

Third Meeting of the Open-Ended Working Group 23 August – 3 September 2021

## Agenda Item 5. Digital sequence information on genetic resources

Thank you, Chair. I'm making this statement on behalf of the CBD Alliance and the CBD Women Caucus.

The misappropriation of genetic resources through use of DSI is an existential threat to the Convention as it is actively undermining the CBD's third objective of fair and equitable benefit sharing. Today, highly complex genomes can be sequenced for US \$300, sequencers are the size of a USB stick, the Earth Biogenome Project proposes to sequence every species on earth, and "genomic surveillance" - the sequencing of a large proportion of the members of a particular species - is becoming a reality.

Much of the sequence information that is being generated is placed in so-called "open access" databases that are a free-for-all for corporations, or directly placed and hoarded in private data banks. These sequence troves are the source of benefits arising from the use of biodiversity that are dramatically unequally shared. To see the profound inequity, look no further than COVID vaccines. All of the COVID vaccines in use are dependent on DSI, and were physically generated directly from pathogen DSI.

Yet the vast majority of the benefits are accruing to only a few. COVID vaccine companies are banking billions. Wealthy countries enjoy easy access, while the vast majority of the world suffers greatly. And even though current and future vaccines rely upon global collaboration, that is on the health services of developing countries to collect and provide DSI to the databases used by the companies, national budgets in the global South strain to pay exorbitant prices.

COVID vaccines are the most dramatic example of vast inequity in benefit sharing from DSI, but similarly unfair situations unfold across other industries – in agriculture, pharmaceuticals, and industrial processing.

A level-headed analysis of technical aspects of how DSI is used - that is, how sequence information is stored, searched, analyzed, and manipulated - offers important lessons.

First, fully elaborated track and trace systems for DSI appear to be possible, but are technically complicated and will require significant resources to develop and manage. But if developed countries don't accept their massive benefit sharing responsibilities for DSI, the use of such systems may be unavoidable.

Preferable to track and trace built around a bilateral model would be the development of a multilateral benefit sharing system with standard terms and conditions for DSI, with benefits paid into an international fund. Such a system would collect payments for the commercial use of DSI, relying on commitments by Parties, and the mandatory implementation of benefit sharing terms and conditions by databases on their users.

Such a fund should support IPLCs, particularly women, given the correlation between IPLC land rights and relatively intact, biodiverse ecosystems. This fund should prioritize IPLCs' autonomous development of their own knowledge systems for biodiversity conservation and sustainable use, which frequently prove superior to our own.

Second, DSI encompasses more than gene sequences. The background paper prepared for the AHTEG (CBD/DSI/AHTEG/2020/1/3) lays out components of DSI in its Table 4. A logical grouping includes all sequences, assembly, annotation, gene expression, heritable elements, and amino acids, proteins and their structure that together constitute DSI. That is, the elements of the table that are labeled "a1" through "d3".

What is not DSI is also clear. Items such as information on ecological relationships and modalities of use - the elements labeled "e" through "i" - are not DSI per se. Such information may be traditional knowledge, and the development of a benefit sharing system for DSI should not co-opt IPLCs and their knowledge, nor force them into any arrangement for their knowledge that is not of their own development and consent.

Finding an equitable benefit sharing solution for DSI has been rightly linked to the adoption of the Post-2020 GBF. The CBD should not repeat the mistakes made at the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA), where the lack of a benefit sharing solution for DSI was a prime contributor to the failure of a six-year negotiation effort.

Negotiation on benefit sharing for DSI should be afforded immediate and in-depth attention and will need to be conducted in person, by Parties, with the participation of CSOs and IPLCs.

Thank you.