



SUMMARY OF THE FOURTH SESSION OF THE SUBSIDIARY BODY FOR SCIENTIFIC, TECHNICAL AND TECHNOLOGICAL ADVICE AND THE INTERSESSIONAL MEETING ON THE OPERATIONS OF THE CONVENTION ON BIOLOGICAL DIVERSITY: 21-30 JUNE 1999

The fourth session of the Subsidiary Body for Scientific, Technical and Technological Advice (SBSTTA-4) to the Convention on Biological Diversity (CBD) met in Montreal, Canada, from 21-25 June 1999. The first Intersessional meeting on the Operations of the Convention (ISOC) convened in Montreal from 28-30 June 1999.

SBSTTA-4 delegates met in two working groups. The first considered developing a work programme on dryland ecosystems, principles for the prevention of impacts of alien species, and further advancement of the Global Taxonomy Initiative. Working Group II discussed: new plant technology for the control of plant gene expression; sustainable use of biological resources, including tourism; and incorporation of biological diversity considerations into environmental impact assessments. Delegates also discussed the SBSTTA work programme, cooperation with other bodies and progress on thematic areas. They considered the terms of reference of *ad hoc* technical expert groups, but deferred making a decision to SBSTTA-5.

ISOC was convened based on COP-4 Decision IV/16, which called for an open-ended meeting to consider possible arrangements to improve preparations for and conduct of the meetings of the Conference of the Parties (COP). ISOC also held preparatory discussions on the COP-5 agenda item on access to genetic resources and benefit sharing, focusing on the upcoming Experts Panel on Access and Benefit Sharing, which will meet in October 1999 in Costa Rica, *ex situ* collections that were acquired prior to the Convention's entry into force and the relationship between intellectual property rights and the relevant provisions of the Agreement on Trade-Related Aspects of Intellectual Property Rights and the CBD.

Most delegates were pleased with the progress made during the two meetings, highlighting decisions to improve the scientific input prior to SBSTTA meetings and the sound basis provided for COP-5 discussions on operations of the Convention. Discussions over

genetic use restriction technologies (GURTs), a possible new subsidiary body on implementation and retroactive application of the Convention on *ex situ* collections evoked the greatest amount of contention among delegates. Most delegates agreed that the most important step remains — COP-5 action to implement and further clarify the intersessional decisions.

A BRIEF HISTORY OF SBSTTA AND THE CBD

The Convention on Biological Diversity, negotiated under the auspices of the United Nations Environment Programme (UNEP), entered into force on 29 December 1993. To date, 175 countries have become Parties to the Convention. Article 25 of the CBD establishes a Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) to provide the Conference of the Parties (COP) with "timely advice" relating to implementation of the Convention. During its first three meetings, SBSTTA developed 28 recommendations for consideration by the Conference of the Parties.

The Parties to the Convention have met four times and developed work programmes on four different thematic areas: marine and coastal, agricultural, forest, and inland water biodiversity. Delegates have also discussed several cross-cutting issues, including biodiversity indicators, approaches to taxonomy, access to genetic resources

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This issue of the *Earth Negotiations Bulletin* © <enb@iisd.org> is written and edited by Changbo Bai <changbo@sprint.ca>, Ian Fry <ifry@pegasus.com.au>, Nabih Megateli <nmegateli@igc.apc.org>, Mark Schulman <markschulman@hotmail.com>, and Lynn Wagner, Ph.D. <lynn@iisd.org>. The Editor is Pamela Chasek, Ph.D. <pam@iisd.org> and the Managing Editor is Langston James "Kimo" Goree <kimo@iisd.org>. Digital engineering by Andrei Henry <ahenry@iisd.ca>. French translation by Mongi Gadhouch <mongi.gadhouch@enb.intl.tn>. The Sustaining Donors of the *Bulletin* are The Netherlands Ministry of Foreign Affairs, the Government of Canada (through CIDA), the United States (through USAID), the Swiss Agency for Environment, Forests and Landscape, and the United Kingdom Department for International Development (DFID). General support for the *Bulletin* during 1999 is provided by the German Federal Ministry of Environment (BMU) and the German Federal Ministry of Development Cooperation (BMZ), the Government of Australia, the Danish Ministry of Foreign Affairs, the European Community (DG- XI), the Ministries of Environment and Foreign Affairs of Austria, the Ministries of Foreign Affairs and Environment of Norway, the Ministry of Foreign Affairs and Ministry of Environment of Finland, the Government of Sweden, the United Nations Development Programme (UNDP), the Global Environment Facility (GEF) and the Ministry for the Environment in Iceland. The *Bulletin* can be contacted by e-mail at <enb@iisd.org> and at tel: +1-212-644-0204; fax: +1-212-644-0206. IISD can be contacted by e-mail at <info@iisd.ca> and at 161 Portage Avenue East, 6th Floor, Winnipeg, Manitoba R3B 0Y4, Canada. The opinions expressed in the *Earth Negotiations Bulletin* are those of the authors and do not necessarily reflect the views of IISD and other funders. Excerpts from the *Earth Negotiations Bulletin* may be used in non-commercial publications only and only with appropriate academic citation. For permission to use this material in commercial publications, contact the Managing Editor. Electronic versions are sent to e-mail distribution lists and can be found on the Linkages WWW server at <http://www.iisd.ca/linkages>. The satellite image was taken above Montreal ©1999 The Living Earth, Inc., <http://livingearth.com>. For information on the *Earth Negotiations Bulletin*, send e-mail to <enb@iisd.org>.



and benefit sharing, and implementation of the Convention's provisions on traditional knowledge (Article 8(j)). Other issues discussed include financial arrangements, the establishment of a clearing-house mechanism (CHM) and national reporting. Negotiations for the first protocol to the CBD on biosafety began in 1996 and are still in progress.

SBSTTA-1: SBSTTA-1 met from 4-8 September 1995 in Paris, France. Recommendations on the *modus operandi* of SBSTTA affirmed its subsidiary role to the COP and requested flexibility to create two open-ended working groups to meet simultaneously during future SBSTTA meetings, *ad hoc* technical panels of experts as needed, and a roster of experts. Recommendations addressed issues including alternative ways and means for the COP to consider components of biodiversity under threat; ways and means to promote access to and transfer of technology; scientific and technical information to be contained in national reports; and preparation of an annual Global Biodiversity Outlook by the Secretariat.

SBSTTA-2: SBSTTA-2 met in Montreal from 2-6 September 1996. Agenda items included monitoring and assessment of biodiversity, approaches to taxonomy, economic valuation of biodiversity, access to genetic resources, agricultural biodiversity, terrestrial biodiversity, marine and coastal biodiversity, biosafety, and the CHM.

SBSTTA-3: At its third meeting, held in Montreal from 1-5 September 1997, SBSTTA considered the implementation of the pilot phase of the CHM and a progress report on the work of SBSTTA and the effectiveness of its advice. Additional decisions were adopted on biodiversity in inland waters, marine and coastal biodiversity, agricultural biodiversity, forest biodiversity, and biodiversity indicators.

RECENT INTERNATIONAL MEETINGS RELEVANT TO SBSTTA-4 AND ISOC AGENDA ITEMS: The second Conference of the Parties of the Convention to Combat Desertification (CCD) met in Dakar, Senegal, from 30 November to 11 December 1998. The CCD's Committee on Science and Technology (CST) met in parallel to the COP from 1 to 4 December and discussed traditional knowledge in-depth. The COP established an *ad hoc* panel to further explore specific aspects of this issue. The decision also requests the Secretariat to explore ways to link the CST's work on traditional knowledge with that under other conventions.

The 8th session of the FAO Commission on Genetic Resources for Food and Agriculture was held in Rome, Italy, from 19-23 April 1999. Delegates considered animal genetic resources for the first time, implementation of the Global Action Plan for the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture, and continued renegotiating the International Undertaking on Plant Genetic Resources for Food and Agriculture. They continued discussions on facilitated access within the multilateral system and established texts on the multilateral system of access and benefit sharing, coverage of the multilateral system, and Farmers' Rights.

The Commission on Sustainable Development (CSD) held its seventh session in New York from 19-30 April 1999. Delegates discussed tourism, among other items, and developed an international work programme on sustainable tourism development. This work programme includes an invitation to the CBD COP to contribute to international guidelines for activities related to sustainable tourism development in vulnerable terrestrial, marine and coastal ecosystems and habitats of major importance for biological diversity and protected areas, including fragile mountain ecosystems.

The 7th COP of the Ramsar Convention Wetlands, held in San José, Costa Rica, from 10-18 May 1999. Delegates advanced the joint work programme between the CBD and Ramsar on inland waters and coastal and marine wetlands by adopting 30 resolutions and four

recommendations, including a toolbox for managing and monitoring wetlands, a Global Action Plan for Peatlands, and a Strategic Framework vision for a Global Network of Wetlands of International Importance. Delegates invited the SBSTTA Chair to be a permanent observer on Ramsar's Scientific and Technical Review Panel

SBSTTA-4 REPORT

SBSTTA-4 delegates gathered on Monday morning, 21 June 1999, to hear several opening statements, elect the Bureau and adopt the agenda. SBSTTA-4 Chair Zakri Hamid (Malaysia) opened the meeting and stressed the importance of incorporating the best available scientific and technical information and translating it into policy advice. He noted that some actors have indicated an interest in exploring the feasibility of a mechanism similar to the Intergovernmental Panel on Climate Change (IPCC) to draw more systematically on existing scientific knowledge, assessments and organizations.

Paul Chabeda (UNEP) noted ongoing UNEP efforts to consult international environmental conventions to identify areas of common concern and opportunities for synergy and to promote collaboration and interlinkages among them. Acting CBD Executive Secretary Hamdallah Zedan noted that CBD Parties have emphasized the need for SBSTTA to focus on the preparation of scientific, technical and technological advice of the highest quality. He also said SBSTTA needs to design mechanisms to enable the identification of those areas where there is insufficient knowledge and the ways in which such gaps could be filled. A representative from the Global Biodiversity Forum, which convened immediately prior to SBSTTA-4, noted that participants had developed a number of recommendations, including the importance of using economic arguments to illustrate the need to integrate biodiversity into decision making and the need for practical, clear biodiversity indicators.

