-chairs from the Russian Federation and the UK, sessions were held on: market outlook and competitive frameworks; energy sector structure; gas, electricity, regulation and nuclear safety; energy investment; transit and transportation; environment and energy; and the role of energy in response to the Kyoto Protocol, including energy technologies, renewable energy and energy efficiency. Ministers attending the Ministerial were Ralph Goodale, Minister of Natural Resources, Canada; Christian Pierret, Secretary for Industry, France; Dr. Gunter Rexrodt, Minister of Economics, Germany; Pierluigi Bersani, Minister of Industry, Italy; Kensei Mizote, Deputy Minister of International Trade and Industry, Masahiko Komura, Deputy Minister for Foreign Affairs, Japan; Federico Pena, Secretary of Energy, US; Christos Papoutsis, Commissioner, European Commission. Observers included the International Energy Agency and the Energy Charter Secretariat.

Delegates signed a communiqué on cooperation in the energy sector. Russia's Acting First Deputy Prime Minister Boris Nemtsov reported that the positions of Russia and the US with regard to developing pipeline routes in the Caspian basin were moving closer together. Nemtsov and the UK Trade and Industry Secretary Margaret Beckett signed the communiqué on behalf of the other ministers, and hailed progress made on cooperation in the energy sector. All participants agreed that energy is one of the main problems not only for G-8, but for the whole world and ensuring reliable, efficient, safe and environment-friendly energy supply is a cornerstone of sustained development. The communiqué highlighted several areas

where the ministers agreed to cooperate. These were state measures to ensure competition in the energy sector; non-discriminatory access to transport networks; opening markets to investment without discrimination or restrictions; and implementation of fair fiscal regimes. Participants said safety should be a top priority, especially in the nuclear sector, adding that special attention would be paid to the Kyoto Protocol. The communiqué adopted was to be sent to the British Prime Minister Tony Blair and to the President of the Russian Federation Boris Nikolayevich Yeltsin to signal that this meeting was an important stage in the preparations for the meeting of G-8 environment ministers in Birmingham, UK.

FIRST ASSEMBLY OF THE GLOBAL ENVIRONMENT FACILITY: The first Assembly of the Global Environment Facility (GEF) met from 1-3 April 1998 in New Delhi, India. The Assembly gathered Ministers and high-level officials from GEF Member governments to exchange views on the policies and operations of the GEF. Over the course of the three-day Assembly, statements were delivered by the Prime Minister and Finance Minister of India, the CEO/Chairman of the GEF, the heads of the GEF's implementing agencies, representatives of the global environmental conventions, the Scientific and Technical Advisory Panel, and an NGO representative. The Assembly was also addressed by approximately 80 Representatives of GEF Member governments, including 30 Ministers and one President. More than 900 participants attended the Assembly, representing 119 GEF Member governments, 16 international organizations and 185 NGOs.

Participants considered: the Overall Performance of the GEF and Lessons Learned; Policies, Operations and Future Development of the GEF; the Status of the GEF Trust Fund; and the Report on Membership. Several parallel panels and workshops were also convened. The Assembly formulated and endorsed the New Delhi Statement of the First GEF Assembly, which the GEF's CEO/Chairman said would be taken to heart by the GEF Secretariat and Implementing Agencies as they double their efforts for the global environment and sustainable development. The three-day Assembly, which was immediately preceded by a GEF Council meeting, considered and exchanged views on the GEF's performance, policies and operations in Plenary sessions. A number of panels and workshops on the GEF, its stakeholders and the global environment were also held.

Following the opening statements, delegates considered the following agenda items: the Overall Performance of the GEF; Policies, Operations and Future Development of the GEF; the GEF Trust Fund; and GEF Membership. Documents on each of these items, which had been prepared for the Assembly's consideration, were presented to participants during Plenary.

Approximately 80 Representatives of GEF Participant governments delivered statements over the course of the Assembly, including 30 Ministers and one President. Many speakers emphasized the need to ensure that GEF projects are country-driven and reflect national priorities. Several Representatives underscored the need to shorten and streamline the GEF project cycle. Many speakers also stressed the need to further clarify the concept of incremental costs. Several Representatives supported the recommendation for a strong monitoring and evaluation system. Some speakers addressed the need for the GEF to diversify its project portfolio and proposed additional areas on which the GEF might focus its efforts, such as: freshwater, agro-biodiversity, new and emerging technologies, land use practices, health and education, and urban management and coastal and marine management. Several Representatives highlighted the particular importance of GEF efforts in the areas of land deg-

radation and desertification. Numerous Representatives emphasized the importance of mainstreaming the global environment into the IAs' regular operations. Several countries, including the US, Canada, Switzerland, Italy, Finland and Vietnam, stressed the importance of confirming the GEF as the permanent financial mechanism of the UNFCCC and CBD. Malaysia called on the GEF to seek greater guidance from the Conventions' COPs as to the allocation and disbursement of funds. Nauru, on behalf of Pacific Island Country Participants, stressed the need to define the relationship between the GEF and the Kyoto Protocol's Clean Development Mechanism.

Numerous Representatives welcomed the second replenishment of the GEF Trust Fund. Several developing country Representatives expressed appreciation for GEF support for projects in their countries. Many shared experiences and highlighted projects from their countries, including: development of national action plans on rivers and biodiversity conservation (India); a regional environmental information project (Central African Republic); an emergency safeguarding programme for the Niger River (Mali and Burkina Faso); a national environmental program that takes into account stakeholders' needs (Togo); a biodiversity project for Lake Tanganyika (Burundi); pollution control for inland waters and a climate change program to determine national emissions (Malawi); photovoltaic projects for household use (Zimbabwe and Indonesia); a regional inventory of land- and marine-based pollution sources (Guinea); extension programs for ranching and biodiversity conservation (Côte D'ivoire); efforts to address oil pollution in the Southwest Mediterranean (Algeria); conversion of aerosol manufacturers to ozone-friendly production (Russia); the need for programs to protect watersheds (Niger); a regional water management project for the Caspian Sea (Kazakhstan); a project to combat desertification and conserve biodiversity in the Chari region (Chad); and establishment of an environmental trust fund at the national level (Bhutan). Many speakers also mentioned GEF support for enabling activities and requirements to meet their commitments under the Conventions, such as national biodiversity strategies and action plans, national reports and communications.

Panel of Eminent Persons on the Global Environment and Sustainable Development: Chaired by Birgitta Dahl (Sweden), the Panel of Eminent Persons was comprised of M.S. Swaminathan (India), Crispin Tickell (UK) and Mostafa Tolba (Egypt) and discussed measures for sustainable development in the context of global environmental problems. Swaminathan focused on biodiversity, stressing the linkages between food security, population pressures and biodiversity resources. He noted that those local communities sustainably using the largest variety of crops receive minimal support compared to publicly funded in situ and ex situ conservation efforts, such as parks, nature reserves, zoos and aquaria. He also emphasized the need to incorporate dimensions of ethics and equity in the 1999 review of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) and its impact on local communities. Reviewing the situation in Egypt, Tolba stated that demands for freshwater would be a central element in future transboundary conflicts, and also proposed that developed countries match environmental improvements funded by the GEF in the developing world (e.g., levels of CO₂ emissions reduced). Noting growing international scientific consensus on the human impacts on climate change, Tickell highlighted the need to further examine the impacts of population pressures, increased energy demands and the responsibilities of industrialized countries. Participants from the floor discussed equitable shares of "atmosphere" for each country, means to address underlying causes of global environmental problems, and how de-

veloping countries most affected by environmental change can act effectively in intergovernmental processes.

Efforts Toward Sustainable Development: Chaired by Vishwanath Anand, Secretary of the Indian Ministry of Forests and Environment, this panel consisted of R.K. Pachauri (India), S.S. Shri Boparai (India), T.N. Koshoo (India), K. Aggarwal (India), C.P. Oberoi (India), K. King (GEF) and Nay Htun (UNDP). The panel opened with a multi-media presentation detailing the development pressures and environmental challenges facing India, including poverty alleviation, water scarcity, air pollution, waste management and land degradation, and reviewed the country's legislative framework and project-oriented initiatives. Panelists raised a number of concerns regarding GEF policies, including the inadequacy of current incremental cost calculations, the length of the project cycle and the inseparability of global environmental benefits from the local context. Recommendations for the GEF included forming regional and national rosters of experts for GEF-related activities (e.g., calculation of incremental costs) and devoting increased attention to transportation, construction and water issues. Also highlighted were India's promotion of alternative energies such as biogas, micro-dams, wind power and photovoltaics, and the challenges to reducing the environmental impacts of coal-based power production. Comments from the floor included the need to replicate small locally-based power generation projects and the inadequacy of focusing on demonstration projects, which detracts from replication of known means to combat environmental degradation (e.g., retrofitting older coal-based power plants).

Science and the Global Environment: Scientific and Technical Advisory Panel (STAP) members Pier Vellinga (Netherlands), Jorge Soberon (Mexico), Robert Williams (US), John Woods (UK) and Istvan Lang (Hungary) comprised this panel, which was chaired by Jyoti Parikh (India). Vellinga discussed linkages between economic development, environmental degradation and resource use and the importance of integrating global environmental issues. He advocated international cooperation to facilitate further analysis by political, social and natural scientists on how human needs can be met in a sustainable manner. Soberon detailed a new paradigm for sustainable use of biodiversity based on an ecosystem approach that integrates community empowerment, market tools and an understanding of underlying ecological processes. Williams examined two trends -- the restructuring of the energy industry and the rapid rate of progress for environmental energy technologies -- and their potential to make clean and safe energy sources widely available in ten to fifteen years. Woods discussed global and transboundary environmental problems in both freshwater and marine ecosystems, STAP's work towards a Global International Water Assessment, and new information technology to improve performance of GEF projects in international waters. Lang announced the World Science Conference to be held in Hungary in June 1999.

GEF in the 21st Century: This panel was organized by NGOs and chaired by Liliana Hisas (Argentina). Panelists included Ashok Khosla (India), Juanita Castano (Ecuador), Thomas Odihiambo (Kenya), Simone Lovera (Netherlands) and Tahi Farvar (Iran). The panel addressed issues raised by the NGO Vision Statement for the Global Environment, including: mainstreaming sustainable development into the IAs and other institutions and NGOs' critical role in applying pressure in this regard; involvement of local communities in decision making, policy formulation and project design; the relevance of local knowledge for sustainable development efforts and for its integration into decision making at the global level; inconsis-

tenacy and conflicting aims of projects and within environmental ministries at the national level; and the need for the GEF to foster political support for environmental issues and participation in project planning. One panelist noted that the GEF is not addressing sustainable development problems holistically but is focusing too exclusively on environment, and highlighted an asymmetry in the GEF by addressing only efforts toward sustainable development in the South and not unsustainable production and consumption in the North. It was emphasized that NGOs must continue to remind the international community of the need for action to systematically address problems impeding sustainable development in both the North and the South. The lack of "additionality" of funding to promote sustainable development was also highlighted. In the ensuing discussion, the importance of improving cooperation and coordination among NGOs and the need for quality, not quantity, involvement of NGOs in the GEF were highlighted. One participant stressed the need to focus NGO efforts, call on governments to specify how they will involve NGOs in the planning and implementation process, and improve the GEF-NGO Network to enable NGOs to become real members of the GEF family.

Parliamentarians and the Global Environment: The Global Legislators Organization for a Balanced Environment (GLOBE) organized a panel of five current or former national representatives who presented a variety of issues and concerns that parliamentarians face. Barber Conable (US) said the US congressional system can lead to impasses if the majority party's policies are not supported, potentially resulting in increased attention to domestic issues at the expense of international issues. Akika Yamanaka (Japan) discussed responses to the changing nature of security and, regarding the environment, suggested that: the GEF support environmental education; Japan expand its technological assistance; and GLOBE establish information centers regarding national experiences and policies. Najma Heptulla (India) highlighted dialogue between countries through their parliaments, such as the Interparliamentary Union, and within countries, such as an Indian parliamentarians' forum for sustainable development. Mathias Keah (Kenya) noted that laws are often scattered in various pieces of legislation and related budgets are appropriated to different government agencies. He noted difficulties for national parliaments in legislating transboundary issues. He said parliaments need to be consistent and laws predictable. Doekma Eisma (Netherlands) said the EU struggles with distinguishing between local and regional environmental policy and suggested that sustainable development projects encompass fewer studies and more concrete environmental investments. GLOBE said it hosts international meetings where member legislators develop resolutions that they try to introduce in their national legislatures.

Media and the Global Environment: Ron Sanders (Antigua and Barbuda) chaired this panel, which was addressed by Anita Pratap (CNN), Regina Scharf (Gazeta Mercantil, Brazil), Diego Perez Andrade (Diario La Nacion, Argentina) and Adrian van Klaveren (BBC). Sanders highlighted the role of media in building awareness as a prerequisite for global action to save the environment. Pratap stressed the need to personalize and humanize reporting on environmental issues in order to bridge the gap between the local and the global. She said media's role is to be a catalyst rather than an agent of change, and stressed the importance of governmental action on environmental problems. Andrade said journalists have a responsibility to inform people of environmental issues and noted differences in types of information necessary for developed and developing countries. Sharf said journalists should be active partners in the promotion of sustainable development and stressed the need for special-

ized journalists knowledgeable of environmental issues and capable of placing them into larger ecological, historical and political contexts. Van Klaveren discussed the need to be more pragmatic about environmental issues as they are incorporated into mainstream media. He noted that the incremental nature of environmental stories makes them different from "news" and that this, along with the sheer breadth of the topic, poses a challenge to coverage. In the ensuing discussion, several themes emerged, including the "moral fatigue" of media consumers and how to keep them engaged, the need for media outreach programs within the GEF and the importance of orientation and training of journalists on environmental concerns.

Developing Country Private Sector Responses to the Kyoto Climate Agreement: Panelists identified barriers to private sector involvement and suggested how their involvement could be increased. Joaquin Ledesma (Argentina) found that, in Argentina, multinational corporations are acquainted with the Protocol, large national companies are familiar with the issue of greenhouse gases but it is not a priority, and small- and medium-sized enterprises are reluctant to provide information on emissions because of possible tax impacts. He recommended disseminating information adapted to each country's situation and stressed the need to convince business that it is rational to incorporate climate change considerations into their decisions.

Dana Younger (International Finance Corporation) said many environmentally-friendly technologies are not fully competitive with traditional technologies or may face market barriers, such as longer payback periods for energy efficient technologies. IFC's activities include exploring new financing modalities related to joint implementation and working with commercial banks to encourage them to enter into novel financing arrangements for energy efficiency projects, which are less amenable to traditional arrangements. He said the Clean Development Mechanism appears to offer an important degree of flexibility for developed and developing countries to expand the use of clean energy technologies in developing countries. B.S.K. Naidu (India) discussed his work in India to motivate private sector interest in renewable and efficient energy projects. Incentives to stimulate the private sector have included tax credits, duty exemptions and captive power consumption, whereby businesses with projects that generate power are ensured equivalent amounts of that power. A number of climatic and topographical conditions constrain the amount of renewable energy that can be generated. Responses to these constraints include a cost-benefit study on building higher wind towers. A member of the audience noted that while projects under the Montreal Protocol have introduced energy efficient technologies, their climatic impacts have not figured into the benefit calculations under the Multilateral Fund.

New Delhi Statement of the First GEF Assembly

Assembly Chair Sinha, in consultation with the Bureau, drafted the Statement of the Assembly. Representatives discussed the Statement at a Roundtable meeting on Friday, 3 April, and the Chair revised the text based on their input. The Assembly agreed to the revised Statement by acclamation during the closing Plenary. The Statement contains ten preambular and twelve operative paragraphs. The following summary highlights changes made after the Roundtable discussion and the agreed Statement's contents.

The preamble expresses utmost appreciation to the Government and people of India for hosting the Assembly. It stresses that the GEF is a unique and successful example of international cooperation and affirms the significant role of the GEF in supporting the objectives of agreed global environmental conventions and protocols. It

acknowledges the significant progress that the GEF, its IAs and the Secretariat have made in the four years since its restructuring and welcomes the second replenishment of the GEF Trust Fund of \$2.75 billion. Finally, it takes note of the Council's decisions and draws, as appropriate, on the analyses and recommendations in the documents prepared for the Assembly.

The operative section of the Statement emphasizes that for the GEF to meet its potential and fulfill its missions, it should:

- remain innovative, flexible and responsive to the needs of its constituents and serve as a catalyst for other institutions and efforts;
- ensure that its activities are country-driven and strengthened to achieve country ownership of its projects by basing them on national priorities, developing an outreach strategy targeting its multiple constituencies, increasing consultations with NGOs and local communities, and developing an action plan to strengthen country-level coordination, including the involvement of local and regional experts and community groups in project design and implementation;
- increase efforts to ensure sustainability of global environmental benefits generated by GEF-financing and catalyze longer-term efforts coordinated with other funders for capacity building and training;
- streamline the project cycle stressing simplification, transparency and country-drivenness;
- undertake long-term planning and multi-year support to maximize global environmental benefits;
- make the process of incremental cost calculation more transparent and pragmatic, recognizing the importance of the concept and the need for its clarification;
- strengthen its monitoring and evaluation functions, as well as stimulate dissemination of lessons learned and the transfer and adoption of new technologies;
- better define linkages between land degradation, particularly desertification and deforestation, and the four focal areas in consultation with the CCD, and increase support for such activities as related to those focal areas;
- allow for IAs to promote measures to achieve global environmental benefits within their regular portfolios, consistent with the relevant conventions and respecting the authority of the IAs' governing bodies;
- build strong relationships with the global scientific community, especially in recipient countries;
- promote greater coordination with and co-financing by other funding sources and expand opportunities for execution of activities by other bodies, particularly regional development banks and NGOs; and
- strive to mobilize additional resources from public and private sources and explore new private sector partnerships and private-public ventures.

For the complete Sustainable Developments report on the GEF Assembly try: <http://www.iisd.ca/linkages/sd/gefasmbly.html>

INTERNATIONAL CONFERENCE ON WATER AND SUSTAINABLE DEVELOPMENT: The International Conference on Water and Sustainable Development took place from 19-21 March 1998 at UNESCO Headquarters in Paris. The conference, sponsored by the Government of France, gathered approximately 600 participants, including Ministers and high-level officials from public bodies in charge of water management in 84 countries and representatives of civil society, UN agencies, international organiza-

tions and development banks involved in the water sector. The objective of the conference was to contribute to the elaboration of strategies necessary for improving freshwater resources conservation and management in rural and urban areas to ensure better-controlled drinking water supply, sanitation and irrigation, while integrating desertification control into these objectives.

Participants convened in three parallel experts' workshops, on improving knowledge of water resources and uses for sustainable management, favoring the development of regulatory tools and institutional capacity building, and defining strategies for sustainable management and identifying appropriate financial resources. In these workshops, delegates heard presentations on a number of case studies and discussed a series of draft recommendations which they later finalized and submitted to the Ministerial session for adoption. Two special workshops were also convened by the Global Water Partnership and the World Water Council and by the International Network of Basin Organizations. A Ministerial session took place during the second half of the conference, where delegates were addressed by more than 120 Ministers, high-level officials and representatives of international organizations, including French President Jacques Chirac and French Prime Minister Lionel Jospin. A drafting committee also convened and formulated a Ministerial Declaration.

The conference adopted a Programme for Priority Actions, comprised of recommendations from the three expert workshops, as well as a Ministerial Declaration. These documents will be submitted as official documents and will provide input for discussion at the sixth session of the Commission on Sustainable Development (CSD-6). The following is a summary of the Programme for Priority Actions.

Improving Knowledge of Water Resources and Uses for Sustainable Management

Establishing and improving integrated systems for monitoring water resources, their uses and ecosystems: This section states that a high priority should be given to the strengthening or establishment of local, national or international integrated water information systems in order to mobilize information for water resource and ecosystem management, water use regulation and protection against point or non-point source pollution, and prevention of crisis situations. A better assessment of water resources, their different uses and their efficiency is essential.

Strengthening and establishment of integrated information systems: Integrated information systems should be developed on various scales, from local to global. They should be structured as long-term monitoring systems, particularly at the level of large river and lake basins, and aquifers. Governments are responsible for their sustainability and must also ensure improvements in quantity and quality of information.

Development of data exchange: Priority should be given to the national and international standardization of definitions, development of user-friendly formats, and access to and exchange of information.

Strengthening Regional, National and International Programmes for Acquiring Fundamental Knowledge of Water Resources

Understanding Major Trends And Their Impact: In order to improve research capacities, international scientific, institutional and technical cooperation should be strengthened to develop concepts along with indicators and common methodologies, particularly with regard to the characterization of:

- reliable and "usable" resources on the basis of rational demand management;

- different consumptive or non-consumptive water uses in basins, their evolution and efficiency;
- point and non-point pollution sources;
- the condition of aquatic ecosystems, rivers, lakes, wetlands and groundwater;
- eutrophication and biological degradation of rivers, lakes and reservoirs;
- extreme meteorological and hydrological events;
- economic and social values of ecosystem functions;
- modification of watercourse flow regimes and functioning of aquifer systems caused by infrastructures, withdrawals and discharges; and
- changes in land use and soil degradation, biological diversity and living aquatic and terrestrial resources.

Due to women's role in utilizing and conserving water resources, their knowledge and experience should be considered as a component of any sustainable water management programme. Information systems should rely on data that reflects the role of women. The users of water-related information must be associated with data collection. Prospective studies should be carried out on water resource availability and changes in water demand to assist in identifying potential water crises. It is particularly important to be able to assess the interaction between inland freshwater resource management and other major environmental issues and to make a connection between water, health, sufficient nourishment and poverty.

Facilitating regional and international cooperation to improve knowledge: To improve knowledge, it is necessary to reinforce regional and global programmes, that will rely, whenever possible, on national programmes. Considering their geographic coverage and their aim, some should be financially supported, while others call for cooperation. The section lists some ongoing international programmes.

Networking Water Documentation Systems

The following activities should be promoted:

- collection of easily understood information and wide dissemination to all stakeholders in order to promote professional training, disseminate new knowledge and enhance public awareness;
- creation of interlinked and widely disseminated systems for exchanging institutional, economic and technical documentation and baseline information; and
- development of compatible references, protocols for computerized exchange of documentation and multilingual approaches, and management of the network and training of documentation specialists.

Promoting Human Resources Development and Institutional Capacity Building

An introduction notes that the two key topics in this section are the integrated management of water resources and services for the supply and use of resources, including sanitation. The section builds on the Harare experts group view that an integrated approach requires a significant reinforcement of institutional and human capacities at both national and local levels in a complementary manner and with the involvement of civil society. There is a call for strong political will and long-term financial commitment to make the recommended actions effective and durable.

a) Institutional Capacity Building

Role of Public Authorities: The importance of supporting integrated and multi-year projects for the establishment and improve-

ment of administrative, financial and technical frameworks is underlined, in order to improve management of the water sector. Taking account of specific needs, capacities and cultures, projects should address:

- legislation and regulations for integrated water management and enforcement;
- management agencies with well-defined responsibilities and financial resources;
- institutions and procedures to enable participation by local authorities, users and civil society, including women, nomadic people and the poor, in decision-making and project specification;
- detailed studies for long-term water development at the river basin or aquifer level; and
- elaboration of multi-year priority national investment programmes, taking account of user-pay systems and the polluter pays principle.

Role of Local Authorities: Objectives with regard to the devolution of water supply and sanitation responsibilities to local authorities include: improving decision-making capacity for local managers; facilitating exchange of experience between managing agencies; improving economic and technical service efficiency; and promoting local initiatives.

Participation of Civil Society: Requirements for public and civil society participation in planning, design and funding are: access to and dissemination of information; training of decision makers, including village leaders and NGOs; promoting initiatives within advocacy groups; and full involvement of women and children's awareness raising. It is recommended that a significant share of ODA for large infrastructure, equipment and institutional reform be allocated to these activities.

Implementation Of Management Tools For Transboundary Freshwater Bodies: Referring to Agenda 21, the Rio Declaration and the UNGASS Programme for Further Implementation of Agenda 21, riparian States are encouraged to cooperate on transboundary water matters, taking account of the interests of the States concerned. To this end, it is considered desirable to: promote information exchange between riparian countries; develop dialogue, including at the level of relevant international institutions when appropriate; and define priority actions of common interest. The section also calls for enhanced action by bilateral and multilateral donor institutions, and invites the GEF to take account of the Priority Action Programme under relevant focal areas.

Collection and Dissemination Of Economic Information: Countries undertake to strengthen studies on costs of different water uses, performance monitoring, and national and regional indicators. Monitoring mechanisms should be developed on an appropriate scale.

b) Human Resources Development

Multidisciplinary and multisectoral training and information provision for water professionals and users are identified as prerequisites for optimum water use and cost-effectiveness.

Vocational Training For Professionals: There are calls for a significant increase in funding, in-service vocational training funded by public and private employers, particular attention to the training of women, priority ODA funding for regional training focal points, and the possible establishment of specialized technical and managerial training institutions. Networks for training trainers and developing materials are also proposed. Implementation of integrated water resources management is said to require appropriate high-level train-

ing and high priority is attached to training least qualified staff to improve operating conditions, maintenance and administration.

Research And Transfer Of Technology: There is a call for the development of national and regional research programmes linked to higher education, and the exchange of know-how and technology, taking account of indigenous technologies. The responsibility of the international community in this regard is underlined.

Awareness, information and education of users: Water management is described as an increasing responsibility of users and local populations, who should be made more aware of issues relating to wastage control, the economic, social and cultural values of water, disease prevention, soil erosion and environmental protection. This will require a global transdisciplinary approach with strengthened actions to enable women's participation.

Defining Strategies for Sustainable Water Management and Identifying Appropriate Means of Financing

Formulation and implementation of sub-national, national and regional strategies: This section states that: countries that have not yet formulated sub-national or national strategies for the water sector should be encouraged to do so; regional strategies should be developed as necessary; existing strategies should be evaluated and updated regularly; and implementation of these strategies should meet requirements for integrated water resources management and include adaptation and modernization of institutional, legislative and regulatory frameworks, improvement of knowledge of resources and uses, and training in service management and equipment maintenance. Instruments to support the use of water as a catalyst for regional cooperation could be emphasized.

Mobilizing Financial and Other Resources

Mobilization of national and local resources: Water planning and management must be considered within a socio-economic development framework while recognizing the vital role of water in fulfilling basic human needs. Incentives to improve water resources use and protection, pricing and financial, as appropriate, should be developed. Ways and means to facilitate a gradual transition toward full cost recovery should be explored and should be transparent. Subsidies for specific groups, particularly poor people, might be considered in some countries.

Appropriate frameworks should be established to:

- enable the sustainable mobilization of private or public funds to finance water supply and sanitation networks;
- facilitate access to credit and encourage micro-credit development;
- provide, as needed, public or private investors with appropriate risk guarantee schemes for the financing of investments;
- set up, to the extent possible, user pays pricing systems that cover direct or indirect costs of services with costs billed to users who can afford to pay;
- manage, as needed, the transition toward recovery of, at a minimum, operational maintenance and replacement costs and watershed costs, with, as necessary, an intermediate phase in which these could be partly covered by public funds;
- ensure transparency;
- apply efficiently the polluter pays principle; and
- take into account costs related to acquisition of knowledge, surface and groundwater protection and development, ecosystem preservation and management, among others.

Mobilization of external resources: Bilateral and multilateral donors should assist countries in formulating and implementing integrated water resources management strategies, consistent with defined priorities. Evidence that existing resources are used optimally will help mobilize additional financial resources from national and international sources, both public and private. Joint action and co-financing of multilateral and bilateral donors should be emphasized.

Use of innovative mechanisms: Due consideration should be given to greater private sector involvement, innovative models for local water resources management and use of market mechanisms where appropriate.

Mobilization of local human resources and knowledge stemming from different cultures: Local human resources should be mobilized and the population's diversified know-how utilized.

Priorities for ODA

Bilateral and multilateral donors should first concentrate concessional financing on enabling activities and programmes intended to improve the enabling environment in order to meet basic priority needs, building on ongoing activities. Among these:

- meeting basic needs, with special consideration for gender and equality issues;
- organization of integrated monitoring systems and databases to improve information on resources, use and pollution;
- implementation of institutional, administrative and economic reforms;
- vocational and in-service training;
- facilitation of public-private partnerships;
- sustainable management of water-related ecosystems;
- research, training and capacity building;
- natural disaster preparedness; and
- efficiency of irrigation.

Annex - Promotion of Partnership and Dialogue

An annex to the Programme states that all public authorities, public and private companies and NGOs involved in the water sector are invited to engage in a permanent dialogue with all users and beneficiaries. This dialogue requires sharing all relevant information with stakeholders and discussions on objectives and implementation modalities. Transfer mechanisms of know-how, knowledge, technology and all relevant information for improving efficiency and fostering development of services will be promoted through institutional or business partnerships, among others. All actors will support, as appropriate, sharing and dissemination of experience and exchange of information.

Ministerial Declaration

In the Ministerial Declaration, Ministers and Heads of Delegations state that they: are convinced that freshwater has mutually linked and supportive social, economic and environmental values and is essential to sustainable development; are guided by the conclusions of UNCED and UNGASS; recall previous deliberations on water by the international community; note the ongoing preparatory process for CSD-6, including contributions from recent expert group meetings; express concern over a number of issues which pose serious threats to social and economic development; are concerned that constraints on access to water could become a major limiting factor in sustainable development; and are determined to take advantage of the opportunities to tackle these problems by promoting local and national systems for managing the sustainable use of water resources.

es based on an integrated approach that links development with protection of the natural environment, participation of all actors and interested parties, and recognition of the social and economic values of water.

The Declaration also underlines the importance of: water resources in satisfying basic human needs, the preservation of ecosystems and for social and economic development; protecting ecosystems to maintain and rehabilitate natural hydrological cycles; water for future prosperity and stability and its recognition as a catalyst for regional cooperation; improving knowledge and understanding of water resources; strengthening institutions, in particular local institutions, and improving training and awareness of professionals and users; promoting the development, management, use and protection of water by public and private partnerships based on participatory decision-making processes; and international cooperation in achieving these objectives at national, regional and global levels.

The Declaration: calls upon the international community, public authorities at every level and civil society to give priority to providing safe drinking water and sanitation to all; calls on the international community to take into account the Harare expert meeting's outcomes and develop a statement of principles to be applied in developing and implementing local and national water management systems and international cooperation to support them; and commits support for the implementation of the following guidelines, where appropriate, and in the framework of national and local strategies, taking into account each country's specific situation:

- promote the integration of all aspects of the development, management and protection of water resources by developing plans that set out to satisfy basic needs and promote efficient and equitable allocation of water resources, protection of ecosystems and maintenance of the hydrological cycle. Shared vision between riparian countries is important for the effective development, management and protection of transboundary water resources. Relevant international conventions can make a contribution to the integration of their special interest in sustainable water use.

- mobilize adequate financial resources from public and private sectors, and as an important part of this task, enhance the effective use of available resources. Provisions for progressive recovery of direct service costs and overheads, while safeguarding low-income users, should be encouraged. ODA should complement and focus programmes designed for creating enabling frameworks for the sustainable development, management and protection of water.

- improve knowledge, training and information exchange by encouraging increased transfer of technology and expertise, development of monitoring and information systems related to water resources and their uses, and support programmes for vocational and continuous training. In parallel, people living in poverty and disadvantaged groups, indigenous communities, youth, local authorities, leaders of local communities and NGOs should be enabled to be more involved in the decision making process. Women should be enabled to participate fully in project definition and implementation.

The Declaration: highlights the importance of following up the guidance contained in the Programme of Priority Actions and submits it for consideration at CSD-6; calls on relevant international institutions to follow-up the actions derived from the recommendations contained in the Declaration and the Programme of Priority Actions; stresses the need to ensure that the problems of achieving sustainable development, management and protection, and equitable use of freshwater resources are kept under review, to improve coordination between UN agencies and other international

organizations, and to ensure periodic consideration, within the UN system and in particular the CSD, of the proposed priorities of governments for action, and to emphasize the role of UNEP in the field of environment; and emphasize the need for continuous political commitment and broad-based public support to ensure the achievement of sustainable development, management and protection, and equitable use of freshwater resources and the importance of civil society to support this commitment. For the complete Sustainable Developments report try <http://www.iisd.ca/sd/frh2o.html>

MEETING ON THE GLOBAL ISSUES OF SUSTAINABLE DEVELOPMENT: A high-level meeting was held in Budapest, Hungary from 13-15 March 1998 to discuss key issues on the international environment and sustainable development agenda that emanate from UNGASS, the Third Conference of the Parties to the UNFCCC and UNEP's High-level Committee of Ministers and Officials. The discussion also focused on the state of preparations for the expected outcome of CSD-6 and the first GEF Assembly. The agenda of the informal of the meeting included: general views on the UNGASS follow up related to freshwater resources and industry; the significance of the Kyoto Protocol and the key steps before COP-4; the evolving role of GEF in support of global environmental conventions; and general status and perspectives on UNEP.

The meeting was attended by environment ministers and representatives from 19 countries and the European Commission, the UN Under-Secretary General for Social and Economic Affairs, the Executive Director of UNEP and the CEO of the GEF.

In addressing the follow-up to UNGASS, participants agreed that UNGASS demonstrated clearly that much more remains to be done at all levels. They also agreed that stronger political will has to be mobilized to expedite the progress in the implementation of Agenda 21 and foster national actions and international cooperation in the area of sustainable development. However, they noted that UNGASS advanced the international understanding of a number of key issues, reconfirmed the UNCED commitments and resulted in the adoption on important decisions. They emphasized the importance of preparations for CSD-6 and expressed hope the session would meet the high expectations attached to it by governments and other partners. Participants highlighted the new CSD Programme of Work, which they characterized as a more integrated approach to the economic, social and environmental components of sustainable development.

They said the main political challenge for CSD-6 is to achieve tangible results, secure further commitments to action and advance international consensus on the issues placed on the CSD agenda. They stressed the importance of CSD building upon the participatory approaches developed during previous sessions and exploring new ways for even more effective involvement of major groups and other partners. They said they were looking forward to deliberations during CSD-6's Industry Segment, which for the first time will provide and opportunity for inter-active dialogue between the representatives from governments, business and industry, trade unions and NGOs. While supporting the UNGASS recommendation that ministers other than environment ministers should participate in CSD discussions, they underscored that the environment ministers should continue to be actively involved.

