

SBSTTA 22 Highlights:

Monday, 2 July 2018

The 22nd meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA 22) of the Convention on Biological Diversity (CBD) convened Monday in Montreal. Following the opening plenary, delegates engaged in discussions on the following agenda items:

- Digital sequence information on genetic resources (DSI);
- Risk assessment and risk management of living modified organisms (LMOs); and
- Synthetic biology.

Opening Plenary

SBSTTA Chair Theresa Mundita Lim (Philippines) opened SBSTTA 22, noting this meeting is special because this is the 25th anniversary of the Convention's entry into force, there are only two more years to reach the 2020 Aichi Biodiversity Targets, and for the first time SBSTTA is considering work under the Convention, the Cartagena Protocol on Biosafety, and the Nagoya Protocol on Access and Benefit Sharing. After reviewing the ten substantive agenda items, Lim asked delegates to focus on the provision of scientific, technical, and technological advice over politics.

CBD Executive Secretary Cristiana Paşca Palmer highlighted that while significant progress has been made, biodiversity loss is continuing at alarming rates. She encouraged parties to accelerate efforts to implement national commitments, underscoring that many actions can still be undertaken over the next two years to get closer to meeting the Aichi Targets. Emphasizing the need to "build a strong case for biodiversity," she called for scientists and practitioners to join forces to foster transformational approaches to address the root causes of ecosystem degradation.

Andreas Obrecht, on behalf of United Nations Environment Programme (UNEP) Executive Director Erik Solheim, said the Sixth Global Environmental Outlook, to be released in early 2019, will provide important context for developing the post-2020 biodiversity framework.

Organizational Matters: Delegates adopted the agenda and organization of work (CBD/SBSTTA/22/1 and Add.1) without amendment. Delegates elected Samuel Dieme (Senegal) rapporteur.

Digital Sequence Information on Genetic Resources

The Secretariat introduced the relevant documents (CBD/SBSTTA/22/2, INF/2, Add.1 and 2, INF/3 and INF/4).

Many supported extending the mandate of the *Ad Hoc* Technical Expert Group (AHTEG), including for addressing terminology. The REPUBLIC OF KOREA noted the term DSI is arbitrary and obscure. JAPAN called for a more operational and appropriate term, and TURKEY for a sound definition. BELGIUM and SWITZERLAND called for conceptual clarity. MEXICO, INDIA, RWANDA, COLOMBIA, SWEDEN, and the UK noted that while DSI may not be the most appropriate term, it can serve as a placeholder as discussions continue. The PHILIPPINES, also for

the Association of Southeast Asian Nations (ASEAN), and CHINA recommended the AHTEG focus on clarifying DSI's scope by using an "umbrella term" that includes all activities. BRAZIL suggested adopting the term "genetic information on genetic resources." GUATEMALA offered "digital data on genetic resources."

Austria for the EU, NORWAY, CANADA, the UK, and SWITZERLAND, among others, noted that DSI cannot be equated to genetic resources and thus falls outside the scope of the CBD and the Nagoya Protocol. GERMANY stressed that DSI lacks both the tangibility and biotic quality required to be covered by the term "genetic material," adding, with SWITZERLAND and the NETHERLANDS, that inclusion of DSI in the CBD's scope could hamper scientific and technological development. FRANCE, BELGIUM, and AUSTRALIA highlighted that DSI is not a genetic resource per se. The GLOBAL BIODIVERSITY INFORMATION FACILITY cautioned against introducing barriers to free and open access to data.

Malawi, for the AFRICAN GROUP, BRAZIL, GUATEMALA, BOLIVIA, MALAYSIA, ETHIOPIA, INDIA, RWANDA, MOROCCO, COLOMBIA, INDONESIA, and others highlighted that DSI originates from physical sources, thus falling within the scope of the Convention and the Nagoya Protocol. BRAZIL stressed that benefit-sharing in cases of uncertainty on origin may be ensured by the Nagoya Protocol's global multilateral benefit-sharing mechanism. SOUTH AFRICA said the focus should be on the fair and equitable sharing of benefits, whether they are accessed physically or digitally.