Chair Hamid, who also served as Chair of SBSTTA-3, noted that COP-4 had invited him to remain in office until the end of SBSTTA-4 with the Chair-elect, Cristián Samper (Colombia), invited to attend the Bureau as an *ex-officio* member. He introduced the Bureau as: Edgar Gutiérrez-Espeleta (Colombia), Jan Plesnik (Czech Republic), Kute-lama Seleko (Democratic Republic of Congo), Martin Uppenbrink (Germany), Gábor Nechay (Hungary), Elaine Fisher (Jamaica), Zipangani Vokhiwa (Malawi), Peter Schei (Norway) and Mick Raga (Papua New Guinea). Jan Plesnik also served as Rapporteur.

Delegates agreed to establish two working groups, the first chaired by Martin Uppenbrink with Elaine Fisher as Rapporteur and the second chaired by Zipangani Vokhiwa with Tevita Savae Latu (Tonga) as Rapporteur. Delegates adopted the agenda (UNEP/CBD/SBSTTA/4/1/Rev.1) and organization of work (UNEP/CBD/SBSTTA/4/1/Add.1) and commenced their deliberations.

Delegates discussed cooperation with other bodies, progress on thematic areas, the SBSTTA programme of work and *ad hoc* technical expert groups in Plenary on Monday, 21 June, and Friday, 25 June. They broke into two working groups on Tuesday, Wednesday and Thursday, 22-24 June. One working group discussed dryland ecosystems, the prevention of impacts of alien species, and the Global Taxonomy Initiative. The second considered new plant technology, the sustainable use of biological resources, including tourism, and environmental impact assessments. Delegates adopted recommendations, several identifying action for SBSTTA or the Executive Secretary and many others to be considered at COP-5. The following report summarizes delegates' discussions on each issue and the recommendations they adopted.

**PLENARY**

COOPERATION WITH OTHER BODIES: The discussion on cooperation with other bodies sought to identify ways for SBSTTA to make more effective use of existing scientific knowledge and expertise. The discussion was based on the document on cooperation with other bodies (UNEP/CBD/SBSTTA/4/2). Additional information was provided by representatives from the secretariats of international agreements and organizations, who addressed the opening Plenary and indicated ongoing efforts and further areas for cooperation. The Ramsar Convention on Wetlands presented a Progress Report on Implementation of the Joint Work Plan between the Wetlands Convention and the CBD. The FAO noted that existing instruments within the FAO's framework, such as the International Plant Protection Convention (IPPC) and the Commission on Genetic Resources for Food and Agriculture (CGRFA), have key roles to play in the way the international community addresses issues on the SBSTTA-4 agenda. The Convention to Combat Desertification (CCD) noted that the CCD and CBD Secretariats had reached a memorandum of understanding (MOU) and were working on a common framework to strengthen the synergies between the two Conventions. The Convention on the Conservation of Migratory Species of Wild Animals (CMS) highlighted the links that were being established between the work of the CMS and SBSTTA. The International Plant Genetic Resources Institute, on behalf of the Consultative Group on International Agricultural Research (CGIAR), highlighted the closer links being established between CGIAR and the CBD, as well as links with FAO in the field of new technologies.

SBSTTA-4 delegates then discussed the use of MOUs and other cooperative mechanisms and proposed areas for improvement in cooperation with other bodies. The REPUBLIC of KOREA suggested speeding up the establishment of MOUs with other bodies, specifically the WTO. CANADA supported more broadly involving IUCN's Commissions of global experts. Several speakers said cooperation should be practical and provide a clear and transparent idea of which body would carry out what action. Additional ideas included enhancing public awareness efforts, including for the International Biodiversity Observation Year (IBOY), and making use of experience and practices of other processes in SBSTTA's work to develop biodiversity indicators.

Delegates discussed a draft recommendation text (UNEP/CBD/SBSTTA/4/CRP.2) on Friday, 25 June, and adopted it as amended. The text invites the Executive Secretary to prepare a proposal for COP-5 that addresses the issues of peer review and scientific assessments for the CBD, drawing on the experience of the UNFCCC and the Montreal Protocol on Substances that Deplete the Ozone Layer. It accepts the Ramsar Convention's invitation to designate the SBSTTA Chair as a permanent observer on that Convention's scientific panel. The text invites the Executive Secretary to enhance communication with Parties by introducing a notification system. It also recommends increased cooperation on scientific, technical and technological advice between the CBD and other relevant international conventions and agreements important for achieving the CBD's objectives.

PROGRESS IN THE WORK PROGRAMME ON

THEMATIC AREAS: Discussion on the work programme on thematic areas sought to review progress in implementation of the CBD's work programmes on agriculture, inland water, marine and coastal and forest biodiversity. The starting point for the discussion was the Executive Secretary's note (UNEP/CBD/SBSTTA/4/3), which covered the period after COP-4 and included a draft recommendation focused on forest biodiversity and coral reef ecosystems. Some noted

the difficulty in monitoring progress. The UK suggested that future progress reports on the thematic areas identify problem areas and remedial actions, in addition to successes.

Several delegations, including the NETHERLANDS, BRAZIL, NORWAY, the UK, MALAWI and NEW ZEALAND, lamented the lack of progress on forest biodiversity. CANADA suggested deleting a proposal to invite Parties to provide human and other resources to assist the Executive Secretary in the work programme on forest biodiversity. MALAWI proposed adding reference to access to genetic resources and benefit sharing and other COP decisions related to this subject, but others said these issues would be better addressed in other fora, such as intersessional meetings or the COP. BRAZIL expressed concern with the slow progress on the development of indicators and added related text to the decision.

On agricultural biodiversity, CANADA suggested that Parties "take note of" the results of the international workshops on sustaining productive ecosystems and agricultural biodiversity and pollinators in agriculture rather than "be guided by" them, and looked forward to seeing many additional inputs. NORWAY expressed opposition to the development of "suicide seeds."

On marine and coastal biodiversity, several speakers noted the need for clear arrangements about who would do what and when, and called for full use of the roster of experts. NORWAY suggested expanding the work on coral reefs to include all forms of physical destruction of such ecosystems.

On inland waters, the NETHERLANDS endorsed the CBD's relationship with Ramsar and JAPAN emphasized the importance of taking the outcome of Ramsar COP-7 into account. ECUADOR proposed text recommending education and public awareness in line with Article 13 of the Convention.

Delegates discussed and adopted a draft recommendation (UNEP/CBD/SBSTTA/4/CRP.3) during the closing Plenary. The recommendation notes the limited progress made on the implementation of the programme of work on forest biodiversity, and urges the Executive Secretary to promote the implementation of that work programme. It agrees that the degradation and destruction of coral reefs pose a significant threat to the biodiversity of these ecosystems and recommends that the COP expand its request to the SBSTTA to include the effects of such activities in addition to the analysis of coral bleaching. It also urges the Executive Secretary to make rapid progress on the issue of coral bleaching. The decision also recommends that education and public awareness be included in the discussions on the thematic work programmes and that the Executive Secretary, in his reports on progress to SBSTTA-5, give special emphasis to identifying limitations and proposing measures to improve implementation.

SBSTTA PROGRAMME OF WORK: Delegates' discussion focused on preparing a proposal for a draft programme of work for SBSTTA for its next five meetings. Deliberations began with the Executive Secretary's note (UNEP/CBD/SBSTTA/4/4 with Annex 1). A number of countries expressed support for developing a long-term SBSTTA work programme. Many speakers, including NEW ZEALAND, GERMANY, the NETHERLANDS and JORDAN, stressed the need to develop a strategic plan with targets and timeframes. COLOMBIA and SWEDEN stated the work programme should focus on scientific and technical matters, rather than dealing with policy-related issues given SBSTTA's heavy work programme. INDIA, CAMEROON and MALAWI proposed that SBSTTA work on access and benefit sharing. CANADA, GERMANY, FINLAND, the UK and SWITZERLAND said access issues and Article 8(j) are being considered in specific groups established by the COP to address these issues. COLOMBIA and the GLOBAL ENVIRONMENT



NETWORK proposed identifying mechanisms to harmonize SBSTTA's work programme with other scientific bodies, such as the Ramsar's Scientific and Technical Review Panel (STRP). Delegates supported a BRAZILIAN proposal to recommend recognizing micro-organisms and genetic diversity, enhancing intersessional activities, and considering the assessment of the status and trends of biodiversity.

Delegates adopted a draft proposal on the programme of work for SBSTTA (UNEP/CBD/SBSTTA/4/CRP.4) in Plenary. The text proposes that the COP adopt the long-term programme of work for SBSTTA, as contained in an annex (UNEP/CBD/SBSTTA/4/CRP.4/Add.1). It recommends the preparation of a strategic plan and suggests considering the interests of indigenous and local communities on each of the topics discussed. The text invites the Executive Secretary to further develop a uniform methodology to use the roster of experts and a common framework for case studies. It also suggests that mechanisms under the Convention dealing with access to genetic resources and benefit sharing and Article 8(j) advise the COP on what scientific, technical and technological aspects should be addressed by SBSTTA. The annex was adopted with modifications based on the outcome of several SBSTTA-4 decisions, including requests for reports on the Global Taxonomy Initiative and alien species.

AD HOC TECHNICAL EXPERT GROUPS: Delegates discussed the document on possible mandates, duration and priority issues for *ad hoc* technical expert groups (UNEP/CBD/SBSTTA/4/5). They supported establishing expert groups, but presented different views on their number, composition, purpose and distinction from liaison groups. NORWAY noted the confusion in CBD terminology regarding informal inter-agency task forces, expert groups and liaison groups and stated that the latter aims to liaise between the Secretariat and other organizations and processes, avoid duplication, and improve documentation preparation. He said there should be no more than two groups, preferably on drylands and forests. AUSTRALIA and KENYA also supported establishing an expert group on drylands. GERMANY suggested treating drylands within the agro-biodiversity work programme. Other proposed issues for expert group consideration included impact assessments (AUSTRALIA); biodiversity indicators (GERMANY); the ecosystem approach (ZIMBABWE and GERMANY); ecosystems and species issues (the NETHERLANDS); marine and coastal, forest and agricultural biodiversity (SWEDEN); and mountain ecosystems (INDIA). INDONESIA supported prioritizing forests. The DEMOCRATIC REPUBLIC OF CONGO, BRAZIL and CÔTE D'IVOIRE supported establishing an invasive species expert group. ECUADOR disagreed, noting that the Global Invasive Species Programme already exists.