Regarding strategic approaches to freshwater management, participants reconfirmed that the issue of freshwater is among the most pressing priorities on the sustainable development agenda. They expressed grave concern that freshwater problems are worse than at the time of UNCED and that current trends in this area identified, if not

reversed, may soon jeopardize the prospects of sustainable development and efforts for poverty alleviation, and may pose a serious security threat in a number of areas of the world. They expressed hope that the CSD would decide on the specific modalities for further policy dialogue to be held under its aegis, on concrete actions towards advancing integrated approaches to sustainable water management, and on effective measures to support national efforts through international cooperation.

They noted that among the most challenging tasks of the further dialogue on the issue of freshwater is the need to integrate the two main approaches to the issue; namely, the need to treat water as an economic good and an environmental resource of growing scarcity and the role water plays in meeting the basic human need and as a source of life. They noted the importance of making equity considerations, in particular in addressing the problems of the poorest people, an integral part in the formulation of strategic approaches to integrated water management. They said an equally important goal is to ensure that water use does not undermine the integrity of the ecosystems. Participants said the CSD should call upon all countries to elaborate as soon as possible their plans and strategies for integrated water management and report to CSD in 2002. An important task for the CSD is to promote effective collaboration within the UN system and UNEP, as the environmental "conscience" of the UN system, is expected to play a leading role. They also supported regional approaches to cooperation.

They called for stronger cooperation and coordination between donors and recipients of financial assistance, which should be guided by recipient priorities, and between international institutes. They invited the CSD to consider this issue when it discusses the recommendation made during its Intersessional Working Group meeting on the possibility of establishing a mechanism for financial support of national efforts in the area of freshwater. Such a mechanism could be designed as a network of existing international donors that will promote greater policy coordination and joint programming among the "traditional" providers of assistance. Participants noted the importance of having the CSD decide on the most effective format for an intergovernmental dialogue on freshwater between 1998 and 2000, and said one option was to devote some time during an Intersessional Working Group meeting in the year 2000 to assess progress achieved. They noted the importance involving water industry and underscored the usefulness of a code of conduct.

Regarding industry and sustainable development, participants welcomed recent initiatives of the private sector aimed at enhancing environmental and social responsibility in industry, promoting broader dissemination of information on sustainable business practices and raising eco-efficiency. They called upon countries to enhance their efforts towards strengthening the markets for green products and moving toward "recycling societies." Governments can set a positive example by promoting "green purchasing" and promote recycling. The potential of such voluntary schemes as eco-labeling and green certification has to be further explored. They noted that all schemes should be carried out in accordance with international trade rules and commitments. They expressed hope that CSD-6 would give due consideration to the linkages between industry and freshwater in the context of sustainable development, as well as to environmental management systems.

Regarding guidelines for consumer protection, they welcomed the results of the recent expert group meeting in São Paulo and expressed hope that CSD-7 would give the issue due consideration. They recognized that some countries need to review the outcome of

the São Paulo meeting and undertake further consultations with stakeholders, but said CSD-6 should consider an effective follow-up process in that area. Such process could take the form of a series of international meetings that would result in the adoption of additional appropriate guidelines for adoption at CSD-7.

Regarding the GEF, they noted there would be increasing demands for GEF funding because many countries were preparing their national communications under the FCCC and national strategy plans for CBD, and called for sufficient funds. Participants highlighted the first GEF Assembly and highlighted several important issues and recommendations in the CEO's report, such as: ensuring country ownership of GEF activities; granting access to GEF resources to regional development banks; mainstreaming environmental issues; increasing private sector involvement; monitoring and evaluating lessons learned; simplifying and clarifying the estimation of incremental costs for all GEF programme areas; stressing the significance of full replenishment; considering the need to elaborate the Clean Development Mechanism of the Kyoto Protocol and ensuring that it not conflict with the GEF; emphasizing the importance of co-financing and leveraging of resources. Participants called on all Parties involved with the replenishment to find rapid solutions to close the current small funding gap.

Regarding the Kyoto Protocol, participants engaged in a general evaluation of the achievements of COP-3 and discussed the key issues and provisions of the new protocol. They agreed that the adoption of the Kyoto Protocol is a significant first step toward climate protection in the 21st Century and said early signature is an important signal in the ongoing process. They pointed out that there are many remaining issues to be further elaborated, including further elaboration of emissions trading, joint implementation, the Clean Development Mechanism, compliance procedures and methods to count sinks. They also noted the need for more active participation of all Parties, including both developed and developing countries, and for longer-term strategy, taking into account the IPCC Third Assessment Report to be issued in 2000/2001. They highlighted the importance of the precautionary approach and cautioned that COP-4 should not reopen the debates completed in Kyoto.

On the elaboration of three mechanisms to prepare for the early ratification and prompt implementation of the Protocol, and said these mechanisms should not be used to create loopholes. Regarding emissions trading, they emphasized that a transparent accessible and verifiable system is needed and this new mechanism should be designed to contribute to actual global reductions of GHG emissions. They said the Clean Development Mechanism is not a fund, but a project-based approach for cooperation between developed and developing countries. There should be a clear distinction between functions of certification of emission reductions resulting from a project activity and disbursement of a share of the proceeds to assist in meeting the costs of adaptation for the most vulnerable countries. Some delegates expressed the view that policies and measures, in particular in the area of energy and transport, should be further elaborated as ways to implement the Kyoto Protocol. Regarding more active participation of all Parties, participants noted that many developing countries have initiated voluntary domestic actions to address climate change and emphasized that a new partnership should be established to promote such initiatives.

Participants also heard a report from the Executive-Director of UNEP who emphasized, *inter alia*: stabilizing UNEP and make it part of a stronger, efficiently organized UN office in Nairobi; giving priority to improving the financial situation of UNEP and UNCHS;

promoting and supporting integrating implementation of environmental conventions; establishing an early warning system; intensifying UNEP's role in cleaner production and chemical management. Participants noted that the task force established to improve institutional arrangements will have a crucial role to play. They stressed that strengthening UNEP implies that the organization must make the transition and become again an authoritative player in the environmental arena. They supported the substantive priority areas outlined by the Executive Director and said other important issues were clarifying the relationship between trade and environment, promoting the development of environmental law; and developing environmental indicators. They said the special session of the Governing Council in May 1998 might provide an opportunity to discuss and agree on early proposals for UNEP activities in important areas such as freshwater management and the follow-up to Kyoto. They agreed that the weak financial situation of UNEP requires urgent action and expressed support for a more adequate and predictable funding system. Efforts should be made to broaden the donor base.

WATER ENVIRONMENT FEDERATION CONFERENCE IN ASIA: The Water Environment Federation Conference for Asia (WEFTEC ASIA) was held in Singapore from 7-11 March 1998 in Singapore, and attended by more than 1400 water quality and wastewater specialists, government officials and business executives from more than 30 countries. For several years, the World Environment Federation has sponsored a technical conference and exhibition in North America. This meeting represented the first WEFTEC conference held in Asia. Participants learned about the latest technology and discovered the needs of the region. In WEFTEC Asia's opening session, speakers from national governments and the UN-ESCAP provided an overview of marketing needs and project potentials in India and the Asia-Pacific region. In addition to profiling the area's wastewater and water quality needs, the meeting offered more than 200 presentations and provided up-to-date technical information and interactive demonstrations. Discussion groups allowed participants to interact with key environment technology leaders from the Asia-Pacific region. Tours of wastewater treatment plants provided access to technologies being used in the area. Case studies addressed the needs of the market in India, Indonesia, Hong Kong and Singapore, as well as many other countries. For more information contact the WEC, 601 Wythe Street, Alexandria VA 22314; tel: +1 (703) 684-2400; fax: +1 (703) 684-2492.

INTERNATIONAL CONFERENCE ON ECOLOGY, ECONOMY AND DEVELOPMENT: The Second International Conference of the European Society for Ecological Economics was held at the University of Geneva from 4 - 7 March 1998. Approximately 300 participants from 28 countries attended the plenary and parallel sessions that considered themes related to ecological economics and development. The Conference provided a platform for academics, researchers, public administrators and international civil servants, as well as policy decision makers from the public and the business sectors, to debate the interrelations between ecological and economic approaches to subjects such as agricultural production; biodiversity; climate change and its impacts on human society; consumption and production processes; governance; participatory approaches for policy decision making; transboundary pollution; water resource management; sustainable development; taxes, subsidies and incentives; trade; town and country planning; and valuation of natural resources. Copies of the Conference Programme and Book of Abstracts (120 contributions of 250-1000 words) can be obtained at a cost of 20 Swiss francs from Roderick Lawrence, CUEH, Uni-

versity of Geneva, 102 Boulevard Carl-Vogt, 1211 Geneva 4, Switzerland.; e-mail: lawrence@uni2a.unige.ch.

CSD INTERSESSIONAL AD HOC WORKING GROUP ON INDUSTRY AND SUSTAINABLE DEVELOPMENT: The Commission on Sustainable Development's Intersessional Ad Hoc Working Group on Industry and Sustainable Development met from 2-6 March 1998 at UN Headquarters in New York. Delegates exchanged views on the issue and then offered comments on two iterations of the Co-Chairs' draft report. The second draft will be revised based on the closing remarks and form the basis for negotiations at CSD-6. Participants identified roles and produced recommendations for industry, governments and the international community. Delegates also briefly considered proposed elaborations of the UN Guidelines on Consumer Protection. Several delegations preferred to put off detailed discussion on these until CSD-7 in 1999. Many participants left pleased with the Co-Chairs' report, but several noted the absence of industry from the talks and stressed the importance of truly engaging the industrial sector in the CSD-6 deliberations.

Chasing Away the UNGASS Blues: The Intersessional Working Group on Industry and Sustainable Development was an early testing ground for the CSD's attempt to recover from the low point of the 1997 General Assembly Special Session (UNGASS). The test was to focus discussion and add value to the all too familiar agreed language and thus begin to rescue the Commission from the creeping danger of degenerating into a solely environmental forum. The question is whether or not the CSD is on track to pass the test.

Homework: Since UNGASS, the CSD Secretariat and others within the UN system have been acutely aware that there could be no better time than this year's ISWG to return to the Rio mandate for a balanced treatment of all three elements of sustainable development: the environmental, the social and the economic. At a September inter-agency meeting in Geneva, a division of labor among UN agencies was agreed for the preparation of documentation for the ISWG on industry. The input from a spread of agencies with expertise in one or more of the three components of sustainable development was designed to kick-start the process of restoring balance to the discussion among delegations.

The new attempt to focus the work of the CSD on sectors such as industry is intended, in part, to take the discussion and conclusions beyond the well-rehearsed agreed language of Agenda 21 and the post-Rio agreements of the CSD. During its first five years, the CSD's discussions about consumption, finance and technology transfer have added little value to its work insofar as they were not embedded within a more focused agenda theme. It is hoped that discussions, such as that on industry, will reveal linkages and help clarify familiar concepts. One example at the ISWG was the clarification that emerged around the concept of eco-efficiency. This concept means making better use of existing levels of materials and energy inputs to increase productivity. The Secretariat reportedly viewed the subsequent output from the ISWG on industry as better than expected and, in response to detractors, they were keen to point out that the ISWG's deliberations would not be the last on the subject now that work on the sector had been operationalized.

Technology Transfer: A good place to look for shifts is the discourse on technology transfer, an issue that regularly invites an almost ritual-style repetition of positions. Some subtle and not so subtle changes stemming from both procedural and substantive innovations in the discussion were noted this year. A perennial critique of the discussions on technology transfer and finance has been that, when couched as they have been in a broad context or discussed as

transfers per se, delegates fall back on familiar rhetorical refrains and have difficulty agreeing on specific actions. The agenda adopted at UNGASS called on delegates to consider technology transfer in the context of their deliberations on one sectoral issue and one economic sector, rather than as a stand alone issue. To avoid diverting attention entirely from the cross-sectoral issues, the developing countries ensured that one afternoon at each session of the ISWG was designated for comments on technology transfer in the context of primary issue on the week's agenda. The resulting discussions on technology transfer as it relates to both freshwater and industry were viewed to be more constructive and specific than in the past, albeit marginally.

Two substantive innovations in the debate may help lay the groundwork for greater specificity as the dialogue continues. The first stemmed from the expert meeting hosted by the Republic of Korea (4-6 February 1998) on publicly-funded research and publicly-owned technologies. Participants there identified policies through which governments generate publicly funded research and development on ESTs and policies for the diffusion and accelerated transfer of publicly-funded ESTs. Delegates to the ISWG commented that the meeting in the Republic of Korea recognized that the much heralded private sector is not the only actor in technology transfer and pointed out ways in which government can and does play a role. The second substantive change was delegates' focus on how this other actor, the private sector, can facilitate technology transfer. Developing countries have been told that the private sector owns the ESTs and will be the primary actor in their transfer. Delegates to the ISWG finally focused on industry's role in this regard. The text on this issue remains fairly general, however: "companies are encouraged to provide ESTs." Some delegates expressed hope that new proposals will emerge during CSD-6's dialogue with industry representatives. The degree to which the CSD can encourage companies to provide ESTs depends on how well the CSD engages the private sector in the sustainable development dialogue.

Industry Participation: Despite its Industry Segment title, some ISWG participants commented that the presence of industry was difficult to detect. During the recent negotiation of the Kyoto Protocol, the prospect of a legally binding instrument with direct economic impacts brought business leaders running from around the world. The CSD, however, lacks a truly comparable incentive and participation appeared limited to a few association representatives. One observer stated that industry had not been invited and that some industry representatives viewed UNGASS's attempt to forge linkages as little more than a lecture and were not likely to return. Still other delegations confessed there had been little if any industry participation in the development of their positions.

During the remaining weeks prior to CSD-6, delegates will need to look seriously at ways to ensure stronger industry participation and launch a follow-up process. One course of action proposed by the US, and advocated by NGOs, would have the CSD establish a process to review the effectiveness of voluntary initiatives intended to promote sustainable and equitable business practices. Canada suggested that the Intergovernmental Forum on Chemical Safety, where governments and industry representatives jointly reach recommendations for the chemical industry, could provide a model for a multi-stakeholder dialogue on CSD agenda topics. Whether the CSD takes up these or generates new ideas will test its resolve to build partnerships for sustainable development.

Consumer Guidelines: A number of NGOs, notably Consumers International, lobbied for negotiations at CSD-6 on the basis of rec-

ommendations in the report from the São Paulo Interregional Workshop on expanding the UN Guidelines on Consumer Protection. The NGO Steering Committee pushed for agreement on criteria for "ethical labeling," stressing the need to take account of criteria reflecting the social as well as the environmental components of sustainable development. The US and members of the G-77/China (notably the Philippines, where the tourism authority promotes the country as "The Shopping Center of the East"), resisted full negotiation of the guidelines at CSD-6. The Co-Chairs recommended a procedural discussion and recommendation to ECOSOC on what to do next. All of this takes place in the run-up to CSD-7's consideration of the overriding issue of changing consumption and production patterns. Supporters of the guidelines agenda, including the European Commission, are keen that delegations arrive at CSD-7 engaged with the issues, including the guidelines, and prepared for an informed and useful negotiation. The Commission is expected to support some kind of formal and inclusive preparatory process on the guidelines prior to CSD-7. This could take the form of a parallel working group at CSD-6, an ECOSOC ad hoc working group or a regional meeting. As part of their preparation, NGOs are expected to focus on national lobbying efforts to ensure the engagement of key States, including the Philippines and the United States. The final test on the CSD's performance on this issue will come at CSD-7 in 1999.

Conclusion: The ISWG on Industry and Sustainable Development presented an obvious opportunity for genuinely engaging business leaders and regaining some credibility that may have been lost at UNGASS. Industry's engagement with the challenge of sustainable development was much clearer and well defined during the Kyoto process. That engagement, of course, consisted of outright opposition as well as a desire to participate in the design of legally binding commitments. Since the CSD's decisions are not legally binding, there is far less impetus for the participation of industry. However, there are some opportunities for the CSD to enhance the currency of its exchanges for the industry sector. The CSD can complement the activities of organizations like the WBCSD and the International Chamber of Commerce insofar as their memberships have already recognized that the environmental and social limits that need to be integrated into the dominant development model, through the systematic application of such concepts as eco-efficiency, represent an economic opportunity. The CSD can offer industry a menu of recommendations, focusing on best practices, and perhaps an opportunity to both guide and ground the debate. The quid pro quo must be a thoughtful attempt by the CSD to guide governments in the establishment of consistent and appropriate national legal, fiscal and policy frameworks. The lack of consistent treatment of the need for these frameworks at the ISWGs on freshwater and industry has not impressed industry representatives.

A significant opportunity for political influence over industry's level of engagement, however, is the CSD's work on issues such as the consumer guidelines. The global democracy made up of the world's citizen-consumers includes a number of highly informed constituencies who will prove more than receptive to a credible and coherent set of expanded consumer guidelines that render transparent the true economic, social and environmental costs of every act of consumption. As Secretary-General Kofi Annan commented recently: "People move governments." The political influence will not come so much from top-down delivery as from a recognition at the CSD that certain elements of its agenda can hit the ground running where they reinforce the objectives of already mobilized constituencies. For the complete *Earth Negotiations Bulletin* report on this meeting try: <http://www.iisd.ca/linkages/vol05/enb0599e.html>

CSD INTERSESSIONAL AD HOC WORKING GROUP ON STRATEGIC APPROACHES TO FRESHWATER MANAGEMENT: The Commission on Sustainable Development's Intersessional Ad Hoc Working Group (ISWG) on Strategic Approaches to Freshwater Management met from 23-27 February 1998 at UN Headquarters in New York. Delegates exchanged views on freshwater issues and offered comments on two iterations of the Co-Chairs' draft report. The report will be revised to include remarks on the second iteration and will provide the basis for negotiation at CSD-6. Many speakers highlighted the numerous existing agreements and plans for freshwater and said the time has come for action and implementation. Central debates focused on the economic and social values of water and accompanying governmental responses as well as cooperation among riparian States on transboundary or international watercourses. Delegates and NGOs believed there was a degree of convergence of positions during the week and left upbeat about the prospects for agreement at CSD-6.

Testing the Water at the CSD: After a not-so-special General Assembly (UNGASS) to review implementation of Agenda 21 last year, the CSD's attempt to harness the international community's political will to act on strategic approaches to freshwater and sustainable development has a special significance. The jury is still out on the CSD's effectiveness in mobilizing political will for sustainable development. With a committed issue sponsor in the form of the EU and a growing recognition of the importance of regional approaches to affect global implementation, the prospects for a transition to an action-oriented phase in the freshwater agenda are good.

The immediate history of the CSD's initiative on freshwater goes back to its inclusion in a three-point agenda tabled by the EU at UNGASS. Together with their energy initiative, the EU proposed a programme on freshwater. An NGO described the CSD-6 process as the "earliest opportunity for this unfinished business to be resolved" after the EU's headline agenda was somewhat frustrated at UNGASS.

The issue has lost none of its momentum in Europe. The UK Presidency of the EU is very conscious of its pioneering and historical role on the issue, a history that stretches back to Britain's 1848 Public Health Act, the first of its kind. The more recent history is rich with texts and dialogue on what needs to be done at the international level to bring clean water, sanitation and the associated services and conservation measures to all parts of the world on a sustainable basis. Principles and themes for strategic, equitable and sustainable approaches to freshwater management have been articulated since the 1977 UN Water Conference at Mar del Plata, Argentina, and through ensuing international conferences, including the 1990 New Delhi Global Consultation on Safe Water and Sanitation and the landmark 1992 Dublin International Conference on Water and the Environment and subsequent elaboration of Chapter 18 of Agenda 21. More recently, there was the Expert Group Meeting on Strategic Approaches to Freshwater Management in Harare earlier this year.

The specific mandate for the CSD's discussion of the freshwater issue is contained in paragraph 35 of the Programme for the Further Implementation of Agenda 21 adopted by UNGASS. The paragraph calls for a dialogue under the aegis of the CSD, beginning at its sixth session, aimed at: "Building a consensus on the necessary actions, and in particular, on the means of implementation and on tangible results, in order to consider initiating a strategic approach for the implementation of all aspects of the sustainable use of freshwater for social and economic purposes."

So delegations arrived at the ISWG well informed and with little doubt that the challenge at CSD-6 will be a test of political will to

agree on the who and the how of the international freshwater agenda as opposed to the questions of what needs to be done and why. Much emphasis will have to be placed on institutional questions and follow-up measures.

Water Under the Bridge: For some of the most vigorous proponents of the freshwater agenda, the ISWG formed a "bridge" between all that has gone before to create a wealth of ideas and principles to choose from and the current lead-up to CSD-6. At the end of the week's proceedings they were confident that the bridge could well take governments towards an action-oriented phase, given that the bulk of the text agreed at the ISWG deals with implementation issues and follow-up.

If the bridge builders at the ISWG faltered, it was due to a personal problem. At Harare, the delegations were made up of water specialists with immediate experience with contemporary developments in the water sector. At ISWG, delegations were dominated by representatives from Foreign Ministries. So, not for the first time, issues became unnecessarily politicized. One example was the debate on public-private partnerships, which have become a common feature in the water sector. At the ISWG, a residual ideological resistance to water pricing was apparent.

One delegate expressed the hope that an opportunity to bridge this gap between what is happening in the real world and the residual lapses into rhetoric will come in March at the Paris Conference on Water and Sustainable Development. During the ISWG it was reported that a Ministerial session on institutional follow-up is being planned for the Paris event.

Regions Hold the Key: The remainder of the Intersessional period will see a number of initiatives taking shape, notably at UNEP's High-Level Committee of Ministers and Officials meeting from March 2-4 March. This is expected to provide an opportunity for the EU to advance its proposals to have UNEP design a regional initiative on freshwater along the lines of its regional seas programme. It is expected that their advocacy of this approach has been coordinated with the UNEP Executive Director, Klaus Töpfer.

The desire to build in accommodation for regional sensitivities was also apparent to G-77/China observers. A particularly sensitive issue is that of shared watercourses. While some within the G-77/China would have preferred that the CSD avoid this legal debate, those with clear and present interests in the question ensured that the Co-Chairs' text reflected the language of the recently agreed Convention on the Law of the Non-Navigational Uses of International Watercourses, which seeks equitable sharing of resources.

There appeared to be some convergence of views from the G-77 and other delegations, including the EU and the US. The convergence was evident on issues like the economic valuation of water (water pricing) – a concept that caused some nervousness within the G-77/China. Members of the G-77/China welcomed the fact that the EU, the US and Japan appeared to meet them half-way and acknowledge that water is also a social good, and indicated a preparedness to take account of country and regional specificities.

After a number of false starts, the international community is now presented with an opportunity to lift the countless words, ideas and principles from the pages of reports agreed at diverse intergovernmental deliberations over the course of the past twenty years. The outcome of the freshwater debate will have a special significance for the Commission, as it is the first post-UNGASS test of the body's ability to mobilize political will for action on a vital dimension of sustainable development. For the complete *Earth Negotiations Bulletin* report try <http://www.iisd.ca/linkages/vol05/enb0594e.html>.

WORKSHOP TO ESTABLISH A NETWORK OF ENVIRONMENTAL ECONOMICS FOR WEST AFRICA: A subregional network that aims at sensitizing decision makers to integrate environmental economics into their development projects, to ensure the sustenance of their goals, was inaugurated at Greenhill near Accra, Ghana on 23 February 1998. The Network of Environmental Economics for West Africa, which has 30 members, was inaugurated by Lee Ocran, Deputy Minister of Environment, Science and Technology of Ghana, at the end of a five-day workshop. Members are from Burkina Faso, Cameroon, Cote d'Ivoire, Ghana, Nigeria, and Sierra Leone but others from the subregion will be included.

The network, which has Professor Adeniyi Osuntogun, director of the Foundation for Environmental Development and Education in Nigeria as Chair, will use the Ghana Institute of Management and Public Administration as its secretariat. Edward Asante and Kwadwo Tutu, both of Ghana, are executive secretaries of the network, which has advisory, management and technical committees to steer its affairs. Ocran, who opened the workshop, said since the environment has no boundaries, it was important to solve all environmental problems with a collaborative effort. Osuntogun noted that environmental issues which were very crucial were given little consideration during the formulation, implementation and appraisal of projects in the subregion. He added that the network would work to strengthen this. He said it would focus on the dissemination of information, research, training and education on all aspects of the environment from the grassroots to the highest levels. The Chair asked members to seek support from their governments, donor agencies, private and public institutions to achieve their goals. They should be prepared to make sacrifices to ensure the growth of the network.

Dr. T. B. Wereko, Director-General of the Ghana Institute of Management and Public Administration, assured the network of its help in the provision of logistics for the secretariat. Patrice Harou of the World Bank urged the participants to utilise the knowledge acquired at the workshop for the improvement of the environment of their countries. The workshop, organized jointly by the Ghana Institute and the Economic Development Institute of the World Bank, trained participants to identify linkages between macro-economic, sectoral and environmental issues and to integrate them to achieve sustainable growth. Participants included professionals and academia from NGOs. For more information try: <http://www.worldbank.org/>

HIGH LEVEL MEETING ON THE MULTILATERAL AGREEMENT ON INVESTMENT (MAI): High level officials of the 29 OECD countries and the European Commission met in Paris on 16-17 February 1998 to discuss the main outstanding questions concerning the MAI and give political impetus to concluding the negotiations, based on the mandate established by OECD Ministers in May 1997. The five Observer Delegations -- Argentina, Brazil, Chile, Hong Kong (China) and the Slovak Republic -- also participated in the discussions. Delegations reaffirmed the importance they attach to achieving a comprehensive multilateral framework for investment with high standards of liberalization and investment protection with effective dispute settlement procedures and open to Non-Member countries. They regard investment as an essential agent of economic growth, employment, sustainable development and rising living standards. The High Level Meeting made progress on the outstanding issues of political importance. Discussions focused in particular on three areas: labor and the environment, liberalization and exceptions, and conflicting requirements.

Labor and Environment: There is growing convergence of views on the need for the MAI to address social concerns and particularly environmental protection and labor issues. Most delegations believe that the MAI should contain a strong commitment by governments not to lower environmental or labor standards in order to attract or retain investment. Delegations agree to make it clear that the MAI will not inhibit the exercise of the normal regulatory powers of government and that the exercise of such powers will not amount to expropriation. They also agree to associate the OECD Guidelines for Multinational Enterprises which highlight investors' responsibilities in the fields of labor and environment.

Liberalization and Exceptions: Delegations confirmed that the MAI is to be an ambitious comprehensive agreement covering, in principle, all sectors and economic activities. Exceptions will nevertheless be needed for overriding and widely-shared policy reasons, such as national security, and to respect political sensitivities and priorities, taking into account other international agreements. The discussion focused particularly on the treatment of measures taken for reasons of national security, public order, regional economic integration organizations, culture, subsidies and government procurement. In judging proposed exceptions, delegations agreed to be guided by the need to preserve the quality of the Agreement and to achieve a satisfactory balance of rights and obligations.

Extraterritoriality: Delegates discussed the issues arising from conflicting requirements, secondary investment boycotts and illegal expropriations. A solution to these issues seems necessary to ensure a successful outcome of the MAI negotiations.

According to the Chair's conclusions, delegations are ready to intensify their efforts to reach agreement on all outstanding issues. They also agree to pursue their dialogue with interested Non-Member countries to facilitate their early participation in the Agreement. For information try the OECD web site at <http://www.oecd.org>. The MAI negotiating text is also available.

INTERNATIONAL EXPERT MEETING ON THE ROLE OF PUBLICLY FUNDED RESEARCH AND PUBLICLY OWNED TECHNOLOGIES: The International Expert Meeting on the Role of Publicly-Funded Research And Publicly-Owned Technologies in the Transfer and Diffusion of Environmentally Sound Technologies (ESTs) was held in Kyongju, Republic of Korea from 4 - 6 February 1998. Sponsored by the Korean government and implemented by UNCTAD, UNDESA and UNEP, the workshop focused on a document that drew from case studies from Brazil, Canada, Czech Republic, France, Germany, India, Japan, the Republic of Korea, the UK and the US. Sessions at the workshop focused on: the relevance of publicly-funded R&D in the generation and diffusion of ESTs; examples of technology cooperation to promote the commercialization and diffusion of ESTs in developing countries; policies and institutional frameworks to facilitate the wider diffusion of public-funded ESTs.

The meeting's findings and suggestions for new policy initiatives note that many governments explicitly refer in their public policy statements to the need to share ESTs with the developing world, but the extent and pace of transfers are inadequate. There is considerable room for governments to play a role in supporting and promoting new transfer and diffusion mechanisms, which could collectively constitute a framework for identification, adaptation, assessment and post-transfer follow-up. Regarding policies for the generation of publicly funded R&D, participants called for: strengthening linkages between the generators of ESTs and downstream players, such as industry and other users; supporting the development of a sustain-

able development business "culture" through national cleaner production centers; and developing national environmental policy frameworks for the stimulation and application of ESTs.

Regarding policies for diffusion and accelerated transfers, participants suggested: creating incentives for the transfers, including tax incentives, tariff reductions and IPR protection in exchange for technology transfer; supporting businesses through funds for feasibility studies on market opportunities and commercial viability; and reducing risks to the environmental industry through financing, such as grants and venture capital investments underwritten by the government. Regarding cross-cutting policies, participants called for: building and strengthening interfaces between existing information networks to facilitate access; encouraging technology needs assessments to identify demands; and developing an inventory of best practices in commercializing and diffusing publicly-funded ESTs.

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/TRADE AND ENVIRONMENT

WTO DISPUTE PANEL RULING: On 6 March, a World Trade Organization dispute resolution panel issued its final ruling against the US in a dispute with Asian nations over a US law designed to protect endangered sea turtles by restricting imports of shrimp caught in nets that also entrap sea turtles. The panel said the US ban contradicted international trade regulations by requiring that, in order to be sold in the US, shrimp must have been caught using a system that offers the same protection for turtles as US law, which requires turtle excluder devices. Thailand, Malaysia, Pakistan and India challenged the US import restrictions on the grounds that they discriminated against shrimp exports from countries that did not require turtle protections. Under international trade rules, countries may not make distinctions between products based on the way they are produced. The US argued that the law was fully consistent with WTO rule exceptions, which allow countries to impose restrictions needed to protect human, animal or plant life. Article XX of the GATT, which lists general exceptions to trade rules, states that nothing in the Agreement "shall be construed to prevent the adoption or enforcement by any contracting party of measures...necessary to protect human, animal or plant life or health," or "relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption."

In March, the WTO panel issued a preliminary finding that the US had broken trade rules by barring the shrimp imports. The US may appeal the decision, or try to negotiate settlements with the four countries that brought the case. US Trade Representative Charlene Barshefsky criticized the decision, stating that the WTO panel reached the "wrong conclusion." Another US trade official said the WTO decision would not change US laws, noting that there are a number of measures that could be taken. The complainant countries fought the ban, stating that it breaches international trade law by imposing US law on others. While Thailand requires excluder devices on its shrimp nets, it filed the case with the others "out of principle" because the ban is inconsistent with international trade rules.

US environmental groups urged for an immediate appeal, saying the ruling would put sea turtles in great jeopardy. They expressed concern other laws protecting animals, such as dolphins trapped in

tuna nets, could be challenged. The Sierra Club stated that this ruling places trade above all else, including endangered species and global environmental protection. The World Wildlife Fund said the ruling, if allowed to stand, would "exacerbate tensions between the multi-lateral trading system and the pursuit of sustainable development, while further reducing the credibility of the WTO in the eyes of a concerned public." They said that rather than relax its conservation actions, the US should redouble its efforts to reform the unbalanced WTO rule system.

The devices could save 97 percent of the 150,000 sea turtles that die in nets every year, while losing up to three percent maximum of the shrimp, according to Deborah Crouse, a senior scientist with the Center for Marine Conservation. Six of the seven species of sea turtles in the world are on the US Endangered Species List, while all seven are covered under the United Nations Convention on Trade in Endangered Species of Flora and Fauna (CITES), which prohibits the trade of such species. Because sea turtles grow and mature very slowly, their populations are particularly vulnerable to mortality of larger juveniles and adults -- those most likely to drown in shrimp nets. These concerns led the US to pass a law, in 1990, requiring US fishing nets to have turtle excluder devices and prohibiting the import of shrimp from countries that do not use the devices. As a result of the law, 18 countries have adopted their own laws requiring the use of such devices. For more information try the WTO Home Page at <http://www.wto.org/> or WWF at <http://www.wwfus.org/>

WORLD TRADE ORGANIZATION SYMPOSIUM OF NON-GOVERNMENTAL ORGANIZATIONS ON TRADE, ENVIRONMENT AND SUSTAINABLE DEVELOPMENT: The World Trade Organization (WTO) Symposium of Non-Governmental Organizations (NGOs) on Trade, Environment and Sustainable Development was held at WTO Headquarters in Geneva from 17-18 March 1998. The Symposium was attended by over 150 individuals representing environment and development NGOs, private corporations, research and academic institutes, and over 60 individuals representing Member governments. The objective of the Symposium, organized by the WTO Secretariat, was to broaden and deepen the constructive dialogue between NGOs and the WTO on the relationship between international trade, environmental policies and sustainable development.

The Symposium was divided into six sessions, wherein participants heard panel presentations, asked questions and offered comments. Discussions focused on three major themes: identifying institutional linkages related to the trade-environment-sustainable development nexus; deepening analysis of the economic linkages between trade liberalization and the environment; and legal compatibility between trade and environmental agreements. The Secretariat compiled papers for consideration at the Symposium concerning a number of topics, including the environmental benefits of removing trade restrictions and distortions.

In the opening session, participants were addressed by: Renato Ruggiero, WTO Director-General; Rubens Ricupero, Secretary-General of UNCTAD; Klaus Töpfer, UNEP Executive Director; Eimi Wantanabe, Assistant Administrator and Director for the Bureau of Development Policy, UNDP. The opening session was followed by panels that considered: overview of trade and environment; trade liberalization and environmental benefits - pursuing win-win links; pricing reform and the environment - sectoral implications; legal compatibility between trade and environmental policies; and the future agenda.

