

BIODIVERSITY CONVENTION CONSIDERS GENETIC SEQUENCE DATA AND BENEFIT SHARING

Cancun, 12 Dec (Edward Hammond) – Negotiators at the Convention on Biological Diversity (CBD) meeting in Cancun, Mexico are working to resolve tough issues surrounding how to share benefits from the use of genetic sequence data from plants, animals, microbes and other biodiversity.

Biodiverse developing countries that typically provide genetic resources are urging immediate CBD action on the issue, in the face of gene sequencing projects that are rapidly placing commercially valuable sequence data in online databases that do not implement the CBD's benefit sharing rules on their users.

Many developing country negotiators consider this as a fast-emerging “loophole” in the CBD, because synthetic biologists, biotechnology corporations, and others that want to commercially utilize biodiversity - for example, valuable diversity in South American tomatoes, African coffee, or Asian rice - can increasingly turn to the internet “cloud” and download digital genetic sequence data to serve their needs, rather than going to the provider country(ies) to negotiate access and benefit sharing agreements.

In effect, genetic sequence data allows companies to access genetic resources without physical material changing hands, and without the typical material transfer agreement.

The issue is being considered under the CBD's agenda item on synthetic biology. This is because the Convention's Ad Hoc Technical Expert Group (AHTEG) on Synthetic Biology, which met in September 2015, identified genetic sequence data's relevance to the CBD's access and benefit sharing provisions.

The AHTEG's report was formulated into a draft resolution by the CBD's Subsidiary Body on Scientific, Technical, and Technological Advice (SBSTTA), which met in April 2016 in Montreal, Canada. But the SBSTTA was unable to come to a resolution on how to address the sequences issue, mainly due to a North-South divide, and two pieces of bracketed text on gene sequences were forwarded to the present 13th CBD Conference of the Parties (COP 13) in Cancun (4 to 17 December).

When the issue came to the floor of the COP 13 Working Group II on Tuesday (6 December) morning, there was near unanimity among CBD Parties in favor of having the Convention and/or its Nagoya Protocol on access and benefit sharing start work to address the issue. Those that spoke in favor of this included Mauritania for the Africa Group and many more Africa Group members in individual interventions. From Latin America, host country Mexico, Costa Rica, Ecuador, El Salvador, Guatemala, and Argentina also supported. From Asia came the Philippines, Indonesia, Pakistan, and Malaysia. Switzerland and Norway also supported addressing the issue.

In its Working Group intervention on synthetic biology, the European Union was silent on genetic sequence data. New Zealand offered that addressing the issue is “premature”, but only Canada expressly sought to dismiss it from consideration.

While the Working Group interventions ostensibly demonstrated near unanimity in favor of the CBD and/or Nagoya Protocol to begin formulating policies in response to the “digital DNA” problem, as was generally understood in the room, the North's lack of candor on the issue did not reflect agreement with the vast majority of countries that spoke.

Japan takes a position similar to Canada's, while the EU's silence masked varied internal perspectives and a desire to either place very tight limitations on how the CBD considers gene sequences, or to allow the perspective of Canada and Japan to carry the debate.

The Chair thus formed a contact group which, after reaching agreement on other outstanding brackets in the synthetic biology resolution, has begun the process of seeking a solution on sequence data. Some predict that the contact group could continue until the final day of COP 13 on 17 December.

Contact Group discussions have confirmed the high priority placed by many developing countries on the issue, and a very significant proposal has been tabled for a resolution to be adopted that will update the Parties' understanding of the Convention's definition of the term "genetic resources".

The proposed update, which has drawn support from most of the developing countries participating in the group, says that with respect to utilization, gene sequences will be treated as equivalent to genetic resources, i.e. physical samples. As one delegate aptly put the situation, with the present state of technology, it is no longer sensible to distinguish between the "hard copy" (e.g. a seed) and the "soft copy" (its genetic sequence data) for the purposes of benefit sharing under the Convention.

Because access and benefit sharing obligations apply to both Parties to the CBD and the smaller number of Parties to the Nagoya Protocol, many developing countries also view it necessary for the Convention itself, and not the Protocol, to take the leading decision on sequence data. Developing policy recommendations could be done by the Nagoya Protocol, they argue, but the major understanding about the status and treatment of sequence data needs to be taken in the Convention.

Developed countries have generally rejected this idea, and have held fast to earlier positions, while making few proposals themselves.

In the corridors, some delegates, especially European biosafety experts, express concern that the access and benefit sharing issue of sequence data is threatening to occupy so much of the attention of a presumed future meeting of the Synthetic Biology AHTEG that urgent biosafety business will be undesirably postponed.

While other delegates are not unsympathetic to this concern – indeed, developing country proposals to restrict controversial gene drive technology remain on hold while the Contact Group discusses sequences – at present, the synthetic biology topic remains the procedurally correct and a scientifically appropriate item under which to consider the gene sequence issue.

At times in the Contact Group discussion, Parties with varying views about how to address gene sequences have hinted that they might be receptive to moving the discussion outside of the synthetic biology item, thereby allowing the Synthetic Biology AHTEG to focus on other issues. But there are few avenues to moving the discussion while maintaining a procedural footing that would enable a decision by the CBD COP 13. Those that do, such as constituting a new contact group under a new agenda item, would likely require unanimous consent from Parties in an unscheduled plenary session of COP 13, and/or have other related procedural difficulties.

A related concern heard clearly in the corridors, primarily from Northern delegations, is that the "right people are not in the room." That is, that Europe and other Northern countries' synthetic biology

negotiating team is primarily composed of biosafety specialists and lacks access and benefit sharing specialists.

This complaint is advanced despite the fact the Terms of Reference for the Synthetic Biology AHTEG clearly extended to access and benefit sharing questions, and the April SBSTTA discussion in Montreal unambiguously presaged an access and benefit sharing discussion about sequences at COP 13 – with the outstanding sets of brackets to be negotiated.

Sympathy is thus limited for the well-resourced developed countries that essentially say they are unprepared, despite the AHTEG result and SBSTTA discussion, and despite the COP being the CBD's highest body. Some observe that the "right people" argument is being advanced in hopes of delay.

In Working Group sessions of the second meeting of the Parties of the Nagoya Protocol (COP-MOP2), held concurrently with CBD COP 13, Namibia, supported by Brazil, Mexico, South Africa, Kenya, Pakistan, Malaysia, the Philippines, and others has raised the question of gene sequences under the item on Nagoya Protocol Article 10.

The idea is that Article 10, on the possible establishment of a Global Multilateral Benefit-Sharing Mechanism, might be considered for use for benefit sharing with gene sequences, in cases where prior informed consent is not possible. This would generally mean cases where sequences are utilized commercially but their origin cannot be identified. A contact group has been formed with no meeting scheduled as yet.

The sequence issue has also been raised in the agenda item related to the Nagoya Protocol's relationships with other instruments. There, Namibia and others propose that the Nagoya Protocol consult with other international organizations with relevant activities, including the World Health Organization (which has the Pandemic Influenza Preparedness Framework), the Food and Agriculture Organization (for the International Treaty on Plant Genetic Resources for Food and Agriculture and the Commission on Genetic Resources for Food and Agriculture), and the World Intellectual Property Organization (that has an Intergovernmental Committee considering genetic resources).

The Synthetic Biology Contact Group is expected to reconvene during the course of the present week.