The UK, with BRAZIL, endorsed the establishment of informal liaison groups and, with CHINA, GREECE, CANADA, ZIMBABWE and ARGENTINA, suggested that further discussion of expert groups be postponed until SBSTTA-4 completed its deliberations on thematic issues. NEW ZEALAND stressed that these groups should have clear and time-limited mandates without duplicating others' work, and recommended limiting expert groups to 15-20 participants representing all geographic regions. CANADA emphasized the need to include specialized experts in the area of traditional knowledge, and with COLOMBIA and NEW ZEALAND, encouraged further development of the expert roster once the terms of reference have been defined. JAPAN said the expert roster should be fully utilized.

Several delegates recommended the continuation of the Marine and Coastal Biodiversity Expert Group and the joint work plan with Ramsar on inland water ecosystems. BRAZIL noted the difference in mandates and Party representation of Ramsar and the CBD. During the final Plenary, Chair Hamid noted a Bureau proposal that further

discussion on *ad hoc* technical expert panels be postponed until SBSTTA-5, and that Parties make an effort to update the existing roster of experts.

WORKING GROUP I

DRYLAND ECOSYSTEMS: SBSTTA-4 delegates considered the conservation and sustainable use of drylands, Mediterranean, arid, semi-arid, grassland and savannah ecosystems, and recommended that the COP consider adopting a work programme on these ecosystems. The Secretariat's background paper (UNEP/CBD/SBSTTA/4/7) assessed the status, trends and options for the conservation and sustainable use of these ecosystems.

Several speakers, including SOUTH AFRICA, ANTIGUA AND BARBUDA and ALGERIA, supported creating a separate work programme on these ecosystems. CANADA, SWITZERLAND, GERMANY, MALI and BRAZIL stressed that a work programme should complement and not duplicate the work of other conventions and organizations. SWITZERLAND added the need to identify synergies, gaps and overlaps with current CBD work programmes. Other comments included BRAZIL and COSTA RICA's suggestion that the official title be shortened to avoid calling the work programme the "dryland ecosystem programme" since it address more than arid ecosystems. Several speakers noted additional relevant ecosystems, including sub-humid areas (PERU) and hyperarid lands (EC). CANADA noted that the Arctic is a specific dryland ecosystem and suggested that work by the Arctic Council be reported to SBSTTA. Speakers also identified issues that should be covered under the work programme, such as fire control and management, the impact of civil wars and refugee inflows, benefit sharing and capacity-building. Many speakers stressed focusing on socio-economic aspects and the importance of local communities and indigenous groups in addressing dryland issues. ZIMBABWE proposed calling on the Global Environment Facility (GEF) to support activities under this programme, but others cited COP instructions that SBSTTA should not address issues related to the GEF unless specifically requested by the COP.

The decision on dryland, Mediterranean, arid, semi-arid, grassland and savannah ecosystems (UNEP/CBD/SBSTTA/4/L.3) recommends that the COP consider adopting a programme of work on biodiversity in these ecosystems and consider "providing guidance to the financial mechanism regarding the financing" of the programme. It requests the Executive Secretary to prepare a draft work programme, in consultation with the Secretariat of the CCD, and to present it to SBSTTA-5. The draft should bear in mind the need to avoid duplication of work with other global conventions or processes and should identify synergies, gaps and overlaps within current CBD work programmes. The draft programme should integrate consideration of a number of issues, including fires, land-use management, social-economic and cultural needs, knowledge, innovations and practices of indigenous and local communities, capacity-building and taxonomic requirements. The decision also requests that the Executive Secretary propose a shorter compound name for the title and invite other relevant conventions, organizations and international programmes to support the elaboration of the work programme.

PREVENTION OF IMPACTS OF ALIEN SPECIES: Discussion of the impacts of alien species was called for in COP-4 Decision IV/1.C, which requested SBSTTA-4 to develop guiding principles for the prevention and mitigation of impacts of alien species and to report on those principles and any related work programmes to COP-5. Document UNEP/CBD/SBSTTA/4/8 presented conclusions and recommendations on developing guiding principles for the prevention of impacts of alien species.



Harold Mooney, on behalf of the Global Invasive Species Programme (GISP), introduced this topic with a presentation on the ecological problems and control costs of invasive species and capacity-building. During the subsequent debate, several speakers noted relevant work underway in other conventions and organizations, particularly GISP, CITES and the IPCC. Delegations also supported the development of a database on control and prevention strategies and making it available through the CHM. Some countries stressed the need for public awareness and education. GERMANY requested the CBD Secretariat to compile more case studies on invasive species and make them available on the Clearing-House Mechanism (CHM). In response to a proposal to use "invasive" as opposed to "alien" species, the US said that a work programme should focus on standardization of terminology and developing technical and financial resources for a distributive network of information.

Additional issues discussed included SOUTH AFRICA and PORTUGAL's highlighting of the need for transboundary control. HUNGARY, AUSTRALIA and NAMIBIA said regional initiatives should be considered. Several delegates supported New Zealand's informal paper on principles to prevent the introduction of invasive species, but noted the difficulty in predicting whether a species is likely to be invasive. GERMANY also proposed a new text on the annex for an outline for case studies. Paula Warren (New Zealand) chaired a small group to produce a revised draft, which was adopted by Working Group I without amendment.

The draft decision (UNEP/CBD/SBSTTA/4/L.2) recommends that the COP request the Executive Secretary to: develop an inventory of initiatives and roster of experts and make them available through the CHM; formally liaise with the GISP; and further integrate the issue of alien species in the implementation of the thematic work programmes and to report to COP-6. The decision also recommends that the COP invite the GISP to undertake a comprehensive review of existing measures for prevention, early detection, eradication and control of alien species and their impacts and invite the GISP, FAO, IMO, WHO and other relevant organizations to assist the Parties to carry out relevant tasks. It requests that the Executive Secretary develop, in cooperation with the GISP, principles for the prevention, introduction and mitigation of impacts of alien species for consideration by SBSTTA-5, and requests him to develop an outline for case studies, taking into consideration related proposals from two Parties (Germany and New Zealand), which were annexed to the decision.

FURTHER ADVANCEMENT OF THE GLOBAL TAXONOMY INITIATIVE: SBSTTA-4 delegates considered how to further advance the Global Taxonomy Initiative (GTI). Their discussion was based on a note from the Executive Secretary that identified options for the development of final products, tools or instruments for the further advancement of the GTI (UNEP/CBD/SBSTTA/4/6 and Corr.1).

Peter Bridgewater, DIVERSITAS Programme/UNESCO, opened the discussion with a presentation on the GTI. He stressed the importance of cooperative efforts at national, regional and international levels and called for new partnerships between the CBD and other institutions. Several delegates identified priorities for action on the GTI, including projects that: support the CBD's work; disseminate and increase access to information on taxonomy; train and build capacity for taxonomy experts; and strengthen infrastructure and training programmes. Many speakers highlighted the decreasing number of taxonomists and the need to create jobs for them. Some speakers suggested identifying economic reasons to support taxonomic work and using this information to educate policymakers about the necessity for permanent taxonomist positions. SWEDEN said it has provided

funding for a senior staff position in taxonomy in the CBD Secretariat, and several speakers suggested that this position be filled. BURKINA FASO and the DEMOCRATIC REPUBLIC OF CONGO suggested designing a global project, with UNEP as coordinator, to help Parties move forward. Others said the GTI should be under the auspices of the Convention, not UNEP. CAMEROON suggested welcoming UNEP's offer to assist in the development of a project in accordance with the priorities of a GTI, but ANTIGUA AND BARBUDA proposed that such activities be through the use of UNEP's own resources. CAMEROON withdrew her proposal on the condition that the SBSTTA-4 report notes that one delegate strongly welcomed UNEP's offer. BRAZIL suggested that the Executive Secretary report to SBSTTA-5 on his identification of options for a coordination structure for the GTI. Several speakers discussed the GEF's involvement in taxonomy initiatives, with COLOMBIA suggesting the adoption of measures to monitor related GEF decisions, BRAZIL highlighting a GEF role in institution building, and CAMEROON calling for GEF funding for the GTI. Others noted the COP-4 decision that SBSTTA should address issues related to the GEF only at the COP's request. A contact group, chaired by Linda Hedlund (Sweden), helped draft the text that was ultimately adopted.

The decision (UNEP/CBD/SBSTTA/4/L.7), as amended during the closing Plenary, recommends to the COP that the Executive Secretary further develop the GTI and undertake preliminary activities required to build a framework for implementing it, including the convening of regional meetings of experts to identify priorities, opportunities and constraints. It suggests that initial priorities should include capacity-building, the development of taxonomy-related products, and dissemination of and access to taxonomy information and collections. It also recommends to the COP that funding institutions, including the GEF, recognize the cross-cutting nature of taxonomy and facilitate partnerships between developing and developed countries. It requests the Executive Secretary to identify options for a coordination structure for the GTI and options for baseline initiatives, and to report this information to SBSTTA-5. The decision also undertakes to integrate the development and implementation of the GTI into the thematic and cross-cutting work programmes of the SBSTTA.