Analysis: Participants at the fourth WTO NGO Symposium drew at least one nearly unanimous conclusion: the trade and environment communities have made giant strides in understanding each other's role and competence. Some of the seemingly insurmountable barriers apparent at the first such symposium in June 1994 have given way to reasoned debate, revealing a sophisticated level of knowledge of both the issues and the possibilities and limits of the WTO in addressing these issues. The days of sterile "WTO bashing" seem largely over.

NGOs recognized the WTO's efforts to increase transparency, particularly through its electronic document distribution system. However, much remains to be done: documents are still routinely restricted until six months after issuance and all meetings, even those not involving negotiations, remain closed to civil society observers. As the NGO representative summing up the meeting observed: The WTO has evolved from opaque to translucent. Transparency is still some distance away.

It was generally recognized that while trade liberalization, subsidy reductions and other trade-related measures could contribute to sustainable development - through improved living standards and more resources for environmental protection, for instance - the link was by no means automatic: adequate national policies coupled with effective enforcement were essential preconditions for trade and sustainable development goals to be mutually reinforcing.

The Format: The Symposium was the largest NGO consultation ever organized by the WTO. It also attracted more government delegates than any of the previous ones. While these facts may indicate success, the time may have come to consider supplementing the rather general exchange-of-views type of symposia with smaller, more focused meetings on specific topics where more concrete and detailed debate on key issues could take place. Among the many possible topics for such meetings are achieving a better balance between the global environmental and trade regimes, and finding mechanisms to address the environmental and social impacts of international trade. There also is an obvious need, expressed by one of the few African NGO participants, to hold symposium-type regional meetings to build civil society capacity to deal with trade and sustainable development issues in Africa and other developing regions.

The Issues that "Will Not Go Away": Most participants agreed that the Committee on Trade and Environment had not lived up to expectations. In his closing remarks, Renato Ruggiero said he shared the sense of disappointment and committed himself to "revitalizing" the CTE, which should move from "identifying problems to identifying solutions." Several major stumbling blocks, however, still remain.

The relationship between multilateral environmental agreements and the WTO: Many speakers acknowledged that the WTO is ill-equipped to deal with the global commons. In his opening statement, Renato Ruggiero challenged the participants to help establish a new "international architecture" or framework to "manage the linkages" between the multilateral trade regime and sustainable development concerns. The need to better integrate the various components of sustainable development was reflected in the addresses of the heads of UNCTAD, UNEP and UNDP's Bureau of Development Policy. Referring to the fragmented nature of the international environmental regime, Klaus Töpfer said one his top priorities as UNEP's new Executive Director was to develop a single voice for MEAs to provide a coherent environmental counterpart to the powerful world trading system. The agreement between the two institutions on "a fresh start of informal cooperation" could prove a part of

the framework. The newly-proposed Standing Conference on Trade and Environment could offer another avenue for forging the missing international architecture.

An upcoming issue of major importance is the 1999 review of the TRIPs Agreement and its relationship with the Convention on Biological Diversity (CBD). The challenge will lie in ensuring that the TRIPs provisions on plant variety protection and biotechnology products support the CBD's provisions on compensation for traditional knowledge and custodianship, as well as benefit-sharing from products based on genetic resources. On the day following the Symposium, NGOs initiated dialogue with the Secretariats of the WTO and the World Intellectual Property Organization (WIPO) in preparation for the review of Article 27.3.(b), which deals with intellectual property protection for plant varieties.

Subsidies: Reflecting talks in the CTE over the past three years, much of the Symposium's "win-win" discussions revolved around subsidy reduction, particularly in agriculture but also in the fisheries and mining sectors. The CTE has identified subsidy reductions as one way to advance the environmental agenda while benefiting freer trade, but has not clearly recommended that the WTO should therefore concentrate on subsidy reductions in future negotiations. The Symposium highlighted the complexity of the issue: subsidy reduction may cause severe social and, in some cases, environmental damage. Furthermore, there might be some scope for using subsidies to achieve environmental benefits. Should the CTE be able to reach a recommendation, it is still doubtful to what extent - if at all - that recommendation would be taken into account when governments start negotiations on the ultra-sensitive agricultural front.

Processing and production methods and unilateral trade measures: Import bans or other forms of discriminatory treatment based on processing and production methods (PPMs) are not allowed under WTO rules. Dispute settlement panels have consistently ruled against such unilateral actions as violations of the obligation of non-discrimination for "like products" on the one hand, and as efforts to extend domestic legislation beyond national borders on the other. While most speakers agreed that MEAs offered the best approach to addressing global environmental concerns, many stressed the difficulty of reaching such agreements, or providing them with stringent and enforceable dispute settlement mechanisms. In the absence of those, trade measures - even unilaterally taken - were sometimes necessary to reach a desired environmental goal, the latter argued.

Many speakers pointed out that one the key components in setting the world on a sustainable development path involves changing the way goods are produced (or commodities grown, harvested or extracted). While NGOs seem to have generally accepted that GATT provisions are unlikely to be changed in this respect, several suggestions were made to initiate discussions on a possible side agreement or other ways of making PPM-based trade restrictions GATT-compatible under certain circumstances. A suggestion was made to possibly allow favorable tariffs for products made with methods that promote sustainable development. While to most Northern advocates the PPM issue is essentially an environmental one, Southern participants saw the need for legitimate product differentiation based on their artisanal and culturally appropriate production.

Looking Forward: Several participants referred to the potential of the Kyoto Protocol to influence the trade and sustainable development interface. If scientific evidence keeps mounting on the existence and consequences of global warming, pushing governments to adopt increasingly stringent mitigation strategies, including trade

measures, the Protocol could become "the most important economic treaty since the creation of the GATT," and as such a WTO test case regarding trade restrictions imposed for environmental purposes.

Civil society is likely to seek avenues to take forward the suggestion to open up the WTO dispute settlement mechanism by allowing public hearings and amicus curiae briefs submitted by NGOs. Measures such as these would make the system more transparent, as well as contribute to making panel rulings more acceptable to the public. A much longer-term goal might be the establishment of a WTO Parliament, suggested by Professor Cottier as a way to further the "democratic legitimization" of the world trading body.

Many of the participants praised the technical expertise that characterized interventions on such subjects as the relationship between the TRIPs agreement and the Convention on Biological Diversity, the revision of the WTO's dispute settlement mechanism or ways to advance the PPM debate. Mechanisms might be found to address some of these issues. Another major challenge, however, needs equal attention: the effects of globalisation on vulnerable populations in the poorest countries, already marginalized in the global trading system. Until the international trading system addresses the real needs of those populations, it will not truly achieve "the objective of sustainable development," as mandated by the Preamble of the Marrakesh Agreement establishing the WTO.

For the complete Sustainable Developments report on this meeting try: <http://www.iisd.ca/sd/wtongo.html>.

UNCTAD AND UNIDO STRATEGIC INVESTMENT ALLIANCE: The United Nations Conference on Trade and Development (UNCTAD) and United Nations Industrial Development Organization (UNIDO) forged a new strategic alliance to boost investment in developing countries. A memorandum of understanding to ensure cost effectiveness and optimal use of official development assistance was signed on 26 March 1998 by UNCTAD Secretary-General Rubens Ricupero and UNIDO Director-General Carlos Magariños. The alliance harnesses the organizations' comparative advantages to maximize delivery of services and avoid duplication.

While UNIDO will focus on advice and assistance on industrial sector issues and investment and technology promotion support, UNCTAD will concentrate on policy issues affecting investment promotion, including the regulatory and institutional framework for investment. These arrangements will also include the formation of new partnerships between the two organizations and the private sector of industry.

Joint activities will take place at country and global level. Selected from where UNIDO or UNCTAD is currently involved in investment-related activities, the initial target countries/regions are Bangladesh, Bolivia, Burkina Faso, Cambodia, Côte d'Ivoire, Democratic Republic of the Congo, Ecuador, Egypt, Ethiopia, Gambia, Guatemala, Guinea, Guinea-Bissau, Indonesia, Mali, Madagascar, Mozambique, Morocco, Namibia, Nepal, Nicaragua, Niger, Pakistan, Peru, Senegal, Togo, Uganda and Uzbekistan as well as the Palestinian Authority and West African Economic and Monetary Union. Both agencies will strengthen their support for the activities of the World Association of Investment Promotion Agencies (WAIPA) which was set up at an international meeting under UNCTAD's auspices in April 1995.

Areas for cooperation include preparation of investment policy reviews and guides; development of regulatory frameworks for investment; organization of investment and technology forums and business gatherings; and promotion of technological innovation. From an institutional perspective, the new alliance between UNIDO

and UNCTAD contributes to reform of the UN. The first stage in developing an operative joint plan of action is scheduled for mid-May of this year. Since taking office last December, Mr. Magariños has pledged to work towards eliminating duplication between UNIDO and other multilateral agencies. UNCTAD on its part had pledged at UNCTAD IX to work with all agencies in the area of investment promotion. For information contact UNCTAD; e-mail:

webmaster@unctad.org; Internet: <http://www.unicc.org/unctad/>

WTO, UNCTAD AND ITC COMMON TRUST FUND FOR TECHNICAL ASSISTANCE TO AFRICA IN THE TRADE SECTOR: The WTO, UNCTAD and the International Trade Centre (ITC) launched a Common Trust Fund on 1 March to support the implementation of a Joint Integrated Technical Assistance Programme in Selected Least-Developed and Other African Countries. The Integrated Programme aims to help African countries participate more effectively in the multilateral trading system and improve their export competitiveness. It reflects a strong commitment by the three organizations to coordinate jointly their efforts and resources for the development of African trade. Donor countries noted that a common trust fund would be a resource-efficient approach to cooperation among international organizations, donor governments and benefiting partner countries, and therefore strongly supported its establishment. The new Fund is the first such mechanism established jointly among the three organizations operating in the economic sphere.

The Fund is guided by a Steering Group that includes donor and benefiting partner countries, and the secretariats of the cooperating institutions. Representatives of potential donors and benefiting partner countries may attend as observers. The Common Trust Fund has two windows. Window I is for: unearmarked contributions, which will be used to finance national needs assessments, project development and other advisory missions; activities for the collective benefit of participating countries; and complementary or full financing of country projects. Window II is for country projects only. ITC manages the Fund. As Fund Administrator, among other things, it provides the Steering Group with progress reports, annual performance results and consolidated annual financial reports. The Fund is subject to UN rules and regulations as well as specific conditions adopted by the Steering Committee.

The Common Trust Fund should reach a total in the range of US\$10 million to cover programme requirements for the seven sub-Saharan partner countries and will consist of two windows. Window I is for unearmarked contributions, which will be used to finance national needs assessments, project development and advisory missions; activities for the collective benefit of participating countries; and complementary or full financing of country projects. Window II, for earmarked contributions, will be allocated to specific country projects. Managed by ITC, the Fund will be guided by a Steering Group consisting of donors, beneficiary countries and the secretariats of ITC, WTO and UNCTAD. To date, those Governments that have indicated an intention to contribute to the Common Trust Fund are: Denmark, Finland, France, Germany, Japan, the Netherlands, Norway, Sweden, Switzerland and the UK.

The Integrated Programme has initially focussed on eight African countries, four of which are least developed: Benin, Burkina Faso, the United Republic of Tanzania and Uganda. The other four are the Côte d'Ivoire, Ghana, Kenya and Tunisia. The Integrated Programme was developed following visits to Africa in January 1996 by Mr. Renato Ruggiero, Director-General of WTO, and Mr. Denis Bélisle, Executive Director of ITC, and was announced by the three

organizations involved on the occasion of UNCTAD IX in May 1996 in Midrand, South Africa.

For the African LDCs involved, the Common Trust Fund should help implement the results of the High-Level Meeting on Integrated Initiatives for LDCs' Trade Development held last October under the auspices of WTO, with the active participation of UNCTAD, ITC, the United Nations Development Programme, the World Bank and the International Monetary Fund. That meeting discussed how to facilitate LDCs' full integration in the world economy and the improvement and enhancement of coordinated actions by international organizations dealing with trade-related technical cooperation.

Among the African Integrated Programme's activities are the strengthening of national capacities to address the trade implications of the WTO agreements, a global electronic discussion forum and a global case network allowing national networks of trade experts to share experience. Surveys to determine the impact of WTO agreements on national economies and external trade patterns will be undertaken in each country covered by the Integrated Programme.

The Integrated Programme also helps African countries to adapt their national legislation to WTO rules, and formulate strategies that will allow them to benefit from new market access conditions and make better use of the special and differential provisions for developing countries and LDCs. Finally, it enables beneficiary countries to set up trade information systems, formulate business development strategies and adapt business performance tools. For more information: Carine Richard-Van Maele, UNCTAD; tel: +41 22 917 5816/28; fax: +41 22 907 0043; e-mail: press@unctad.org.

/CLIMATE AND ATMOSPHERE

INTERNATIONAL ENERGY AGENCY TASK XV/25 WORKSHOP: The International Energy Agency (IEA) Task XV/25 Workshop, "Effects of the Kyoto Protocol on Forestry and Bioenergy Projects for Mitigation of Net Carbon Emissions," was held from 9 - 13 March 1998 in Rotorua, New Zealand. This workshop focused on the consequences of the protocol for forestry and bioenergy projects aimed at reducing carbon emissions or enhancing carbon sinks. The Kyoto Protocol states that "... The net changes in greenhouse-gas emissions from sources and removals by sinks, resulting from direct human-induced land-use change and forestry activities, limited to afforestation, reforestation, and deforestation since 1990, measured as verifiable changes in stocks in each commitment period... shall be used to meet the commitments...". Of particular interest at the workshop was the issue of "baselines" (both in terms of reference land uses and reference energy systems), needed as a benchmark to derive the net carbon benefits of forestry, bioenergy or other land-use related projects.

A number of speakers made presentations, including one who summed up the feeling of the Kyoto conference with the expression "for now, let's allow the minimum amount of sinks possible." He said many delegates saw sinks as a "cop-out." For others, they involved the "fear of the unknown." There was also a lot of ignorance, for example in the confusion of sinks and reservoirs. Another speaker detailed some of the confusions and perversities evident in the existing protocol. He mentioned, for example, that if 'harvesting' is to be distinguished from 'deforestation' then the minimum or maximum time-interval between periods of forest cover should be clearly specified. Allowing Land Use Change and Forestry (LUCF) sinks to be excluded from the 1990 baseline and LUCF sources to be included would result in great distortions for those countries that possess

both. If the Clean Development Mechanism (CDM) allows, say, the US to gain credits from tree planting in Costa Rica, what happens when those sinks become a steady-state reservoir, or worse a source? He thought that, for forestry, a longer time span for reporting was necessary than the five years implicit in the Protocol.

Regarding silvicultural carbon sequestration options under the Kyoto Protocol, a Canadian speaker pointed out that the current Protocol provisions do not apply to Canada, in view of the small area of afforestation in that country. The Protocol ignored the huge carbon reservoir in Canada's existing forests, natural or managed. His interpretation of the word "reforestation" included replanting (restocking), rather than only land that was being planted in trees having spent a long period in another (low carbon density) land use. He thought that forest management that includes fire control, silviculture and disease prevention has a great impact on carbon sequestration, and is cost-effective.

One speaker voiced several objections to carbon credits from forestry, including the increase in land prices that is expected to result. He argued that carbon credits would provide a windfall gain to current owners of bare (i.e. low carbon-density) land, but would provide no lasting benefit to future forest owners who would have to pay more for their most important raw material. He pointed out some perverse consequences of the Protocol. Anthropogenic deforestation, for example, is an expensive debit, but natural deforestation is not counted. This provides a strong incentive for a human who wishes to clear an area of forest to create a "natural" fire. He argued that even a modest value placed on carbon credits would soon distort the forestry sector to the stage where it was farming for carbon, with wood as a by-product. Weeds could be more valuable than timber trees. He stated that the global warming was caused by fossil fuels, and should be solved through fossil fuels, without involving the forestry industry.

Another speaker a different list of perverse outcomes from Kyoto, noting that a system should not be optimized by optimizing its components in a piecemeal way. If only post-1990 plantings are to be considered, then we must distinguish the harvested wood from these plantings, and track this right through the economy. It might pay to leave the post-1990 plantings for on-site carbon sequestration, and to obtain wood only from plantings that were established prior to 1990. It might pay Annex I countries to plant their trees in non-Annex I countries, because then they could benefit from the different carbon accounting practices that are outlined in the Protocol.

Other speakers discussed: activities at the project, rather than the national scale that brought together more than 160 companies who are prepared to operate on a voluntary, self-regulatory basis; the effects of fire on the carbon stocks of a forest, with and without human intervention; a trial comparing coal with bio-fuel, wherein the latter had low levels of pollutants, except for particulates, CO and CH₄; carbon modeling concepts used in New Zealand, including methane, which as a product of livestock, is a major component of New Zealand's greenhouse balances; determination of baseline scenarios for a forest sector carbon balance; and an elevated CO₂ project using waste gas from municipal effluent ponds. The formal talks ended with a short plea to concentrate on the bioenergy aspects of carbon sequestration, rather than being diverted into the issue of changes in standing carbon stocks. For more information contact: Reinhard Madlener, Joanneum Research, Graz, Austria; tel: +43 316 876 340; fax +43 316 876 320; e-mail: reinhard.madlener@joanneum.ac.at.

CONFERENCE ON CLIMATE AFTER KYOTO: This meeting, "Climate After Kyoto: Implications For Energy" was held in

London, UK by the Royal Institute of International Affairs, and attended by several hundred leading government, industrial, and non-governmental participants. Many speakers noted that the complexity of the Kyoto climate accord and many issues it left unresolved mean it could be years before the Kyoto Protocol comes into force. And while the world's first treaty limiting greenhouse gas emissions remains a mere piece of paper, developing countries crucial to the war against global warming will continue to refuse to sign up to its provisions, participants said. Two months after the pact was signed, some experts could not agree on the meaning of some provisions. Others blamed political leaders who played a large role in the final stages of Kyoto for creating what they called a confusing, inconsistent and sometimes incoherent accord. They said the pact already contained so much flexibility and imprecision that its implementation would not survive more political meddling. A US oil company executive noted his enthusiasm about the potential about some of the measures but there are so many unknowns. One NGO participant said there is too much uncertainty and too much room for change in the Kyoto Protocol to decide what it is countries have committed to. Other experts said they had detected signs that poor countries were extremely interested in introducing climate-friendly power technology. Some officials said a more benign post-Cold War political climate that had helped ease tensions between the rich North and poor South meant Kyoto's provisions would be discussed in a more rational way by developed and developing nations.

UN experts called on the US to resist vigorous business opposition and ratify the Kyoto Protocol, noting it could fall apart if legislators in the US rejected it. One official noted the desperate need for the US to be a full player and said there is no way that Europe and Japan will ratify if the US doesn't, because it would then be against their business interests. A US government official agreed that US participation would be crucial but said ratification would only follow signs of meaningful participation in the fight against climate change by developing countries. He said this would require that developing countries take a variety of actions domestically to fight climate change, disclose inventories of greenhouse gas-related materials and implement climate friendly technologies in cooperation with developed countries. He said that while some US firms were resistant to the Kyoto accord others were in favor and as implementation measures such as emissions trading were explained to business heads more companies would come around.

Some industry executives said energy in the 21st century would be a highly diversified marketplace where once dominant oil and coal share booming demand with climate-friendly upstarts like gas and renewables. A powerful springboard for the development of an increasingly varied energy scene came from the Kyoto Protocol, which placed the expansion of alternative energy sources to oil and coal high on the international agenda. The total amount of global fossil fuel use is also heavily weighted to the industrialized world. Speakers described Kyoto as a significant signal for change for a world shaped by affordable energy from fossil fuels but now increasingly worried about global warming. One speaker predicted strong growth in renewable energy technologies and with particular enthusiasm in Europe. Europe's solid track record in the commercialization of renewable energy technologies lie behind European Commission plans to derive 12 percent of energy supplies from renewable sources, double the current six percent, by 2010. Officials say this could be achieved by measures including the planting of millions of acres of quick growing trees and big offshore wind farms, although at a cost in the tens of billions of dollars.

Small island states charged that the Kyoto Protocol failed to offer them long term protection from global warming. The head of the Alliance of Small Island States (AOSIS) said the Protocol needed a vast range of improvements to strengthen its provisions and remove its ambiguities. He said implementation of so-called flexibility measures to allow rich countries to meet their targets would actually result in real reductions in emissions of harmful gases such as carbon dioxide. Such measures would include trading of permits to pollute the air with greenhouse gases and transfer between nations of climate-friendly industrial technologies. He asked how small island states could be sure that these reductions will actually occur, and whether industrialized countries would continue to dump waste gases into the atmosphere while "bubbling their way to compliance" by cooperating on efforts to meet emissions reductions commitments.

The UK said the Kyoto targets would be a key priority for the EU Presidency. New product standards, transport initiatives, renewable energy schemes and the removal of subsidies in the energy sector will all be used by the EU to help achieve its target of an 8% reduction in greenhouse gas emissions between 2008 and 2012. He said one of the UK's priorities during its presidency of the EU was to reach agreement on the allocation of the 8% target between individual member states. A June agreement is possible, he said. A formal meeting of EU energy ministers in May would include a major discussion on the Kyoto agreement and its implications for EU energy policy, he added. He said emissions trading was a key issue that needed to be addressed early on in the process. Liquidity in the emissions trading market will clearly be necessary but trading must not be undermined by a flood of permits on the market.

The Kyoto Protocol would have only a small impact on oil markets provided its provisions are implemented fairly, an oil expert from Saudi Arabia said. He said Saudi Arabia accepted a need for international action against climate change, provided the costs of addressing it were equitably shared. He said the impact on the oil market will be very minimal if Kyoto is implemented in the right way. Asked whether Saudi Arabia accepted that climate change was occurring, he said Saudi Arabia is not calling for "no action" and is ready to positively participate, provided that it is not the victim. He welcomed provisions in the accord that widened the scope of action on greenhouse emissions to sectors such as agriculture, industry, waste management and solvents. He said this would mitigate the effect of Kyoto on the energy market. He called for a scrupulous implementation of those paragraphs of the Protocol that require signatory countries to take full account of the international economic impact of any emission reduction measures they may take. He said that in particular industrialized countries trying to reduce emissions should heed a requirement in the Kyoto protocol to reduce or phase out structural anomalies such as fiscal incentives, tax and duty exemptions and subsidies in all greenhouse gas emitting sectors of their economies. He said that if taxes on oil in industrialised countries were lowered to reflect their actual carbon content, then oil prices would on average fall by 17 percent. The same regime, pegging taxes strictly to carbon content, would strip coal of its subsidies and boost its price by 77 percent, he said. For information contact the Royal Institute for International Affairs at <http://www.riia.org/>

/CHEMICAL MANAGEMENT

FIFTH SESSION OF THE INC FOR PRIOR INFORMED CONSENT PROCEDURE (PIC): The fifth session of the International Negotiating Committee (INC-5) for an International

Legally Binding Instrument for the Application of the Prior Informed Consent (PIC) Procedure for Certain Hazardous Chemicals and Pesticides in International Trade was held from 9-14 March 1998 in Brussels. Delegates met in Plenary, a Legal Drafting Group and several contact groups to consider a consolidated draft text of articles for the instrument and proposals from the US and the European Community (EC). In a push to finalize the Convention text by the end of the session, delegates met during the evenings and on Saturday. Over one hundred conference room papers (CRPs) were produced during the six-day session.

Almost two years to the day after the first INC, a draft PIC Convention has now been completed. Delegates expressed relief and varying degrees of satisfaction at the completion of a difficult and compressed negotiating process. The number of negotiating sessions held throughout the week and the small but significant number of outstanding issues left for resolution at INC-5 suggested that the original goal of completing the Convention by the end of 1997 had been somewhat unrealistic. It also underlined the difficulties of the seemingly simple task of transforming an existing voluntary procedure into a legally binding agreement. Nevertheless, delegates have now fulfilled their mandate and their Ministers will gather in Rotterdam later this year for the Diplomatic Conference and signing ceremony. Overall, completion of the PIC Convention is a small but significant step towards a more comprehensive and sustainable international chemical management framework.

Managed jointly by the FAO and UNEP, the PIC procedure is a means for formally obtaining and disseminating the decisions of importing countries on whether they wish to receive future shipments of such chemicals. The aim is to promote a shared responsibility between exporting and importing countries in protecting human health and the environment from the harmful effects of certain hazardous chemicals being traded internationally. The voluntary PIC procedure is designed to:

- help participating countries learn more about the characteristics of potentially hazardous chemicals that may be imported;
- initiate a decision-making process on the future import of these chemicals; and
- facilitate the dissemination of these decisions to other countries.

A Brief Analysis of PIC

To Brussels and Back Again: More than a few delegates remarked on the suitability of completing the PIC negotiations in Brussels, the same city where they began two years ago. Less auspicious, however, was the fact that some fundamental controversies that had not been untangled since INC-1 returned to Brussels for resolution. On the underlying issue of whether the Convention should be an expanded framework for chemical management or simply a legally binding version of the existing voluntary procedure, the language of the agreement would indicate that this Convention does not significantly exceed the scope of the existing voluntary procedure. However, according to one developed country delegate, while expressing general satisfaction with the text, the Convention was "still not as narrow as we would have liked." Attempts to create a wider international chemical management framework, however, will not end with the PIC Convention, and some members of the international community are sure to keep this idea under discussion.

There was also the question of increasing developing country capacity to fulfill the legislative and administrative requirements of the PIC procedure. While many references were made to the fact that this Convention was to benefit developing countries, the main protagonists were OECD countries. Moreover, developing country del-

egations often pointed out that there was little or no provision for technology transfer and additional resources that would allow them to truly benefit from the better information that the PIC procedure was supposed to give them. According to at least one developing country delegate, the current text "did not really meet their needs" but was only "the best they could get."

The question of the relationship between the Convention and the WTO was dealt with somewhat conclusively at INC-5, although the contact group charged with finalizing the issue spent long hours creating what was termed a "delicately balanced" text in which language relating to the relationship between this Convention and other existing international agreements was moved from the body of the Convention to the Preamble. In fact, the compromise almost unraveled at the end of the week when one delegation began to make a formal statement that acceptance of this language would not set any precedent for them regarding other trade and environment discussions. This provoked many other delegations to register similar statements. However, intensive discussions in the corridors resolved one of the tensest moments of INC-5 and several delegations will now state in the meeting report that the Preamble will not "prejudge their respective positions in other international forums and negotiations addressing issues related to environment and trade." NGOs expressed satisfaction with location of this language in the Preamble, perceiving this as less "threatening" than if it were contained in the body of the Convention.

On the whole, however, most delegates seemed to believe that nothing in the Convention could be contrived as being inconsistent with the WTO. The need to include such language was based on the fear that the Convention might be used as an excuse to take WTO-inconsistent measures or that the perception of a hierarchy between different agreements might be created.

Ratification, Acceptance and Approval?: The next step for the PIC Convention is signature and ratification. There were no indications during the INC process that the Convention will have any trouble receiving the requisite number of signatures and ratifications in order to enter into force. Nevertheless, several important issues will likely remain under active consideration in the period between the signing of the Convention and the first Conference of the Parties. First, regarding arrangements for the financing of the Convention, members of the African Group were especially concerned that explicit direction regarding financing had been deferred to the first COP. While proposals for the establishment of a voluntary fund for the interim period were suggested in Brussels, the actual financial arrangements remain subject to available resources and more secure sources of funding will have to be found.

Second, the issue of dispute resolution provoked substantial debate at INC-5. A number of delegations questioned the adequacy of a legally binding agreement that fails to provide recourse to a body that can render binding decisions for the settlement of disputes. Since the proposed conciliation commission will only render recommendations that are non-binding, and any Party may decline the submission of disputes to arbitration or the ICJ, it is feared that Parties may attempt to circumvent their obligations under the Convention. However, other delegations noted that the strength of a conciliation commission is not about whether it can offer binding or non-binding decisions. Experience has shown that such bodies have been extremely effective in resolving disputes in other areas of international law, such as in trade and arms control, and was introduced into these negotiations primarily as an attempt to expand options for dispute settlement in a multilateral environmental agreements (MEA).

While several delegations appreciated this attempt to pursue new ideas; they pointed out that the tradition of MEAs has been less about assigning fault and more about strengthening compliance. Until MEAs adopt a more "hard law" approach, Parties may have less of an incentive to fulfill their commitments under these agreements.

Third, countries will need to address the status of PIC chemicals in the voluntary procedure not currently in Annex III. Regardless of the length of time before the Convention enters into force, the interim PIC procedure will remain an important bridge between the voluntary and legally binding procedures and discussions will continue to ensure that the transition is as smooth as possible. Also, the terms of reference and functioning of the new subsidiary body for scientific and technical advice, to be known as the Chemical Review Committee, will need to be refined and tested. Such bodies are integral to the workings of other agreements, such as the Convention on Biological Diversity and the Framework Convention on Climate Change, and may play a similar role for the PIC Convention.

The Future of International Chemicals Management: Completion of the PIC Convention is only the first of a number of efforts by the international community to address chemical management issues. With the ink barely dry on the Convention, countries will meet in Montreal in late June to begin negotiations on a legally binding instrument to reduce the risks to human health and the environment from a list of twelve persistent organic pollutants (POPs). These negotiations are likely to be more difficult because, unlike PIC, they will be discussing the possibility of eliminating the production of a number of particularly dangerous chemicals.

More immediately, however, a number of observers have pointed to issues regarding the implementation of the PIC Convention as being crucial to its success. In addition to outstanding questions regarding financial arrangements, Parties to the Convention will face other problems similar to those in other MEAs. For example, treatment of non-compliance has recently become a central issue in MEAs. While a clear dispute-settlement procedure may go some way to helping Parties deal with conflict, the model of the Montreal Protocol to employ a "softly, softly" approach in dealing with Parties deemed in non-compliance may also be an option for the PIC Convention. Also, developing countries, and the African Group in particular, expressed concern about the subject of illegal traffic in hazardous chemicals. The degree to which this activity takes place, and how the Conference of the Parties decides to deal with it, are important but unresolved questions. Moreover, attempts by developing countries to include provisions for liability and compensation were fended off during the INC process but will likely resurface at the first COP and perhaps as early as the Diplomatic Conference.

A Convention for Prior Informed Consent regarding hazardous chemicals in international trade is a small but significant step towards a more comprehensive and sustainable international chemical management framework. Now, Parties must now concentrate on avoiding the potholes and pitfalls of ratification and implementation issues so as to ensure that this is an effective Convention.

For ENB's article-by-article review of the draft PIC Convention, try <http://www.iisd.ca/linkages/vol15/enb1504e.html>

COP-4 OF THE BASEL CONVENTION: The Fourth Meeting of the Conference of the Parties to the Basel Convention on the Control of Transboundary Movement of Hazardous Wastes and their Disposal, held from 23-27 February 1998 in Kuching, Malaysia, took more than 23 decisions, including ones on financing the Secretariat, an information management system on wastes and the establishment of regional training centres. Two of the major decisions

involved the establishment of hazardous waste lists and an amendment to Annex VII. The Annex VII list of countries, consisting of OECD member states, Liechtenstein and the EU, are prohibited by the Ban from exporting hazardous wastes to non-Annex VII (non-OECD) countries. Delegates decided to leave Annex VII unchanged in its current structure until the Ban Amendment enters into force. To enter into force the Ban Amendment has to be ratified by three fourths of the Parties. The Convention has grown from 30 Contracting Parties in 1992 to 117 in 1997.

They also commended the work completed by the Technical Working Group in development of Lists A and B, which facilitate the implementation of the Amendment and called for the inclusion of these lists to the Convention as its Annexes on the understanding that the reviewing system of these lists will also be adopted. The Hazardous Waste list (A) would ban the export of wastes containing arsenic, lead, mercury, asbestos and dozens of other chemicals and substances. The non-hazardous waste list (B) would exempt from the ban those wastes that can be safely and profitably recycled or re-used, including scrap iron, steel or copper, certain electronic assemblies, non-hazardous chemical catalysts and many ceramics solid plastics, and paper and textile wasters.

Many representatives speaking at the High-level segment of the meeting stressed the need for international technical assistance and capacity building. They supported the establishment of regional centres for training and technology transfer regarding the environmentally sound management of hazardous wastes and the minimization of the incineration. They appealed to the international community for generous support. The representatives recommended faster development of a Protocol for Liability and Compensation for damage resulting from transboundary movement of hazardous wastes and their disposal. They emphasized that the main goal of the Basel Convention was environmentally sound management of hazardous wastes, among other things. The Basel Convention was adopted in March 1989 after a series of notorious "toxic cargoes" from industrialized countries galvanized world outrage over the dumping of hazardous wastes in developing and East European Countries. For information contact: UNEP Regional Office for Asia and the Pacific, Bangkok, Thailand 10200; tel: + 662-288-2127; fax: +662-280-3829; e-mail: lazarus.unescap@un.org; Internet: <http://www.unep.ch/basel/index.html>

OECD COMMON GUIDELINES FOR PESTICIDE REGISTRATIONS: The OECD Pesticide Forum agreed on Common Guidelines for Pesticide Regulation at a meeting held from 9-10 February 1998 of pesticide regulators from Ministries of Environment, Health and Agriculture with representatives of the pesticide industry, trade unions, and environmental NGOs. OECD countries meeting in the OECD Pesticide Forum have agreed to common guidelines that will bring their registration procedures closer together. Registration is the process by which pesticide producers submit data to governments on the potential health and environmental risks of specific products, and governments evaluate the data to determine whether or not to allow the products on the market.

The agreed guidelines establish two new formats - one for industry to use when submitting data, the other for governments to use when writing evaluations. The new formats do not require OECD countries to make the same regulatory decisions. Their purpose is to minimize duplication of effort by industry and governments in pesticide registration and improve the quality of evaluation reports.

Currently, pesticide producers, who are responsible for testing any pesticide they want to register, usually have to present the test

results in different formats for different OECD countries. The new common format for industry will greatly facilitate their future data submissions to OECD countries.

