

DSI at COP16: what happened and how to deal with it

COP16 discussed a new benefit-sharing mechanism based on the use of a virtual object (DSI), which still has no agreed legal definition. This allows industry and the countries from the Global North to claim that they are products of research, when in fact they are just the dematerialised representation of the genetic components of physical biological resources, sometimes combined with other information on associated phenotypic traits that are already well known. This lack of definition also allows industry and the countries of the Global North to talk about DSI when it comes to justifying open access, and then about genetic information or biological materials when it comes to claiming patents obtained through the use of these DSI. That allows to bypass the impossibility of patenting what is already freely accessible, and therefore already well-known.

COP16 approved the establishment of an international mechanism to ensure that the benefits from DSI are shared. The multilateral mechanism for the fair and equitable sharing of benefits from the use of digital sequence information on genetic resources covers "digital sequence information that is made publicly available and that is not subject to **mutually agreed terms** (MAT) established at the time of access to the genetic resources from which the digital sequence information on genetic resources is derived". It also covers DSI for which "the fair and equitable sharing of benefits is not provided for by other international agreements on access and benefit sharing, except if those instruments choose the multilateral mechanism for that purpose".

At this stage of ITPGRFA negotiations, the COP mechanism would apply to all seed traded by seed companies that will not adopt the ITPGRFA subscription mechanism, except for their seeds coming from PGRFA obtained through a single access agreement with the ITPGRFA.

Countries agreed to create the so-called **Cali Fund**, a global benefit sharing fund to which companies using DSI "should contribute". The fund will be administered by the United Nations through the United Nations Multi-Partner Trust Fund Office, in accordance with decisions of the Conference of Parties, and under the authority of and accountable to the Conference of Parties.

Pharmaceutical, cosmetics, agribusiness, nutraceutical and technology sectors are the ones indentified as main users of genetic data. They "should" contribute 1% of their profits, or 0.1% of their revenue to the new fund. The use of the word "should" implies that contribution is voluntary and the payment rates are "indicative", and non-binding.

African and Latin American countries sought a legally binding mechanism on DSI, but they failed. The **first review of the mechanism is set to happen at COP18, in 2028**.

Additionally, companies can also decide not to pay, since they are not obliged to "demonstrate" that they were not using DSI. This key clause has been removed and now the **seed industry and other multinationals can just lie and say they do not make use of DSI to avoid payments**. Paragraph 5 of the decision says that "The provisions [...] do not apply to entities active in the sectors listed in Enclosure A that do not directly or indirectly use digital sequence information on genetic resources". There are no details on how they should demonstrate they are not using DSI. This seems to be a loophole.

As DSI cannot be traced, companies can take advantage of another loophole. The same DSI may be contained in multiple biological resources of different varieties, breeds or even species. Companies can always say that they have used the physical genetic resources of their own collections containing biological material identified by DSI, without mentioning the use of those DSI.

Academia and research institutions won't contribute either. They are only expected to **make explicit on their databases the countries of origin of data**, to inform users of these databases on to whom benefits should go to. "Entities operating databases, and tools and models dependent on digital sequence information on genetic resources, that make digital sequence information on genetic resources publicly available should", among other things:

- Require the provision of information on the country of origin of the
 genetic resources from which digital sequence information was
 derived, where known, as well as, when appropriate, metadata associated with
 the genetic resources from which the digital sequence information was derived,
 including indicating the use of traditional knowledge associated with genetic
 resources and its origin or source
- Request that those submitting digital sequence information on genetic resources indicate that it is not subject to any restrictions which prohibit its sharing

This is wishful thinking for all the biological resources that are already known. Databases containing DSI of almost all PGRFA of the Treaty's MLS are already freely accessible. It is technically no longer possible to trace this origin, especially as the same DSI may be contained in multiple biological resources of different varieties, breeds or species.

At least half of all benefits collected, should meet the "self-identified" needs of Indigenous communities in developing countries, but only "where appropriate and subject to national circumstances". **Funding to Parties will be disbursed through direct allocations to countries**. Each recipient Party is invited to designate or establish a national entity to receive funds and to distribute them, also on a project basis.

Given the non-binding nature of the payments, only those who are interested in using the fund will pay, i.e. countries that are rich financially but poor in biodiversity and the pharmaceutical and seed industries, which will only pay the essential minimum:

- to maintain and, above all, digitise the few collections of public biological resources that they badly need;
- for the collection of new biological resources conserved or developed by farmers, Indigenous Peoples and Local Communities and their associated knowledge, known as "traditional, including innovations". These digitised biological resources and associated "traditional" knowledge are

essential for "artificial intelligence" to identify genetic information (a sequence and its function) or the function of "biological materials" that can be patented. These patents will prevent farmers, Indigenous Peoples and Local Communities from continuing to use the biological resources they have saved and developed, including those handed out to this new mechanism for financing biopiracy.