WORKING GROUP II

NEW PLANT TECHNOLOGY: Following COP-4 Decision IV/6, SBSTTA-4 delegates considered and assessed whether there are consequences of the use of the new technology for the control of plant gene expression for biodiversity conservation and sustainable use. The Secretariat introduced a note by the Executive Secretary with a technical assessment as an annex (UNEP/CBD/SBSTTA/4/9/Rev.1). Richard Jefferson, author-in-chief of the expert assessment and Chair of the Center for the Application of Molecular Biology in International Agriculture (CAMBIO), presented an overview of the core technology and biology behind genetic use of restriction technologies (GURTs). He distinguished between V-GURTs, variety-level GURTs (e.g., "terminator"), which produce plants with inviable seeds, and T-GURTs, trait-specific GURTs, in which "added value" transgenic traits of the seed are protected by technical means that can be activated by farmers and end users. He contended that commercially viable V-GURTs may decrease transgene spreading, but outstanding issues remain, such as: indirect effects of GURTs on biodiversity; toxicity of inducing compounds and cellular toxins; environmental spreading of V-GURT traits; and patents as a means of control of V-GURTs. He indicated that further scientific study is necessary and GURTs will not be commercialized for another five years.



Many delegates supported HUNGARY's call to apply the CBD's precautionary principle to the application of this technology. Speakers also addressed the numerous uncertainties involved with GURTs and potential effects on biodiversity, food security and human health. NORWAY stressed that GURTs' impacts on ecosystems, species and genetic diversity need an in-depth review with the participation of the environmental community. GERMANY and others recommended that the Secretariat conduct further scientific assessments on, *inter alia*: technological accessibility; patent licensing options; liability questions; gene constructions and silencing; inducers used; and potential apomixis effects on wild relatives and non-GURT crops.

CANADA recommended that new plant technologies be addressed by the FAO's CGRFA. The NETHERLANDS said UNEP could coordinate future scientific assessments, and with SOUTH AFRICA and the Rural Advancement Foundation International (RAFI), preferred that the CBD continue its consideration of GURTs.

The working group continued negotiations on the Chair's draft recommendations, which incorporated input from a contact group chaired by Andreas Gettkant (Germany). NORWAY and a number of others recommended an international moratorium on GURT commercial use and field testing. The US called for further study of the issue and, with AUSTRALIA, said that SBSTTA is an inappropriate forum to call for a moratorium. CANADA proposed that the use of GURTs not be approved by Parties until further scientific assessment. GERMANY proposed that the use of GURTs in the field not be approved until their viability is demonstrated.

INDIA added reference to Farmers' Rights. SURINAME added reference to indigenous rights and traditional knowledge. Delegates agreed to an amended version of a UK proposal calling for further assessments and adding a new preambular paragraph on moratoriums. NEW ZEALAND, with AUSTRALIA, requested that the SBSTTA-4 report indicate their reservations regarding a preambular paragraph that recognizes that Parties and governments may establish a moratorium on the commercial use and field testing of GURTs, since they said such a moratorium should only refer to "uncontained field testing" of GURTs.

The recommendation (UNEP/CBD/SBSTTA/4/L.5), as amended and adopted in the final Plenary, contains preambular paragraphs recognizing that any country may establish a moratorium, subject to national legislation, and stressing the precautionary approach. At the international level, it recommends that the COP: continue work on new plant technologies under its agro-biodiversity work programme; invite the FAO and other members of the Ecosystem Conservation Group to further study policy questions and implications of such technologies on agro-biodiversity; invite FAO and its CGRFA to inform COP-6 of its initiatives; invite relevant organizations to study the impact of technologies on the protection of intellectual property for the agricultural sector; and recommend that products incorporating GURTs not be approved by Parties for field testing until appropriate scientific data justifies such testing, and for commercial use until appropriate authorized and strictly controlled scientific assessments. At the national level, the COP is recommended to invite Parties and governments to carry out scientific assessments on the ecological, social and economic effects of GURTs and disseminate results through the CHM. The COP is recommended to encourage Parties and governments to address concerns regarding such technologies under national and international approaches to germplasm use and to identify ways and means to address their potential impacts on *in situ* and *ex situ* biodiversity conservation and sustainable use. It requests the Executive Secretary to prepare two reports: one for SBSTTA prior to COP-6 on the status of development of GURTs, and another for the COP

based on discussions with organizations with relevant expertise and representatives of indigenous and local communities on potential GURTs' impacts on those communities and on Farmers' Rights.

SUSTAINABLE USE, INCLUDING TOURISM: In accordance with Annex II of COP-4 Decision IV/16, delegates discussed the development of approaches and practices for the sustainable use of biological diversity, including tourism. The Executive Secretary's note on this topic (UNEP/CBD/SBSTTA/4/11) outlined the role of tourism in the sustainable use of biological resources, identified potential impacts of tourism on biodiversity, discussed management options and strategies for addressing biodiversity through tourism, and explained the role of the CBD in the development of a framework of policy options for sustainable tourism, and to broaden its consideration of sustainable use to cover other activities.

The NETHERLANDS, along with the UK, the US, NEW ZEALAND and SWITZERLAND, stressed the importance of interlinkages between tourism and the sustainable use of biodiversity. Delegates annexed an assessment of these interlinkages to the CBD report to the work on tourism of the UN Commission on Sustainable Development (CSD).

Many participants, including NORWAY, CUBA, AUSTRALIA, BOLIVIA, and the EC, expressed concern that the Secretariat paper did not consider other aspects of sustainable use. The US stressed the importance of including language that takes into consideration the unique role of ecotourism in contributing to the conservation of biodiversity. The NETHERLANDS, along with CANADA, ZIMBABWE, SURINAME, TONGA, CÔTE D'IVOIRE, ECUADOR, the INDIGENOUS PEOPLES BIODIVERSITY NETWORK and the UK, emphasized the involvement of local and indigenous communities in the decision making process. Following an initial discussion in Working Group II, a contact group chaired by Marcel Vernooij (the NETHERLANDS) was created. Chair Vernooij introduced draft recommendations for Working Group II's consideration, which were amended and adopted.

The final Plenary adopted the draft recommendation (UNEP/CBD/SBSTTA/4/L.4), as amended. The decision recommends, *inter alia*, that the COP should adopt the assessment of interlinkages between biodiversity and tourism, as contained in an annex to the decision, and transmit it to the CSD; and accept the invitation to participate in the intersessional work programme on sustainable tourism development under the CSD process. It also recommends that the COP call on Parties, governments, the tourism industry and relevant international organizations to pay particular attention to: developing strategies and planning based on an ecosystem approach; considering the need for long-term monitoring and assessment, including the development and use of indicators; and involving the participation of indigenous and local communities in the development and management of tourism.

The annex to the decision elaborates the definition of sustainable use and development, as well as of the environmental and socio-economic impacts of tourism on wildlife, water resources, marine and coastal and mountain ecosystems, and local communities.

ENVIRONMENTAL IMPACT ASSESSMENT: Delegates considered the incorporation of biological considerations into environmental impact assessment (EIA), using document UNEP/CBD/SBSTTA/4/10 as a starting point for discussion.

A number of developing countries stressed the importance of capacity-building and financial assistance to run EIA workshops. Several speakers highlighted elements to incorporate in EIAs, including traditional knowledge (CANADA), biodiversity and human health (MEXICO), and quality of human life (ECUADOR). Most countries were disinclined to support detailing all their EIA experi-



ences in national reports, as suggested in the Executive Secretary's note. Delegates could not agree whether to have an EIA and biodiversity expert group, a roster of experts or to develop strategies for collaborating with other institutions, notably the International Association for Impact Assessment. Subsequently, the idea of any form of expert group did not make it through to the final recommendations. FRANCE and others emphasized the importance of undertaking transboundary EIAs and also underscored the need to undertake EIA's on policies, plans and strategies rather than just projects. A number of delegates stressed the importance of undertaking strategic environmental assessments. The Ramsar Convention representative highlighted its development of an EIA toolbox and suggested that this instrument could be applied in other biodiversity-related situations.

On developing guidelines on the incorporation of biodiversity-related issues into legislation, AUSTRALIA proposed adding reference to the precautionary approach and the ecosystem approach. GERMANY added a reference to the "principle of equivalency" in mitigation measures. The German text was deleted in the final Plenary as some delegations did not understand the concept of equivalency.

Delegates adopted, as amended, a draft decision (UNEP/CBD/SBSTTA/4/L.6), which recommends that the COP invite Parties, governments and other relevant organizations to, *inter alia*: integrate EIA into their work programme on thematic areas; address loss of biological diversity and interrelated cultural and human health effects in EIAs; consider biodiversity concerns in new legislation; ensure the involvement of interested and affected stakeholders; and organize experts meetings to develop local expertise. It encourages Parties, governments and relevant organizations to use strategic environmental assessments to assess cumulative and global effects, and requests Parties to include practices, systems, mechanisms and experience in national reports. The SBSTTA is requested to further develop guidelines on the incorporation of biodiversity-related issues into legislation. The decision also requests the Executive Secretary to make accessible and increase the call for case studies, in particular impact assessments that apply the ecosystem approach.

CLOSING PLENARY

SBSTTA-4 Chair Hamid opened the final Plenary session of SBSTTA-4 on Friday, 25 June, and invited them to elect the Bureau for SBSTTA-5. Delegates elected Mary Fosi Mbantekhu (Cameroon), Tevita Savae Latu (Tonga), Evgeny Oreshkin (Russian Federation), David Brackett (Canada), and Cristián Samper (Colombia). Martin Uppenbrink (Germany), Kutelama Seleko (Democratic Republic of Congo), Zakri Hamid (Malaysia), Elaine Fisher (Jamaica) and Jan Plesnik (Czech Republic) will remain in office. Cristián Samper will chair SBSTTA-5. Delegates adopted the draft report on the opening of the meeting, organizational matters, reports, and priority issues (UNEP/CBD/SBSTTA/4/L.1), including priority issues discussed in Working Group I (UNEP/CBD/SBSTTA/4/L.1/Add.1) and Working Group II (UNEP/CBD/SBSTTA/L.1/Add.2) with several amendments. The report of SBSTTA-4, based on these "L" documents, was amended to incorporate comments during the closing Plenary and was distributed during the following week as a single document (UNEP/CBD/SBSTTA/4/14).

Delegates then considered draft decisions from the two Working Groups and Plenary deliberations. Several delegates offered statements or reservations that they wanted entered into the meeting's report. On sustainable use, including tourism, several countries supported NORWAY's statement that he could accept the recommendation on the understanding that a broader discussion on sustainable use would be taken up at the next SBSTTA meeting.