The format for government evaluations will change the way regulatory authorities in OECD countries write their pesticide evaluation reports on the tests submitted by industry. It should help ensure that the reports are clear, complete, well-organized and transparent. It will also make it easier for governments to use reports written by other countries without having to carry out a separate comprehensive evaluation for every study, as was generally done in the past. However, governments will continue to apply their own criteria when making decisions.

While these formats provide countries with important guidelines for pesticide data submission and review, each country will decide on an appropriate schedule to start using them. Certain countries are ready to begin using the formats now. Others will have to make internal adjustments to their national procedures before use of the formats could begin.

The agreement reached culminates five years of work by the OECD Pesticide Forum, supported by the Environmental Health and Safety Division of the Environment Directorate. The Forum was created in 1992 to help countries share the work of pesticide evaluation and thereby reduce the costs of registering new pesticides and re-registering old ones. Governments and industry each invest substantial resources in registration and re-registration: testing and evaluating just one pesticide takes years and costs millions of dollars.

The OECD benefited greatly by work done by the EU, which started a project in 1992 aimed at developing common guidelines for all European countries in assessing and regulating pesticides. The OECD and EU have worked closely together to complete the guidelines. The fact that most pesticides are registered in more than one country has always made worksharing an attractive concept. But the differences in governments' formats for data submissions and evaluation reports have presented an obstacle to collaboration.

The new agreement will enable governments to use each other's reports more easily than in the past, and to plan their pesticide reviews so as to share the work with others. Governments have already shown their keen interest in doing this: even before agreeing the common formats, they have used an OECD database of countries' pesticide evaluation schedules to identify and exchange more than 200 pesticide evaluation reports since 1995.

As to industry's response to this work, one company has already applied for registration of a new pesticide and submitted similar data packages to the EU and to three non-European countries concurrently. The governments of these countries are now sharing the work of the evaluation. For more information try: <http://www.oecd.org/>.

/BIODIVERSITY

OAU TASK FORCE ON COMMUNITY RIGHTS AND ACCESS TO BIOLOGICAL RESOURCES: The Scientific, Technical and Research Commission of the Organization of African Unity (OAU/STRC) task force on community rights and access to biological resources met in Addis Ababa on 20-23 March 1998. The objective of the meeting was to develop a draft model legislation on community rights and access to biological resources to ensure the continuing control by local communities of their natural resources, knowledge and technologies, as well as to develop a draft African Convention on the same. After national review and discussions, the

model legislation would be expected to form the basis for African nations to develop national legislation on community rights and access to biological resources, community knowledge and technologies, and an African convention would create coherence among the national legislations.

According to the Declaration produced by the Task Force, natural resources and indigenous knowledge and technologies are a legacy humanity owes to local communities. The task force understands a local community as a section of society in a given area whose means of livelihood are based on the natural resources, knowledge and technologies of and related to its immediate ecosystems. The local community keeps adapting, generating and regenerating those natural resources, knowledge and technologies as its preceding generations had done and, if spared disruption by external forces, as its succeeding generations will do.

The Declaration states that the essential role of the community in the conservation of biological diversity, on which the very survival of planet earth is dependent, is recognized by the Convention on Biological Diversity (CBD). A large part of humanity represented by 150 States created the CBD in 1992. A smaller part of humanity, represented by 40 States, concluded the negotiations for the creation of the WTO in 1994. African countries had negligible or no inputs into the negotiations. The objectives of WTO are global and concern the movement of goods and services throughout the world for the ease of corporate global trade. The two, CBD and WTO, are therefore global, all pervading and very serious. CBD recognizes the essential role of communities in the creation, maintenance and sustainable utilization of biodiversity, knowledge and technologies for the survival of life. On the other hand, WTO promotes the privatization of resources, knowledge and technologies to the detriment of the State and its citizens. WTO imposes IPRs (intellectual property rights) modeled on the protection of industrial innovations to grant individual monopolies on living things and categorically denies the existence of community collective innovations. It is the conviction of the Task Force that the WTO-based approach is predatory in nature and runs counter to the aspirations of communities that are the innovators of biodiversity so necessary for the survival of the planet.

The Task Force also declared its belief that the privatization of life forms through any intellectual property rights (IPR) regime violates the basic right to life and goes counter to the African sense of respect for life. The task force therefore strongly recommends that OAU/AEC member states urgently make legislation to regulate access to biological resources, knowledge and technologies so that such access shall be allowed only with the prior informed consent of the local communities and the State and shall benefit them, and to recognise community rights in order to protect the heritage of the people of Africa. The task force commits itself to the achievement of the noble objectives of this proposed legislation and this draft convention on Community Rights and on Access to Biological Resources. For more information contact: Institute for Sustainable Development, P.O. Box 30231, Addis Ababa, Ethiopia; tel: +251-1-204210; fax: +251-1-552350; e-mail: sustain@telecom.net.et; or isd@padis.gn.apc.org.

CLEARINGHOUSE MECHANISM REGIONAL WORKSHOP FOR AFRICA: The Clearinghouse Mechanism Regional Workshop for Africa, was held in Nairobi, Kenya from 5 - 7 March 1998. The meeting was attended by representatives of Benin, Botswana, Burkina Faso, Chad, Comoros, Democratic Republic of Congo, Djibouti, Egypt, Ethiopia, the Gambia, Guinea, Ivory Coast,

Kenya, Lesotho, Madagascar, Malawi, Mali, Mauritania, Mozambique, Namibia, Niger, Nigeria, Seychelles, South Africa, Sudan, Swaziland, Tanzania, Togo, Tunisia, Uganda and Zimbabwe, as well as a representatives of UNEP and the Global Environment Facility (GEF). Observers from the Arab Center for the Studies of Arid Zones and Drylands (ACSAD), SADC, IUCN/BCIS, WWF, ACTS, KIPO, and representatives from the Kenya Permanent Mission to UNEP, National Environment Secretariat, Ministry of Water Resources of Kenya, the Kenya Forestry Research Institute and Kenyatta University were present.

The Secretariat recalled the decisions made by the Conference of the Parties related to the Clearinghouse Mechanism (CHM). A document background recalled the state of the art of the CHM and restates the terms of reference of this meeting, namely, to attain a clear definition of country and regional level scientific and technical information needs, priorities identified, modalities to deliver information and evaluation of national capacities for the implementation of the Convention. The regional workshop should also review experiences in scientific and technical co-operation in support of the objectives of the Convention, in order to identify ways by which the CHM can best facilitate such co-operation. The representative of the Secretariat underscored the latest developments of the CHM pilot phase, regional workshops and prospects and expectations.

Many delegations lacked knowledge and clarity about the CHM and recommended that efforts should be made to provide support on a country-by-country basis in the establishment of the CHM and its operationalization. Delegations also recommended that there should be a linkage between the development of the National Strategies and Action Plans and the CHM. Representatives from Egypt, The Gambia, Kenya, Malawi, and Mauritania presented their national experiences in the development of the CHM.

The GEF urged countries to designate their national CHM Focal Points, presented the CHM module under the framework of GEF support to Enabling Activities and explained the steps needed to access GEF funding. She noted that the GEF had provided funding for the CHM module for those countries that have fulfilled the requirements. She stated that the CHM module under the Enabling Activities was not the only modality of GEF support to countries for activities related to biodiversity information and data management.

After listening to several country presentations on the CHM that have already implemented their own information systems, the African delegates made the following recommendations:

- reflection should be made on the IPRs and the equitable sharing of benefits derived from the utilization of genetic resources.
- each delegation member should organize a meeting at the national level to brief their national biodiversity committees.
- the cost, duration and objectives of the national programmes should be conceptualized with respect to national specificities.

The four types of focal points recommended are: Secretariat Focal Point; National Focal Points; Regional and sub-regional Focal Points; and Thematic Focal Points. The African group recommended that steps be taken to facilitate the networking of different counterparts of exchange centres, (national, sub-regional, regional and specialized). This network must work in close cooperation with national committees charged with the implementation of the Convention. Focal points should make available metadata, whenever possible. The African group invited the Secretariat to assist national counterparts to obtain information on genetic resources originated from or originating from their respective countries that are preserved *ex-situ* in northern countries.

On capacity building, participants recommended that financial and technical means are strengthened to facilitate the CHM activities in developing countries. It includes training for information technics to benefit from the latest communication tools. The group proposed that the Parties present at the meeting work in close collaboration with regional and sub-regional organizations in order to be involved in the establishment of the exchange centre mechanism. Regarding training, participants agreed that adequate training on current information management, including software and hardware should be considered. Also a choice of training methods would need to be made, or even a combination of methods, depending on the circumstances and needs. In addition to the basic training second-level advanced training is needed, including on the application of database-web and GIS-web interconnectivity. Training could be provided by an organization(s) that meets specified criteria, such as: In-country training on the Internet should be provided, understanding; CBD and CHM issues training experience in closely related areas ability to provide support services; training can be provided in country or in the form of "Training of the Trainers." The objective is to raise the level of expertise not only for those delegated to implement the national CHM but also their colleagues. For information contact the CBD Secretariat; tel: +1-514-288-2220; fax: +1-514-288-6588; e-mail: chm@biodiv.org; Internet: <http://www.biodiv.org>.

FOURTH SESSION OF THE AD HOC WORKING GROUP

ON BIOSAFETY: The fourth session of the Open-ended Ad Hoc Working Group on Biosafety (BSWG-4) met from 5-13 February 1998 in Montreal, Canada. Delegates began negotiations on consolidated text, which will serve as the basis for further negotiations for a biosafety protocol to the CBD at the next session of the Working Group to take place in August. BSWG-4 built upon the work of BSWG-3 by further consolidating options contained in the draft text, while beginning the process of negotiation to clearly define divergent positions and to identify common ground for moving forward. The meeting continued to follow the structure from BSWG-3, using two Sub-Working Groups to address the core articles of the protocol and two Contact Groups on definitions and annexes and on institutional matters and final clauses. Delegates began consideration of several articles that had only received preliminary discussion at BSWG-3, including, *inter alia*: principles/objectives, general obligations, non-discrimination, socio-economic considerations, and liability and compensation. Delegates continued work on issues previously addressed, including, *inter alia*: advance informed agreement, risk assessment and management, minimum national standards, emergency measures and capacity building.

By the end of eight working days, including Saturday sessions, delegates had consolidated text on most of the articles for a protocol on biosafety, including provisions on highly contentious issues, such as scope, advance informed agreement, risk assessment, and consideration of liability and socio-economic impacts. Many delegates expressed satisfaction with the work accomplished and appreciation for a relatively smooth process, and appeared ready to carry the work forward to BSWG-5. As one delegate phrased it, the BSWG appeared to have found its "rhythm of working." Nonetheless, given that major differences remain on key provisions of the protocol, continued progress is essential if the BSWG is to fulfill its mandate to complete a draft protocol for presentation to the COP by the end of its next two sessions.

Although delegates may have achieved a workable process, the many options regarding the substance of the protocol reflect the varying goals and agendas of the governments. It appears that many

developing countries are seeking to ensure that the protocol will provide adequate safety measures, and a system of accountability and redress for harm resulting from transboundary movement of LMOs, as well as increased capacity to deal with biosafety issues. Some commented that they want to avoid a new form of dependency on the developed world. Countries with nascent biotechnology industries seemed to support technology transfer and capacity building, while keen to avoid restrictions on transfers and red tape for national industries. Some developed countries seem especially concerned with establishing guidelines to standardize reporting procedures and coordinate divergent national systems, while avoiding provisions that would be too complicated or financially burdensome to implement.

These divergent agendas are reflected in the text of the meeting, but with the notable caveat that all options remain in brackets. Outside the meeting hall, delegates often pondered how they would be able to bridge polarized positions within the limited time frame. The options for some of the most contentious issues spanned a wide range of possibilities, including removing the provision, deferring discussion until the first MOP, establishing guidelines or detailing specific provisions.

Given coalescing support for the protocol, it is clear that the political will exists to see it through. The challenge now is to ensure that a critical mass of countries is able to find the answer to the question, "What is the incentive?" This raises the central debate over the protocol's scope and how it can be crafted to represent true compromise and attract widespread support. The potential of biotechnology for human welfare is enormous and should be realized, but in a manner that is complementary to and protective of biodiversity in its broadest sense. In the bigger picture, the protocol's success or failure will certainly impact the position of the CBD in the intergovernmental arena. As the first major agreement under the CBD, the protocol will be a key test to show the commitment of the world's governments to the Convention and its objectives. For the complete *Earth Negotiations Bulletin* report on the Biosafety negotiations try <http://www.iisd.ca/linkages/biodiv/bswg4.html>

/AGRICULTURE

REGIONAL CONFERENCE FOR THE NEAR EAST: At the twenty-fourth Regional Conference for the Near East, Ministers of Agriculture and senior officials met from 21 - 26 March 1998 in Damascus to review progress made during the last two years. They also charted plans for the next Biennium, with the view of boosting their national capacities towards achieving food security.

The conference commended FAO and its Director-General, Dr. Jacques Diouf for actions taken to assist Member States in implementation of the Plan of Action of the World Food Summit (Rome 1996), aimed at securing food for all. It also stressed that the main focus of action lies at the country level, where governments have the primary responsibility for creating conducive economic and political environments that assure food security of their citizens, involving to this end all segments of civil society. The Conference made an appeal against the use of food or food aid as a tool for political or economic pressure, in keeping with the right of all humans to have a sustained access to safe and healthy food. It also requires FAO to report on progress achieved in relation to cooperation with the UN High Commissioner for Human Rights on the "Right to Food" issues. The Conference welcomed the Results of the TeleFood Campaign of 1997, and supported plans for a wider campaign in 1998

aimed at raising awareness about the plight of the hungry and raising funds to help rural communities.

The meeting called upon Member States of the Near East Region to collaborate in the exchange of experiences regarding the implementation of FAO's Special Program for Food Security and the Emergency Prevention System for Transboundary Animal and Plant Pests and Diseases; to actively participate in the "Regional Network on Rural Development and Food Security; and to support FAO's efforts for the establishment of a Network for this purpose.

The Conference also appealed to Arab and Regional funding agencies, particularly the Arab Fund for Social and Economic Development, to cooperate with FAO, especially in funding Special Programme on Food Security projects, in line with the standard agreement already signed by FAO with the IBD, World Bank and other Asian-African funding institutions.

The Conference emphasized the need for balanced economic growth to reduce income disparities through improving access to food by disadvantaged segments of society, and the adoption of a participatory approach to development in order to broaden the involvement of rural communities at the grassroots level to include women and youth.

Member States of the Near East Region were called upon to promote the development of appropriate agro-industries for increasing the residue value added of agricultural crops, consequently, raise farms income, generate employment opportunities, reduce crop waste and losses, encourage exports of agricultural products as well as intra-regional trade, which stands at a very low level at present. The Conference called for simultaneous development of marketing and agricultural production and for the enhancement of marketing infrastructures as vital components of sustainable agriculture. For information contact the FAO; e-mail: webmaster@fao.org; Internet: <http://www.fao.org>

OECD COMMITTEE FOR AGRICULTURE AT MINISTERIAL LEVEL: The OECD Committee for Agriculture met at Ministerial level on 5-6 March 1998 in Paris. Ministers judged it timely to examine the future role of the agro-food sector in the light of recent developments, in particular the outcome of the Uruguay Round Agreement on Agriculture, and of the World Food Summit. Most OECD countries have adjusted their agricultural policies over the last decade, and many are actively exploring new initiatives. Ministers undertook to further the process of the reform of agricultural policies as agreed in the 1987 OECD Council, through adoption of a set of shared goals and policy principles. Ministers noted that, in conformity with the conditions of Article XX of the Uruguay Round Agreement on Agriculture (URAA), further trade negotiations are due to continue the ongoing process towards the long-term objective of substantial progressive reductions in support and protection resulting in fundamental reform.

Noting the report prepared by the OECD Secretariat, "Agricultural Policy Reform: Stocktaking of Achievements," ministers acknowledged that progress has been made since 1987, but more remains to be done. According to OECD Secretariat calculations, support to agricultural producers, as measured by the Producer Subsidy Equivalent, has fallen from an OECD-wide average of 45 percent of the value of production in 1986-88 to an estimated 35 percent in 1997. During the same period, total transfers from consumers and taxpayers due to agricultural policies decreased from a share of 2.2 percent of GDP to 1.3 percent, reaching a level of US\$280 billion in 1997. There has been some shift away from price support towards direct payments and other policy measures that are less distorting to

production and trade, that allow a greater influence of market signals, and are more efficient in the targeting of support. OECD countries have developed agricultural policy measures to address environmental, rural development and structural adjustment issues, and more attention has been paid to the impact of agricultural policy reforms on the agro-food sector as a whole. The growing importance of these issues was identified by agriculture ministers in 1992.

Ministers took note of the report "Agricultural Policy: The Need for Further Reform," as a valuable contribution to the discussion on advancing the policy reform process. Ministers stressed that a major challenge for agriculture and the agro-food sector in OECD countries is to meet the growing demand for adequate and safe supplies of food in efficient and sustainable ways, while recognizing the diversity of agricultural, economic and social situations and public preferences concerning the role of the agro-food sector across OECD countries.

As globalization advances, foreign investment in agro-food industries is increasing and trade in agricultural goods is expanding rapidly, particularly for processed products. There are closer agricultural trade and investment relations between OECD and non-OECD countries, especially some Asian and South American countries, which are emerging as major players in agricultural markets. The OECD area also has a responsibility to contribute to world food security, and Ministers stressed the importance of the 1996 World Food Summit Declaration on Global Food Security and the Plan of Action agreed upon. Food security requires a multifaceted approach involving national and international efforts, including: ensuring the eradication of poverty, sufficient food production, and a fair and market-oriented world trade system.

Ministers outlined a set of Shared Goals, stressing that the goals should be viewed as an integrated and complementary whole. There was a broad consensus that OECD Member governments should provide the framework to ensure that the agro-food sector, *inter alia*:

- is responsive to market signals;
- is efficient, sustainable, viable and innovative, so as to provide opportunities to improve standards of living for producers;
- is further integrated into the multilateral trading system;
- provides consumers with access to adequate and reliable supplies of food, which meets their concerns, in particular with regard to safety and quality;
- contributes to the sustainable management of natural resources and the quality of the environment;

Ministers stressed that agro-food policies should seek to strengthen the intrinsic complementarities between the shared goals, thereby allowing agriculture to manifest its multifunctional character in a transparent, targeted and efficient manner. The challenge in pursuing the shared goals is to use a range of well-targeted policy measures and approaches that can ensure that the growing concerns regarding food safety, food security, environmental protection and the viability of rural areas are met in ways that maximize benefits, are most cost-efficient, and avoid distortion of production and trade.

Ministers viewed future public policy as contributing to the achievement of the shared goals through appropriate well-targeted policy measures to accompany competitive, market-led developments in the agro-food sector. They noted that agricultural policy cannot be isolated from influences that are shaping the economy of which the agricultural sector is a part, and saw a clear need to ensure that agricultural policies are compatible and mutually reinforcing

with broader economy-wide policies in areas such as social welfare, employment, environment and regional development.

In striving to realize the shared goals, Ministers adopted a set of policy principles, while recognizing that governments will want to retain flexibility in the choice of policy measures and in the pace of reform, taking into account the diverse situations in Member countries. These principles, which build on the agricultural policy reform principles agreed by OECD Ministers in 1987 and reiterated by Agriculture Ministers in 1992, are as follows:

- reaffirm the support for Article 20 of the Uruguay Round Agreement on Agriculture and the commitment to undertake further negotiations as foreseen in that Article and to the long-term goal of domestic and international policy reform to allow for a greater influence of market signals:

- address the problem of additional trade barriers, emerging trade issues and discipline on export restrictions and export credits.

- strengthen world food security in particular through the actions agreed in the Rome Declaration and Plan of Action of the 1996 World Food Summit;

- promote innovative policies that facilitate responsiveness to market conditions by agricultural producers;

- facilitate improvement in the structures in the agricultural and agro-food sectors, taking into account the needs of farmers affected, in particular those in disadvantaged regions.

- enhance the contribution of the agro-food sector to the viability of the rural economy through, for example, efficient and well-targeted agricultural policy measures, facilitating the mobility of labour, new market opportunities, alternative uses of land (both within and outside agriculture), and the provision of rural amenities;

- take actions to ensure the protection of the environment and sustainable management of natural resources in agriculture by encouraging good farming practices, and create the conditions so that farmers take both environmental costs and benefits from agriculture into account in their decisions;

- take account of consumer concerns by improving the effectiveness and reliability of food safety regulations, strengthening standards on origin and quality, and improving the content and availability of information to consumers, within the framework of international rules;

- encourage increased innovation, economic efficiency, and sustainability of agro-food systems through, *inter alia*, appropriate public and private research and development efforts, respect for the protection of intellectual property, and improvements in public infrastructures, information, advice and training;

- preserve and strengthen the multifunctional role of agriculture in order to combat territorial imbalances, to encourage the sustainable management of natural resources and to favour diverse farm development strategies.

Ministers agreed to seek innovative ways and appropriate institutional frameworks to integrate public, private and co-operative initiatives, which take into account local and regional conditions. They agreed that in designing and implementing cost-effective policy measures, these should be regularly monitored and evaluated with respect to their stated objectives. Ministers also agreed that policy measures should seek to meet a number of operational criteria:

- transparent: having easily identifiable policy objectives, costs, benefits and beneficiaries;

- targeted: to specific outcomes and as far as possible decoupled;

- tailored: providing transfers no greater than necessary to achieve clearly identified outcomes;

- flexible: reflecting the diversity of agricultural situations, be able to respond to changing objectives and priorities, and applicable to the time period needed for the specific outcome to be achieved;

- equitable: taking into account the effects of the distribution of support between sectors, farmers and regions.

In order to contribute to the achievement of the shared goals, Ministers agreed on a number of priority areas for future work by the OECD, which they recommended be reflected in the overall programme of work determined by the OECD Council. Ministers asked the OECD to:

- develop the analysis and analytical tools to monitor and evaluate developments in agricultural policies against the shared goals, policy principles, and operational criteria of policy measures;

- continue and strengthen the analysis of main agricultural markets and trade developments, taking into account market developments in non-OECD countries;

- examine ongoing and new agricultural trade and transboundary policy issues and their impacts, provide analytical support, as appropriate, to the process of agricultural trade liberalization, without duplicating the work of the WTO. In this connection, Ministers noted the contributions that the OECD Committees, within their existing work programmes, might make to the process of information exchange and analysis now underway in the various WTO Committees, while avoiding unwanted duplication with work in other fora.

- identify and analyze existing and new policy approaches to address issues related to structural adjustment in the agro-food sector, rural development, farm incomes, farm employment, income risk management, and food security and food safety;

- foster sustainable development through analysing and measuring the effects on the environment of domestic agricultural and agri-environmental policies and trade measures;

- promote an active policy dialogue with non-Member countries in particular those that are relevant players in agricultural production and trade;

- improve the dialogue with NGOs, in particular those representing farmers, other actors in the agro-food sector including consumers, and those concerned with agriculture and the environment. For more information try the OECD at <http://www.oecd.org/>

AGRICULTURAL STATISTICS 2000: The International Conference on Agricultural Statistics, convened on 18 March 1998 in Washington, DC, was sponsored by the International Statistical Institute (ISI) and attended by over 200 statisticians representing 50 countries. The conference program was divided into major topic areas. Discussions on agricultural statistics requirements and uses focused on data needs for public policy, private organizations, and environmental monitoring. Discussions on sources of agricultural statistics included a world tour of methodologies, ranging from censuses to sample censuses, comparison of crop cutting versus farmer reports, collection for environmental monitoring and agricultural accounts. The discussion on advancements in data collection and analysis concerned papers on land use classification, the use of document imaging technology, new methods of editing and imputing to combining information from overlapping samples. Participants also considered remote sensing and other applications for agricultural statistics, which provided a look at these methods in several countries with different agriculture and requirements. Discussions on future perspectives for agricultural statistics addressed

future needs for developing countries, countries with emerging markets and developed countries. Technological trends and trends affecting statisticians were included.

Demonstrations of area frame sampling, remote sensing, and the data warehouse were provided. Several countries requested individual meetings on matters specific to their interest, so meeting and conference rooms were full. Special round table discussions were held on remote sensing and survey/census issues. The conference Chair closed the conference with a challenge to the participants to begin a new spirit of cooperation among agricultural statisticians around the world, with the hope that an international web site dedicated to agricultural statistics be established to include the conference papers and the list of participants. It was proposed that ISI form a new association called the International Association for Agricultural Statisticians and that another international agricultural statistics conference be held in the future. For information, contact program chair: Fred Vogel, USDA/NASS; tel: +1 (202) 720-3896; fax: +1 (202) 690-131; e-mail: fvogel@nass.usda.gov.

/WETLANDS

FIRST MEETING OF THE MEDITERRANEAN WETLANDS COMMITTEE: The Mediterranean Wetlands Committee (MedCom) met for the first time in Thessaloniki, Greece from 15-16 March 1998 and consisted of officially designated representatives from 21 countries (Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, France, Greece, Israel, Italy, Jordan, Lebanon, Malta, Morocco, Portugal, Slovenia, Spain, Syria, the Former Yugoslav Republic of Macedonia, Tunisia, Turkey, and Yugoslavia), the Palestinian Authority, the Council of Europe, UNEP-Coordinating Unit for the Mediterranean Action Plan, the Convention on Wetlands, and seven NGOs working on wetland-related issues in the Mediterranean. Participants noted the wide-ranging participation in the meeting as a signal of a much wider involvement in the conservation and sustainable use of wetlands in the region.

The MedCom reviewed the working documents prepared by the MedWet Coordination Team, listened to the presentation of the MedWet Coordinator and debated the issues in plenary sessions and in two workshops. Participants noted the first steps made in implementing the Mediterranean Wetland Strategy, consisting of:

- completion of the MedWet 2 project in Albania, Algeria, Croatia, Morocco and Tunisia;

- approval and imminent start of the MedWet 3 project funded by the Global Environment Facility (GEF) and the French Fund for the Global Environment (FFEM);

- establishment of a collaboration structure in the Mediterranean in the framework of the Convention on Wetlands, which includes MedCom and the MedWet Coordination Team.

Participants also re-emphasized the principles of the Venice Declaration of June 1996, and reaffirmed, in particular, the following:

- efforts for the conservation of biological diversity should take into account the needs of local populations, within the framework of sustainable use of wetland resources;

- the importance of the role of wetlands in regulating the water cycle in their catchment areas, as well as their dependence on water;

- a multi-sectoral management approach, involving all stakeholders, including the local populations, is the best means of conserving wetlands and managing their resources wisely;

They also agreed that the priorities of action for wetland conservation and wise use in the Mediterranean remain substantially as agreed at the Workshop held in Tour du Valat, Camargue, in November 1996, and advised that these priorities should be integrated in the following framework:

- on the Mediterranean level: strengthening of technical and financial collaboration and assistance, both bi-lateral and multi-lateral, in view of the economic disparities in the region;

- on the national level: development of national and sub-national/regional wetland policies, which would take into account the principles noted above;

- on the local level: establishment at major wetlands of locally-based management bodies, with broad constitution, charged with developing and implementing properly prepared management plans.

Participants endorsed the specific proposals submitted by the MedWet Coordination Team and requested them to study the feasibility of these proposals and develop them into projects. Further to report to the MedCom at its next meeting, which is set provisionally for February 1999, on progress made concerning these proposals.

Finally, taking into account the results of the technical session on wetland restoration and rehabilitation held on 16 March, participants stressed the importance of wetland restoration, wherever this is feasible, and rehabilitation of wetland functions, in stopping and reversing the loss and degradation of Mediterranean wetlands. The also commended the Government of Greece for its intention to restore Lake Carla, one of the major wetlands of the Mediterranean in the past, and advises the Ramsar Bureau to make available to Greece any international expertise and technical advice required. For information contact: the Ramsar Convention Bureau; tel: +41 22 999 0170; fax: +41 22 999 0169; e-mail: ramsar@hq.iucn.org; Internet: <http://w3.iprolink.ch/iucnlib/themes/ramsar/>

SOUTHERN AFRICAN SUB-REGIONAL RAMSAR MEETING: The Government of South Africa hosted a Ramsar Southern African Sub Regional Meeting in Pretoria, South Africa from 2-6 February 1998. This meeting was called in response to a request by the African countries, during the last meeting of the Conference of the Parties to the Convention held in Brisbane, Australia for coordination meetings to be organized at sub regional level. It follows similar meetings held in the West African and East Africa subregions. The objectives of the meeting were to: provide information about the implementation of the Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar, 1971) at national level; identify priority actions for strengthening the application of the Convention in southern Africa; and strengthen cooperation between states in the subregion. The Contracting Parties in the subregion were represented: Botswana, Malawi, Mauritius, Namibia, South Africa and Zambia. The observers, all members of the Southern African Development Community (SADC) were: Lesotho, Mozambique, Swaziland, Tanzania and Zimbabwe.

The Secretary General and the African Technical Officer presented background information on the Convention, covering the following topics: the Convention's objectives, successes, obligations and benefits of membership to a country; benefits of members to the subregion; activities of the Standing Committee; activities of the Scientific and Technical Review Panel; representation of the subregion on the Standing Committee and Technical Committees, and the preparations for the Seventh Conference of Parties to the Convention, to be held in 1999.

The topic wise use of wetlands was discussed under three sub-headings.

- Wetland values, where the need for a programme to carry out an economic valuation of wetland systems in the SADC to be initiated was identified; the need for the project arises from the low profile of wetlands in both national and regional planning processes in the subregion, and because most of the major catchments in the subregion are shared systems. The results of this programme will be used to promote the wise use of wetlands in both national and regional planning in the Sub-region. This programme will be launched immediately by the Ramsar Bureau in cooperation with IUCN-ROSA.

- Policy development, where Tanzania and Zimbabwe indicated that they intended ratifying the Convention, but the name of the Convention was causing confusion as to its intent, waterfowl being considered less important than other values of wetlands. The relationship between national policies on biological diversity, water resource management and wetland policies was discussed at length. It was concluded that the development of the other related policies should be seen as opportunities rather than threats, and that wetland policies should either form part of those policies or link very closely with them. Ideally, separate wetland conservation policies should be developed, but it may be strategically wise to raise wetland issues within related policies, such as biodiversity conservation strategies, currently being developed by Contracting Parties to the CBD.

- National planning, where again the need for establishing wetland values in the subregion was emphasized. The need for a larger pool of expertise in wetlands in the subregion was also identified. It was suggested that strong wetlands programmes working in concert with biodiversity programmes are necessary. It was emphasized that all role players, from the land-user to the politician, must be brought on board to participate in any action plan if it is to succeed. National Ramsar committees were suggested as being an effective tool for bringing a wide range of interest groups together. The emphasis in planning should be on cross-sectoral integration and participation.

In terms of international cooperation, at the subregional level, wetlands are considered part of the mandate of the SADC Wildlife Sector, which is based in Malawi. In the subregion, the link to biodiversity policy programmes are therefore closer than to water resource management policy programmes. At the wider level, Wetlands International has launched a West African Programme, and maintains its activities throughout the region by means of the African Waterfowl Census. Participants agreed that Africa, north of the equator is enjoying a far higher profile internationally than the Southern African Subregion, resulting in better funding for those areas. This is reflected in the number of programmes being run by various organizations, as well as the representation on the Convention's committees (both STRP member and alternate are from west Africa, the African members on the Standing Committee have all been from north of this subregion (Tunisia, Kenya, Senegal, Uganda)).

In terms of raising awareness, the questions of what is a wetland and which are the important ones were raised. The importance of upper catchment areas with numerous small wetlands, which ultimately feed the larger more obvious one downstream was emphasized. The need to make everyone aware of the value of the resource they are using or abusing was noted. Support throughout the subregion by the exchange of materials, examples of good practice, etc. was encouraged, as was the support for successful local initiatives. In order to gain the necessary support of politicians and to build their awareness, field trips to wetlands were suggested. In order for the Convention to receive a higher profile in the subregion, non-Contracting Parties should be encouraged to ratify the Convention. The profile

will also be raised when the Convention takes on some of the hard issues in wetland conservation.

Capacity building is an important issue in the subregion. Awareness of wetland issues and capacity building must be closely linked. Being cross-sectoral, wetland conservation training requires the coverage of numerous sectors. There is a need for community based capacity building programmes. Policy makers need to be targeted (e.g. the Tre Bien course). However courses are required to address issues specific to southern African. This is being variously addressed in the subregion. IUCN-ROSA initiated a workshop to determine training needs in the SADC; a number of short courses are being planned in South Africa, and a post graduate programme is being considered. Institutional capacity must also be addressed.

The issues relating to sites on the List of Wetlands of International Importance in terms of the Convention included the possibility of some sort of vetting of sites before they are accepted for designation, and the need for good documentation on the site at the time of Listing. The question of benefits to the local community dependent on the wetland was raised. It was agreed that more sites should be listed in the subregion. The need for the inclusion of the Convention into the legal systems of Contracting Parties was highlighted.

The development of inventories was discussed and the benefits of computer databases highlighted. As a number of these systems are already in use, it was suggested that these should be considered for the subregion. The lack of capacity to develop wetland inventories was noted as a problem in the subregion. A number of pertinent issues were raised about management plans for listed sites. It was noted that the pro-forma supplied by the Convention was an all or nothing approach, which is not particularly relevant to southern African conditions. It was agreed that this needs revision to incorporate a step-by-step process to manage the system, taking into account various tenure systems in the subregion. A number of recommendations, reflecting the workshop's discussions were adopted and will be taken to the Pan African meeting in July, to other instruments of the Convention, the SADC Wildlife Sector and to countries. For information contact: the Ramsar Convention Bureau; tel: +41 22 999 0170; fax: +41 22 999 0169; e-mail: ramsar@hq.iucn.org; Internet: <http://w3.iprolink.ch/iucnlib/themes/ramsar/>

/OCEANS AND COASTS

INTERNATIONAL SEABED AUTHORITY: The first part of the fourth session of the International Seabed Authority was held in Kingston, Jamaica from 16 - 27 March 1998. The Authority received a new draft of a mining code to regulate the search for polymetallic nodules in the international area of the deep seabed. The draft, a product of two years of work by the Authority's Legal and Technical Commission, was received by the Council of the Authority, which devoted formal meetings to the text and examined its details in informal sessions. The proposed regulations define how the Authority will oversee prospecting and exploration by private and public contractors interested in recovering mineral-rich deposits containing manganese, nickel, cobalt and copper from ocean bottoms beyond any nation's jurisdiction. The basic text, consisting of 33 regulations, sets out the framework for the exploration regime, with annexes containing a model contract and standard clauses. Its terms are based on provisions in the two basic instruments governing the Authority's work -- the UN Convention on the Law of the Sea and the Agreement relating to the Implementation of Part XI (seabed provisions) of the Convention, adopted in 1994 and in force since 1996.

