

AN INTRODUCTION TO THE CALI FUND*

- **Setting the Context – the International Framework on Access and Benefit Sharing**

The Convention on Biological Diversity (“CBD”) is an international legal framework adopted in 1992, aimed at conserving biological diversity, promoting the sustainable use of its components, and ensuring fair and equitable sharing of benefits from the use of genetic resources.¹ Article 8 of the CBD provides for “in-situ conservation” strategies and to establish protected areas where special measures are needed to be taken to conserve biological diversity.² One of the mandates of Article 8 (j) is that each country must, through its national legislation must provide a mechanism for the fair sharing of the benefits arising from the utilisation of biological resources and traditional knowledge associated thereto with, the holders of said resources and the knowledge.

In furtherance of this objective, in 2014, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilisation (“Nagoya Protocol”) was adopted as a supplementary agreement to the CBD. It represents an important advancement in integrating Indigenous People & Local Communities’ (“IPs & LCs”) rights as a key issue in international negotiations.

Thereafter, the Kunming-Montreal Global Biodiversity Framework (“KMGBF”), was adopted at the CBD’s 15th Conference of Parties (“COP”) after four years of consultations. It outlines an ambitious plan for achieving a world in harmony with nature by 2050. Target 13 of the framework requires parties to implement effective legal, policy, administrative and capacity building measures at all levels, as appropriate, to ensure the fair and equitable sharing of benefits derived from the use of genetic resources, digital sequence information related to genetic resources. This directly supports the realisation of Goal C of the KMGBF which calls for the fair and equitable sharing of benefits arising from the use of genetic

* Prepared by Esha Joshi, with comments from Neema Pathak Broome, for Kalpavriksh – Environment Action Group, Pune 21/04/2025).

¹ Convention on Biological Diversity (adopted 22 May 1992, entered into force 29 December 1993) 1760 UNTS 79 (CBD), Introduction.

² CBD, art 8.

resources with IPs & LCs and the protection of traditional knowledge associated with genetic resources in accordance with internationally agreed Access and Benefit Sharing (“ABS”) instruments.

- **What is the Cali Fund?**

It was in this backdrop that, the Cali Fund was [established](#) during the CBD COP-16 as a mechanism to ensure the fair and equitable sharing of benefits arising specifically from the use of digital sequence information (“DSI”). This was in furtherance of [decision 15/9](#) the COP which first acknowledged the need to develop a solution for the sharing of benefits arising from the use of digital sequence information.

- **What is Digital Sequence Information and why is it so important?**

Before we understand, the modalities of the fund and its implications on national biodiversity laws, the concept of ‘digital sequencing’ must be explained. There is no settled and official definition of the term ‘Digital Sequence Information’ under the CBD or any other international instruments that may relate to it. [Genetic sequence information is the manner in which the DNA and RNA are structured in an organism.](#) Through the CBD Secretariat’s 2020 [note](#) on DSI, one may conclude that anything in the form of a sequence stored in computer memory or data storage which has been derived through the processing of data and relating generally to an underlying genetic resources can constitute DSI. The Secretariat outlined 4 major groups of DSI as follows: “

1. *Group 1 has as a narrow scope or proximity to the genetic resource and is limited to nucleotide sequence data associated with transcription.*
2. *Group 2 has an intermediate scope and extends to protein sequences, thus comprising information associated with transcription and translation. Two interpretations for the scope of this group are possible, either subject matter is strictly limited to nucleotide and protein sequence data, or it includes information associated with transcription and translation more broadly, for instance, functional annotations of genes, gene expression information, epigenetic data, and molecular structures of proteins.*

3. *Group 3 has a wider intermediate scope and extends to metabolites and biochemical pathways, thus comprising information associated with transcription, translation and biosynthesis.*
4. *Group 4 has the broadest scope and includes data/information with the weakest proximity to the underlying genetic resource, thus extending to behavioural data, information on ecological relationships and traditional knowledge, thus comprising information associated with transcription, translation and biosynthesis, as well as downstream subsidiary information.”*

Major uses of DSI may include biodiversity research, developing of commercial treatments and vaccines, and research in conservation, food security and energy. Thus, DSI is critical for advancing scientific research and innovation. Restricting its open access could have adverse consequences for the same. On the other hand, it is also vital to acknowledge and compensate indigenous people and local communities for their contributions to the derivation of DSI. However, the fact that it is often held in open-access databases and can be based on comparing hundreds if not thousands of digital sequences from varied species, makes it difficult to trace the origin of the DSI and consequently share the benefits arising from it with the concerned community. It also makes it a challenge to comply with the ‘Mutually Agreed Terms’ and ‘Prior Informed Consent’ requirements set out under the Nagoya Protocol. Thus, countries have been attempting to develop a multi-lateral mechanism, to ensure that benefits both monetary and non-monetary are received by the people and communities whose traditional knowledge and control over genetic resources enables the development of DSI. This has been the major rationale behind the development of the Cali Fund at COP-16.