On the draft recommendation on new plant technology, NEW ZEALAND recorded her reservation on the preambular paragraph recognizing that any Party or government may establish a moratorium on GURT's without including reference to "uncontained" field testing. The US noted for the record that it could not associate with any implicit call for a moratorium on testing or commercialization of this technology. On a recommendation to not approve field testing GURT's until scientific assessments are validated, AUSTRALIA recorded his reservation on the references to food security, agricultural production and other socio-economic and human health issues. He said these issues extend beyond the mandate of SBSTTA. The Chair announced that the Bureau had suggested addressing *ad hoc* technical groups at SBSTTA-5, so no draft decision was circulated on that issue. Delegates agreed that the date and the venue of SBSTTA-5 would be 31 January - 4 February 2000 in Montreal.

During closing Plenary statements, PERU, on behalf of the Latin American and Caribbean Group, expressed satisfaction with the progress made during the week, but noted that much work remains to be done. INDIA, on behalf of the Asian Group, commended the initiatives to invite experts and scientists to address the meeting on relevant subjects. Hamdallah Zedan, Acting Executive Secretary, noting the implications of SBSTTA's outputs on the CBD agenda and the Secretariat's human and financial resources, called for Parties to make the necessary funding available to carry out the work. SBSTTA-4 Chair Zakri Hamid said the inputs received at this meeting from a wide range of actors provided a variety of views and made the meeting report a living process. He noted that, as Chair he has seen SBSTTA evolve from tentative beginnings to a global center of referral in the field of biodiversity. He closed SBSTTA-4 at 5:30 pm.

ISOC REPORT

Lászlo Miklós (Slovakia), President of COP-4, opened the Intersessional meeting on the Operations of the Convention on Monday, 28 June 1999. He said principle questions that delegates should address include: how to improve the clarity and implementation of COP decisions; expectations for the financial mechanism and other institutions; measures to improve scientific input and the scientific basis for policy recommendations; and the possibility of creating further subsidiary bodies. Hamdallah Zedan, Acting Executive Secretary, noted that the Convention will only achieve its goals through effective management and organization. Jorge Illueca, on behalf of UNEP Executive Director Klaus Töpfer, wished participants a successful meeting.

Delegates agreed that the COP-4 Bureau would serve as ISOC's officers. Therefore, Lászlo Miklós (Slovakia) served as President. The Vice-Presidents were: Ralph Adewoye (Nigeria), Elaine Fisher (Jamaica), Ilona Jepsen (Latvia), Bernarditas Muller (Philippines), Sid-Ali Branci (Algeria), Mohammed Reza Salamat (Iran), Robert Lamb (Switzerland) and Marcel Vernooij (Netherlands). Mariângela Rebuá (Brazil) served as Rapporteur. Delegates adopted the agenda (UNEP/CBD/ISOC/1) and agreed to conduct the entire meeting in Plenary.

Delegates then commenced their deliberations on the review of the operations of the Convention and programme of work. Delegates offered statements on this issue during morning and afternoon Plenary sessions on Monday, 28 June. A contact group chaired by Jonathan Tillson (UK) met on Monday evening and throughout Tuesday to develop a decision on this issue. Delegates offered statements on access and benefit sharing during two Plenary sessions on Tuesday, 29 June. A contact group chaired by Elaine Fisher (Jamaica) met Tuesday



evening and Wednesday to develop a decision on the issues discussed under that agenda item. This report summarizes the discussion and decisions on these issues.

REVIEW OF THE OPERATIONS OF THE CONVENTION

ISOC's consideration of the operations of the Convention and programme of work was based on the Executive Secretary's note (UNEP/CBD/ISOC/1/Add.1), which contains options for review, including proposals regarding scientific assessment, a more developed programme of work, regionalization of work and potential needs for subsidiary bodies.

Cristián Samper (Colombia), Chair of SBSTTA-5, highlighted improvements made during SBSTTA-4 and suggested that delegates may wish to find ways and means to: enhance scientific inputs into SBSTTA, including peer reviews and transparent intersessional workshops; develop a strategic plan for SBSTTA, leaving politically sensitive issues to open-ended working groups or another subsidiary body; improve SBSTTA outputs to COPs; request the Executive Secretary to assess the relevance of SBSTTA recommendations to COPs and possible follow-up mechanisms for their implementation; and promote better coordination with other scientific bodies and institutions.

On proposed changes to existing structures, GERMANY, on behalf of the EU, and others, expressed preference to make the CBD's existing structures work better rather than fundamentally changing them, such as through a subsidiary body. BRAZIL and others supported a parallel intersessional body that could address implementation issues not dealt with by SBSTTA, such as financing and capacity-building. GUYANA, on behalf of the G-77/CHINA, supported creating a subsidiary body for monitoring. INDIA and others supported establishing a limited number of specific expert panels, which many stressed should be transparent and have equitable geographic representation. A number of institutional options are included in the final set of recommendations.

On institutional linkages of the Secretariat, ETHIOPIA, on behalf of the African Group, said the CBD should work closely with other multilateral agreements, including the Ramsar Convention and CITES. The PHILIPPINES sought to record in the ISOC report that her country believes there is "need to review," rather than to "consider whether there is a need to review" these linkages.

Most delegates supported developing a strategic plan, with CHINA emphasizing the need for a 10-year plan, along with a medium five-year and two-year rolling implementation plan. Some delegates emphasized the need for such a plan to retain flexibility. CAMEROON said such flexibility could translate into the Secretariat's participation in the upcoming WTO TRIPs negotiations. In the contact group, one delegate indicated that she preferred developing options for a strategic plan rather than a plan itself. This wording is reflected in the final set of recommendations.

On guidance to the financial mechanism, ANTIGUA AND BARBUDA requested a change in identifying priority issues "which will provide support," rather than "with special reference to the modalities" of cross-cutting issues. A number of countries emphasized the important role of the financial mechanism in capacity-building. In the final Plenary, the PHILIPPINES requested that the meeting's report reflect her delegation's belief that there should be a review of the "effectiveness of the financial mechanism" rather than a "review of the MOU" between the COP and the GEF Council.

On the importance of regional meetings and processes, ANTIGUA AND BARBUDA opposed, and NEW ZEALAND and others supported such regional processes. The COOK ISLANDS, on behalf of the Pacific Island Countries, recommended measures to improve the

participation of small island countries of the Pacific, including CBD Secretariat cooperation with regional conventions and biodiversity-related bodies such as the South Pacific Regional Environment Programme. This draft decision on regional processes remains in brackets. The NETHERLANDS wanted the report of the meeting to record that several delegates underlined the importance of regional meetings and that the draft decision did not reflect the broad level of support for these processes.

Many delegates supported the SBSTTA Chair's recommendations for reforms, especially regarding the establishment of expert groups under the SBSTTA. On a reference to the role of SBSTTA in undertaking sound scientific assessments, NORWAY, in the final Plenary, proposed creating a mechanism for undertaking such assessments, including the preparation of the Global Biodiversity Outlook. This was accepted. ECUADOR suggested additional language, which was recorded in the report of the meeting, calling on the Executive Secretary to compile information on other relevant conventions as to how they relate to the CBD and how they can help.

Many delegates noted the importance of the CHM for sharing information, scientific cooperation and COP preparation. A number of developing countries emphasized the need for capacity-building in this context. In the final Plenary, CANADA wanted the report to indicate that it interpreted the final recommendation on the development of the CHM as not changing the scope of the CHM. CHINA, with CAMEROON, requested developing themes for each year's International Biodiversity Day.

The final set of recommendations to COP-5 (UNEP/CBD/ISOC/L.2) retains some bracketed text, including five options regarding implementation. Delegates recommended that the COP decide to, *inter alia*:

- hold COP meetings every [two] year[s];
- hold SBSTTA meetings every year;
- revise procedures on decision making regarding administrative and financial matters;
- incorporate guidance to the financial mechanism in a single decision;
- request the Executive Secretary to limit the number of documents;
- consider whether there is a need to review the institutional linkages of the Secretariat;
- develop options for a strategic plan;
- authorize the Chair of SBSTTA attend meetings of other scientific bodies of biodiversity-related conventions;
- allow the SBSTTA to establish *ad hoc* technical expert groups;
- call on SBSTTA to reflect properly the findings of in-depth scientific assessments in its recommendations; and
- promote the development of the CHM.

The set of recommendations on implementation proposed a number of alternative administrative arrangements for the implementation of the convention, through, *inter alia*:

- existing institutions and procedures;
- including a Working Group on Implementation;
- holding a second intersessional meeting on implementation;
- enhancing the functions of regional meetings;
- agreeing that the COP Bureau [and SBSTTA Bureau] shall act as an Intersessional Executive Body; or
- establishing a Subsidiary Body on Implementation (SBI).

The proposal on a SBI includes a number of elements based on the FCCC SBI model. The draft decision was adopted, with the various options on implementation and the reference to regional processes remaining in brackets, and will be forwarded to COP-5 for its consideration.



ACCESS TO GENETIC RESOURCES AND BENEFIT SHARING

REVIEW OF ACCESS TO GENETIC RESOURCES AND BENEFIT SHARING ARRANGEMENTS: ISOC delegates conducted preparatory discussions on access to genetic resources and benefit sharing arrangements in order to provide guidance to COP-5 and to contribute to preparations for the Expert Panel on Access and Benefit Sharing scheduled for October 1999 in Costa Rica. Deliberations were based on the Executive Secretary's note on options on access to genetic resources and benefit sharing (UNEP/CBD/ISOC/3), and included consideration of modalities for the operation of the Expert Panel.

During general Plenary discussions, many representatives, including INDIA, ARGENTINA and DJIBOUTI, stressed the urgent need to tackle benefit sharing, the CBD's third objective, and emphasized that access issues are at the core of the Convention. Several speakers highlighted the importance of ongoing work under the FAO International Undertaking on Plant Genetic Resources (IU). Many delegations emphasized the importance of an effective CHM in this regard, both at the national and international levels. GERMANY, on behalf of the EU, said due consideration should be accorded to the diversity of practices and perspectives of providers and users and recommended that the CBD's long-term work programme regularly examine the implementation of the CBD's provisions on access and benefit sharing.