The provisional text defines the manner in which interested parties can become seabed contractors by obtaining the Authority's approval of their plans of work for exploration in specified geographical areas. Applicants must be sponsored by States and must possess certain financial and technical capabilities. They would have to supply specified kinds of information in support of their plans and pay a \$250,000 fee. Plans of work would require approval by the Commission and consideration by the Council, subject to the provision in the implementation agreement that the plans of registered pioneer investors shall be considered approved by the Council. Once approved, the Authority would issue a 15-year contract granting recognized security of tenure. That would incorporate schedules giving the geographical coordinates and an illustrative chart of the exploration area, as well as a work programme that would be reviewed every five years jointly by the Authority and the contractor. Each contractor would be obligated to provide a training programme for personnel of the Authority and developing countries.

The obligation of contractors to keep records and to submit annual reports is spelled out, as is a requirement to submit information once the contract expires. The confidentiality of information submitted to the Authority by contractors would be assured. Contractors would be obliged to accept inspection by the Authority, comply with safety, labor and health standards, and accept responsibility and liability for damage. The Authority would have the right to suspend or terminate the contract and to impose penalties under certain circumstances. Most of the text reproduces a preliminary version produced by the Commission last August and circulated to Authority members for comments. However, the new text incorporates several changes, notably relating to environmental protection and the confidentiality of data and information provided by contractors. The regulations specify that the freedom of marine scientific research, enshrined in the Law of the Sea Convention, is not affected.

Regarding environmental protection, a new clause would require applicants for an exploration contract to submit "a preliminary assessment of the possible impact of the proposed exploration activities on the environment," as well as a description of proposed measures to prevent, reduce and control pollution and other environmental hazards. Another added paragraph would oblige contractors to "ensure the effective protection of the marine environment from serious harm" and to "take precautionary measures to anticipate, prevent or minimize any adverse impacts on the marine environment... as far as reasonably possible, using the best available technology."

With regard to confidentiality of data, expanded clauses on information required from prospectors and contractors would extend to 10 years or more the period during which the Authority must maintain the confidentiality of commercially sensitive and proprietary data. The Commission, with the consent of the prospector, could release such data when prospecting has ended, but data obtained from exploration would remain confidential if the contractor embarked on exploitation. Proprietary data or other confidential information supplied by contractors could not be disclosed by Commission members or Authority staff even after termination of their functions.

Commission Chair Lenoble pointed out that the draft dealt only with prospecting and exploration for polymetallic nodules. Additional provisions would have to be established later to regulate the future exploitation of nodules and the prospecting, exploration and exploitation of the other mineral resources of the area. The Chair explained that it had been found useful to introduce the concept of "guidelines" -- to be issued with the Commission's approval -- that

would complete the provisions of the code and guide the conduct of seabed contractors. In that regard, the Commission proposed to draft a list of environmentally appropriate technologies for exploration. The Council's four-day deliberations on the draft took the form of general statements by 25 delegations and informal meetings in which the document was examined regulation by regulation.

Among the pioneer investors in seabed mineral exploration, the Russian Federation made the point that profitability was important to potential investors; therefore, the mining code should provide a workable balance between their interests and those of the Authority. China said that, since the code was intended to cover prospecting and exploration only, it should not attempt to regulate situations that might occur during the exploitation stage. Supporting comments by others on the provisions on training programmes by seabed contractors, France said a system must be in place to encourage the transfer of knowledge. On environmental protection, Germany said knowledge of the potential impact of exploitation activities would be gained only after testing of mining equipment. The US observed that commercial deep-seabed mining was still decades away and would only augment, not replace, land mining. The UK expressed cautious optimism that, given the nature and the composition of the Authority, the "North-South confrontation" that was a feature of international deliberations during the 1970s would not be revisited in the mining code discussions.

Brazil, on behalf of the G-77/China, voiced concerns about provisions for protection and preservation of the marine environment, regulations on the confidentiality of information supplied by seabed contractors, and training programmes and technology transfer issues. Regarding the Authority's role, the G-77/China said the code should ensure its ability to comply with its mandate of effectively regulating, managing and monitoring seabed mining activities; some of its provisions did not seem to enable the Authority to acquire enough information to that end. The Group welcomed workshops planned by the Authority during this year and next to deal with available knowledge on the environment and on technologies for mineral exploration and environmental protection. Among suggestions by other developing countries, Chile advanced the idea of establishing a fund to compensate coastal States in the event of accidental environmental damage. Cameroon, Indonesia and Nigeria felt that the term "commercially sensitive data," which the Authority would have to keep confidential under the code, needed a more precise definition and should not be left to the interpretation of the contractor alone. On this point, Tunisia thought the text placed too much emphasis on confidentiality rather than international cooperation.

The Assembly of the Authority, the other of its two principal organs meeting during the session, elected half the membership of the 36-member Council for new four-year terms beginning January 1999. The Assembly is composed of all 137 members of the Authority. The Assembly also approved a protocol on privileges and immunities, which deals with matters pertaining to the legal status of the Authority, its officials and representatives of its members. By acclamation, the Assembly elected Tadeusz Bachleđa-Curus (Poland) as its President for the 1998 session. Joachim Koch (Germany) was elected Council President. For information contact the UN Division for Ocean Affairs (DOALOS), Office of Legal Affairs.; e-mail: doalos@un.org; Internet: <http://www.un.org/Depts/los/>

TUNA-DOLPHIN AGREEMENT: Twelve tuna-fishing nations agreed to protect dolphins and other marine life in the eastern tropical Pacific tuna fishery at the meeting of the UN Inter-Ameri-

can Tropical Tuna Commission that concluded on 7 February 1998 in La Jolla, California, US.

The agreement calls for:

- establishing measures to avoid, reduce and minimize bycatch;
- conserving tuna stocks and the tuna fishery;
- effectively tracking tuna to differentiate between dolphins and unsafe tuna;
- providing incentives to improve skipper performance;
- enhancing and strengthening compliance and enforcement and
- providing greater protection and promoting the recovery of individual dolphin stocks, especially those that are depleted.

The agreement is the culmination of a process that began in 1995 with the Panama Declaration, under which Belize, Colombia, Costa Rica, Ecuador, France, Honduras, Mexico, Panama, Spain, the US, Vanuatu and Venezuela agreed to work together to strengthen dolphin protections rather than abandon the dolphin-saving practices they had developed to meet the tough dolphin death reduction targets set by the US and the UNIATTA. The Panama Declaration produced an immediate effect. Dolphin deaths in the eastern tropical Pacific tuna fishery declined sharply from 100,000 animals in 1989 to fewer than 2,600 in 1996. The Declaration committed the 12 countries to take legal action to hold dolphin kills to 5,000 a year or less if the US lifted the embargo. For information contact the Inter-American Tropical Tuna Commission (IATTC-CIAT); Scripps Institution of Oceanography; tel: +1 (619) 546 7100, ext. 301; fax: +1 (619) 546 7133; Internet: <http://www.gsf.de/UNEP/amiat.html>. Also contact the Center for Marine Conservation; tel: +1 (202) 429-5609; fax: +1 (202)872-0619; e-mail: dccmc@ix.netcom.com; Internet: <http://www.cmc-ocean.org/main.html>.

/HABITAT AND HUMAN SETTLEMENTS

ENVIRONMENTAL AND HUMAN SETTLEMENTS TASK FORCE: On 9 February, the Secretary-General designated Klaus Töpfer to be Director-General of the United Nations Office at Nairobi, in addition to his duties as Executive Director of UNEP. He was also asked to serve, for the time being, as the head of the UN Centre for Human Settlements (Habitat). The Secretary-General asked Mr. Töpfer to chair a task force to prepare proposals for his consideration, and subsequent submission to the General Assembly, on reforming and strengthening UN activities in the environmental and human settlements areas, in line with relevant indications in his reform programme (document A/51/950, paras. 170-179).

The Secretary-General is pleased to announce that the following persons have agreed to serve on this important task force:

- Maria Julia Alsogaray, Secretary for Natural Resources and Sustainable Development of Argentina;
- John Ashe, Deputy Permanent Representative of Antigua and Barbuda to the United Nations;
- Nitin Desai, Under-Secretary-General for Economic and Social Affairs;
- Lars-Göran Engfeldt, Permanent Representative of Sweden to UNEP and Habitat in Nairobi;
- Jean-Pierre Halbwachs, UN Controller and Assistant Secretary-General for Programme Planning, Budget and Accounts;
- Sir Martin Holdgate, former Head of the World Conservation Union (IUCN);
- Martin Khor, Director, Third World Network, Malaysia;

- Ashok Khosla, Head of Development Alternatives, India;
- Tommy Koh, Ambassador-at-Large, Ministry of Foreign Affairs of Singapore;
- Julia Marton LeFevre, President of LEAD International, Inc.;
- James Gustave Speth, Administrator of the United Nations Development Programme (UNDP);
- Mostafa K. Tolba, President, International Centre for Environment and Development, Cairo;
- Joseph Tomusange, High Commissioner of Uganda to India;
- Makirim Wibisono, Permanent Representative of Indonesia to the United Nations and Current Chair of the G-77- China;
- Timothy E. Wirth, President, United Nations Foundation; and
- Michael Zammit Cutajar, Executive Secretary, United Nations Framework Convention on Climate Change.

Maurice Strong, Special Adviser to the Secretary-General, and Peter Thacher, former Deputy Executive Director of UNEP, will serve as advisers to the Task Force. The Task Force is scheduled to submit its recommendations to the Secretary-General in June 1998. The Terms of Reference of Task Force are:

- to review existing structures and arrangements through which environment and environment-related activities are carried out within the United Nations, with particular reference to those departments, funds and programmes that report to the Secretary-General, but taking into account also the relevant programmes and activities of the specialized agencies;

- to focus particularly on the distinctive functions of policy, development of norms and standards, programme development and implementation and financing, as well as relationships amongst these functions;

- to evaluate the efficacy and effectiveness of existing structures and arrangements and make recommendations for such changes and improvements as will optimize the work and effectiveness of the United Nations environmental work at the global level and of UNEP as the leading environmental organization or "authority", as well as the role of UNEP as the principal source of environmental input into the work of the Commission on Sustainable Development; and

- to prepare proposals, for consideration by the Secretary-General and subsequent submission to the General Assembly, on reforming and strengthening UN activities in the environmental and human settlement areas. For more information contact the UN Centre for Human Settlements; tel: +254 2 623149, 623151; fax: +244 2 624060, 624333 e-mail: infohabitat@igc.apc.org
Internet: <http://www.unhabitat.org>

GLOBAL FORUM OF PARLIAMENTARIANS ON HABITAT: The Global Forum of Parliamentarians was held in Cancun, Mexico from 27 - 30 January 1998, with the aim of evaluating progress on improvements in public policy and legislative reforms in relation to urban development and housing. After four days of deliberations, over 600 Global Parliamentarians on Habitat from 63 countries and five continents approved the Cancun Declaration, which re-affirms their commitment to the implementation of the Habitat Agenda -- the Global Plan of Action adopted at the second United Nations Conference on Human Settlements (Habitat II) in June 1996. The Secretary-General of the United Nations, Kofi Annan sent a congratulatory message to the Global Parliamentarians attending the Forum that emphasized the importance of dialogue between elected representatives and civil society. Annan further urged Global Parliamentarians on Habitat to strengthen their rela-

tionship with the UN, and the UN Centre for Human Settlements (Habitat) in particular. Mr. Darshan Johal, the Assistant Secretary-General and Acting Executive Director of UNCHS (Habitat) called on the Parliamentarians to support the Habitat Agenda through promoting policy and legislative reforms in their respective countries. He further stated that it was his hope that the Forum would provide the opportunity to forge a close partnership between the Global Parliamentarians and Habitat.

Senator Lopez Velarde of Mexico, who was re-elected as Chair of the Board of Directors of the Global Parliamentarians on Habitat, pointed out that while in some countries vanguard laws on human settlements have been created, most countries did not have any specific laws to improve urban development and housing. Ms. Julia Carabias Lillo of the Ministry of Environment, National Resources and Fisheries, Mexico, highlighted the need to increase awareness of the implications of urbanization on natural resources and the environment and the need to improve urban management practices. There was consensus among the participants on the success of the Forum and commitment to meet again for the next session of the Forum, scheduled to be held in Asia in 1999 or in the year 2000. For further information please contact: UNCHS (Habitat), c/o Cepal Naciones Unidas, Apartado Postal 6-718, Mexico City, Mexico; tel: + (52 5) 254 24 73; fax: +(52 5) 5311 151; e-mail:

Aura.Silva@un.org.mx

/SOCIAL DEVELOPMENT

COMMISSION FOR SOCIAL DEVELOPMENT: The Commission for Social Development held its thirty-sixth session from 10 - 20 February 1998 in New York. Stressing that poverty is a root cause of social exclusion, the Commission called on the international community to support developing countries' efforts to address social and economic problems. It adopted a set of agreed conclusions on its sessional theme of promoting social inclusion and participation for all people. It also adopted two decisions on matters related to the International Year of Older Persons (1999) and the 1982 International Plan of Action on Ageing.

In the three-part agreed conclusions, the Commission, noting that the globalization of the world economy created opportunities for the development process but also social hazards, stressed that efforts at the local, national and international levels are needed to minimize the negative effects of globalization. Also, there is a need for cooperation between State and non-State actors, including transnational corporations, private institutions and civil society organizations. All actors, particularly international financial bodies, should consider the social consequences of their actions.

The vast human and financial resources available to the illicit drug trade, in many cases exceeding the resources of national governments, have made international cooperation and coordination imperative to an effective anti-drug strategy, the Commission stated. It called for international assistance to be given to developing countries as they must address unemployment, illiteracy, deteriorating economies and lack of resources.

Poverty and exclusion should be attacked through employment, the Commission emphasized. Discrimination in employment -- on any grounds -- should be eliminated. Labor policies must be sensitive to the needs of disadvantaged and vulnerable groups, while young people should have opportunities for meaningful employment. Attention should be given to reconciling professional activity

and family responsibilities through affordable childcare, family support and flexible working arrangements.

By another decision, the Commission invited the Department of Economic and Social Affairs to draw up proposals for developing an Internet database on policies and programmes on ageing and to explore, with UNDP, the feasibility of including an ageing-related development index in the Human Development Report. For more information contact: United Nations Commission for Social Development; tel: + 1 (212) 963-6763; fax: + 1 (212) 963 3062; Internet: <http://www.un.org/esa/socdev/social.htm>

/POPULATION

COMMISSION ON POPULATION AND DEVELOPMENT: The thirty-first session of the Commission on Population and Development was convened in New York from 23-27 February 1998. The Commission called for assistance to strengthen the national health services of developing countries, including building their capacity to produce essential drugs, approving a decision on this year's theme of "health and mortality" and two other proposals.

By the terms of that text, which was adopted after intense negotiation, the Commission requested the Population Division and the United Nations Population Fund (UNFPA) to explore ways and means -- such as the establishment of an internationally accessible electronic database -- to facilitate the exchange of information among all relevant actors concerning best practices and lessons learned in implementing the Programme of Action of the 1994 International Conference on Population and Development (ICPD). By other terms of the text, governments were called upon to:

-- support, with the assistance of international and non-governmental organizations, efforts to determine the causes of the stagnation, or increase of mortality among the adult population of countries with economies in transition as well as in some developing countries; and

-- renew and reaffirm their commitment to reducing disparities in health and mortality among countries and within countries.

In addition, relevant bodies of the UN system were called upon to coordinate with each other and with other international and non-governmental organizations in strengthening national capacities to collect, analyze and utilize health and mortality data at both national and local levels, in the priority areas of the ICPD Programme of Action. The Commission adopted the report of the thirty-first session and a provisional agenda for its 1999 session, in which it will act as the preparatory body for the General Assembly's special session on implementation of the ICPD Programme of Action.

By one of two draft resolutions approved, the Economic and Social Council would:

-- recommend that the length of the thirty-second session of the Commission be extended to seven working days, in March 1999;

-- request the Secretariat to prepare a comprehensive plan, including a timetable, setting out the purpose, working methods and key outcomes and how they would contribute to the Secretary-General's comprehensive report on the five-year review and appraisal of the implementation of the Programme of Action; and

-- request that, the following be prepared for the Commission's next session in 1999: a Secretary-General's comprehensive report on the five-year review and appraisal of the implementation of the Programme of Action, to be coordinated by the Population Division; a report of the International Forum on the operational review of the

Programme of Action, to be coordinated by UNFPA; and a Secretary-General's draft report for the General Assembly's special session on the further implementation of the Programme of Action, also to be coordinated by the Population Fund.

By the draft resolution on the importance of population census activities for evaluation of progress in implementing the ICPD Programme of Action, the Economic and Social Council would invite governments to give priority to the planning and undertaking of the next population and housing census. It would recommend that countries lacking adequate vital statistics systems give due consideration to the collection and analysis of data in the year 2000 round of population censuses for the estimation of levels of mortality. The Council would call upon relevant organizations of the United Nations system, donor governments, through multilateral and bilateral mechanisms, and non-governmental organizations to provide the necessary support to those countries in need of undertaking such censuses, including the building of national capacity. For more information contact: UN Population Information Network (POPIN); e-mail: popin@undp.org; Internet: <http://www.undp.org/popin>.

/WOMEN

COMMISSION ON STATUS OF WOMEN: The Commission on the Status of Women held its forty-second session from 2 to 13 March and adopted 12 texts, including draft conclusions on four of the critical areas of concern contained in the Beijing Platform for Action, the outcome of the 1995 Fourth World Conference on Women. During the session, the Commission held 13 meetings, in addition to convening as the preparatory body for the General Assembly's High-level Review in the Year 2000 of the Implementation of the Nairobi Forward-Looking Strategies and the Beijing Platform for Action.

In one of the seven resolutions adopted without a vote, the Commission urged states to design and revise laws to ensure that women were accorded full and equal rights to own land and other property, including through the right to inheritance. States were also urged to undertake administrative reforms and other necessary measures to give women the same right as men to credit, capital, appropriate technologies, access to markets and information. Following the adoption of this text, the representative of Zambia, speaking on behalf of the Southern African Development Community (SADC), called the adoption of the text by consensus a milestone for which all could be proud. Chair Patricia Flor (Germany), said she hoped the understanding reached on the issue of human rights and land discrimination rights would prevail for years to come.

By a vote of 34 in favor to 1 against (US), with 5 abstentions (Lebanon, Lesotho, Norway, Rwanda, Uganda), the Commission approved a resolution on Palestinian women, to be submitted to the Economic and Social Council for adoption. By terms of that text, the Council would reaffirm that the Israeli occupation remains a major obstacle to Palestinian women's advancement, self-reliance and integration in the development planning of their society. Israel would be called on to facilitate the return of all refugees and displaced Palestinian women and children to their homes and properties in the occupied Palestinian territory.

By the terms of other resolutions, the Commission, *inter alia*:

-- Recommended that all activities for the commemoration of the fiftieth anniversary of the Universal Declaration of Human Rights should address the human rights of women to achieve common un-

derstanding and awareness on the promotion and protection of all human rights of women;

-- Condemned the continuing violations of the human rights of women and girls, including all forms of discrimination against them, in Afghanistan; and strongly urged all of the Afghan factions to end discriminatory policies and to recognize, protect and promote the equal rights and dignity of women and men;

-- Condemned violent acts against civilian women and children in areas of armed conflict and called for the immediate release of women and children taken hostage, including those subsequently imprisoned;

-- Called upon concerned governments, particularly those of sending and receiving countries, to put in place penal and criminal sanctions to punish perpetrators of violence against women migrant workers and to provide victims of violence with immediate assistance, such as counselling, legal and consular assistance, and temporary shelters;

-- Invited Member States to consider implementing at the national level recommendations on older women and support systems, including in the areas of research, economic security, education and empowerment, and the well-being of caregivers.

The Commission approved, as amended, draft conclusions on four critical areas of concern identified by the Beijing Platform for Action of the 1995 Fourth World Conference on Women. The agreed conclusions emerged from expert panel discussions and exchanges of views among Commission members, and covered the following issues: human rights of women, the girl child, women and armed conflict, and violence against women. Those texts were the subject of intense negotiations until the final hour of the session, which concluded at 11:45 p.m.

By the terms of the draft conclusions on human rights of women, governments, NGOs and other actors in civil society would be asked to ensure universal awareness of the human rights and fundamental freedoms of women and children, including the girl child, through comprehensive human rights education, in accordance with the United Nations Decade for Human Rights Education, and to create and promote a culture of human rights, development and peace.

The draft conclusions on the girl child would have the Commission urge the elaboration of an optional protocol to the Convention on the Rights of the Child on measures to prevent and eradicate the sale of children, child prostitution and pornography. Governments would be asked to enact and enforce laws that prohibit sexual exploitation and to prosecute and punish offenders.

By the provisions of the draft text on women and armed conflict, the Commission would have governments modify legal definitions and standards to ensure they encompass concerns of all women and girls affected by armed conflict and, in particular, make explicit that systematic rape and sexual slavery in armed conflict constitute war crimes.

The draft conclusions on violence against women, would ask governments to formulate multi-disciplinary and coordinated national plans, programmes and strategies to eliminate all forms of violence against women and girls, and provide targets and timetables for implementation and effective domestic enforcement procedures. Finally, the Commission adopted the draft provisional agenda and documentation for its forty-third session, and an orally amended report of its forty-second session. For more information contact the United Nations Division for the Advancement of Women; e-mail: daw@un.org; Internet: <http://www.un.org/womenwatch/daw/csw/>

/linkages/journal/



/UPCOMING

/SUSTAINABLE DEVELOPMENT

HUMAN RIGHTS, ENVIRONMENT & COMMUNITY WORKSHOP: The University at Buffalo (UB) Law School is hosting a workshop entitled "Human Rights, Environment & Community" from 17 - 18 April 1998. Participants in the two day program will explore the ways in which threats to human rights, environment, and communities overlap. For more information contact: Wendy Irvine; tel: +1 (716) 645-3989; e-mail: wlvirvine@acsu.buffalo.edu.

SUSTAINABILITY AND IMPACT ASSESSMENT: The conference, "Sustainability and the Role of Impact Assessment in the Global Economy: Excellence, Innovation and Adaptability" will be held from 19 - 24 April 1998 in Christchurch, New Zealand. For more information contact: the IAIA Executive Office; e-mail: iaia@ndsuxext.nodak.edu.

CSD-SIDE EVENT ON CYBERPARTNERSHIP FOR SUSTAINABILITY: This meeting will be held on 23 April in conjunction with CSD-6. The Side Event focuses on wide area knowledge networking devoted to challenges of sustainability—at all levels, regions, and sectors. Organized by MIT Technology and Development Program— on behalf of the Global Partnership on Cyberspace for Sustainability ("the CyberPartnership") -- the session is designed to illustrate current collaborative initiatives, value-added potentials, and improvements in venues for international collaboration toward greater effectiveness in knowledge-sharing, applications, and implementations. For further information, please contact Nazli Choucri, MIT; e-mail: nchoucri@MIT.EDU

CSD-SIDE EVENT ON NATIONAL COUNCILS: The Earth Council is organizing a special Side Event called "National Councils for Sustainable Development and the CSD: the Way Forward" to be held on April 28 from 1:15-2:45 pm on the First Basement level of the UN Headquarters. The exact room number will be available the day of the event. For more information contact: Francisco Mata, Deputy Executive Director, the Earth Council; tel: +506-256-1611; fax: +506-255-2197; e-mail eci@terra.ecouncil.ac.cr.

CSD SIDE-EVENT ON THE ASIAN FINANCIAL CRISIS: The CSD-6 Side Event "The Asian Financial Crisis and Sustainable Development" is being organized by the Philippine Council for Sustainable Development and the Earth Council and scheduled for April 22 from 6-8 pm. Francisco Mata, Deputy Executive Director, the Earth Council; tel: +506-256-1611; fax: +506-255-2197; e-mail: eci@terra.ecouncil.ac.cr.

CSD SIDE-EVENT "RIVERS TO OCEANS": The government of Portugal, UNDP, UNEP, the American Association of Port Authorities and IUCN will hold the CSD-6 Side Event "Rivers to Oceans" on 27 April 1998 from 6:00 - 8:00 pm in UNDP's Hank Shannon Conference Room, DC-1, 21st floor, 1 UN Plaza. For more information contact: Phillip Reynolds, UNDP; tel: +1 (212) 906-5866

WORLD INFORMATION TRANSFER'S ANNUAL HEALTH AND ENVIRONMENT MEETING: World Information Transfer will hold its annual Health and Environment Confer-

ence, "Global Partners for Global Solutions" at UN headquarters in New York from 16 - 17 April 1998. This year's topic is: the Trauma of Environmental Disaster. The co-sponsoring UN Member State is Bangladesh. For more information contact: World Information Transfer, 444 Park Ave. South, Suite 1202, New York, NY 10021. tel: +1 (212) 686-1996, option 3. fax: +1 (212) 686-2172; email: wit@igc.apc.org

COMMISSION ON SUSTAINABLE DEVELOPMENT: The CSD will hold its sixth session (CSD-6) in New York from 20 April - 1 May 1998. For more information contact the Division for Sustainable Development; United Nations Plaza, Room DC2-2270, New York, NY 10017 USA; telephone: +1 (212) 963 3170; fax: +1 (212) 963 4260; Internet; <http://www.un.org/esa/sustdev/>; e-mail: dpcsd@un.org.

TRADE, GLOBAL POLICY AND THE ENVIRONMENT: This meeting will be held from 21 - 22 April 1998 in Washington, DC. It will focus on a number of issues relevant to the ongoing debate on the effects of trade liberalization on the environment. For more information contact: Per Fredriksson; tel: +1 202 4737341; fax: +1 202 4770968; e-mail: pfredriksson@worldbank.org; Internet: <http://www.worldbank.org>

INDUSTRIAL ECOLOGY III: The Third Annual Sustainability Workshop and Round Table Retreat (IE III) will be held in San Francisco, US from 24 - 26 April 1998. The Future 500 is a network of some of the world's most forward thinking business change agents from the corporate, technology, environmental and social spheres. IE III will draw together a highly dynamic group of people to learn, discuss and put into practice cutting edge business and policy tools that emulate nature's efficient and creative systems. For more information contact: Future 500 at <http://www.globalff.org/ie3-info.htm>

SECOND SUMMIT OF THE AMERICAS: The Second Summit of the Americas will be held from 18 - 19 April in Santiago, Chile. For more information contact: Organization of American States, Foreign Trade Information System - SICE, 1889 F Street, NW Washington, DC 20006, USA; tel.: +1 (202)458-3725; fax: +1 (202) 458-3907; e-mail: forum_m@sice.oas.org; Internet: <http://www.sice.oas.org/>

1998 CONFERENCE ON CORPORATE ENVIRONMENTAL, HEALTH, AND SAFETY EXCELLENCE: This conference, co-sponsored by the Conference Board and the Arthur D. Little consulting firm, will be held 28-29 April 1998 at the Hilton in New York. Global leaders in business and the environment will convene to tackle the tough issues confronting organizations as they move to weave environmental "best practices" into core business strategies. For information contact the Conference Board; tel: +1 (212) 339-0232; e-mail: courter@conference-board.org.

CONFERENCE ON WATERSHED MANAGEMENT: MOVING FROM THEORY TO IMPLEMENTATION: This meeting will be held from 3 - 6 May 1998 in Denver, Colorado, US. For more information contact: Water Environment Federation; tel.: +1 (703) 684-2400

INTERNATIONAL WORKSHOP ON COMMUNITY-BASED NATURAL RESOURCE MANAGEMENT: This meeting will be held from 10 - 14 May 1998 in Washington, DC. For more information contact Christopher D. Gerrard, World Bank; fax: +1 (202) 676-0977; e-mail: cgerrard1@worldbank.org; Internet: <http://www.worldbank.org/html/edi/conatrem/index.htm>.

CHINA-U.S. INTERACTIVE STUDY PROGRAM: "ENVIRONMENTAL CHALLENGES & BUSINESS OPPORTUNITIES: This programme consists of Study Program Itinerary One, to

be held from 18 May - 2 June 1998, and Study Program Itinerary Two, to be held from 18 May - 30 May 1998 at the Friendship Hotel in Beijing, People's Republic of China. The Study Program will be convened by: China Association for Science and Technology of Beijing and Global Interactions, Inc. in Phoenix, Arizona, US. For more information contact Global Interactions, Inc. at tel: +1 602/906-8886; fax: +1 602/906-8887; e-mail: global@goodnet.com; Internet: <http://www.goodnet.com/~global>.

CONFERENCE ON THE DILEMMA OF ECOSYSTEM MANAGEMENT: This meeting will take place from 19 - 25 May 1998 in Florence, Italy. For more information Borsi Zeide, University of Arkansas; tel: +1 (870) 460-1648; e-mail: zeide@uamont.edu

NORTH/SOUTH CONFERENCE FOR SUSTAINABLE DEVELOPMENT: This meeting, "Solidarity for the Future," will be held from 25 - 29 May in 1998 in Bern, Switzerland. The conference is designed to address aspects of political, economic and social change that will shape North/South relations in the 21st century and give broad public exposure to the concerns of the South. For more information contact: the Swiss Coalition of Development Organizations; tel: + (41 (0) 79 412 89 72; fax: +41 (0) 31 381 1718; e-mail: conference@swisscoalition.ch; Internet: <http://www.swisscoalition.ch>

ECWATECH 98 -WATER: ECOLOGY AND TECHNOLOGY: This meeting will be held in Moscow, Russia from 25 - 30 May 1998. Maximum emphasis will be focused on practical, specific, technical, technological and managerial problems that trouble managers, experts and administrators. For information contact the Secretariat; tel: (+7-095) 207 63 60; fax: (+7-095) 207 64 75; e-mail: ecwatech@sibico.msk.ru; Internet: <http://www.relcom.ru/ecwatech/>.

WORLD CONFERENCE ON INTERNATIONAL COOPERATION OF CITIES AND CITIZENS FOR CULTIVATING ECO-SOCIETY: This meeting, "Eco-Partnership Tokyo," will be held from 26 - 29 May 1998 and organized jointly by the UN and the Tokyo Metropolitan Government. For information contact: Juxia Yan, DGPAF/DESA; tel: +1 (212) 963-6052; fax: +1 (212) 963-2916 or Shin Yamamoto or Masanori Sugitani, Tokyo Metropolitan Government, 8-1 Nishi-Shinjuku 2-chome Shinjuku-ku, Tokyo 163-01, Japan; tel.: +81-3-5388-3090, 3097 or 3155; fax: +81-3-5388-1329; e-mail: ccc-info@Tokyo-teleport.co.jp; Internet: <http://www.tokyo-teleport.co.jp/world-ccc/>.

MIRAMICHI INTERNATIONAL ENVIRONMENTAL CONFERENCE: This meeting will be held from 27 - 29 May 1998 in Miramichi, New Brunswick. For more information contact Mr. R. Augustine, 1773 Water Street, Miramichi, NB, Canada E1N 1B2; tel.: +1 (506) 627-4633; fax: +1 (506) 622-7492; e-mail: Raugustine@igs.net.

ETHICS AND THE CULTURE OF DEVELOPMENT: BUILDING A SUSTAINABLE ECONOMY: This international conference will be held in Havana, Cuba from 31 May - 5 June, 1998 and is presented by UNESCO's Regional Office for Latin America and the Caribbean, the American Friends Service Committee, and the Centro Felix Varela. The task of the conference is to develop comprehensive guidelines for building a sustainable economy. For more information contact: the Cuba Conference Staff, American Friends Service Committee, Latin America and Caribbean Desk, 1501 Cherry Street, Philadelphia, PA 19102; tel.: +215.241.7296; fax: 215.241.7026; e-mail: idlac@afsc.org; Internet: <http://www.afsc.org/cubahome.htm>.

INTERNATIONAL CONFERENCE ON WORLD WATER RESOURCES AT THE BEGINNING OF THE 21ST CENTURY: This conference, "Water: A Looming Crisis?" will be held at UNESCO in Paris from 3 - 6 June 1998. The conference will be convened by UNESCO, the International Association of Hydrological Sciences (IAHS) and the World Water Council (WWC). For more information contact: UNESCO, Division of Water Sciences, 1 Rue Miollis, 75732 Paris Cédex 15, France; fax: +33 1 45 68 58 11; Internet: <http://www.pangea.org/orgs/unesco/Flash.html>

SIXTH FORUM ON NATURE CONSERVATION AND PASTORALISM: This meeting will be held in Luhacovice, in the south-east of the Czech Republic, from 6 - 10 June 1998. The proposed theme for the conference is "Managing high nature conservation value farmland: policies, processes and practices." For information contact Dr. Davy McCracken, Environmental Sciences Department, Scottish Agricultural College, Auchincruive, Ayr KA6 5HW, UK; fax: +44 (0)1292 525 333; e-mail: D.McCracken@au.sac.ac.uk.

INTERNATIONAL SYMPOSIUM ON REMOTE SENSING OF ENVIRONMENT: This symposium will be held from 8 - 12 June 1998 in Tromsø, Norway. The theme is "Information for Sustainability," focusing on the use of Earth observation satellites in understanding and managing the environment. For information contact the Norwegian Space Centre, PO Box 113 Skoyen, N-0212 Oslo, Norway; fax: +47 22 51 18 01; e-mail: isrse@spacecentre.no; Internet: <http://www.spacecentre.no>

INTERNATIONAL SYMPOSIUM ON ADVANCED TECHNOLOGY IN ENVIRONMENTAL AND NATURAL RESOURCES: This meeting will be held from 8 - 12 June 1998 in Rovaniemi, Finland. For more information contact "Resource Technology 98;" P.O.Box 16, FIN-96301, Rovaniemi, Finland; fax: +358-16-3364640; e-mail: rt98sec@roi.metla.fi; Internet: <http://www.metla.fi/event/rt98/>.