JAPAN stressed that further consideration is needed to determine whether DSI is a new and emerging issue according to the criteria in CBD decision IX/29. MEXICO noted that many gaps need to be addressed before analyzing potential implications of DSI for the CBD objectives. NEW ZEALAND called for reflecting the range of views expressed, focusing on areas where further work is required. CANADA proposed revisiting the scoping study, particularly on issues of taxonomy and ecology. The NETHERLANDS, INDIA, YEMEN, the UK, and others highlighted that discussions on DSI are also held in other fora.

ASEAN, with others, highlighted the need for additional information on the possible impacts of DSI, gathering information on best practices. SOUTH AFRICA, MALAYSIA, the FEDERATED STATES OF MICRONESIA, JORDAN, VENEZUELA, YEMEN, UGANDA, ECUADOR, TANZANIA, BELARUS, ETHIOPIA, and SUDAN called for additional capacity-building and technology transfer activities with regard to DSI. INDONESIA noted that capacity-building efforts should also focus on developing potential for traceability.

BOLIVIA urged parties to set up clear mechanisms and direct guidelines on the use of DSI. COSTA RICA noted that for non-commercial purposes, free access and use of DSI should be safeguarded, while commercial uses should ensure both monetary and non-monetary benefits. GLOBAL YOUTH BIODIVERSITY NETWORK called for regulating commercial uses of DSI.

The INTERNATIONAL INDIGENOUS FORUM ON BIODIVERSITY (IIFB) suggested the COP examine the potential implications of the use of DSI on the lands, territories, and means of subsistence of indigenous peoples and local communities (IPLCs).

SBSTTA Chair Lim established a contact group, facilitated by Hendrik Segers (Belgium) and Hesiquio Benítez Díaz (Mexico), which commenced work in the evening.

Risk Assessment and Risk Management of Living Modified Organisms

The Secretariat introduced the relevant documentation (CBD/SBSTTA/22/3, INF/11 and INF/12).

COSTA RICA, FRANCE, and FINLAND highlighted the need for more research and guidance before organisms containing engineered gene drives can be released into the environment.

Rwanda, for AFRICA, with MOROCCO, SWEDEN, and NORWAY highlighted the need to carry out a comprehensive study on the potential adverse effects of LMOs containing gene drives.

The PHILIPPINES drew attention to existing guidance documents for living modified fish. JAPAN supported emphasizing existing guidance. SOUTH AFRICA noted while there is merit in developing new guidance, it must be practical and respond to existing needs.

SWITZERLAND stressed the need to develop new guidance materials. MOLDOVA supported further guidance on products of synthetic biology, living modified fish, soil dwelling organisms, and coexistence between LMOs and non-LMOs. BRAZIL stressed that guidance should be non-binding, and should be elaborated according to scientific criteria. CANADA did not support development of additional guidance at this time.

The NETHERLANDS, with GERMANY and NEW ZEALAND, supported case-by-case risk assessment for introducing LMOs into the environment. NEW ZEALAND noted that not all organisms created using genome editing and containing gene drives have similar risk profiles.

GERMANY, SWITZERLAND, and BELGIUM said SBSTTA recommendations should focus on the process and criteria for identifying and prioritizing specific issues of risk assessment that may warrant future consideration. BELGIUM and FRANCE noted that concrete topics, such as organisms containing engineered gene drives and living modified fish could be used to check the criteria.

Ukraine for Central and Eastern Europe (CEE), BOLIVIA, NORWAY, SWEDEN, FRANCE, and FINLAND supported establishing a new AHTEG. CHINA supported an AHTEG subject to defining its mandate and terms of reference, and JAPAN suggested attaching draft terms of reference to the recommendations. THAILAND suggested that the new AHTEG be tasked to simplify existing guidance. BOLIVIA called for the AHTEG to produce new guidance, including on cross-cutting issues like human health, risks to IPLCs, and implications of coexistence between LMOs and non-LMOs.

Ukraine for CEE, INDONESIA, MOLDOVA, SRI LANKA, SWEDEN, BELGIUM, CHINA, THAILAND, FRANCE, and FINLAND supported the extension of the online forum.

GUATEMALA, supported by PERU, highlighted gaps in assessing new types of LMOs. VENEZUELA highlighted the difficulty for developing countries in assessing risks posed by LMOs, calling for additional guidance.