BRAZIL, among others, said access must be in accordance with national legislation. On behalf of the African Group, MALI recommended initiating a process to develop a protocol along the lines of the IU to cover access and benefit sharing, protection of indigenous and local communities, recognition of the origin of resources, and biopiracy. The US said that contractual arrangements, based on mutually agreed terms, represent an effective and flexible instrument to guide benefit sharing.

EXPERT PANEL ON ACCESS AND BENEFIT SHARING:

During Plenary discussions on the Expert Panel on Access and Benefit Sharing, a number of delegates supported inclusion of representatives from a variety of international and regional organizations in the Expert Panel. Many speakers, including the EU, CÔTE D'IVOIRE and KENYA, stressed the importance of involving stakeholders, especially indigenous and local communities. SWITZERLAND added the private sector. The REPUBLIC OF KOREA and others emphasized the importance of transparency. INDIA and others endorsed equitable geographic and regional representation. COSTA RICA and SWITZERLAND, supported by PERU, proposed establishing an *Ad Hoc* Executive Committee, which would, among other things, elaborate an agenda and choose the Panel's experts from the Secretariat's list.

For the Panel's agenda, CANADA suggested identification of: benefits of the use of genetic resources on a sectoral basis; mechanisms currently used to share these benefits, particularly capacity-building; the need for new and improved measures; and legal cases related to IPR and genetic resources for a discussion paper, which could be prepared in cooperation with the World Intellectual Property Organization (WIPO). The G-77/CHINA proposed a focus on access and benefit sharing, *ex situ* collections, and how IPR can be harmonized with the CBD.

Other proposals for possible Panel agenda items were: review of COP decisions on access and benefit sharing and identification of national CHM needs and training areas for GEF financing, including negotiating capacity on access and benefit sharing arrangements (ARGENTINA); measures to implement prior informed consent provisions (EU); the pros and cons of the regional approach and analysis of case studies on access and benefit sharing (INDONESIA);

laws, policies and parameters for equitable benefit sharing in recipient and user countries (INDIA); definitions for "equitable" benefit sharing and access to genetic resources (COLOMBIA); transfer and development of technologies (BRAZIL); protection of the rights of communities and source countries (MADAGASCAR); mechanisms for monitoring and enforcing contracts and permits (AUSTRALIA); best practices for contractual arrangements based on mutually agreed terms (US); and flaws in "bioprospecting contractual models" (RAFI).

Several speakers, including TURKEY, NORWAY, COLOMBIA, RUSSIA and MEXICO, suggested that the Panel examine how to make distinctions between research and commercial uses in the context of access and benefit sharing. ECUADOR said that for practical and other reasons the boundary between research and commercialization is not easy to determine.

Further debates on the agenda, composition and operation of the Expert Panel on access and benefit sharing took place in a contact group. While transparency, regional representation and inclusion of non-anglophones were endorsed, different views were held regarding whether the Secretariat, the Bureau and/or an *Ad Hoc* Executive Committee should set the agenda, select a relevant roster of experts for the Panel, or develop criteria for selecting representatives of relevant regional and international organizations. Delegates agreed to drop the idea of an Executive Committee and omit the proposed agenda item on pre-CBD public and private *ex situ* collections.

The final decision on the Expert Panel on Access and Benefit Sharing (UNEP/CBD/ISOC/L.3) recommends that the Panel's preparatory documentation include a synthesis of access and benefit sharing case studies, and no more than 50 experts participate with regional and intergovernmental organization representatives as observers. Recommended agenda items for the Expert Panel are:

- access and benefit sharing for scientific and commercial purposes, including review of existing access and benefit sharing contractual arrangements and guiding principles or voluntary codes of conduct;
- review of legal and policy measures, at national and regional levels, on how to address prior informed consent, equitable benefit sharing, and mutually agreed terms;
- legislation on IPR and *sui generis* systems;
- capacity-building;
- review of incentive, regulatory and valuation measures; and
- the facilitation of access to genetic resources.

EX SITU COLLECTIONS ACQUIRED PRIOR TO THE ENTRY INTO FORCE OF THE CBD AND NOT ADDRESSED BY THE CGRFA:

ISOC delegates, as per COP-4 Decision IV/8, discussed recommendations to COP-5 for future work on this issue. The Secretariat introduced related documentation, UNEP/CBD/ISOC/4 and UNEP/CBD/ISOC/Inf.1, noting that the Executive Secretary's invitation for input had resulted in information from five governments, the FAO, IPGRI, Botanic Gardens Conservation International (BCGI), the International Species Information System (ISIS), and the World Federation of Cultural Collections (WFCC).

The EU said information exchange about *ex situ* collections would be helpful and, with NORWAY, stressed that the CBD had no retroactive effect regarding these collections. ETHIOPIA, on behalf of the African Group, supported bringing *ex situ* materials collected prior to the CBD's entry into force under CBD provisions and recommended the provision of GEF funds for initiatives that strengthen and establish gene banks in developing countries. BURKINA FASO opposed limiting consideration of *ex situ* collections to phylogenetic resources, while COLOMBIA suggested creating a forum to study mechanisms for *ex situ* collections, in particular plant and animal genetic resources



and micro-organisms. INDIA suggested that the COP recommend establishing unified guidelines for access to such collections. CANADA recommended avoiding duplication of work by other sectors, such as botanical gardens, the food and agriculture sector and microbial collections. AUSTRALIA wished to have noted in the ISOC report that it has not changed its position on COP-4 Decision IV/8, which stated that his country was not in favor of revisiting the issue of biological resources acquired prior to the Convention's entry into force.

In the contact group's deliberations on pre-CBD and non-CGRFA *ex situ* collections, delegates debated on what sort of information and follow-up is needed. A number of delegates noted the complexities posed by such collections, including the trend in privatization of public *ex situ* collections. One developed country emphasized that the dynamic and political nature associated with elaborating a questionnaire meant it should be voluntary and piloted before general distribution. One participant emphasized it could only agree to the sharing of information and principles for access and benefit sharing and *ex situ* collections. Others said recommendations regarding a programme of work, uniform multilateral principles, the GEF, a roster of experts, and an *ad hoc* working or expert group were "premature forays" beyond the CBD's scope.

Delegates discussed if and what to include in an annexed questionnaire on such collections, how the CBD should relate to centers hosting *ex situ* collections, whether international law can allow for treaty retroactivity, and if COP Decision IV/8, which invites the Executive Secretary to gather information on such collections, ought to be interlinked with the Nairobi Final Act, which recognizes a need to seek outstanding issues concerning plant *ex-situ* collections "not acquired in accordance with CBD."

The proposal that the GEF support the promotion and capacity-building for the establishment, maintenance and utilization of *ex situ* collections was deleted. After the group annexed elements for a questionnaire, one delegate replaced items on plant and animal "live collections" with "plant field collections" and "whole animal collections." Annex references to repatriation of information and repatriation of duplicate germplasm and a replacement of seed banks by "seed gene banks" were added by another delegate.

The final recommendation (UNEP/CBD/ISOC/L.5) states that the COP may wish to consider:

- the continuation of information gathering by requesting the Secretariat to gather available data on items of the type described in two annexes, as appropriate and where necessary, via a questionnaire to be developed by the Secretariat;
- application on a voluntary basis by the holders of such collections;
- the facilitation of technology transfer for the maintenance and utilization of *ex situ* collections; and
- development, on a sectoral basis, of principles for access and benefit sharing.

INTELLECTUAL PROPERTY RIGHTS AND TRIPS: Based on COP-4 Decisions IV/8 and IV/15 respectively, delegates considered and made recommendations for future work to develop a common appreciation of the relationship between IPR and relevant provisions of the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs) and the CBD. Discussions were based on the Secretariat's document on the relationship between IPR, TRIPs and the CBD (UNEP/CBD/ISOC/5). During Plenary, INDIA said IPR are not the main mechanisms for realizing equitable benefit sharing and that the synergies between the CBD and TRIPs have not been adequately treated. COLOMBIA called for further studies on IPR in relation to biodiversity, technology transfer, the protection of traditional knowl-

edge and national, regional and international measures on access and benefit sharing. The EU noted that TRIPs provisions and CBD objectives are interrelated, and attention should be given to the protection of knowledge and innovation of indigenous and local communities. Several delegations, including MEXICO, emphasized the importance of *sui generis* systems, biodiversity protection and sovereign rights over biological resources. SWITZERLAND suggested that the intersessional working group on Article 8(j) consider the potential and options of IPR and *sui generis* systems to protect traditional knowledge.

Delegates conveyed a variety of perspectives on how and what the CBD should communicate to the WTO and other institutions. MALAWI suggested that the COP should give the Executive Secretary clear guidance on how to tackle the interrelationship between the CBD and the WTO. BRAZIL called for the establishment of a permanent mechanism for information sharing between the CBD, WTO and WIPO. SOUTH AFRICA expressed concern that no provision is made in the TRIPs agreement to protect IPR relating to indigenous and local communities. ECUADOR recommended that CBD deliberations be communicated to the TRIPs Council.

CAMEROON, on behalf of the African Group, and with INDIA, highlighted the potential for TRIPs to jeopardize Farmers' Rights and the application of the CBD. He suggested requesting the TRIPs Council to defer decisions reviewing patent excludability until after COP-5 and recommended inviting the Council to address potential conflicts with the CBD, such as *sui generis* protection of plant varieties and the right of countries to exclude plants, animals, micro-organisms and any parts thereof, and microbiological processes for animal and plant production. NORWAY noted it was premature to change TRIPs. The US noted that TRIPs establishes appropriate levels of protection for IPR, including patents that can be supportive of the CBD. He recommended that the COP consider ways in which Parties could use existing forms of intellectual property to encourage development based on local biological resources and indigenous knowledge.

Participants also considered the issue of patent excludability. A number of delegates, including INDIA, NORWAY, TOGO and COLOMBIA, opposed granting patents for animals and plants. Some emphasized that TRIPs members should be allowed to exclude such patents for ethical and social reasons. WWF said exemptions under TRIPs need to be maintained until there has been adequate experience with *sui generis* systems. The THIRD WORLD NETWORK stressed the importance of CBD proactive participation in the TRIPs negotiations.