FIRST INTERNATIONAL CONFERENCE ON ADDRESSING ENVIRONMENTAL CONSEQUENCES OF WAR - LEGAL, ECONOMIC AND SCIENTIFIC PERSPECTIVES: This meeting will be held from 10 - 12 June in Washington, DC. For information contact: Carl Bruch, Environmental Law Institute, 1616 P St., NW, Suite 200, Washington, DC 20036; tel.: +1 (202) 939-3240; fax: +1 (202) 939-3868; e-mail: bruch@eli.org; Internet: <http://www.eli.org/ecw/home.htm>.

IIASA/SSRC MEETING: An Open Meeting of the Human Dimensions of Global Environmental Change Research Committee will be held in Laxenburg, Austria from 12 - 14 June 1998. For more information contact IIASA; A-2361 Laxenburg, Austria, tel.:+43-2236-807-0; fax: +43-2236-71313; e-mail: inf@iiasa.ac.at; Internet: <http://www.iiasa.ac.at/>

TWELFTH INTERNATIONAL CONFERENCE ON COMPUTATIONAL METHODS IN WATER RESOURCES: This meeting will be held in Crete, Greece from 15 - 19 June 1998 at the Institute of Chemical Engineering and High Temperature Chemical Processes and the Foundation for Research and Technology, Hellas (ICE/HT-FORTH). For information contact: Dr. Vasilis N. Burganos, ICE/HT-FORTH, Stadiou St., Platani, GR26500, Patras, Greece or Dr. George P. Karatzas, RCGRD, 215 Votey Bldg., Department of Civil and Environmental Engineering, University of Vermont; Internet: <http://www.wessex.ac.uk/conferences/cmwr98/>.

SUSTAINABLE COMMUNITY DEVELOPMENT: The meeting, "A Forum for Sustainable Community Development in the Baltic Region" will be held in Uppsala, Sweden from 15 - 17 June

1998. This year the workshops will address the interplay between town and countryside, water issues and energy. For more information contact the secretariat; Magda Ivarsson; Uppsala Municipality, P.O. Box 216751 04 Uppsala, Sweden; tel: +46 18 271203; fax: +46 18 123058; e-mail: office@balticmeetingpoint.com; Internet: <http://www.balticmeetingpoint.com>

FIRST INTERNATIONAL FACTOR 4+ CONGRESS AND TRADE FAIR CONGRESS ON SUSTAINABLE PRODUCTION TECHNOLOGIES: This meeting will be held in Klagenfurt, Austria from 17 - 21 June 1998. This congress is organized by the Carinthian Trade Fair, Austria and the Wuppertal Institute for Climate, Environment and Energy, Germany. For more information contact: Klagenfurter Messe Betriebsgesellschaft mbh; Messeplatz 19021 Klagenfurt, Austria; tel: +43 463 56800 61; fax: +43 463 56800 39; e-mail: ktnmessen@mail.carinthia.co.at; Internet: <http://www.ktn-messen.co.at/messe>.

INTERNATIONAL SYMPOSIUM ON ENVIRONMENTAL MANAGEMENT IN THE MEDITERRANEAN: The Kriton Curi International Symposium on Environmental Management in the Mediterranean will be held from 18 - 20 June 1998 in Antalya, Turkey. For more information contact: Prof. Gunay Kocasooy, Bogazici University; tel.: +90-212-263-150, ext. 1276; fax: +90-212-265-1800; e-mail: Envsymp@boun.edu.tr.

ECOPROCURA '98: This meeting, "Saving money and the environment" will be held in Hannover, Germany from 24 -25 June 1998. The meeting will: bring together purchasers from municipal authorities or businesses with product developers, manufacturers and suppliers; present the various environmental labels and certifications; and link cost-effectiveness with ecological concerns and demonstrate that ecological procurement pays off. For more information: ICLEI International Training Centre, Eschholzstraße 86; D-79115 Freiburg, Germany; tel: +49 761 3689220; fax: +49 761 36266; e-mail: ICLEI_Training_Centre@compuserve.com; Internet: <http://www.iclei.org/europe/ecoprocura98.html>

THE INFORMATION SOCIETY AND SUSTAINABLE DEVELOPMENT: "The Information Society and Sustainable Development" will be held in Stuttgart, Germany on 2 July 1998 by Working Group 3 of Germany's National Information Infrastructure. Speakers have been invited from German ministries, the EU and UNEP. For more information contact the Info2000 Project Office; e-mail: info@forum2000.de.

SIXTH INTERNATIONAL COMMUNAL STUDIES CONFERENCE: The meeting "Utopian Communities and Sustainability" will be held in Amsterdam, the Netherlands from 7 - 9 July 1998. This conference intends to trace new international thoughts on community in theory and practice. For more information: University of Amsterdam Conference office; Spui 21, 1012 WX Amsterdam, the Netherlands; tel: +31 20 5254791; fax: +31 20 5254799; e-mail: congres@bdu.uva.nl; Internet: <http://www.uva.nl/uva/aktueel/congres/icsa.html>

FOURTH INTERNATIONAL INTERDISCIPLINARY CONFERENCE ON THE ENVIRONMENT: This meeting will be held in Washington DC, USA from 7 - 10 July 1998. The conference is motivated by the increasing need to combine ideas and research findings from different disciplines to enhance our understanding of the interactions between the natural environment and human institutions. For information contact: Kevin Hickey; tel: +1 (508) 767-7557/7296; fax: +1 (508) 767-7382; (508) 767-7382; e-mail: khickey@eve.assumption.edu; Internet: <http://www.assumption.edu/html/academic/conf/iicecall.html>

INTERNATIONAL CONGRESS ON ECOLOGY: The Congress will be held in Florence, Italy from 19 - 25 July 1998. For more information contact Almo Farina, INTECOL, Secretariat VII International Congress of Ecology, c/o Lunigiana della Brunella, 54011 Aulla, Italy; tel.: +39-187-400252, fax: +39-187-420727; e-mail: afarina@tamnet.it; Internet: <http://www.tamnet.it/intecol.98>

SUN 21 - FIRST INTERNATIONAL WEEK FOR A SUSTAINABLE ENERGY FUTURE: This conference will be held in Basel, Switzerland from 27 July - 1 August 1998. The meeting will attempt to: demonstrate how renewable energies and energy-efficient technologies create new significant employment worldwide for both today and tomorrow; For more information contact: SUN21; P.O. Box 332; CH-4010 Basel, Switzerland; tel: +41 61 271 0389; fax: +41 61 271 1083; e-mail: info21@sun21.ch; Internet: <http://www.sun21.ch>

INTERNATIONAL SYMPOSIUM ON ENVIRONMENTAL GEOTECHNOLOGY AND GLOBAL SUSTAINABLE DEVELOPMENT: This meeting will be held from 9 - 12 August in Boston, MA, US. For information contact: Dr. Vincent Ogunro; tel.: +1 (508) 934-3185; fax: 1 (508) 934-4014; e-mail: ogunrov@woods.uml.edu.

IEP '98: Issues in Environmental Pollution (IEP'98) will take place from 23 - 26 August 1998 in Denver, Colorado, US. The symposium will focus on the state and use of science and predictive models. The main scientific issues in environmental pollution--persistent organic chemicals; metals and radioactivity; ozone and acidic deposition; particulates and global climate change--will be linked with the use of science and predictive models. For more information contact Lyn Quirke; tel.: +44-0-1235-868380; fax: +44-0-1235-868420; e-mail: lynquirke@compuserve.com; Internet: <http://www.elsevier.nl/locate/iep98>

34th INTERNATIONAL PLANNING CONGRESS ON LAND AND WATER: The 1998 World Planning Congress in Azores, Portugal will be held from 26 September - 2 October 1998. The theme of the Congress is the exploration of the inescapable correlation between the (spatial) planning for human settlements and the natural environment on the one hand and the planning and management of the earth's water resources on the other. For information contact: the ISoCaRP Secretariat; tel.: +(31-70) 346 2654; fax: +(31-70) 361 7909; e-mail: isocarp@bart.nl; Internet: <http://www.soc.titech.ac.jp/isocarp>

ENVIRONMENTAL ENGINEERING AND MANAGEMENT '98: The conference "Environmental Engineering and Management '98" will be held in Barcelona, Spain from 30 September - 2 October 1998. For information from Liz Kerr, ENVMAN 98; tel.: +44 (0) 1703 293223; fax: + 44 (0) 1703 292853; e-mail: liz@wessex.ac.uk.

FIFTH INTERNATIONAL BOTANIC GARDENS CONSERVATION CONGRESS: This Congress, scheduled from 14 - 18 September 1998 in Kirstenbosch, Cape Town, South Africa, will have the theme "Plants, People and Planet Earth - the role of botanic gardens in sustainable living." For further information contact Prof. Brian J. Huntley, National Botanical Institute, Private Bag X7, Claremont 7735, South Africa; tel: +27 21 762 1166; fax: +27 21 761 4687; e-mail: hgci98@nbict.nbi.ac.za; or Botanic Gardens Conservation International, Descanso House, 199 Kew Road, Richmond, Surrey, TW 3BW, UK; tel.: +44 181 3325953/4/5; fax: +44 181 3325956; e-mail: hgci@rbgkew.org.uk.

INTERNATIONAL CONFERENCE ON INDUSTRY AND ENVIRONMENTAL PERFORMANCE: This conference will be

held in Aalborg, Denmark from 23-25 September 1998. The themes to be discussed are: environmental management; environmentally sound product development; self-regulation versus public regulation; cleaner technology and prevention; and stakeholder management. For further information contact: the Secretariat, tel: +45 9935 5555, fax: +45 9935 5580, e-mail: euro@akkc.dk; Internet: <http://www.akkc.dk/uk/euro/envire/index.htm>

71ST ANNUAL WATER ENVIRONMENT FEDERATION CONFERENCE & EXPOSITION: This meeting will be held from 3 - 7 October 1998 and the Orange County Convention Center in Orlando, Florida US. The meeting is North America's largest water quality and pollution control conference and exposition is expected to attract more than 14,000 of the world's leading water quality experts and over 700 exhibiting companies. For more information contact: the Water Environment Federation, 601 Wythe Street, Alexandria, VA 22314-1994 US; tel.: +1 (703) 684-2400; fax: 1 (703) 684-2492; e-mail: webfeedback@wef.org; Internet: <http://www.wef.org>.

VILLAGE POWER '98: This international conference for renewable energy for sustainable development will be held at the World Bank in Washington DC, US from 6-8 October 1998. For more information contact: Heather Bulmer; tel: +1 (303) 275-4317; e-mail: bulmerh@tcplink.nrel.gov; Internet: <http://www.rsvp.nrel.gov/rsvp/tour/VPConference/VP98.htm>

PARTNERS FOR DEVELOPMENT: "Partners for Development" will be hosted by the city of Lyon and organized by UNCTAD from 9 - 12 November 1998. The summit will bring together representatives from governments, NGOs, the private sector, academia, the media, and international organizations to launch joint projects where market forces serve the cause of development. For information contact: Partners for Development, UNCTAD, Palais des Nations, 1211 Geneva 10 - Switzerland, tel: + 41 22 907 55 55; fax: + 41 22 907 00 22; e-mail: alessandra.vellucci@unctad.org; Internet: <http://www.unicc.org/unctad/en/special/tb44his5.htm>.

SEVENTH INTERNATIONAL CONFERENCE OF THE GREENING OF INDUSTRY NETWORK: This conference, "Building Alliances for a Sustainable Future," will be held in Rome, Italy from 15-18 November 1998. The focus of this conference will be the engagement of partners in the transition of society towards sustainability. The conferences of the Greening of Industry Network are a platform for people from diverse backgrounds to exchange ideas, experiences and to develop relationships, visions and practices for sustainability. For information contact: Ellis Brand, University of Twente; tel: +31 53 489 3203; fax: +31 53 489 4850; e-mail: M.L.Brand@CSTM.utwente.nl.

FIFTH INTERNATIONAL MEETING OF THE INTERNATIONAL SOCIETY FOR ECOLOGICAL ECONOMICS: This meeting, "Beyond Growth: Institutions and Policies for Sustainability," will be held from 15 - 19 November 1998 in Santiago, Chile. For more information contact Osvaldo Sunkel; Organizing Committee, International Society for Ecological Economics (ISEE), Universidad de Chile, Diagonal Paraguay 265, Torre 15, of. 1303, Santiago, Chile; tel.: +56 2 678 2308 - 56 2 678 2272; fax: +56 2 678 2581; e-mail: ISEEconf@abello.dic.uchile.cl; Internet: <http://www.uchile.cl/facultades/ISEE3.html>.

FOURTH INTERNATIONAL CONFERENCE ON ENVIRONMENTAL COMPLIANCE AND ENFORCEMENT: This meeting will be held from 16 - 20 November in Monterey, CA, USA. For more information contact: Cheryl Wasserman, US-EPA; fax: +1 (202) 260-0129.

INTERNATIONAL DEVELOPMENT CONFERENCE - GLOBAL MEETING OF GENERATIONS: This meeting will be held from 13 - 15 January 1999 in Washington, DC, US. For more information contact: International Development Conference; tel: +1 (202) 884-8580, fax: 1 (202) 884-8499; e-mail: fdc@fdc.org.

US NATIONAL SUMMIT ON SUSTAINABLE DEVELOPMENT: The US National Summit on Sustainable Development will be held in Detroit, MI from 2 - 5 May 1999. The Summit intends to introduce a national dialogue about sustainable development to the US public, showcase and celebrate sustainable development efforts already underway across the country, and spark a greater movement toward a sustainable development path for American business, government, environmental, and social service community. For more information contact Patricia Sinicropi, PCSD; +1 (202) 408-5445.

/TRADE AND ENVIRONMENT

ASIA PACIFIC ENVIRONMENTAL COOPERATION: The Third APEC Energy Ministers' Meeting will be held from 9 - 10 October 1998 in Okinawa, Japan. The Tenth APEC Ministerial Meeting will be held from 14 - 15 November and the Sixth APEC Economic Leaders' Meeting will meet from 16 - 18 November in Kuala Lumpur, Malaysia. The Eleventh APEC Ministerial Meeting will be held from 10 - 11 September and the Seventh APEC Economic Leaders' Meeting will be held on 13 September in Auckland, New Zealand. For information contact the Asia-Pacific Economic Cooperation Secretariat, 438 Alexandra Road, #14-00, Alexandra Point, Singapore 119958; tel: +(65) 276-1880; fax: +(65) 276-1775; e-mail: info@mail.apecsec.org.sg; Internet: <http://www.apecsec.org.sg/>

NORTH AMERICAN FREE TRADE AGREEMENT-COMMISSION ON ENVIRONMENTAL COOPERATION: The Joint Public Advisory Committee (JPAC) of the Commission for Environmental Cooperation (CEC) will meet on 7 May 1998 in El Paso, Texas, US. For more information contact: María García, tel: +1 (514) 350-4366; fax: +1 (514) 350-4314; e-mail: mgarcia@ccemtl.org.

OECD: The OECD Council at Ministerial Level will be held from 27 - 28 April 1998. For information contact: OECD, 2 rue André Pascal, 75775 Paris Cedex 16, France; tel: +33 (0)1 45 24 81 19; fax: +33 (0)1 45 24 80 07; e-mail: news.contact@oecd.org

WORLD TRADE ORGANIZATION: The Committee on Trade and Development will meet on 23 April 1998, followed by a meeting of the Sub-Committee on Least-Developed Countries. The Ministerial Conference and 50th Anniversary meeting (WTO/AIR/794) will be held from 18-20 May 1998 in Geneva. For more information contact the WTO; Internet: <http://www.wto.org>

ECONOMIC COMMISSION FOR LATIN AMERICA AND CARIBBEAN (ECLAC): ECLAC will hold its twenty-seventh session in Aruba from 11 - 16 May 1998. The chief topic of debate at the session will be fiscal management in the countries of Latin America and the Caribbean. For more information try <http://www.eclac.cl/index1.html>.

ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC (ESCAP): ESCAP will hold its fifty-fourth session in Bangkok, Thailand in from 16-22 April 1998. The Committee on Environment and Natural Resources Development, first session, organized by Environment and Natural Resources Management Division will meet from 21-23 October 1998 Bangkok, Thai-

land. For more information contact ESCAP, Rajdamnern Ave., Bangkok 10200, Thailand; e-mail: unisbkk.unescap@un.org; Internet: <http://www.unescap.org/>

ECONOMIC COMMISSION FOR EUROPE: The UN Economic Commission for Europe (ECE) will hold its fifty-third session will be held in Geneva from 20 - 23 April 1998. For more information contact the ECE Information Office, Palais des Nations, 1211 Geneva, Switzerland; tel: +41 22 917 2893; fax: +41 22 917 0036; e-mail: info.ece@unece.org; Internet: <http://www.unicc.org/unece/>.

ENVIRONMENTAL RESPONSIBILITY IN WORLD TRADE: The British Council will hold this conference from 6 - 9 September 1998 in London. The conference will provide senior figures in government and business with an update on prospects for environmentally responsible international trade. For information contact the British Council; tel: +44 (0) 1865 316636; fax: +44 (0) 1865 557368; e-mail: international.seminars@britcoun.org; Internet: <http://www.britcoun.org/seminars/>.

ICTSD MEETING ON REGIONAL AGREEMENTS, TRADE AND SUSTAINABILITY: ICTSD is convening this international conference in Geneva on 28-29 September 1998, the first in an annual series of conferences in Geneva focusing on regional integration approaches to addressing the issues of trade liberalization and sustainable development. It will be an opportunity for policy-makers and civil society representatives to exchange information and compare experiences on the sustainability objectives and performance of regional integration schemes; the management of sustainable development determinants at the regional level; and their relation to multilateral concerns and the global environment. For information contact Miguel Jimenez-Pont at tel: +(41-22) 979 94 78; fax: + (41 22) 979 9093; email ictsd@iprolink.ch.

/CLIMATE AND ATMOSPHERE

US CLIMATE CHANGE REGIONAL WORKSHOPS: The Upper Great Lakes workshop will be held at the University of Michigan in Ann Arbor, MI from 5 - 7 May 1998. The Appalachian workshop will be held at West Virginia University in Morgantown, WV from 26 - 29 May 1998. For information contact: Melissa Taylor; National Assessment Coordination Office of the US Global Change Research Program; tel: +1 (202) 314-2239; fax: +1 (202) 488-8681; e-mail: mtaylor@usgcrp.gov; Internet: <http://www.epa.gov/globalwarming/news/calendar.html>

ENVIRONMENTAL SUMMIT '98: The Environmental Resource Center's "Environmental Summit '98" will be held from 11-15 May 1998 in Research Triangle Park, North Carolina, USA. Leaders from industry, government and academia will come together to jointly develop strategies for proactive compliance and future initiatives that the 21st century will require. The aim of Environmental Summit '98 is to assess the effectiveness of past techniques and weigh that against the return on investment of time and resources. For more information contact the Environmental Resource Center; tel: +1 (888) 4ES-1998; fax +1 (919) 469-4137; post: Environmental Summit '98, 101 Center Pointe Drive, Cary, N.C. 27513-5706; Internet: <http://www.ercweb.com/SUMMIT98/>

UNCTAD-EARTH COUNCIL EMISSIONS TRADING POLICY FORUM: The UNCTAD -Earth Council Emissions Trading Policy Forum will be held from 13-15 May 1998 in London, UK. For more information contact: Frank Joshua, UNCTAD; e-mail: frank.joshua@unctad.org.

OCEAN CIRCULATION AND CLIMATE: The 1998 WOCE Conference will be held from 24-29 May 1998 in Halifax, Nova Scotia, Canada. For more information contact John Gould, WOCE IPO, Southampton Oceanography Centre, Room 256/18, Empress Dock, Southampton, SO14 3ZH UK, tel +(44 1703) 596-789, fax +(44 1703) 596-204.

LATIN AMERICAN AND CARIBBEAN AND SEMIAR ON GREENHOUSE GASES: This seminar, organized by the UNEP Collaborating Centre on Energy and Environment (UNCCEE) and the Latin American Energy Organization (OLADE), will be held from 21 - 22 May 1998 in Quito, Ecuador. The seminar will present methodologies and results of the UNEP/GEF Project "Economics of Greenhouse Limitations." The second objective is to present and discuss important issues on climate change, especially for the Latin American energy sector: UNFCCC, the Kyoto Protocol, certified emission reductions, the Clean Development Mechanism, tradable permits, the Carbon Initiative, GEF, national communications and enabling activities. For more information contact: Juan Zak, OLADE; e-mail: juanzak@ecnet.ec; Internet: English page - <http://www.olade.org.ec/ingles/igases.html> Spanish page - <http://www.olade.org.ec/gases.html>.

FCCC MEETINGS: The FCCC subsidiary bodies will meet from 2 - 12 June 1998 in Bonn, Germany. The subsequent subsidiary bodies meetings will coincide with the Fourth Conference of the Parties in Buenos Aires, Argentina, scheduled from 2 - 13 November 1998. For more information contact the UNFCCC Secretariat in Bonn, Germany; tel: +49-228-815-1000; fax: +49-228-815-1999; e-mail: secretariat@unfccc.de; Internet: <http://www.unfccc.de/>

GLOBAL WARMING INTERNATIONAL CONFERENCE AND EXPO: This meeting will be held from 8 - 11 June 1998 in Hong Kong, China. For more information contact: the GW9 International Program Committee, c/o GWIC (Global Warming International Center, USA); P.O. Box 5275, Woodridge, IL, 60517-0275 US; fax: 1 (630) 910-1561; e-mail: gw9@globalwarming.net

FOURTH INTERNATIONAL CONFERENCE ON GREENHOUSE GAS CONTROL TECHNOLOGIES (GH-GT-4): This conference will be held from 30 August - 2 September 1998 in Interlaken, Switzerland. For information contact: Dr. Baldur Eliasson, Head, Energy and Global Change, ABB Corporate Research Ltd., Baden-Dättwil, Switzerland.; tel: + 41-56-486 80 31; fax: + 41-56-493 45 69 e-mail: baldur.eliasson@chrc.abb.ch.

SECOND INTERNATIONAL CONFERENCE ON CLIMATE AND HISTORY: The Second International Conference on Climate and History: "Past and present variability - a context for the future," will be held from 7 - 11 September 1998 in Norwich, UK. For more information contact: Susan Boland, Climatic Research Unit, Univ. of East Anglia, Norwich, NR4 7TJ, UK; tel: +44-1603-456-161; fax: +44-1603-507-784; e-mail: s.boland@uea.ac.uk; Internet: <http://www.cru.uea.ac.uk/cru/conf>

CONGRESS OF THE WORLD ENERGY COUNCIL: This meeting will be held from 13 - 17 September 1998 in Houston, Texas, US. For more information contact: The Houston Congress; tel: +1 (202) 331-0415; fax: +1 (202) 331-0418; Internet: <http://www.wec98congress.org/>

ELEVENTH WORLD CLEAN AIR & ENVIRONMENT CONGRESS (& EXPO): The Congress is schedule from 13 - 18 September 1998 in Durban, South Africa. For information contact: Conference Secretariat, PO Box 36782, Menlo Park 0102, South Africa; fax: +27 12 460 170; e-mail: wissing@iafrica.com.

SIXTH INTERNATIONAL CONFERENCE ON MODELING, MONITORING AND MANAGEMENT OF AIR POLLUTION (Air Pollution '98): This meeting will be held from 28 - 30 September 1998 in Genova, Italy. The meeting will be organized by the Wessex Institute of Technology (UK) and the Università di Genova, Italy. For information contact: Sally Radford, Conference Secretariat, Air Pollution 98, WIT; tel: +44 (0) 1703 293223; fax: +44 (0)1703 292853; e-mail: sradford@wessex.ac.uk

INTERNATIONAL CONFERENCE ON TROPICAL FORESTS AND CLIMATE CHANGE: This meeting will be held from 19-22 October 1998, Manila, the Philippines. For more information contact the Conference Secretariat, Environmental Forestry Program, UPLB College of Forestry, 4031 College, Laguna, the Philippines; tel.: + 63-49-536-2342; fax: +63-49-536-2341; e-mail: Rdl@mudspring.uplb.edu.ph.

1998 EARTH TECHNOLOGIES FORUM (formerly Climate Change Conferences and Ozone Protection Technologies Conference): This meeting will be held from 26-28 October 1998 in Washington, DC. The Forum will address climate change and ozone protection technologies and policies. It is co-sponsored by the International Climate Change Partnership (ICCP), the US Environmental Protection Agency and the Alliance for Responsible Atmospheric Policy. For conference registration, program and exhibit information contact: Heather Tardel; tel: +1 (703) 807-4052; fax: +1 (703) 243-2874; <http://www.earthforum.com>.

MONTREAL PROTOCOL: The Environmental Effects Assessment Panel will meet from 9 - 17 August 1998 in Hawaii, USA. The Scientific Assessment Panel Meeting will be held from 1 - 5 June 1998 in Les Diablerets, Switzerland. The *Ad Hoc* Working Group of Legal and Technical Experts on Non-Compliance will be held from 1 - 3 July 1998 at the International Conference Centre, Geneva, Switzerland. The Implementation Committee under the Non-Compliance Procedure for the Montreal Protocol will meet on 6 July 1998 at the International Conference Centre in Geneva.

The Bureau of the 9th Meeting of the Montreal Protocol will be held on 6 July 1998 and the 17th Meeting of the Open-Ended Working Group of the Parties to the Montreal Protocol will be held from 7 - 10 July 1998 in Geneva. The *Ad Hoc* Working Group of the Legal and Technical Experts on Non-Compliance will meet from 11 - 13 November 1998 in Cairo, Egypt. The Tenth Meeting of the Parties to the Montreal Protocol will be held from 17 - 27 November 1998 in Cairo, Egypt. For more information contact the Secretariat for the Vienna Convention and the Montreal Protocol in Nairobi, Kenya; tel: +(254-2) 62-1234/62-3851; fax: +(254-2) 52-1930/62-3913; Internet: <http://www.unep.ch/ozone>.

/BIODIVERSITY

WORKSHOP ON BIODIVERSITY AND IMPACT ASSESSMENT: This workshop, coordinated by the IUCN, will be held 22-23 March 1998 at the eighteenth annual meeting of the International Association for Impact Assessment in Christchurch, New Zealand. For more information, contact: Andrea Bagri, IUCN, Economic Services Unit, Rue Mauverney 28, Gland 1196 Switzerland; tel: +41-22-999-0001; fax: +41-22-999-0002; Internet: <http://iucn.org/themes/economics>.

WORKSHOP ON BIODIVERSITY AND IMPACT ASSESSMENT: IUCN is coordinating a workshop on Biodiversity and Impact Assessment at the 18th annual IAIA meeting in Christchurch, New Zealand from 22 - 23 April 1998. The workshop

will examine how impact assessment can be used as a tool for biodiversity and how biodiversity issues are addressed through impact assessment. For more information contact: Andrea Bagri, IUCN-The World Conservation Union; e-mail: esu@indaba.iucn.org; Internet: <http://iucn.org/themes/economics>.

WEST ASIAN/NORTH AFRICAN REGIONAL MEETING ON PLANT GENETIC RESOURCES: This meeting will be held in Spring 1998 in Aleppo, Syria and is organized by FAO/IPGRI/ICARDA. This meeting will discuss the implementation of the Global Plan of Action in the West Asian and North African Region. For more information contact; IPGRI-WANA/CA; Regional Office, c/o ICARDA, P.O. Box 5466; Aleppo, Syria; e-mail: g.ayad@cgnet.com.

TENTH SESSION OF THE GLOBAL BIODIVERSITY FORUM: IUCN is co-hosting the 10th session of the Global Biodiversity Forum in Bratislava, Slovakia from 1 - 3 May 1998, immediately prior to the 4th meeting of the Conference of the Parties to the CBD. For more information contact: Caroline Martinet, IUCN-The World Conservation Union, Biodiversity Policy Coordination Division, Rue Mauverney 28, Gland 1196 Switzerland; e-mail: ccm@hq.iucn.org; Internet: <http://www.wri.org>.

INTERNATIONAL EXHIBITION ON BIOLOGICAL DIVERSITY: The event will be held in conjunction with COP-4 to the Convention on Biological Diversity from 4 - 15 May 1998, Bratislava, Slovakia. For information contact Ing. Stefan Petkanic, INCHEBA, Viedenska cesta 7, 852 51 Bratislava, Slovakia; tel.: +(4217) 802-210/802-051; fax: +(4217) 847-982; 581-5811665.

WORLD MINISTERIAL ROUNDTABLE ON BIOLOGICAL DIVERSITY: This roundtable will be held from 4 - 5 May 1998, Bratislava, Slovakia. For information contact: H.E. Mr. Jozef Zlocha, Minister of Environment, Ministry of Environment, Namestie L. Stura 1, Bratislava, 812 35, Slovakia; tel. +421-7-516 2455/2460; fax +421-7-516 2557 or Zuzana; Guziova, National Secretariat for the CBD, Ministry of Environment, Hanulova 5/d, 841 02 Bratislava, Slovakia. tel: +421-7-786 581/568; e-mail: zuzana_g@ba.gef.sanec.sk.

FOURTH CONFERENCE OF THE PARTIES TO THE CONVENTION ON BIOLOGICAL DIVERSITY: COP-4 is scheduled for 4 - 15 May 1998 in Bratislava, Slovakia. For more information contact the CBD Secretariat, World Trade Centre, 393 St. Jacques Street, Montreal, Quebec, Canada H2Y 1N9; tel: +1-514-288-2220; fax: +1-514-288-6588; e-mail: chm@biodiv.org; Internet: <http://www.biodiv.org>.

INTERNATIONAL ASIA-PACIFIC MYCOLOGICAL CONFERENCE ON BIODIVERSITY AND BIOTECHNOLOGY: This conference will be held from 6-9 July 1998 in Hua Hin, Thailand. For more information, contact: BIOTEC Committee; Gypsum Metropolitan Tower, 5th Floor, 539/2 Sri-Ayudhya RD, Radhevee, Bangkok, 10400, Thailand; tel: +662-642-5322; fax: +662-248-8305; e-mail: mycology@biotec.or.th; Internet: <http://www.biotec.or.th/diary/mycology/mycology.htm>.

THE DILEMMA OF ECOSYSTEM MANAGEMENT: To Extend the Agony or to Address the Cause? This meeting will be held from 19-25 July in Florence, Italy. For information contact: Boris Zeide, School of Forestry, University of Arkansas, Monticello, AR 71656-3468; tel: 870.460.1648; e-mail: zeide@uamont.edu.

XV EUCARPIA GENERAL CONGRESS: The meeting "Genetics and Breeding for Crop Quality and Resistance" will be held from 21-25 September 1998 in Viterbo, Italy. For information contact: Dr. Mario A. Pagnotta, XV Eucarpia Congress, University of

Tuscia, Via S.C. de Lellis, 01100, Viterbo, Italy; e-mail: eucarpia@unitus.it; Fax: +39-761-357256; Internet: <http://www.unitus.it/confsem/eucarpia/eu.html>

CONFERENCE ON GENETICALLY MODIFIED ORGANISMS IN NORDIC HABITATS-SUSTAINABLE USE OR LOSS OF DIVERSITY?: This conference will be held 1-2 October 1998 in Helsinki, Finland. For more information, contact: Marja Ruohonen-Lehto; tel: +358-9-4030-0541; e-mail: marja.ruohonen-lehto@vyh.fi; or Hans Erik Svart; tel: +45-39-47-20-00; e-mail: hes@sns.dk.

SECOND ANNUAL EUROPEAN BIOTECHNOLOGY BUSINESS CONFERENCE: This conference will be held 27-30 October 1998 in Brussels, Belgium. For more information, contact: EuropaBio, Avenue de l'Armee 6, B-1040 Brussels, Belgium; tel: +32-2-735-0313; fax: +32-2-735-4960; e-mail: mail@europabio.be; Internet: <http://www.europa-bio.be>.

MEETINGS UNDER THE CONVENTION ON BIODIVERSITY: A Liaison Group of Experts on Agro-Biodiversity meeting is tentatively scheduled for October/November 1998. A meeting on the Conservation and Sustainable Use of Inland Waters is tentatively scheduled for November. For more information contact the CBD Secretariat, World Trade Centre, 393 St. Jacques Street, Montreal, Quebec, Canada H2Y 1N9; tel: +1-514-288-2220; fax: +1-514-288-6588; e-mail: chm@biodiv.org; Internet: <http://www.biodiv.org>.

STRATEGIES AND TECHNOLOGIES FOR CONSERVATION OF SUSTAINABLE USE OF BIODIVERSITY IN WEST ASIA AND NORTH AFRICA LANDSCAPES: This meeting will be held from 7 - 12 November 1998 in Marsa Matrouh, Egypt. This international workshop is organized to focus on strategies and technologies for conserving and for sustainable use of biological diversity in plant communities in the Middle East. For information contact: IPGRI-WANA/CA; Regional Office, c/o ICARDA, P.O. Box 5466; Aleppo, Syria; e-mail: g.ayad@cgnet.com.

SECOND ASIA-PACIFIC CONFERENCE ON BIOTECHNOLOGY: This meeting will be held from 23 - 27 November 1998 in Perth, Western Australia (WA). This conference will provide a blend of papers on basic scientific and conservation issues and the application of new biotechnologies to these. For more information contact Biodiversity, Biotechnology & Biobusiness, Congress West Pty Ltd. PO Box 1248, West Perth WA 6872, Australia; fax. +61 8 9322 1734; e-mail: biodiversity@science.murdoch.edu.au

EIGHTH SESSION OF THE COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE: The next session of the CGFRA will take place during the second half of April 1999. The fifth and sixth extraordinary sessions of the Commission are tentatively scheduled to be held in Rome in June and September 1998. For more information, contact FAO: Viale delle Terme di Caracalla, 00100 Rome, Italy; tel: +39-6-52251; +39-6-52253152. Also try <http://www.fao.org> or <http://web.icppgr.fao.org>.

/FORESTS

SECOND INTERNATIONAL CONFERENCE ON PRIVATE FORESTS: This meeting will be held from 1 - 2 May 1998 in Penha Longa, Sintra, Portugal. For more information contact the Conference Secretariat; Av. Do Colégio Militar, Lote 1786, 1500 Lisboa, Portugal; tel.: +351-1-710-0000; +351-1-716-6122.