- **How is the fund to be operationalised?**

A. Contributions

In Enclosure 1 of CBD COP-16 decision 16/2, a list of sectors that may benefit directly or indirectly from DSI is provided which includes pharmaceuticals, nutraceuticals, cosmetics, biotechnology, animal and plant breeding, etc. Users from these industries are expected to make contributions to the fund. The Conference of Parties at its 17th meeting is expected to establish the thresholds and contribution rates for these users. However, for now entities that exceed 2/3 thresholds mentioned in paragraph 3 of the decision should contribute 1 % of their profits or 0.1 % of their total revenue to the fund per year.³ As indicated in paragraph 9 of the decision, entities operating public databases, public research and academic institutions are not expected to monetarily contribute to the fund.

B. Nature of Benefits

The benefits can be both monetary and non-monetary in nature with, non-monetary benefits being complimentary to monetary ones. Non-monetary benefits include support for “*capacity-building for the generation of, access to and use and storage of digital sequence information on genetic resources, as well as the self-identified needs of indigenous peoples and local communities, including women and youth within those Communities*”⁴. This is to be facilitated through the existing ABS clearing house mechanism.

C. Disbursement⁵

The funding is to be disbursed through direct allocations to countries. The amounts disbursed to each individual country will be determined on the basis of funding available in the global fund and the criteria listed in ‘Enclosure II’ which includes biodiversity richness, geographical origin of the genetic resources and the capacity needs for the conservation and sustainable use of biodiversity. The Conference of Parties will derive a formula in its 17th meeting based on these criteria. Recipient parties may designate or establish a national entity to receive and distribute the funds in a transparent manner. These entities must operate in line with internationally accepted fiduciary standards and also, provide reports on activities

³ Thresholds provided are as follows – ‘total assets: 20 million United States dollars, sales: 50 million dollars, and profit: 5 million dollars’.

⁴ Convention on Biological Biodiversity, Conference of Parties 16, Decision 16/2, Paragraph 7.

⁵ Convention on Biological Biodiversity, Conference of Parties 16, Decision 16/2, Paragraphs 18-20.

undertaken. These funds should support the realisation of the objectives of the CBD in developing country parties especially towards the conservation and sustainable use of biodiversity, research on biodiversity, benefit of indigenous people and local communities and capacity building as under Article 16 of the convention.

- **Future Actions**

Decision 16/2 also outlines actions to be undertaken at COP-17 and COP-18 to review and increase the efficacy of the fund.

A. COP-17

1. Develop additional modalities for the fair and equitable sharing of benefits arising from DSI.
2. Develop tools and platforms for making DSI available and accessible in a transparent and accountable manner
3. Establish thresholds and contribution rates for entities falling under Enclosure I.
4. Develop a formula for the allocation of funding based on recommendations from the recommendations of the Steering Committee under Enclosure IV.
5. Develop a methodology for reviewing the effectiveness of the multilateral mechanism.

B. COP-18

1. Review the effectiveness of the multilateral mechanism including, the global fund.
2. Consider any adjustments necessary to increase the effectiveness and efficacy of the multilateral mechanism including, the global fund.

- **How does it relate to domestic obligations vis-à-vis ABS?**

As per paragraph 26 of decision 16/2, without prejudice to national legislation, where parties put in place domestic mechanisms for access and benefit-sharing arising from DSI, they are encouraged to align them with the multilateral mechanism. This is to ensure that, there is no duplication of expectations pertaining to sharing of benefits from the use of DSI. Parties are also encouraged to take administrative, policy or legal measures that are consistent with national legislation to incentivise users to contribute to the global fund.

- **The Indian Context**

At present, the Indian Biological Diversity Act 2002 (“BDA”), does not provide for any mechanism for the access to and sharing of benefits arising from the use of DSI. Section 2 (a) of the Act which defines “access” as “*collecting, procuring or possessing any biological resource occurring in or obtained from India or traditional knowledge associated thereto, for the purposes of research or bio-survey or commercial utilisation*”, may include an implicit reference to DSI. However, section 2 (b) which refers to ‘biological resources’ appears to include only tangible components. The Biological Diversity Rules 2004, make a limited reference to DSI in Rule 16 wherein, foreign entities seeking the approval of the National Biodiversity Authority for grant of intellectual property rights must also do so for inventions based on DSI.

However, India’s [2019 note](#) to the CBD Secretariat, states that terms defined under the BDA such as ‘research’ and ‘information on biological resources’ would cover DSI. It also acknowledged that accessing DSI would amount to accessing the genetic resource itself. Furthermore, the recently notified Biological Diversity (Access to Biological Resources and Knowledge Associated thereto and Fair and Equitable Sharing of Benefits) Regulations, 2004 include DSI within the ambit of ‘biological resource’ in the context of benefit sharing mechanisms under Sections 3 and 7 of the principal Act. Thus, DSI now forms an integral part of India’s ABS framework.

The National Biodiversity Fund established under Section 27, is currently the repository for all loans, grants and benefit-sharing amounts received by the NBA. This fund is to be used to disburse money to benefit-claimers, fulfil the objectives of the Act and also to ensure socio-economic development of areas from where resources are derived. When the Cali Fund is operationalised, the NBA could receive DSI contributions received from the Cali fund into this fund or if they so choose, establish a separate fund for the same.