During contact group discussions, many delegates agreed that the CBD should continue exploring existing knowledge gaps on the implications of IPR on biodiversity and benefit sharing. One government preferred that the WTO be invited to conduct such further exploration. Several emphasized the importance of giving a role to the CBD to transmit its perspective to other relevant fora. Delegates accepted a proposal to recognize the urgency of the CBD to become a WTO TRIPs Council observer.

The final decision (UNEP/CBD/ISOC/L.4) recognizes: the need to ensure the mutual supportiveness between the TRIPs agreement and the CBD; the need for CBD exploration of the implications of IPR on biodiversity and equitable benefit sharing; and the urgency for the CBD to achieve observer status in the WTO TRIPs Council. Follow-up activities for COP consideration include: an invitation to WTO to acknowledge relevant CBD provisions and explore the relationship between the CBD and TRIPs provisions; recognition of the ongoing work on Article 8(j) and the importance of systems, such as *sui generis*



and others; and ways and means to closely follow work done by WIPO and the WTO and to provide inputs from the perspective of the CBD when relevant, including on issues related to traditional knowledge.

CLOSING PLENARY

Chair Miklós called the closing Plenary to order at 5:10 pm on Wednesday, 30 June. Elaine Fisher, Chair of the contact group on access and benefit sharing, introduced the texts on the review of access to genetic resources and benefit sharing arrangements (UNEP/CBD/ISOC/L.3), the relationship between IPR, the relevant provisions of the TRIPs Agreement and the CBD (UNEP/CBD/ISOC/L.4), and *ex situ* collections acquired prior to the entry into force of the CBD (UNEP/CBD/ISOC/L.5). Delegates adopted them without amendment.

The Rapporteur, Mariângela Rubuá (Brazil), introduced the report of the meeting (UNEP/CBD/ISOC/L.1 and Add.1). She noted that the report covered only the first two days (Monday and Tuesday). The PHILIPPINES wanted to ensure that interventions made on the third day (Wednesday) during the adoption of the text on the review of the operations of the Convention would be added to the report. The Chair said those comments would be recorded and the third day would be incorporated into the final report. Delegates adopted the report.

The Secretariat noted that informal consultations on the process to resume the session of the ExCOP for the Biosafety Protocol would take place Thursday, 1 July 1999, in the offices of the Secretariat. This consultation chaired by the Colombian Environment Minister, Juan Mayr, was to be attended by the appointed spokespeople of the negotiating groups.

NORWAY noted that the meeting had recognized that there are knowledge gaps and links to be explored between the TRIPs agreement and the CBD and asked what the Secretariat would do in the meantime to convey the results of ISOC to the next meeting of the TRIPs Council (7-8 July 1999). The Acting Executive Secretary said he would consider sending a representative to brief the TRIPs Council on the meeting's deliberations.

MALAWI, as a member of the African Group, commended the Secretariat for its work and expressed his hope that the Secretariat would be fully functional and all positions would be filled in the lead up to SBSTTA-5 and COP-5.

The Acting Executive Secretary informed delegates that negotiations with Kenya, the host government for COP-5, are proceeding. He also urged all Parties that had not yet done so to nominate experts to the Expert Panel on Access and Benefit Sharing by 15 July 1999. President Miklós noted that the meetings' recommendations will help COP-5 focus its work and he expressed hope that COP-5 would be able to adopt decisions that will improve the operations of the Convention. He said that convening a three-day intersessional meeting also provides an important opportunity for the Convention to work through its agenda. At 5:59 pm, "almost midnight in Central Europe," President Miklós gavelled the meeting to a close.

INFORMAL CONSULTATIONS ON THE BIOSAFETY PROTOCOL

Informal consultations on the Biosafety Protocol took place on Thursday, 1 July 1999, at the CBD Secretariat's office in Montreal. Colombian Environment Minister Juan Mayr presided over the discussion in his capacity as the President of the Extraordinary session of the COP (ExCOP), which was held in Cartagena, Colombia, in February 1999. Representatives and their advisers from the core negotiating groups from Cartagena, including the Miami Group, the Compromise

Group and the Like-minded Group, participated in the meeting. Other participants included Klaus Töpfer, UNEP Executive Director, and Hamdallah Zedan, Acting Executive Secretary of the CBD.

Participants reported that discussion focused on intersessional arrangements before the resumed ExCOP session. Some participants preferred a resumed session of the ExCOP prior to December 1999, while others noted the need for time to brainstorm on the pending issues and preferred that it be held in 2000, preferably in March. After an extended morning discussion, participants agreed that there will be another informal consultation in September lasting five days and, subject to satisfactory progress, a resumed ExCOP likely in February 2000, lasting 2-3 days. Participants agreed that those coming to the informal consultation in September would have the full negotiating authority of their governments. Participants further agreed that the ExCOP Bureau, in consultation with the CBD Secretariat, will decide on the specific dates for meetings and communicate these arrangements to governments. Each of the core negotiating groups stated its commitment to concluding a Biosafety Protocol at the next ExCOP. As part of this commitment, they agreed not to reopen issues that had been agreed upon in Cartagena and only to deal with those remaining articles, including the scope of the Protocol and its relationship with other international conventions. To facilitate participation at these meetings, UNEP offered to help mobilize funding.

A BRIEF ANALYSIS OF SBSTTA-4 AND THE ISOC

Apart from brief moments of contention over genetic use restriction technologies (GURTs), a possible new subsidiary body on implementation and retroactive application of the Convention, SBSTTA-4 and the ISOC proceeded relatively smoothly. Delegates were generally pleased with the streamlined and more manageable agenda for SBSTTA-4, although some noted that several agenda items, like *ad hoc* technical expert panels, were passed off to SBSTTA-5. Most welcomed the opportunity to hold a special intersessional meeting to improve the implementation of the Convention. Decisions to improve the operations of the COP and SBSTTA were a key focus of both meetings and most delegates believed that they laid the groundwork for a positive step forward. This brief analysis elaborates on these issues and other accomplishments and shortcomings, and looks at coming challenges for CBD meetings in the year 2000.

SCIENCE VS. POLITICS: The ongoing identity crisis for SBSTTA remains a significant point of discussion. While some delegations treated the SBSTTA as a mini-COP, delegates from the scientific community wanted greater time for scientific and technical discussions. Some delegations were concerned that SBSTTA did not have the mandate to make "political decisions" over such issues as GURTs and moratoriums. Others observed that delegations with scientists rather than diplomats floundered over the negotiation process, putting forward text changes that did not reflect previous COP decisions or political nuances associated with the Convention itself.

Despite the identity crisis, delegations welcomed SBSTTA's technical presentations that introduced the discussions on GURTs, the Global Taxonomy Initiative (GTI) and the Global Invasive Species Programme (GISP) and hoped that this new format would be expanded at subsequent SBSTTAs. Many commented on the improved quality of the background papers for the meetings, although some lamented that detailed scientific inputs are still lacking. Delegates also valued the numerous, lunchtime side-events and the Global Biodiversity Forum that preceded SBSTTA. A number of delegates commented that they



thought that SBSTTA had matured and that "biodiversity," rather than other extraneous matters, was now becoming the primary subject of discussions.

Some suggested that the decision to hold the ISOC also helped delegates at SBSTTA focus on the scientific mandate. This meant that SBSTTA was becoming less like a mini-COP. In addition to providing an alternative forum for COP preparations, delegates noted that this "field test of a possible subsidiary body on implementation" — a wistful association with the UNFCCC's institutionalized Subsidiary Body on Implementation — set several good examples that could help improve SBSTTA and the COP's operations in the future.

Proposals to improve the scientific input and output of SBSTTA prevailed in many discussions during both SBSTTA-4 and the ISOC. SBSTTA Chair Hamid's opening suggestion that delegates consider establishing a structured mechanism like the Intergovernmental Panel on Climate Change (IPCC) received limited support, but proposals to develop expert panels and rosters of experts appear to be a step in that direction. Additional proposals to improve SBSTTA, including closer collaboration with other scientific mechanisms and bodies will not be realized until SBSTTA-6, after the COP adopts decisions on these issues.

SLIPPED THROUGH THE NET: A number of delegates expressed concern that some issues received only superficial treatment at SBSTTA-4. Drylands and sustainable use were cited as two examples. On drylands some delegates questioned why so much time was spent on defining drylands rather than discussing scientific and technical aspects of dryland biodiversity. Many anticipated that SBSTTA-5's discussion of the issue will provide an opportunity to more fully elaborate the work programme, although some questioned why SBSTTA-4 did not complete the discussion, leaving SBSTTA-5 with a very cluttered agenda. Some delegates were also disappointed that the issue of coral bleaching had dropped off the agenda, despite the COP decision that SBSTTA address this issue prior to COP-5. These delegates were less than impressed with the Executive Secretary's explanation that this issue was being in other fora.

On sustainable use, many delegates expressed displeasure that the SBSTTA-4 agenda had narrowed this issue to focus on tourism. Some delegates confessed that they were unhappy with the fact that this subject had been "hijacked" at COP-4 in Bratislava by Germany and that this thematic dominance had flowed through to SBSTTA. Like drylands, sustainable use will re-appear at SBSTTA-5. Many are hoping for a broader discussion on the issue.

While most delegates wanted a stronger scientific analysis of issues, all proposals to establish new technical panels were dropped at the end of SBSTTA-4, although draft recommendations at ISOC meant that they will be given further consideration at SBSTTA-5 and the next COP.

Timing of meetings has also created some difficulties and resulted in some missed opportunities. Some delegates expressed concern that the close proximity of the Convention to Combat Desertification's COP-3 and the simultaneous meeting of its Committee on Science and Technology at the end of November and SBSTTA-5 will limit the opportunity for collaboration between the two conventions. The drylands issue is not the only example of poor timing in the CBD annual schedule. The documents for COP-5, which is scheduled for 15-26 May 2000, should be distributed six months prior to the meeting, which means they will be completed before SBSTTA-5, which will meet from 31 January – 4 February 2000. COP-5 decisions on the

SBSTTA programme of work and periodicity of COP and SBSTTA meetings could facilitate efforts to avoid such missed synergies in the future.