FIRST EUROPEAN FORUM ON URBAN FORESTRY:

This meeting will be held from 4 - 8 May 1998 in Wuppertal, Germany. For more information contact: Prof. Dr. Max Krott, Institut für Forstpolitik, Forstgeschichte und Naturschutz, Büsgenweg 5, D-37077 Göttingen, Germany; tel.: +49-551-393 412; fax: +49-551-392 415; email: mkrott@gwdg.de

HISTORY AND FOREST RESOURCES: This meeting, "History and Forest Resources - Changing Economies and Changing Forests," will be held from 18 - 23 May 1998 in Florence, Italy. For more information contact: Dr. Mauro Agnoletti, Istituto di Assestamento e Tecnologia Forestale, Università di Firenze, Via San Bonaventura 13, 50145, Firenze, Italy; tel.: +39-55-302 3140, 302 31276; fax: +39-55-319 179; e-mail: agnoletti@cesit1.unifi.it.

24TH SESSION OF THE INTERNATIONAL TROPICAL TIMBER COUNCIL: This meeting will be held from 20-28 May 1998 in Libreville, Gabon. For information contact: International Organizations Center, 5th Floor, Pacifico-Yokohama, 1-1-1, Minato-Mirai, Nishi-ku, Yokohama, 220 Japan; tel: + (81-45) 223-1111; fax: +(81-45) 223-1110;

e-mail: Itto@mail.itto-unet.ocn.ne.jp; Internet: <http://www.itto.or.jp>

INTERNATIONAL EXPERT CONSULTATION ON OPERATIONALIZATION FOR THE IPF'S PROPOSALS FOR ACTION AT THE NATIONAL LEVEL: This meeting (dates and title tentative) will be held in May-June 1998 in Germany. The meeting will be held in support of Programme Element I.a. of the programme of work of the IFF. A preparatory meeting will be held in Bonn, Germany from 3-5 February 1998. For information contact: Christian Mersmann, GTZ Coordinator, International Programmes in Tropical Forestry; tel. +49 6196 79 3453; fax +49 6196 79 7333; e-mail: 101562.31@compuserve.com

THIRD MINISTERIAL CONFERENCE ON THE PROTECTION OF FORESTS IN EUROPE: This meeting will be held in 2-3 June in Lisbon, Portugal. For information contact: Liaison Unit, Direcção Geral das Florestas, Av. João Crisóstomo, 26-28, 1000 Lisboa, Portugal; tel.: + 351-1312-4807; + 351-1312-4992; e-mail: Meeting@ip.pt.

WORKSHOP ON THE IMPLEMENTATION OF IPF/CSD PROPOSALS FOR ACTION IN LATIN AMERICA AND THE CARIBBEAN WITH SPECIAL REFERENCE TO NATIONAL FOREST PROGRAMMES: This meeting will be held from 3-5 June 1998 in Santiago, Chile (subject to confirmation) by the: FAO. For information contact: Jean Clement; tel: +39-6-5705 3589; fax: +39-6-5705 2151; e-mail: jeanclaude.clement@fao.org

SEMINAR ON THE IMPORTANCE OF RESEARCH FOR TEACHING AND EVERYDAY LIFE IN FORESTRY: This meeting will be held from 21-24 June 1998 in Praha, Czech Republic and organized by the IUFRO and the Forestry and Game Management Research Institute of the Czech Republic. For more information contact Vancura Karel, VÚLHM Jiloviste, Strnady 136, 156 04 Praha; Zbraslav, Czech Republic; tel.: +420-2-5792 1643,1286; fax: +420-2-5792 1444, e-mail: forinst@ms.anet.cz or vancura@vulhm.cz, Internet: <http://www.vulhm.cz>

LAW AND ENVIRONMENTAL LEGISLATION IN EASTERN EUROPE: This meeting will be held from 24 - 27 June 1998 in Ossiach, Austria. For more information contact: Peter Herbst, Wulfenstrasse 15, A-9500 Villach, Austria; tel: +43-4242-52471; fax: +43-4242-264048; e-mail: hp@net4you.co.at.

XXI IUFRO WORLD CONGRESS: This meeting of the International Union of Forest Research Organizations (IUFRO) will be held from 7 - 12 August 2000 in Kuala Lumpur, Malaysia. For more

information contact the Chair of the Organizing Committee, Forest Research Institute, Kepong, 52109 Kuala Lumpur, Malaysia; fax: +603-636-7753; e-mail: lufroxxi@frim.gov.my; Internet: <http://frim.gov.my/iufro.html>

INTERNATIONAL CONFERENCE ON THE INVENTORY AND MONITORING OF FORESTED ECOSYSTEMS: This meeting will be held in Boise, Idaho, US from 16 - 20 August 1998. For more information contact: Mark Hansen, USDA Forest Service, 1992 Folwell Avenue, St. Paul, MN 55108; fax: +1 (612) 649-5285; e-mail: hanse034@maroon.tc.umn.edu; Internet: <http://dendron.fr.umn.edu/burk/boise/>

IUFRO/FAO INTERNATIONAL CONFERENCE ON INDICATORS FOR SUSTAINABLE FOREST MANAGEMENT: This meeting will held from 24-28 August 1998 in Melbourne, Australia. For more information contact: David Flinn, Centre for Forest Tree Technology, Australia; e-mail d.flinn@dce.vic.gov.au

CONTRIBUTION OF GENETICS TO THE SUSTAINED MANAGEMENT OF GLOBAL FOREST RESOURCES: IUFRO and FAO will sponsor this meeting, which will be held from 22 - 28 August 1998 in Beijing, China. The aim of the conference is to discuss accomplishments, trends and future developments, redefine the role of forest genetics and breeding in contemporary forestry and set priorities for future research and development. For more information contact: Prof. Hong Jusheng, Chinese Academy of Forestry, Wan Shou Shan, Beijing 100091, China; fax: +86-10-62884229; e-mail: zhangbp@caf.forestry.ac.cn.

INTERGOVERNMENTAL FORUM ON FORESTS: The Intergovernmental Forum on Forests (IFF) will hold its first substantive meeting from 24 August - 4 September in 1998 Geneva. The second session will be held in February/March 1999 in Geneva. The third session will be held in February/March in a venue to be determined. For more information contact the Secretariat of the Intergovernmental Forum on Forests, Two United Nations Plaza, 12th Floor, New York, NY 10017 USA; tel: +1 (212) 963-6208; fax: +1 (212) 963-3463; Internet: <http://www.un.org/esa/sustdev/iff.htm>.

INTERNATIONAL SUSTAINABILITY CONFERENCE: The Task Force on Sustainable Forest Management will sponsor this meeting, which will be held from 24 - 28 August 1998 in Heidelberg Victoria, Australia. For more information contact: David W Flinn, Centre for Forest Tree Technology, PO Box 137, Heidelberg, Victoria 3084, Australia; tel.: +60-3-94508 666, fax: +60-394508 644, e-mail: d.flinn@dce.vic.gov.au.

20TH SESSION OF THE FAO LATIN AMERICAN AND CARIBBEAN FORESTRY COMMISSION: This meeting will be held from 10-14 September 1998 in Havana, Cuba. For information contact: FAO, Viale delle Terme di Caracalla, 00100 Rome, Italy; tel.: +39(6) 57051; fax: +39(6) 57053152; e-mail: Postmaster@fao.org; Internet: <http://www.fao.org>.

INTERNATIONAL CONSULTATION ON RESEARCH AND INFORMATION SYSTEMS IN FORESTRY: This meeting, sponsored by Indonesia and Austria, in cooperation with IUFRO, CIFOR, FAO and the IFF Secretariat, will be held in September 1998 in Ort/Gmunden, Austria. For information contact: Heinrich Schmutzenhofer, IUFRO; tel: +43-1-8770151; fax: +43-1-8779355; e-mail: hschmutz@forvie.ac.at; or Ingwald Gschwandtl, Ministry of Agriculture and Forestry, Vienna, Austria; tel: +43-1-21323 ext 7207; fax: +43-1-21323 ext 7216; e-mail ingwald.gschwandtl@bmlf.gv.at

GLOBAL CONCERNS FOR FOREST UTILIZATION - SUSTAINABLE USE AND MANAGEMENT: This meeting will be held from 5 - 8 October 1998 in Miyazaki, Japan. For more information contact: Kiyoshi Yukutake, Miyazaki University, Faculty of Agriculture & Forest Economics, 1-1 Gakuen Kibanadai Nishi Miyazaki 889-21 Japan; tel.: +81-985-582 811; fax: +81-985-582 884; website: <http://www.miyazaki-u.ac.jp/FORESEA>

FOREST ECOSYSTEM AND LAND USE IN THE MOUNTAIN AREAS: This meeting will be held from 12 - 17 October in Seoul, Korea. For more information contact: Don Lee, Seoul National University, College of Agriculture and Life Sciences, Department of Forest Resources, 103 Seodoondong, Suwon 441-744 Korea; tel.: +82-331-2902327; fax: +82-331-2931797; email: leedk@agri.snu.ac.kr.

ENVIRONMENTAL FOREST SCIENCE CONFERENCE: This meeting will be held from 19 - 23 October 1998 at Kyoto University, Japan. For more information contact: IUFRO8, Kyoto University, Uji, Kyoto 611; tel.: +81-774-384110; fax: +81-774-384300; e-mail: iufro8-sec@bio.mie-u.ac.jp; Internet: <http://www.bio.mie-u.ac.jp/iufro8/bulletin2.html>.

29TH SESSION OF THE FAO EUROPEAN FORESTRY COMMISSION: This meeting will be held from 19-23 October 1998 in Finland. For information contact: FAO, Viale delle Terme di Caracalla, 00100 Rome, Italy; tel.: +39(6) 57051; fax: +39(6) 57053152; e-mail: Postmaster@fao.org; Internet: <http://www.fao.org>.

25TH SESSION OF THE INTERNATIONAL TROPICAL TIMBER COUNCIL: This meeting will be held from 3-9 November 1998 in Yokohama, Japan. For more information contact: International Organizations Center, 5th Floor, Pacifico-Yokohama, 1-1-1, Minato-Mirai, Nishi-ku, Yokohama, 220 Japan; tel.: +(81-45) 223-1111; fax: +(81-45) 223-1110; Itto@mail.itto-unet.ocn.ne.jp; Internet: <http://www.itto.or.jp>

19TH SESSION OF THE FAO NORTH AMERICAN FOREST COMMISSION: This meeting will be held from 16-20 November 1998 in Villahermosa, Mexico. For information contact: FAO, Viale delle Terme di Caracalla, 00100 Rome, Italy; tel.: +39(6) 57051; fax: +39(6) 57053152; e-mail: Postmaster@fao.org; Internet: <http://www.fao.org>.

13TH SESSION OF THE FAO NEAR EAST FORESTRY COMMISSION: This meeting will be held from 6-9 December 1998 in Damascus, Syria. For information contact: Jean Clement; tel: +39-6-5705 3589; fax: 39-6-5705 2151; e-mail: jeanclaude.clement@fao.org; Internet: <http://www.fao.org>.

CONTRIBUTIONS OF SCIENCE TO THE DEVELOPMENT OF FOREST POLICIES: This meeting will be held from 7 - 15 January 1999 in Pretoria, South Africa. For more information contact: Perry J. Brown, Montana Forest and Conservation Experiment Station, School of Forestry, University of Montana, Missoula, Montana 59812, US; tel.: +1 (406) 243-5522; fax: +1 (406) 243-4845, e-mail: pbrown@selway.umt.edu.

NEW APPROACHES TO INTEGRATED MANAGEMENT OF PRIMARY AND SECONDARY FORESTS FOR THE 21ST CENTURY: This meeting is scheduled for September 1999 in Belém, Pará, Brazil and is organized by CATIE/WWF/CIFOR. For more information contact: Dr. Natalino Silva; Brazilian Agricultural Research Corp., CP 48, CEP 66240 Belém, Pará, Brazil; tel: +55-91-2266622; fax: +55-91-2269845; e-mail: natalino@cpatu.embrapa.br; or natalino@amazon.com.br.

ECOLOGICAL HISTORY - METHODS AND APPLICATIONS, A LABORATORY OF ECOLOGICAL HISTORY TOWARD THE YEAR 2000: This meeting will be held in Sardinia, Italy in September 1999. For more information contact: Prof. Alessandra Zanzi Sulli; Istituto di Selvicoltura, Via San Bonaventura 13, I-50145 Firenze, Italy; tel.: +39-55-3023 1248, fax: +39-55-307 263, e-mail: zanzi@cesit1.unifi.it

/DESERTIFICATION

CONFERENCE ON THE SAHEL: This one-day conference, "The Sahel - 25 years after the great drought. Assessing Progress - Setting a New Agenda," will be held on 13 May 1998 at the Royal Geographical Society, London, UK. This meeting brings together prominent European and African experts from different research traditions to re-consider Sahelian research priorities. For information contact Alison Glazebrook, RGS-IBG; tel: + 0171 591 3006; fax: +0171 591 3001; e-mail a.glazebrook@rgs.org. Internet: www.colorado.edu/geography/projects/rgs98.html

INTERNATIONAL PROGRAM FOR ARID LAND CROPS (IPALAC): The IPALAC 1998 Calendar of Events include: a course in French on Date Palm Cultivation in Israel in June 1998; a workshop on *Zizyphus mauritiana* in Zimbabwe in June 1998; a course on Rainfed Farming Systems in Semi Arid Regions in Rajasthan, India, in September 1998; a symposium: "Silk - An Economic Opportunity for Semi-Arid Africa" in Dakar, Senegal, in October 1998; and an international conference: "Plant-Based Solutions for Combating Desertification" in Beer Sheva, Israel, from 2-5 November 1998. Contact: Mr. Arnie Schlissel, Administrative Coordinator, International Program for Arid Land Crops, c/o Ben-Gurion University of the Negev, P.O.B. 653, Beer Sheva, Israel 84105; tel: +972 7 646 1905, 646 1972; fax: +972 7 647 2984; e-mail: ipalac@bgumail.bgu.ac.il

CCD MEETINGS: National Awareness Seminars are scheduled for the following - Dhaka, Bangladesh, 20-21 April; Ankara, Turkey, 23-24 April; Sofia, Bulgaria, 28-29 April; St. John's Antigua and Barbuda, 20-22 April; New Delhi, India, 18-19 May; Osaka, Japan; Nicosia, Cyprus, 22-23 October; West Bank, Palestine, 28-29 October.

An Western Asia Expert Group Meeting is scheduled for 15-17 September 1998. An Expert Group Meeting for CIS countries will be held in the second half of 1998. For information contact: CCD Secretariat; tel: +(41 22) 979-9419; fax: +(41 22) 979-9030/31; e-mail: Secretariat@unccd.ch; Internet: <http://www.unccd.ch>

SECOND CONFERENCE OF THE PARTIES: COP-2 will be held in Dakar, Senegal from 30 November - 11 December 1998. For information contact: CCD Secretariat, Geneva Executive Center, 11/13 Chemin des Anémones, CH-1219 Châtelaine, Geneva, Switzerland; tel: +(41 22) 979-9419; fax: +(41 22) 979-9030/31; e-mail: Secretariat@unccd.ch; Internet: <http://www.unccd.ch>

/OCEANS AND COASTS

APEC WORKSHOP ON REGIONAL IMPLEMENTATION OF THE GLOBAL PROGRAMME OF ACTION FOR THE PROTECTION OF THE MARINE ENVIRONMENT FROM LAND-BASED ACTIVITIES: The US will host a Workshop on Regional Implementation of the Global Programme of Action for Protection of the Marine Environment from Land-Based

Sources (GPA) as approved by the APEC Working Group on Marine Resource Conservation (MRC) at their May 1997 meeting. The Workshop will be held at the Sheraton Townsville Hotel & Casino in Townsville, Australia from 14 - 16 April 1998. For further information contact: Susan Ware, Office of International Affairs, NOAA, 14th and Constitution Ave. NW, Washington, DC 20230; tel: +1 (202) 482-6196; fax: +1 (202) 482-4307; e-mail: susan.ware@noaa.gov. The full text of the GPA can be found at: <http://www.unchs.unon.org/unep/gpa/gpapol2.htm>.

IMO WORKSHOP ON WASTE MANAGEMENT AND MARINE POLLUTION PREVENTION IN SOUTHERN AND EASTERN AFRICA: This meeting will be held in April 1998 in Cape Town, South Africa. For more information contact International Maritime Organization (IMO), 4 Albert Embankment, London SE1 7SR, UK; fax: +(44 171) 587 3210; e-mail: info@imo.org.

CARIBBEAN REGIONAL WORKSHOP ON THE GLOBAL PROGRAMME OF ACTION FOR THE PROTECTION OF THE MARINE ENVIRONMENT FROM LAND-BASED ACTIVITIES: This meeting is scheduled for May in Kingston, Jamaica. For more information: UNEP-RCU, tel: +1-876-922-9267; fax: +1-876-922-9292; e-mail: uneprcuja@toj.com.

UN CONVENTION ON THE LAW OF THE SEA: The Eighth Meeting of States Parties to the UN Convention on the Law of the Sea - (SPLOS) will be held from 18 - 22 May 1998. The Third Session of the Commission on the Limits of the Continental Shelf - (CLCS) will be held from 4 - 15 May and the Fourth Session will be held from 31 August - 4 September 1998. The International Seabed Authority (ISBA) - Assembly will hold its fourth session from 16 - 27 March 1998 (first part) and 17-28 August 1998 (second part). The International Tribunal for the Law of the Sea - (ITLOS) will hold its fourth meeting from 6-31 October 1998. For more information contact the Division for Ocean Affairs and the Law of the Sea, Office of Legal Affairs; e-mail: doalos@un.org; Internet: <http://www.un.org/Depts/los/>.

HAZARDS-'98, SEVENTH INTERNATIONAL CONFERENCE ON NATURAL AND MAN-MADE HAZARDS: The Seventh International Conference on Natural and Man-Made Hazards will be held from 17-22 May 1998, Chania, Crete, Greece. For more information contact: Dr. G.A. Papadopoulos, LOC Chair, Institute of Geodynamics National Observatory of Athens, P.O. Box 20048, 11810 Athens, Greece; tel: 301-3462-664; fax: 301-3426-005; e-mail: m.sachp@egelados.gein.nad.gr

EXPO '98: The 1998 Lisbon World Exposition (EXPO '98) will be held from 22 May - 30 September 1998 in Lisbon, with the theme "The Oceans, a Heritage for the Future." For information contact the Secretariat: e-mail: info@expo98.pt; Internet: <http://www.expo98.pt/pt/default.html>

1998 OCEAN CIRCULATION AND CLIMATE: The 1998 WOCE Conference will be held from 24 - 29 May 1998 in Halifax, Nova Scotia, Canada. For more information contact John Gould, WOCE IPO, Southampton Oceanography Centre, Empress Dock, Southampton, SO14 3ZH, UK; tel: + (44 1703) 596 789; fax: +(44 1703) 596 204; e-mail: woceipo@soc.soton.ac.uk; Internet: <http://www.soc.soton.ac.uk/OTHERS/woceipo/wconf/index.html>.

INTERNATIONAL CONFERENCE ON EDUCATION AND TRAINING IN INTEGRATED COASTAL AREA MANAGEMENT (ICAM) - THE MEDITERRANEAN PROSPECT: This conference will be held from 25-29 May 1998 in Genoa, Italy by the International Centre for Coastal and Ocean Policy Studies (ICCOPS). For information contact: ICCOPS Secretariat - c/o Uni-

versity of Genoa, Department Polis Stradone di S. Agostino 3716123 Genoa, Italy; tel/fax: (39 10) 209 5840; e-mail: iccops@polis.unige.it; Internet: <http://www.polis.unige.it/1998education/>

9TH CONFERENCE ON SATELLITE METEOROLOGY AND OCEANOGRAPHY: The 9th Conference on Satellite Meteorology and Oceanography will be held from 25-29 May 1998 at UNESCO in Paris, France. For more information contact: Dr. Marie Colton, ONR Code 321SR, Subj: SatMet 1998, 800 N. Quincy St., Arlington, VA, 22217 USA; fax: +1 (703) 696 2007; e-mail: coltonm@onr.navy.mil; Internet: http://www.onr.navy.mil/sci_tech/ocean/9thsmo

CONFERENCE ON COASTAL AND MARGINAL SEAS: This conference on 1 - 4 June 1998 at the UNESCO Headquarters in Paris, France. The Oceanography Society (TOS) and IOC will organize this meeting. For more information contact Judi Rhodes, TOS, 4052 Timber Ridge Drive, Virginia Beach, VA 23544, USA; tel: +1 (757) 464 0131; fax: +1 (757) 464 1759; e-mail: rhodesj@exis.net; Internet: <http://www.tos.org>.

SECOND INTERNATIONAL CONFERENCE ON MARINE POLLUTION AND ECOTOXICOLOGY: This meeting will be held from 10 - 14 June 1998 in Hong Kong and is sponsored by the City University of Hong Kong and the IOC. For information contact: Prof. Rudolph Wu, City University of Hong Kong; tel: + (852) 2788 7404; fax: +(852) 2788 7406.

THIRD ANNUAL INTERNATIONAL CLEAN OCEAN CONFERENCE: This conference will be held in Hawaii, USA from 12 - 14 June 1998 and intends to celebrate Oceans Day in the USA and Hawaii. For more information try http://planet-hawaii.com/sos/clean_oceans.html.

INTERGOVERNMENTAL MARITIME ORGANIZATION: The IMO Council will hold its eightieth session in London from 15-19 June 1998. For more information contact the IMO, 4 Albert Embankment, London SE1 7SR; tel: +0171-735 7611; fax: +0171 587 3210; e-mail: rkohn@imo.org; Internet: <http://www.imo.org>.

PACON 98: The Conference on the 8th Pacific Congress (PACON) on Marine Science and Technology, "Towards the 21st Century-The Pacific Era," will be held from 16 - 20 June 1998 in Seoul, Korea. For more information contact: PACON International, PO Box 11568, Honolulu, Hawaii 96828-0568; tel: +1 (808) 956 6163; fax: +1 (808) 956 2580; e-mail: pacon@wiliki.eng.hawaii.edu.

INTERNATIONAL SYMPOSIUM ON COASTAL MEGA-CITIES: This conference will be held mid-1998 in Shanghai, China and is sponsored by the Ministry of Foreign Affairs, the State Science and Technology Commission, and the State Oceanic Administration of China, as well as the Shanghai Municipality. For information contact: Li Haiqing, IOC, UNESCO; tel: +(33 1) 45 68 39 94; e-mail: h.li@unesco.org

FIRST INTERNATIONAL CONFERENCE ON GEOGRAPHICAL INFORMATION SYSTEMS (GIS) FOR THE 21ST CENTURY: This meeting will be held from 6 - 8 July 1998 in Udine, Italy. This meeting is organized by the Wessex Institute of Technology, UK, and University of Udine, Italy. For information contact: Sue Owen, GIS 98 Conference Secretariat; tel: + (44 1703) 293 223; fax: + (44 1703) 292 853; e-mail: sue@wessex.ac.uk.

INDEPENDENT WORLD COMMISSION ON THE OCEANS: The Independent Commission on Oceans will hold its sixth session in Lisbon, Portugal in July 1998, in conjunction with

EXPO'98 - "The Oceans: A Heritage for the Future." The Commission seeks to draw attention to the issues of ocean development and encourage the further development of the ocean regime evolving from UNCLOS. For information contact the Secretariat in Geneva; tel: + 41-22-710-0711; fax: +41-22-710-0722; e-mail:

secretariat@world-oceans.org.

PAN-AFRICAN CONFERENCE ON SUSTAINABLE INTEGRATED COASTAL MANAGEMENT (PACSIKOM): This meeting will be held from 13-17 July 1998 in Maputo, Mozambique and is organized by UNESCO and Government of Mozambique. For more information contact: Robin Harger, IOC, UNESCO; e-mail:

r.harger@unesco.org;

Internet: <http://www.unesco.org/ioc/pacsicom/pacsicom.htm>

EUROMAT'98: The EUROMAT'98 Conference on Materials in Oceanic Environment will be held from 22 - 24 July 1998 in Lisbon, Portugal. The meeting is organized by the Sociedade Portuguesa de Materials on behalf of the Federation of European Materials Societies. For information contact: Prof. Luciano Faria; tel: +(351 1) 841 77 46; fax: + (351 1) 841 79 15.

SIXTH INTERNATIONAL CONGRESS ON HISTORY OF OCEANOGRAPHY: This meeting will be held from 15-20 August 1998 in Qingdao, China. For information contact: G.K. Tan, First Institute of Oceanography, SOA, 3A Hongdao Branch Road, Qingdao 266003, P.R. China; tel: 86-532-288-3127; fax: 86-532-287-9562; e-mail: fioljc@ns.qd.sd.cn

INTERNATIONAL CONFERENCE ON SATELLITES, OCEANOGRAPHY AND SOCIETY (ICSOS): This conference will be held from 17 - 21 August 1998 in Lisbon, Portugal. ESA, EXPO '98, IGBP, IOC, NASA, NOAA, SCOR and WCRP will sponsor the meeting. For more information contact: Dr. David Halpern, Jet Propulsion Laboratory, MS 300-323, California Institute of Technology, Pasadena, CA 91109-8099, USA;

e-mail: halpern@pacific.jpl.nasa.gov.

INTERNATIONAL OIL SPILL CONFERENCE (SPILLCON'98): This meeting will be held from 17 - 21 August 1998 at the International Conference Centre, Cairns, Queensland, Australia. For information contact Australian maritime Safety Authority; e-mail: michael.julian@amsa.gov.au.

SIXTH INTERNATIONAL CONFERENCE ON PALE-OCEANOGRAPHY (ICP-VI): This meeting will be held from 23-28 August 1998 in Lisbon, Portugal. This meeting is sponsored by EXPO'98, Instituto Geológico e Mineiro (IGM), the European Commission and IOC. For information contact: Dr. Fátima Abrantes, IGM, Associação Portuguesa de Paleoceanografia; tel: 346 39 15; fax: 342 46 09.

COASTAL ZONE CANADA '98 (CZC'98): This meeting will be held over five days at the end of August 1998. It is the third of a series of biennial conferences on integrated coastal zone management. For information contact; 2WE Associates, Victoria, BC, Canada; tel: +1 (250) 472-2254; fax: +1 (250) 472-9475; email: wilson@bc.sympatico.ca

THE ATLANTIC - PAST, PRESENT AND FUTURE: This meeting will be held from 30 August - 2 September 1998 in Lisbon, Portugal and will be organized by the International Geographic Union. For information contact Prof. Carminda Cavaco, Centro de Estudos Geográficos (CEG); tel: + (351 1) 796 5469 / 794 0218; fax +(351 1) 793 8690; e-mail: ceg@mail.telepac.pt; Internet: <http://www.geocities.com/athens/acropolis/2510/index.html>

AQUACULTURE EUROPE '98: This conference will be held from 5 - 9 June 1998 in Bordeaux, France. For more information contact the EAS Secretariat, Slijkensesteenweg 4, B-8400 Oostende, Belgium; tel.: +(059) 32 38 59; fax: +(059) 32 10 05; e-mail: eas@unicall.be.

INTERNATIONAL CONFERENCE ON SATELLITES, OCEANOGRAPHY AND SOCIETY: This meeting will be held from 17 - 21 August 1998 in Lisbon, Portugal. For more information contact: Dr. David Halpern, Cal Tech; fax: +1 (818) 393-6720; e-mail: halpern@pacific.jpl.nasa.gov.

OCEANS '98 - CONFERENCE ON COASTAL MANAGEMENT & OCEAN RESOURCES: This meeting will be held in Nice, France from 28 September - 1 October 1998. The conference is organized by IEEE Oceanic Engineering, under the theme of "Engineering for Sustainable Use of the Oceans". The main subject is various marine aspects relating to "Green Eneropia" Centres, remote areas, on land or at sea, which serve as real-world models of sustainable development for their host countries. For more information contact: Hawaii Energy Institute; fax: +1 808 956 2335; e-mail: daver@hgea.org; Internet: <http://www.ifremer.fr/oceans98/>

FIFTH INTERNATIONAL CONFERENCE ON REMOTE SENSING FOR MARINE AND COASTAL ENVIRONMENTS: This meeting will be held from 5 - 7 October 1998, San Diego, California, USA. This conference will cover various aspects of remote sensing of the marine environment and will highlight remote sensing applications focusing on solving real-world problems in marine and coastal environments. For information contact: ERIM Conferences; tel.: +1 (313) 994 1200, ext. 3234; fax +1 (313) 994 5123; e-mail: wallman@erim.org; Internet: <http://www.erim.org/CONF/conf.html>.

SYMPOSIUM ON MARINE POLLUTION: This Symposium will be held from 5 - 9 October 1998 in Monaco. It will be organized by International Atomic Energy Agency (IAEA) and co-sponsored by the IOC, UNEP and IMO, in cooperation with: CIESM and the Marine Environment Laboratory (MEL). For information contact: the Conference Secretariat, Vienna International Centre, Wagramerstrasse 5, PO Box 100, 1400 Vienna, Austria; tel: +(43 1) 2060 21312/21311; fax +(43 1) 20607, e-mail: Official.mail@IAEA.ORG.

COASTAL ENVIRONMENT 98: The Second International Conference (Coastal Environment '98), entitled "Environmental Problems in Coastal Regions," will be held in Cancun, Mexico from 8 - 10 September 1998. The meeting will be organized by the Wessex Institute of Technology (WIT), Southampton, UK. For information contact Liz Kerr, WIT; tel: + 44 (0) 1 703 293223; fax: + 44 (0) 1 703 292853; e-mail: liz@wessex.ac.uk.

INTERNATIONAL SYMPOSIUM ON INFORMATION TECHNOLOGY IN OCEANOGRAPHY: This Symposium (ITO'98) will be held from 12 - 16 October 1998 in Goa, India. For information contact: Shri. Vishwas Chavan, Organizing Secretary, National Institute of Oceanography, Dona Paula, Goa 403004, India; fax: +(91 832) 223 340/229 102; e-mail: ito98@csnio.ren.nic.in; Internet: <http://www.nio.org/ito98/>

CONFRONTING UNCERTAINTY IN THE EVALUATION AND IMPLEMENTATION OF FISHERIES MANAGEMENT SYSTEMS: This meeting is scheduled for 16 - 19 November 1998 in Cape Town, South Africa. This meeting is organized by ICES and co-sponsored by FAO and ICLARM. For information contact Dr. T.K. Stokes, CEFAS, Lowestoft Laboratory, Lowestoft, Suffolk

NR33 OHT, England, UK; e-mail: kevinstokes@compuserve.com; or t.k.stokes@cefas.co.uk.

OCEAN COMMUNITY CONFERENCE '98: This conference is scheduled from 16 - 19 November 1998 in Baltimore, Maryland, USA and organized by the Marine Technology Society (MTS). For information contact ITCMS; tel. in US & Canada: +1 (800) 810 4333; tel. outside US & Canada: +1 (732) 562 6826; fax: +1 (732) 981 1203; e-mail: mts-occ98@ieee.org; Internet: <http://www.noaa.gov/public-affairs/MTS98.html>.

CLIVAR SCIENTIFIC CONFERENCE - WORLD CLIMATE RESEARCH PROGRAMME: This conference is scheduled from 1 - 3 December 1998 and will be co-sponsored by IOC, WMO and ICSU. For more information contact: Art Alexiou, IOC/UNESCO; e-mail: a.alexiou@unesco.org or Dr. Andreas Villwock, International CLIVAR Project Office c/o Max-Planck-Institut für Meteorologie, Bundeststr. 55, D-20146 Hamburg, Germany; tel: + (49) 40 41173 414; fax: (49) 40 41173 413; e-mail: andreas.villwock@clivar.dkrz.de; Internet: <http://www.dkrz.de/clivar/hp.html>.

/WETLANDS

RAMSAR MEETINGS: A Workshop on Early Warning Systems for Wetlands will be held from 20-21 April 1998. The Ramsar Scientific and Technical Review Panel (STRP) will hold its 7th meeting from 22-24 April 1998. The Ramsar European Regional Meeting will meet from 3-6 June 1998 in Riga, Latvia. The Ramsar Pan-African Regional Meeting will be held from 6-10 July 1998 in Kampala, Uganda. For more information contact: the Ramsar Convention Bureau, Rue Mauverney 28, CH-1196 Gland, Switzerland; tel. +41 22 999 0170; fax +41 22 999 0169; e-mail: ramsar@hq.iucn.org.

RAMSAR COP-7: The 7th Ramsar COP is scheduled for San José, Costa Rica from 10 - 18 May 1999. COP-7 will focus on the interrelations between human societies and wetland habitats. The general theme will be "People and Wetlands - The Vital Link." For information contact the Ramsar Convention Bureau, Rue Mauverney 28, CH-1196 Gland, Switzerland; tel +41 22 999 0170, fax +41 22 999 0169, e-mail ramsar@hq.iucn.org; Internet: <http://w3.iprolink.ch/iucnlib/themes/ramsar/>.

SECOND INTERNATIONAL CONFERENCE ON WETLANDS AND DEVELOPMENT: The Second International Conference on Wetlands and Development will be held from 8-14 November 1998 in Dakar, Senegal. The Conference will include plenary and workshop sessions to review trends in wetland conservation, in order to identify solutions to critical issues which help agencies and wetland managers better achieve wetland conservation goals at both local and international levels. For more information contact: Maria Pierce, Wetlands International, Marijkeweg 11, PO Box 7002, 6700 CA Wageningen, the Netherlands; tel. +31 317 474711; fax. +31 317 474712; e-mail: pierce@wetlands.agro.nl; Internet: http://www.wetlands.agro.nl/wetl_sen.html

/WILDLIFE

CONVENTION ON MIGRATORY SPECIES: The CMS Scientific Council will meet from 3-5 June in Wageningen, the Netherlands. The Second Meeting of the Parties to the European Bats Agreement under the Convention on Migratory Species will be held

from 1 - 3 July in Bonn. For information contact the UNEP/CMS Secretariat; UN Premises in Bonn; Martin-Luther-King-Str. 8, D-53175 Bonn, Germany; tel: +(49 228) 815 2401/2; fax: +(49 228) 815 2449; e-mail: cms@unep.de; Internet: <http://www.wcmc.org.uk/cms/>.