The mechanism is so weak that **many countries from the Global South successfully opposed it replacing national laws around DSI**, access and benefit-sharing. Where Parties put in place national measures on access and benefit-sharing from digital sequence information on genetic resources, they are "invited to align them with the multilateral mechanism" in order to avoid double payments.

The decision:

- does not include reference to UNDROP;
- does not explicitly say that use of DSI should not restrict the use of genetic resource;
- does not talk about FPIC requirement for the use of DSI.

So, basically, it does talk about benefit sharing but does not talk about safeguarding communities from DSI becoming an instrument to violate our rights. Our rights not just relate to save, use, exchange, etc. but also relates to prior consent for accessing all our resources, participation in decision-making processes, right to information.

Enclosures to the document go into the details of the functioning of this Multilateral mechanism. It can be useful to know the list of sectors supposed to directly or indirectly benefit from the use of digital sequence information on genetic resources. The list in **Enclosure A** includes:

- (a) Pharmaceuticals;
- (b) Nutraceuticals (food and health supplements);
- (c) Cosmetics;
- (d) Animal and plant breeding
- (e) Biotechnology;
- (f) Laboratory equipment associated with the sequencing and use of digital sequence information on genetic resources, including reagents and supplies;
- (g) Information, scientific and technical services related to digital sequence information on genetic resources including artificial intelligence.

It's also interesting to know the composition of the **Steering committee of the fund**. The Steering Committee would be set up and includes:

- Representatives of Parties, with equal geographical representation of the UN regions
- Representatives of indigenous peoples and local communities
- Representatives of stakeholders from civil society, academia/entities operating public databases, and the private sector
- Representatives of UN organizations

There will be **25 members**: 15 Parties (regional representatives, 3 per region), 1 Chair (appointed from among Parties), 7 IPLC (one from sociocultural region), 2 UN Organizations.

There will also be **6 observers** (Civil society, scientific institutions, private sector, 2 per category).

CONCLUSION

Today's irreversible free access to DSI is the justification for this multilateral benefit-sharing mechanism. It suppresses bilateral agreements that currently make access to biological resources subject to the supplier's **Free, Prior and Informed Consent** (FPIC). This prior consent currently enables the supplier (farmers, Indigenous Peoples and Local Communities) to oppose the beneficiary's claim to any intellectual property rights relating to the resource supplied, or its genetic parts or components. Unlike the ITPGRFA Multilateral System, **this new CBD Multilateral Mechanism does not prohibit the assertion of any intellectual property rights relating to biological resources, their parts or their genetic components. It will therefore only serve to finance biopiracy.**

What this decision means for the IPC WG on Agrobiodiversity and how it can affect our work

The Cali Fund and the entire Multilateral mechanism for the fair and equitable sharing of benefits from the use of digital sequence information on genetic resources seems to be a tool of legalized biopiracy.

Entities operating databases and tools and models dependent on digital sequence information on genetic resources, that make digital sequence information on genetic resources publicly available should, among other things, "request that those submitting digital sequence information on genetic resources indicate that it is not subject to any restrictions which prohibit its sharing". This means they should, but are not obliged to, not upload patented DSI. Even if the DSI is not patented when it's uploaded to databases, it could be right after, when a company takes it and uses it to create new Living Modified Organisms through synthetic biology or New Genomic Techniques (NGTs).

We think this task should not be left to private individuals or entities, because only international conventions or treaties and the national laws of each country can prohibit intellectual property rights or other restrictions. As pointed out above, the absence of a legally agreed definition of the term DSI allows the industry to claim that it is not DSI freely available on databases, and therefore already well-known, that is patented (something that no intellectual property law allows), but genetic information or biological material identified by artificial intelligence (called "research"), through cross-referencing those DSI with the "traditional" knowledge associated with the biological resources that contain it.

When DSI is already present in PGRFA of the ITPGRFA MLS, we usually demand that they be subject to **Article 12.3d of the Treaty**. Given the new scenario opened by CBD decision on Multilateral Mechanism for sharing the benefits arising from the use of DSI, the proposal is the following:

• For plant genetic resources that have not been the subject of an SMTA with the ITPGRFA's MLS and for all other biological resources, we can only encourage:

- our governments to reject this new benefit-sharing mechanism and to prohibit the application on their territory of any intellectual property rights on living organisms;
- o farmers, Indigenous Peoples and Local Communities to stop providing their resources and associated knowledge, except in a secure manner within and between their communities (which is very hard to do in the age of Internet and dematerialisation!)

If we explain these new biopiracy mechanisms clearly in every country, we can hope to convince a majority of our governments to reject this new dematerialised biopiracy.