SUB-TEXTS AND SUBSTANCE: A few issues, substantive and otherwise, stood out as having occupied delegates' time and emotions more than others. Possibly the most contentious related to whether or not to call for a moratorium on the use of GURTs. Many delegates commented that the technical presentation by Richard Jefferson during SBSTTA provided a useful insight into the complexity of this technology. Delegates were amazed by the level of sophistication that gene technology has now reached, given the fact that genetic expression can be turned on and off by the application of chemicals. Jefferson's presentation stimulated a variety of questions, reflecting the broad spectrum of knowledge on this issue. Some delegations were obviously concerned about the environmental and social implications of this technology. A number focused on the importance of safety and capacity-building to ensure any use is properly executed. Debate over a moratorium on field-testing and the implications that the technology has for food security became the primary focus during negotiations. For some of the scientists present, the concept of banning field-testing was anathema to their scientific training. Some delegates suggested that the issue of food security was beyond the competency of a "scientific" organization like SBSTTA. Others believed that food security was clearly a matter of social science and should be considered by this organization. Most felt that the final text, suggesting that the use of GURTs would not be approved until authorized scientific assessments were carried out, was a good compromise and reflected a well-reasoned application of the precautionary principle.

The presentation and discussion on the GTI triggered background tensions between the CBD and UNEP to rise to the fore. Delegates deleted a proposal suggesting that the GTI would be formalized as a project under the auspices of UNEP, in preference for the CBD Secretariat. Observers suggested that some delegations still recall UNEP Executive Director Töpfer's presentation at COP-4, which some interpreted as a CBD takeover bid. Additional concerns in this regard extended to unfilled positions in the Secretariat, including a new position on taxonomy, and the acting status of the Executive Secretary. As Malawi stated during the closing Plenary of ISOC, many participants hoped that all positions would be filled and the Secretariat would be fully functional in the lead up to SBSTTA-5 and COP-5.

Calls for the retroactive application of the CBD to *ex situ* genetic resource collections sparked lively discussions within the contact group. The fact that the call to establish a technical panel on this issue was scrapped by a number of developed countries suggests that it will be some time before this issue will be given serious consideration. The discussion on the relationship between the CBD and TRIPs, on the other hand, appeared to make some in-roads into the sacred territory of the World Trade Organization. Even so, for some delegates, the in-road was minute with one delegate suggesting the Plenary discussion on this issue was a preview to trade negotiations "in thirty years time."

SMOOTHING THE AGENDA: Overall, most delegates left the meetings with the feeling that some progress had been made. SBSTTA started settling down to business, although SBSTTA-5 inherited unresolved issues from SBSTTA-4 adding to its already heavy agenda. With Chair Samper's proposed reform agenda for SBSTTA and the numerous ISOC decisions, delegates are hoping that these changes will provide a sound starting point for smoothing COP machinations. Many hope that SBSTTA reforms and the development of new CBD implementation mechanisms will help go some way towards making the huge CBD agenda a little more manageable.



THINGS TO LOOK FOR BEFORE COP-5

TRIPS COUNCIL MEETING: The next meeting of the Council for the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) will take place at WTO headquarters from 7-8 July 1999. For more information, contact: WTO, Centre William Rappard, Rue de Lausanne 154, CH-1211 Geneva 21, Switzerland; tel: +41-22 739 51 11; fax: +41-22-739 54 58; Internet: <http://www.wto.org/wto/inteltec/inteltec.htm>.

NINTH EUROPEAN CONGRESS ON BIOTECHNOLOGY: This meeting, which will be held from 11-15 July 1999 in Brussels, will consider four sectors of applied biotechnology and five main-stream fundamental sciences underpinning biotechnology. For more information contact: ECB9 Secretariat, Reyerslaan 80, B-1030 Brussels, Belgium; tel: +32 2 706 8174; fax: +32 2 706 8170; e-mail: secretariat@ecb9.be; Internet: <http://www.ecb9.be/>.

INTERNATIONAL CONFERENCE ON BIOTECHNOLOGY IN THE GLOBAL ECONOMY: The Harvard University Center for International Development is organizing an International Conference on Biotechnology in the Global Economy on 3-4 September 1999 at Harvard University in Cambridge, Massachusetts, USA. The conference will address the implications of biotechnology for international trade, intellectual property rights, biodiversity prospecting, developing countries, human and environmental safety, and social values. For more information contact: Calestous Juma, Harvard University; tel: +1-617-496-0433; e-mail: Calestous_Juma@harvard.edu.

BIOSAFETY PROTOCOL: Informal consultations on the outstanding issues in the Biosafety Protocol will take place in September 1999, for a period of five days yet to be determined. A resumed extraordinary session of the COP is expected to be scheduled in February 2000. For more information, contact: CBD Secretariat; World Trade Center, 393 Jaques St., Suite 300, 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>.

WORLD SEED CONFERENCE: This Conference will be held in Cambridge, UK, from 6-8 September 1999. For more information contact: The World Seed Conference Secretariat; tel: +44 1 223 323437; fax: +44 1 223 460396; e-mail: cc@confcon.demon.co.uk.

3RD TRONDHEIM CONFERENCE ON BIODIVERSITY: The Norway/UN Conference on the Ecosystem Approach for Sustainable Use of Biological Diversity will take place in Trondheim, Norway from 6-10 September 1999. For more information contact Rita Strand, NINA-NIKU; tel: +47 73 80 15 48; fax: +47 73 80 14 01; e-mail: rita.strand@ninitrd.ninaniku.no; Internet: <http://www.ninaniku.no> or <http://chm.naturforvaltning.no>.

FAO/NETHERLANDS CONFERENCE ON THE MULTI-FUNCTIONAL CHARACTER OF AGRICULTURE AND LAND MANAGEMENT: This FAO/Netherlands co-sponsored conference will be held from 13-17 September 1999 in Maastricht, the Netherlands. For more information contact: Lucas Janssen, FAO/SDRN; tel: +39 6 57052287; fax: +39 6 57053369; e-mail: agr99-conference@fao.org; Internet: <http://www.fao.org/sd/agr99/>.

FAO CONTACT GROUP ON THE INTERNATIONAL UNDERTAKING: A contact group will meet from 20-24 September 1999 at FAO headquarters in Rome to decide on how to continue the revision of the International Undertaking on Plant Genetic Resources in harmony with the CBD. For more information contact: FAO, Viale delle Terme di Caracalla, 00100 Rome, Italy; tel: +39 6 52251; fax: +39 6 52253152; Internet: <http://www.fao.org> or <http://web.icppgr.fao.org>.

UNEP MEETING OF THE INTERLINKAGES EXPERT PANEL AND THE INAUGURAL MEETING OF THE SUBSIDIARY SCIENTIFIC AND TECHNICAL BODIES OF ENVIRONMENTAL CONVENTIONS: These meetings will be held in October 1999 in Bonn, Germany. For more information contact: Jorge Illueca, AED Division of Environmental Conventions, UNEP, P.O. Box 30552, Nairobi, Kenya; tel: +254 2 624 011; fax: +254 2 623 926; e-mail: jorge.illueca@unep.org.

EXPERT PANEL ON ACCESS AND BENEFIT SHARING: An Expert Panel on Access to Genetic Resources and Benefit Sharing will be held from 4-8 October 1999 in San José, Costa Rica. For information contact: CBD Secretariat; World Trade Center, 393 Jaques St., Suite 300, 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>.

THE SIXTH MEETING OF THE CONFERENCE OF THE PARTIES TO THE CONVENTION ON MIGRATORY SPECIES: This meeting will be held in Cape Town, South Africa from 10-16 November 1999. For information contact: UNEP/CMS Secretariat, tel: +49 228 815 2405; fax: +49 228 815 2449; e-mail: cms@unep.de; Internet: <http://www.wcmc.org.uk/cms/>.

THIRD CONFERENCE OF THE PARTIES TO THE CONVENTION TO COMBAT DESERTIFICATION (CCD): The CCD COP-3 will take place from 15-26 November 1999 in Recife, Brazil. For more information contact: CCD Secretariat, POB 260129, Haus Carstanjen, D-53153, Bonn, Germany; tel: +49 228 815 2800; fax: +49 228 815 2899; e-mail: secretariat@unccd.de; Internet: <http://www.unccd.de/>.

CBD AD HOC WORKING GROUP ON ARTICLE 8(J): This meeting will be held from 24-28 January 2000 in Montreal. For more information contact: CBD Secretariat; World Trade Center, 393 Jaques St., Suite 300, 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>.

FIFTH MEETING OF THE SBSTTA of CBD: SBSTTA-5 of CBD will be held from 31 January - 4 February 2000 in Montreal. For more information contact: CBD Secretariat; World Trade Center, 393 Jaques St., Suite 300, Montréal, Québec, Canada, H2Y 1N9; tel: +1 514 288 2220; fax: +1 514 288 6588; e-mail: chm@biodiv.org; Internet: <http://www.biodiv.org>.

INTERNATIONAL CONFERENCE ON MANAGING NATURAL RESOURCES FOR SUSTAINABLE AGRICULTURAL PRODUCTION IN THE 21ST CENTURY: This Conference will take place from 14-18 February 2000 in New Delhi, India. Themes to be discussed include: agro-biodiversity and agro-forestry; biodiversity, people and sustainable agriculture; and natural resources management and comprehensive food security. For more information contact: A.K. Singh, Secretary-General, Indian Agricultural Research Institute, New Delhi, 110 012 India; tel: +91 11 5731494; fax: +91 11 5755529; e-mail: icmnr@bic-iari.ren.nic.in.

THE FIFTH MEETING OF THE CONFERENCE OF THE PARTIES TO THE CONVENTION ON BIOLOGICAL DIVERSITY: CBD COP-5 will be held in Nairobi, Kenya, from 15-26 May 2000. For information contact: CBD Secretariat; World Trade Center, 393 Jaques St., Suite 300, 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>.