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES (CITES): The 14th Meeting of the CITES Animals Committee will be held from 25-29 May 1998 in Caracas, Venezuela. For more information contact the CITES Secretariat, C.P. 456, Geneva Executive Centre, 1219 Châtelaine (Geneva), Switzerland; telephone: +(41-22) 979 9139/40; Internet: <http://www.wcmc.org.uk/CITES/english/index.html>.

/CHEMICAL MANAGEMENT

POPs WORKSHOPS: A Regional Awareness Raising Workshop on POPs is tentatively scheduled from 4 - 7 May 1998 in Abu Dhabi, UAE. A Regional Awareness Raising Workshop on POPs is tentatively scheduled for late May/June 1998 in Ljubljana, Slovenia. For more information contact: UNEP Chemicals (IRPTC); tel: +41 (22) 979-9190; fax: +41 (22) 797-3460; e-mail: dogden@unep.ch; Internet: <http://irptc.unep.ch/pops/>.

DIPLOMATIC CONFERENCE FOR ADOPTION OF THE PIC CONVENTION: The Diplomatic Conference for the Adoption of an International Legally Binding Instrument for the Application of the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides is scheduled for September in Rotterdam, the Netherlands. For information contact: UNEP Chemicals (IRPTC), tel: +41 (22) 979-9111; fax: +41 (22) 797- 3460; e-mail: jwillis@unep.ch; Internet: <http://irptc.unep.ch/pic/>. Or contact: FAO, tel: +39 (6) 5705 3441; fax: +39 (6) 5705 6347; email: niek.vandergraaff@fao.org; Internet: <http://www.fao.org/ag/agp/agpp/pesticide/pic/pichome.htm>.

PERSISTENT ORGANIC POLLUTANTS: The First Session of the Persistent Organic Pollutants (POPs) Intergovernmental Negotiating Committee (INC-1) is scheduled for 29 June-3 July 1998 in Montreal, Canada. The Second Session is tentatively scheduled for 7-12 February 1999 in Geneva. For more information contact: UNEP Chemicals (IRPTC); tel: +41 (22) 979-9190; fax: +41 (22) 797-3460; e-mail: dogden@unep.ch; Internet: <http://irptc.unep.ch/pops/>.

INTERGOVERNMENTAL FORUM ON CHEMICAL SAFETY: The Third Meeting of the Intersessional Group (ISG-3) will be held from 1-4 December 1998 in Yokohama, Japan. Brazil will forward its decision to host FORUM III, scheduled for late 2000, to the IFCS as soon as possible. The Plenary also agreed tentatively to hold ISG-4 in 2002. For information on these meetings, contact the IFCS Secretariat, World Health Organization, CH-1211 Geneva 27, Switzerland; tel: +41 (22) 791-3588; fax: +41 (22) 791-4848; e-mail: ifcs@who.ch; Internet: <http://www.who.ch/whosis/ifcs/ifcshome.htm>.

/HABITAT AND HUMAN SETTLEMENTS

HABITAT AND HUMAN SETTLEMENTS MEETINGS: The World Conference on International Cooperation of Cities and Citizens will be held from 26-29 May in Tokyo. The First World Conference of Health and the Urban Environment will be held in Madrid from 6 - 10 July 1998. For information contact UN Centre

for Human Settlements (Habitat), P.O. Box 30030, Nairobi, Kenya; tel: +(254-2) 624328; fax: +(254-2) 624266/624267; e-mail: infohabitat@igc.apc.org; Internet: <http://www.unhabitat.org>

1998 DUBAI INTERNATIONAL AWARD FOR BEST PRACTICES IN IMPROVING THE LIVING ENVIRONMENT: The United Nations Centre for Human Settlements (Habitat) and the Municipality of Dubai, U.A.E. have announced the global call for submissions for the 1998 Dubai International Award. The award intends to recognize and raise awareness of Best Practices: outstanding and sustainable achievements in improving the quality of life in a rapidly urbanizing and changing world. The Award is open to all organizations and individuals from the public and private sectors and from civil society whose initiatives meet the criteria for a Best Practice. The deadline for submissions is 30 April 1998. For more information contact: Dubai Municipality, tel: +(971 4) 215555; fax: +(971 4) 246666; e-mail: dm@emirates.net.ae; Internet: <http://www.dm.gov.ae>; or UNCHS (Habitat); tel: +(254 2) 624328/623029/623799; fax: +(254 2) 623080/624266/624267; e-mail: bestpractices@unchs.org; Internet: <http://www.unhabitat.org/> (Habitat home-page) or <http://www.bestpractices.org> (Best Practices database).

EIGHTH CONFERENCE ON URBAN AND REGIONAL RESEARCH: The Eighth Conference on Urban and Regional Research will be held in Madrid, Spain from 8-11 June 1998. The Conference will be preceded by a Study Tour from 6-7 June 1998. For information contact: the Committee on Human Settlements of the Economic Commission for Europe; Internet: <http://www.unece.org/>

FOURTH INTERNATIONAL CONFERENCE ON URBAN TRANSPORT AND THE ENVIRONMENT FOR THE 21ST CENTURY: This meeting will be held from 31 August - 2 September 1998 in Lisbon, Portugal in conjunction with the Sixth International Conference on Computer Aided Design, Manufacture and Operation in the Railway and other Advanced Mass Transit Systems. For information contact Paula Doughty-Young, Conference Secretariat UT 98, Wessex Institute of Technology, Ashurst Lodge, Ashurst, Southampton, SO40 7AA, UK; tel: + 44 (0) 1703 293223; fax: + 44 (0) 1703 292853; e-mail: paula@wessex.ac.uk.

INTERGOVERNMENTAL ORGANIZATIONS

GLOBAL ENVIRONMENT FACILITY: The next meeting of the GEF Council will take place from 4-6 November 1998 in Washington, DC. The meeting will be preceded by NGO Consultations. For more information contact Marie Morgan at the GEF Secretariat; tel: +1-202-473-1128; fax: +1-202-522-3240; Internet: <http://www.gefweb.com>.

WORLD METEOROLOGICAL ORGANIZATION: The WMO Executive Council will hold its fiftieth session in Geneva from 16 - 26 June 1998. For information contact the Secretariat at 41, avenue Giuseppe-Motta, 1211 Geneva 2 Switzerland; tel: +(41 22) 730 8314/15; fax: +(41 22) 733 2829; e-mail: ipa@www.wmo.ch; Internet: <http://www.wmo.ch/>.

INTERNATIONAL FUND FOR AGRICULTURAL DEVELOPMENT (IFAD): The IFAD Executive Board will meet in Rome in April 1998. For information contact the Secretariat; e-mail: w.admin@ifad.org; Internet: <http://www.ifad.org>.

UNDP/UNFPA: The UNDP/UNFPA Executive Board will hold its second regular session from 20 - 24 April 1998, and its annual session from 8 - 19 June 1998. For more information contact UNFPA, 220 East 42nd Street, New York, NY 10017, USA; tel: +1 (212) 297-5020; fax: + 1 (212) 557-6416; e-mail: ryanw@unfpa.org; Internet: <http://www.unfpa.org/>.

UNESCO: The UNESCO Executive Board will hold its one hundred fifty-third session in Paris in April 1998. For more information contact UNESCO, 7 place de Fontenoy, 75352 Paris, France; +33 1 45 68 10 00; international: +33 1 45 67 16 90; Internet: <http://www.unesco.org>.

UNCTAD: The Expert Meeting of the Commission on Enterprise, Business Facilitation and Development will be held from 20 - 22 April and 29 June-1 July 1998 in Geneva. The third session of the Commission on Enterprise, Business Facilitation and Development will be held from 23 - 27 November 1998 in Geneva. The Trade and Development Board will hold its eighteenth executive session in June and its High Level Mid-Term Review from 5 - 16 October.

The Expert Meeting of the Commission on Trade in Goods and Services, and Commodities will convene from 4 - 6 May, 3 - 5 June and 13 - 15 July 1998. The Commission on Trade in Goods and Services, and Commodities will hold its third session 21 - 25 September 1998 in Geneva. The third session of the Commission on Investment, Technology and Related Financial Issues will be held from 14 - 18 September 1998 in Geneva. For information contact: the Office of the Secretary of the Board; tel: + 41 22 907 50 07; fax: + 41 22 907 00 56; e-mail: Awni.Behnam@unctad.org.

INTERNATIONAL LAW

SIXTH ANNUAL CONFERENCE ON INTERNATIONAL INTELLECTUAL PROPERTY LAW AND POLICY: This meeting will be held from 16-17 April 1998 in New York at Fordham University School of Law. For more information contact T. Scott Lilly; tel: +1 (212) 636-6777; e-mail: Slilly@mail.lawnet.fordham.edu.

LATIN AMERICAN SECOND REGIONAL CONFERENCE: This meeting will be held in Rio de Janeiro, Brazil from 11-13 May 1998. The meeting is being organized by the IBA Section on Business Law. For more information contact the IBA; 272 Regent Street, London W1R 7PA, England; tel: + 44 (0) 171 629 1206; e-mail: confs@int-bar.org

FORUM GENEVA: This meeting will be held on 16 May 1998 in Geneva, Switzerland with the theme "Multilateral Treaty-making: The Current Status of Challenges to and Reforms Needed in the International Legislative Process." It will be organized jointly by the American Society of International Law and the Graduate Institute of International Studies, Geneva. For more information, contact ASIL Services; tel: +1 (202) 939-6000; fax: +1 (202) 797-7133; e-mail: meeting@asil.org.

INTERNATIONAL LAW ASSOCIATION 68TH CONFERENCE: This conference will be held in Taipei, Taiwan, ROC and is organized by the ILA and the Chinese Society of International Law. For more information contact: Hungdah Chiu; University of Maryland School of Law; tel: +1 (410) 706-3870; fax: +1 (410) 706-4045.

/READINGS

Compiled by Peter Doran,
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/SUSTAINABLE DEVELOPMENT

“Developing indicators of sustainability: US experience.” Building Research and Information, 1998, Vol. 26, No.1, pp.39-45. G.B. Guy and C.J. Kibert, USA, observe that sustainability indicators integrate environmental, social and economic factors such that the complex cause-and-effect relationships between these multiple factors can be more readily investigated. The whole systems approach of sustainable development differs from traditional environmentalism by its inclusion of economic and social factors. The selection of sustainability indicators will therefore inevitably be a human value-driven process. Environmental health will nonetheless be paramount. Empirical studies in the USA have found that states with lower pollution levels and more environmental regulation have healthier economies and fewer disparities in income between economic classes (Templet, 1995) It is argued that indicators of sustainable development are a necessary parallel to the macro-national and regional-scale indicators measuring society’s movement toward or away from some approximation to sustainable development.

“Unity in environmental discourse? The role of decision makers, experts and citizens in developing Finnish environmental policy.” Policy and Politics, 1998, Vol. 26, No.1, pp.55-70. P. Jokinen and K. Koskinen, Finland, deal with the construction and content of Finnish environmental policy. The basic issue is whether there are discourse and strategy coalitions of key players to be identified as well as interests with which the discourses and strategies coincide. In the study, 41 key players in the Finnish National Commission on Sustainable Development were interviewed. The main result is that environmental discourses are diverse. Two ideal types of basic environmental policy strategies, termed ‘ecological modernization’ and ‘structural change’, were found. It is concluded that there is no easy starting point for unity in environmental policy making. However, additional research is needed to examine the relevant policy sectors from the broad viewpoint of social development and environmental politics.

“Statement of the International Peoples’ Tribunal on Human Rights and the Environment: Sustainable development in the context of globalization.” Alternatives: Journal of Social Transformation and Humane Governance, 1998, Vol. 23, No.1, pp.109-147. S.H. Mendlovitz, USA, introduces a Statement intended as a contribution to the movement for a just world order and the creation of human global governance. It refers to the lives of individuals and groups throughout the globe who allege violations of law - including violence and killing inflicted upon them by transnational corporations, frequently in collaboration with State institutions. A final statement will be available in May 1998.

/DEFORESTATION

“Sources of deforestation in tropical developing countries.” Environmental Management, 1998, Vol. 22, No. 1, pp.19-33. L. Toole, Scotland, investigates key causes of tropical deforestation using data from 90 developing countries for the period 1981-1990. Regression results reveal that deforestation is associated with both development and scarcity. Deforestation accelerates with expanding infrastructure, trade, debt, investment in the human capital base, and resource-based economic expansion. On the other hand, absolute and relative scarcities manifested by growing population pressures, food and land shortages, fuel wood dependency and inequalities in access to land are also key factors explaining forest loss. Thus, results point to a fundamental environmental conundrum: development is required if countries are to alleviate scarcity-driven forms of forest exploitation but is itself a major cause of deforestation. The paper concludes that forest sustainable development cannot be achieved by implementing simple technical improvements in land-use practices alone. Securing the foundations for the sustainability of forests will require that countries address the underlying social processes driving tropical forest loss as well.

/CLIMATE CHANGE

“Knowledge, rhetoric and power: International politics of climate change.” Economic and Political Weekly, 1997, Vol. 32, No.49. A. Sagar and M. Kandlikar, writing during the build up to UNFCCC COP-3 in Kyoto, observe that the real battles over climate change are being fought over issues of trade and national competitiveness in the context of greenhouse policies. For the countries of the south, building appropriate scientific and economic assessment capacity may be the most critical task.

“World carbon dioxide emissions: 1950-2050.” Review of Economics and Statistics, 1998, Vol. 80, No. 1, pp.15-27. R. Schmalensee, T.M. Stoker and R.A. Judson, USA, present projections for emissions of carbon dioxide from the combustion of fossil fuels through 2050, using reduced-form models estimated with national-level panel data for the period 1950-1990. Using the same set of income and population growth assumptions as the IPCC they find that the IPCC’s widely used emissions growth projections exhibit significant and substantial departures from the implications of historical experience. The writers’ model employs a flexible form for income effects, along with fixed time and country effects, and they handle forecast uncertainty explicitly. They find clear evidence of an “inverse U” relation with a within-sample peak between carbon dioxide emissions (and energy use) per capita and per-capita income.

“Disembodied and disembedded? The social and economic implications of atmospheric change and biodiversity.” Environmental Monitoring and Assessment, 1998, Vol. 49, No.2-3, pp.111-122. P. Timmerman, Canada, argues that the social and economic implications of atmospheric change on biodiversity need to be seen in a global context of major shifts in the conceptualization and management of our relationship with nature. Traditionally, we have conceptualized the atmosphere and the other creatures of the biosphere as separate from the human, but their quasi-autonomy is now becoming subject to more and more human management. This raises not only economic issues but social, political and ethical concerns that will have substantial influence on public policy. Among these are the commodification of genetic material, the privatization of traditional knowledge, and the management of information. In

this broader context, the writer examines an array of current and proposed strategies of response to changes in biodiversity as a result of climatic and other stresses.

“Climate change and energy policy - The impacts and implications of aerosols.” Energy Policy, 1997, Vol. 25, No.11, pp. 923-939. J.J. West, C. Hope and S.N. Lane, USA & England, observe that anthropogenic increases in aerosol concentrations are believed to significantly affect climate, notably by exerting a negative radiative forcing which counteracts, to some extent, the positive radiative forcing of greenhouse gases (GHGs). The potential effects of aerosols and their short atmospheric lifetimes raise issues which are critical to climate policy. The writers isolate the implications of aerosols by treating aerosol emissions as a policy variable separate from GHG emissions, but linked through energy policy. They question the view that aerosols are beneficial to climate because they counteract greenhouse warming. Scenarios with high aerosol and GHG emissions are expected to yield both greater uncertainty in mean temperature and a greater likelihood of changes in other climate parameters.

“Coercion and enterprise in the provision of environmental public goods: The case of carbon sequestration in the United States.” Critical Reviews in Environmental Science and Technology, 1997, Vol. 27, No. SISI, pp.S293-S307. K. Richards, USA, observes that current discussions of greenhouse gas abatement strategies have focused on the use of carbon taxes and marketable allowance schemes. Implementation of a large-scale carbon sequestration program in the United States will require broadening the scope of the instruments under consideration to include contracts, subsidies, command and control regulation and direct government production. The paper develops a taxonomy for these instruments, examines the factors that affect their relative attractiveness, and applies that analysis to carbon sequestration in the United States.

“Why regional studies are needed in the development of full-scale integrated assessment modeling of global change processes.” Global Environmental Change - Human and Policy Dimensions, 1997, Vol. 7, No. 4, pp.337-356. W.W. Easterling, USA, agrees that full-scale integrated assessment models (IAMs) allow many components of the global climate change problem to be examined in one framework. The chief advantage of the IAM approach over less complete modeling frameworks is that the socio-economic and environmental consequences of policy choices aimed at abating or adapting to climate change can be evaluated in their totality. However, the highly aggregated functional forms that IAMs currently embed lack sufficient regional and sectoral detail to be totally credible. The author provides ten reasons why regional studies are needed in support of the development of full-scale IAMs. A strategic cyclical scaling exercise involving regional and global integrated modeling frameworks is proposed.

/BIODIVERSITY

“The political ecology of biodiversity, conservation and development in Nepal’s Terai: Confused meanings, means and ends.” Ecological Economics, 1998, Vol. 24, No. 1, pp. 73-87. K. Brown, UK, argues that the term biodiversity is fraught with contested definitions and uncertainty. The paper examines some of the difficulties that the multi-dimensional nature of the concept poses in devising conservation and development policies. It explores these issues with reference to field-based research in Nepal. The case study identifies the different interest groups and stakeholders involved in biodiver-

sity conservation and analyzes the policy prescriptions they promote. It highlights inadequacies in scientific understanding of the dynamics of complex systems; the lack of historical data on resource use; and crucially, the use/misuse of existing data by different interests. Conventional wisdom dictates that local people’s utilization of resources in areas where biodiversity is high is in conflict with conservation and tourism. The author concludes that access to and extraction of resources are therefore strictly controlled. The conceptualization of biodiversity, the causes of its degradation and the solutions offered by conservation stakeholders thus has implications not only for conservation, but critically for the livelihoods and welfare of people in poor countries.

/TRADE AND ENVIRONMENT

“The globalization of international health.” The Lancet, 1998, Vol. 351, No. 9100, pp.434-437. G. Walt, UK, observes that new players such as the World Bank and, increasingly, the WTO, have become involved in international health issues. As globalization of trade and markets takes hold, new coalitions and alliances are forming to examine and deal with the direct and indirect consequences on health. The paper examines the changing context of cooperation in international health and voices concerns about rising potential inequalities in health, both within and between countries. The question of how such changes will affect the actions of organizations working in international health is also addressed.

“Energy development and environmental constraints in China.” Energy Policy, 1998, Vol. 26, No. 2, pp.119-128. L. Gan, Norway, analyzes the inter-relationship of energy development and environmental constraints in China. He examines the effects of economic development, investment, energy trade and environmental limitations in shaping energy development and highlights the tensions between institutions involved in energy development, energy conservation and environmental protection. He concludes that total fuel mix in China will be diversified in the future. The share of coal in primary energy production and consumption will increase in the short time span until 2020, and diminish gradually thereafter, being largely replaced by gas, nuclear and renewables. China will become a big oil importer due to increases in demand and resource limitations. Meanwhile, coal exports will increase in the long run and SO₂ and CO₂ emissions will become potentially larger in future, because of the speed of economic growth and the lack of effective control measures. The paper also observes that there exist huge investment potentials for energy development from both international and domestic investment funds. Energy efficiency in China will continue to improve, associated with a gradual decline in the use of non-commercial energy in final consumption. Energy conservation holds the key to sustainable energy development, which should be promoted at the national and local levels with demand management as a focus in policy implementation.

“A multi-regional perspective on growth and environment: The role of endogenous technology and trade.” Annals of Regional Science, 1998, Vol. 32, No. 1, pp.115-131. J. van den Bergh and P. Nijkamp, Netherlands, argue that an important element which has been missing from both neoclassical and endogenous growth analyses is the multiregional perspective. Their study tries to present one of the first attempts to fill this gap. The analysis is based on a model of two interactive regions, with possible interaction between the two regional environments via the global environment. The implications are manifold. One is that the endogenous nature of growth is not

only due to technology and knowledge formation but also due to the effects of trade, resource scarcity and environmental degradation. Another implication is that a co-ordinated environmental policy of regions should address long-term sustainability, and take account of the positive technological and negative environmental dynamic externalities.

“World Trade and investment agreements: Implications for public health.” Canadian Journal of Public Health-Revue Canadienne de Sante Publique, 1998, Vol. 89, No.1, pp.10-12. R. Labonte, Canada, writes that the Canadian Public Health Association this year adopted a resolution calling for inclusion of social clauses in world trade and investment agreements. Social clauses refers to international declarations on such issues as human and labour rights or environmental protection.

/RECOMMENDED JOURNAL

Review of European Community and International Environmental Law, Edited by: Philippe Sands, Editor-in-Chief and Ruth Khalastchi, Managing Editor, The Foundation for International Environmental Law and Development (FIELD), London, UK. The journal includes articles, case notes, book reviews, a notice-board, documents and an index. Available from Blackwell Publishers, 108 Cowley Road, Oxford, Ox4 1JF, UK. Tel +44 (0)1865 244083.

/SHORT BOOK REVIEWS

Eco-Pioneers: Practical Visionaries Solving Today's Environmental Problems, 1997, The MIT Press, by Steve Lerner, is a welcome dose of therapy for researchers and practitioners lost amid the multiply contested meanings of 'sustainable development'. Lerner's book is an exploration of practical projects and their sponsors who have succeeded in putting "a human face" on sustainable development in the United States, i.e. Lerner's 'eco-pioneers'. He concludes that "Eco-pioneers will play a crucial role" in the process of internalizing environmental costs in the prices of goods "by developing cost-effective ways to meet human needs while causing a minimum of damage to nature." His subjects provide innovative approaches to logging, growing food, house building, redesigning rural communities, power generation, water conservation and river protection, hazardous waste treatment, materials reuse, and reducing waste and consumption.

“The Implementation and Effectiveness of International Environmental Commitments - Theory and Practice,” edited by David G. Victor, Kal Raustiala and Eugene B. Skolnikoff. MIT Press (April 1998). The contributors to this book examine how international environmental agreements are put into practice. Their main concern is effectiveness--the degree to which such agreements lead to changes in behavior that help solve environmental problems. Their focus is on implementation at both the domestic and international levels. Implementation is the key to effectiveness because these agreements aim to constrain not just governments but a wide array of actors, including individuals, firms and agencies whose behavior does not change simply because governments have made international commitments. The book includes fourteen case studies that cover eight major areas of international environmental regulation: conservation and protection of fauna and flora, stratospheric ozone depletion; pollution in the Baltic Sea; pollution in the North Sea; trade in hazardous chemicals and pesticides; air pollution in Europe, whaling and marine dumping of nuclear waste.

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/NEW ON THE WEB

FAO REPORT ON CLIMATE CHANGE IMPACTS: Sea-level rise (SLR) seems to be one of the more certain consequences of global climate change: under the "worst case" scenario, global mean sea-level is expected to rise almost one metre by the year 2100, affecting more than 140 million people in China and Bangladesh alone. Now, an interdisciplinary team of FAO experts has conducted a major study of the Potential impacts of sea-level rise on populations and agriculture. The authors - R. Gomme and J. du Guerny, of FAO's Sustainable Development Department, and F. Nachtergaele and R. Brinkman, of its Agriculture Department - review SRL's demographic, physiographic and socio-economic setting, its direct and indirect effects, and lessons from extreme events of the recent past. They conclude that, given the gradual nature of the foreseen changes, populations and agriculture will gradually adapt and move. "In general," they write, "it is likely that the relative importance of coastal disasters will decrease, even if their number and the associated economic losses are likely to increase due to general economic development." The publication can be found at <http://www.fao.org/sd/EIdirect/EIre0045.htm>

STRATEGIES FOR RESPONDING TO THE KYOTO PROTOCOL: A new paper by Resources for the Future (RFF) discusses some of the key features of the Kyoto Protocol from an economic perspective and outlines the issues that have to be addressed to move climate policy in a sound direction. In his paper, Strategies for Responding to the Kyoto Protocol, RFF's Michael Toman describes the Kyoto Protocol as both ambitious and ambiguous. The Protocol is ambitious, Toman argues, in the sense that it attempts to accomplish significant Annex I emissions reductions in a relatively short period of time. It is also ambiguous because none of the mechanisms for achieving emissions reductions are spelled out with adequate detail for implementing the Protocol at reduced cost. Toman points out that some issues involve clarifying existing aspects of the Protocol while others involve "going beyond the scope of the response strategies envisaged in the agreement." The paper is available at <http://www.weathervane.rff.org/negtable/index.html#paper>

GLOBAL CARBON TRADING INITIATIVE SITE: The World Bank's web page on the Global Carbon Trading Initiative is now on-line. The site is motivated by a need to provide a better underpinning to the growing international debate. It will focus on the following issues: the prerequisites for creating markets for carbon offsets (whereby developing countries would sell carbon abatement or sequestration services to developed countries); the feasibility of using these offset markets to promote forest conservation goals; the potential for developed country carbon taxes or quotas to induce industrial migration to developing countries; the implications of alternative climate change instruments for economic growth, as well as international distribution of income; and the risk to investors in the Bank's Carbon Investment Fund of various proposed secondary markets for traded carbon allowances. The site can be found at <http://www.worldbank.org/html/prddr/prdhome/>

CENTER FOR ENERGY AND ENVIRONMENTAL POLICY: The Center for Energy and Environmental Policy (CEEP), the

principal unit for graduate research and study in the fields of energy and environmental policy at the University of Delaware, recently posted a new home page at <http://www.udel.edu/ceep>. Through the Graduate School of Urban Affairs and Public Policy, CEEP supports graduate instruction and conducts interdisciplinary research in the areas of energy policy, environmental policy, and sustainable development. The page contains, inter alia, information on projects, courses, publications and news. For more information contact: Dr. John Byrne, Director; tel: +1 (302) 831-8405; fax: +1 (302) 831-3098; e-mail: jbbyrne@udel.edu

NEW FORESTRY WEBSITE FOR SOUTHERN AFRICA: The SADC Forestry Sector Technical Co-ordination Unit announces their new website for the forestry sector of Southern Africa. The site covers the mandate of the FSTCU within the SADC, the SADC forestry programme, policy papers, newsletters, regional database, forestry library and more. The site is located at <http://www.fstcu.org>.

ROUTLEDGE'S INTERNET RESOURCE CENTRE FOR GEOGRAPHY, ENVIRONMENT, URBAN STUDIES & ARCHITECTURE: Geoworld is currently under preparation. The publisher's site will target students, teachers and researchers and will include annotated guides and links to internet sites worldwide, as well as information and resources unique to the Geo-World site. Geo-World will go live this Spring. Further information from: geoworld@routledge.com. Contributions: sloyd@routledge.com.

THE UN TREATY COLLECTION ON THE INTERNET: American Journal of International Law, 1998, Vol. 92, No. 1, by P.T.B. Kohona. The Treaty Section of the UN is engaged in a major effort to disseminate its vast collection of both bilateral and multilateral treaties by electronic means, including the Internet. As a complementary measure, the publication of the UN Treaty Series (UNTS) is being updated. The Treaty Section also publishes the document "Multilateral Treaties Deposited with the Secretary-General" available at <http://www.un.org/Depts/Treaty>

CENTER FOR CLEAN AIR POLICY SITE: The Center for Clean Air Policy is currently developing its web site. The Center seeks to promote and implement innovative solutions to major environmental and energy problems which balance both environmental and economic interests. Through efforts at the state, federal, and international levels, the Center emphasizes the need for cost-effective, pragmatic, and comprehensive long-term solutions. The site can be found at <http://www.ccap.org>

CAIRO +5 WEB SITE: Progress and challenges in implementing strategies on population and development will be the focus of world leaders at a Special Session of the United Nations General Assembly when it meets 30 June-2 July, 1999, according to a General Assembly resolution adopted on 18 December 1997. The Special Session, which will take place some five years after the International Conference on Population and Development (ICPD) in Cairo, Egypt, will provide a forum for world leaders to review and appraise implementation of the Programme of Action. From now through June 1999, UNFPA will sponsor a series of review-related activities that will involve many partners--programme countries, donor countries, the UN System and representatives of civil society, including NGOs and the private sector. The review will culminate in an International Forum, to be convened in the Hague, the Netherlands from 8-12 February 1999. Information on events and activities related to the ICPD+5 review will be regularly updated on this web page and through a monthly news bulletin starting in May 1998. The page is located at <http://www.unfpa.org/ICPD/ICPD.HTM>. To subscribe to the ICPD+5 news bulletin, e-mail mccormick@unfpa.org.

UN CHRONICLE WEB SITE: The UN Chronicle, a publication of the UN Department of Public Information, is now available on the Web. The site contains details concerning individual issues with links to selected articles and images. The site can be found at <http://www.un.org/Pubs/chronicle/>.

INDUSTRIAL DEVELOPMENT OF GLOBAL REPORT 1997: The major part of investments into industrial development of developing countries and transition economies comes from local sources, according to this annual report published by UNIDO. It states that loans from the domestic sector are the most important source of formal financing for industrial investment in these economies. The report, published in English, French and Spanish, also notes that demand for long-term financial resources has been increasingly met by domestic equity markets in a growing number of middle- and high-income economies. The publication is available from UNIDO, Vienna, Austria; e-mail: unido-pinfo@unido.org; Internet: <http://www.unido.org>.

ECONOMIC AND SOCIAL COMMISSION FOR WESTERN ASIA: The new Economic and Social Commission for Western Asia (ESCWA) page contains information on publications, reform, the 19th Ministerial Session, and special issues. The site, at <http://www.escwa.org.lb/escwa/homepage.htm>, also contains a 1998 Calendar and press releases.

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Selected Sustainable Development Meetings

April 1998

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
			GEF Assembly - New Delhi			
			41st IMO Marine Environment Protection Committee - London			
<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>10</i>	<i>11</i>
<i>12</i>	<i>13</i>	<i>14</i>	<i>15</i>	<i>16</i>	<i>17</i>	<i>18</i>
<i>19</i>	<i>20</i>	<i>21</i>	<i>22</i>	<i>23</i>	<i>24</i>	<i>25</i>
	6th Session of the Commission on Sustainable Development - NY					
	Sustainability and the Role of Impact Assessment in the Global Economy - Christchurch, New Zealand					
<i>26</i>	<i>27</i>	<i>28</i>	<i>29</i>	<i>30</i>		
		Conf. on Corporate Env. Health - NY				
	6th Session of the Commission on Sustainable Development - NY					

This calendar is based on information available as of 13 April 1998 and is subject to change. For updates and corrections, contact kimo@iisd.org

Selected Sustainable Development Meetings

May 1998

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
					CSD-6 - New York Global Biodiversity Forum - Bratislava	
3	4	5	6	7	8	9
	Biodiversity Convention COP-4 - Bratislava, Slovakia					
	3rd Session of the UN Commission on Limits of the Continental Shelf - New York					
Biodiversity Forum	1st European Forum on Urban Forestry - Wuppertal, Germany					
10	11	12	13	14	15	16
			UNCTAD-Earth Council Emissions Trading Forum - London			
	Biodiversity Convention COP-4 - Bratislava, Slovakia					
	3rd Session of the UN Commission on Limits of the Continental Shelf - New York					
International Workshop on Community-Based Natural Resource Mgmt - Washington, DC						
17	18	19	20	21	22	23
			Int'l. Tropical Timber Council - 24th Session - Libreville, ..			
	WTO Ministerial Conference - Geneva					
	8th Meeting of States Parties to the UN Convention on the Law of the Sea - New York					
24	25	26	27	28	29	30
	Int'l. Tropical Timber Council - 24th Session - Libreville, Gabon					
	North-South Conference for Sustainable Development - Bern, Switzerland					
	ECWATECH 98 -Water: Ecology & Technology - Moscow					
	14th Mtg of the CITES Animals Committee - Caracas, Venezuela					
31						

Selected Sustainable Development Meetings

June 1998

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4	5	6
			Conv. on Migratory Species Scientific Council - Netherlands			
			Intl. Conf. on World Water Resources at the beginning of the 21st Century - Paris			
		UNFCCC Subsidiary Bodies Meetings - Bonn				
	Conference on Coastal and Marginal Seas - Paris					
	Conference on Ethics & the Culture of Development - Havana, Cuba					
7	8	9	10	11	12	13
			Intl Conf. on Env. Consequences of War - Washington, DC			
6th Forum on Nature Conservation & Pastoralism - Luhacovice, Czech Rep.						
	UNFCCC Subsidiary Bodies Meetings - Bonn					
	Intl. Symposium on Advanced Technology in Environmental & Natural Resources - Rovaniemi, Finland					
	International Symposium on Remote Sensing of Environment - Tromso, Norway					
	5th Extraordinary Session of the Commission on Genetic Resources for Food and Agriculture - Rome					
14	15	16	17	18	19	20
		50th Session WMO Executive Council - Geneva				
	80th IMO Council Meeting - London					
21	22	23	24	25	26	27
	50th Session WMO Executive Council - Geneva					
28	29	30				
	INC-1 for Persistent Organic Pollutants - .					

Selected Sustainable Development Meetings

July 1998

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
			INC-1 for Persistent Organic Pollutants - Montreal			
<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>10</i>	<i>11</i>
		17th Mtg Open-Ended Working Group of Parties to the Montreal Protocol - Geneva				
	ECOSOC - New York					
<i>12</i>	<i>13</i>	<i>14</i>	<i>15</i>	<i>16</i>	<i>17</i>	<i>18</i>
	Pan-African Conference on Sustainable Integrated Coastal Management. - Maputo, Mozambique					
	ECOSOC - New York					
<i>19</i>	<i>20</i>	<i>21</i>	<i>22</i>	<i>23</i>	<i>24</i>	<i>25</i>
	ECOSOC - New York					
<i>26</i>	<i>27</i>	<i>28</i>	<i>29</i>	<i>30</i>	<i>31</i>	
	ECOSOC - New York					