THAILAND called for capacity-building activities on risk assessment. MALAWI highlighted capacity building to facilitate the adoption of existing and future guidelines.

IPLCs proposed textual changes to provide greater emphasis to, *inter alia*, possible effects of LMOs on agriculture, human health, and IPLCs' livelihoods.

The FEDERATION OF GERMAN SCIENTISTS supported additional guidance on LMOs focusing on organisms containing engineered gene drives and living modified fish.

The GLOBAL YOUTH BIODIVERSITY NETWORK opposed case-by-case assessments.

A contact group, facilitated by Tim Strabala (New Zealand), was established.

Synthetic Biology

The Secretariat introduced the relevant documentation (CBD/SBSTTA/22/4, INF/17, and INF/18).

Many reaffirmed the need for a precautionary approach. NORWAY underscored the importance of striking a balance between research freedom, and safeguarding biodiversity and human health. Many parties supported extending the mandate of the AHTEG, while others opined that different options, like using only the online forum, should be considered.

FRANCE, BELGIUM, MOLDOVA, and others supported regular assessment of developments in the field of synthetic biology. MEXICO stressed the need to establish a forward-looking periodic analysis. The NETHERLANDS reiterated that introduction to the environment of organisms containing engineered gene drives should be preceded by adequate risk assessment on a case-by-case basis, noting, with COSTA RICA, that additional guidance may be needed. Ukraine, for CEE, stressed additional research is needed before any environmental release of organisms containing gene drives, while COLOMBIA stressed appropriate guidelines as a pre-requisite.

FRANCE, the NETHERLANDS, BELGIUM, SOUTH AFRICA, SWITZERLAND, and GERMANY called for a coordinated approach, in synergy with work on risk assessment of LMOs under the Cartagena Protocol and on DSI under the Nagoya Protocol. CEE, SOUTH AFRICA, KUWAIT, VENEZUELA, INDIA, and MALAYSIA underscored the need for capacity-building activities.

The PHILIPPINES invited parties to develop an international, legally binding definition. CANADA considered that the working definition proposed by the AHTEG needs to be more focused. MOLDOVA and THAILAND suggested that the AHTEG consider relevant criteria for identifying organisms developed through synthetic biology that might not be regarded as LMOs.

ETHIOPIA emphasized the need to develop a supplementary protocol, noting that genome editing and gene drives are not captured by the Cartagena Protocol. GUATEMALA called for determining which products of synthetic biology fall under the scope of the Cartagena Protocol and the Convention.

AUSTRALIA, CANADA, NEW ZEALAND, and JAPAN noted the absence of consensus on whether synthetic biology is a new and emerging issue or an extension of modern biotechnology. GERMANY disagreed with creating a *de facto* moratorium on organisms containing engineered gene drives. The UK stressed that genome editing comprises a broad range of applications.

COLOMBIA and BOLIVIA called for attention to the potential adverse effects of synthetic biology on IPLCs. IIFB called for a moratorium on the release of synthetic biology organisms, components, and products, stressing the need to ensure full and effective participation of IPLCs before any organism containing gene drives is released.

Citing relevant scientific research, the ETC GROUP said organisms containing engineered gene drives should not be released into the environment, noting that containment, detection, monitoring, and risk management are necessary.

INDIGENOUS WOMEN'S BIODIVERSITY NETWORK, UNION PAYSANNE, and FRIENDS OF THE EARTH cautioned against "false solutions that endanger our livelihoods," emphasizing the need for risk assessment specific to synthetic biology, taking into account environmental, socio-economic, and gender impacts.

In the Corridors

SBSTTA 22 Chair Lim opened the meeting by "warmly" welcoming delegates to Montreal. Indeed, with record-setting high temperatures, many were already quite warm as they entered the ICAO Conference Centre. Amid murmurs of climate change, CBD Executive Secretary Cristiana Paşca Palmer noted biodiversity is not a primary concern outside the conservation community, and urged delegates to ensure it is no longer "the elephant in the room" but mainstreamed into policy making, including the finance community. Following an explicit warning by Palmer that we are not on track to achieve the Aichi Targets, some delegates expressed optimism that national actions in the next biennium may fill the gaps, while others cautioned that national priorities must change to achieve meaningful results.