

FOREWORD

Meridian's current work on the topic of digital sequence information (DSI) originated decades ago with our work on plant genetic resources (PGR) that began in the 1980s. In the intervening decades, we have continued our work in international consensus building and problem solving on PGR and related issues including but not limited to access and benefit sharing, intellectual property rights, biodiversity, and more recently DSI.

Over the past 18 months, one of the dynamics we have observed in our work with parties, rightsholders, and stakeholders on DSI and benefit sharing is that the challenges presented by the search for an equitable and workable benefit sharing mechanism make it very difficult to discuss other aspects of DSI. The complexity of those issues understandably demands a great deal of attention. However, the gravitational pull of such issues can make it difficult to find space to discuss other aspects of DSI, particularly the governance of an eventual DSI fund and the ways in which the fund would be deployed in order to best support conservation and sustainable use of the world's biodiversity.

We know that for both providers and users of DSI, determining equitable ways to govern and disburse an eventual DSI fund and understanding best practices for promoting the greatest impact on biodiversity conservation are issues of great concern. However, for the reasons mentioned above, the focus of conversation has typically been how to get money into the fund rather than how to get money out to the frontlines of conservation. A common sentiment we have heard is, how can we talk about how to spend money we do not have? Still, our idea is that knowing how a fund will be governed and spent will help to move the conversation on the overall mechanism forward.

As with all complex topics, there is no shortage of interrelated issues to discuss. Our hope is that the results of the collective exploration of these topics in Oslo will be useful to parties in their forthcoming meetings to determine the role of DSI in funding biodiversity conservation.

Sincerely,



Todd Barker Chief Executive Officer, Meridian Institute

DISCLAIMER

The document below is intended to summarize the meeting held at the Lysebu in Oslo, Norway from 2 – 4 October 2023. It is not meant to serve as a summary of comprehensive consultations. Questions around digital sequence information are inherently complex given that the topic touches multiple sectors, and areas of expertise. Due to limitations of time prior to the meeting, the scope of the work, and space at the meeting venue, we were not able to consult with all relevant stakeholders and interested parties. As a result, this summary does not reflect the full range of views related to digital sequence information, and citations do not reflect the breadth of literature and research about the subject.

This document presents an interpretation and summary of what transpired at the October 2023 meeting from the viewpoint of the Meridian Institute team. In drafting this document, we summarized conversations without attribution, while pulling out key themes, insights, trends, and areas of disagreement. Thus, this document is not intended to represent the collective view or any formal positions of the meeting participants individually or collectively. Meridian intends to draw upon the contents of this document to inform and guide future work. This is a public document, submitted to the Open-Ended Working Group on DSI in advance of their meeting from November 14-18, 2023. We encourage stakeholders to share the summary and to contact us with questions.

ACKNOWLEDGEMENTS

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ABOUT MERIDIAN INSTITUTE

Meridian Institute is a mission-driven, non-profit organization that has helped our clients and partners develop and implement solutions to complicated, often controversial problems—big and small, global and local—for over two decades.

We do this with an innovative approach that brings together three elements: our deep understanding of the issues at hand, as well as the people, politics, and power dynamics that surround them; our dedicated, expert team; and our ability to foster constructive discussions, manage decisions, and support actions that shape the world for the better. We work not only to shape meaningful consensus and action in the near term, but also to build our partners' capacity for cooperation that often continues for years, even decades.

We focus on five key services: collaboration, implementation, strategy, research, and philanthropic support. We bring our skills to bear on a diverse range of issues, including environment & natural resources, climate change, agriculture & food systems, forests, health, oceans & coasts, resilience, science & technology, and water. Across issues, boundaries, and systems, our work is a catalyst for powerful impact.

OSLO MEETING FACILITATION TEAM

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Executive Summary

Meridian Institute is pleased to present this summary of the meeting we convened in early October in Oslo, Norway, titled "Dialogue on the Design of a Global Fund from the Use of Digital Sequence Information (DSI)." Over the course of the meeting, we made progress towards understanding the range of perspectives about the intent and envisioned impact of a Global Fund from the use of DSI (referred to henceforth as "the fund" or "the global fund"); discussed financial mechanisms and governance structures that can enable the fund to achieve its envisioned impact; and explored how a Global Fund from the use of DSI might interface with other global biodiversity funds and/or conservation and sustainable use initiatives.

KEY HIGHLIGHTS

- On fund design. The objectives of the fund need to be grounded in the Convention on Biological Diversity (CBD) COP decision 15/9 and the Kunming-Montreal Global Biodiversity Framework (GBF). Further conversation is needed on how the three pillars of the CBD relate to the DSI global fund. The outcomes of the fund could primarily focus on DSI capacity building if the volume of the fund is on the lower end of expectations and/or on sustainable development and conservation if the fund is closer to the higher end of expectations. Incorporating trust-building measures in the design of the fund is critical, and there may also be an important role for systems thinking in designing the fund.
- On disbursement mechanisms and financial vehicles. There are a variety of disbursement mechanisms that might work for the fund. These include country-level disbursement, either through National Biodiversity Strategic Action Plans (with a budget and national resource mobilization strategies per guidance from National Biodiversity Finance Plans) or through country-level ecosystem-scale funds (such as the Amazon fund); regional landscape or ecoregional disbursement; and Indigenous-led, regional or region-agnostic funds (such as the Indigenous Amazonian Fund, Meso American Territorial Fund, and Nusantara Fund).
 In addition, there are a variety of financial mechanisms that might be useful to consider for the fund, including both mechanisms with traditional grant-like qualities and mechanisms that could garner a financial return on investment. These disbursement and financial mechanisms are not necessarily mutually exclusive and could be applied in the form of different funding streams. In any case, it is critical that Indigenous Peoples (IPs) and Local communities (LCs) receive money and have a say in how resources are spent.
- On governance. There will likely be a need for some sort of tiered and principle-driven governance structure which includes representatives from countries as well as rightsholders, stakeholders, and potentially representatives of other international instruments dealing with DSI. Lessons learned from other funds indicate that an emphasis on learning and adaptation built-in early in the lifespan of the fund could increase its impact.
- On payment schema. While not the focus of this meeting, participants learned about and
 discussed four proposals regarding who should pay into the global fund and how much they
 should pay. In addition, the group discussed two modalities for payment—one being that users
 pay directly into the fund, the other being that countries collect payments from users in their

jurisdictions and transfer those payments to the fund. There may be a need for multiple policy options on payment, both to ensure multiple streams of funding and to ensure that parties have fit-for-purpose solutions.

PROCESS RECOMMENDATIONS

Based on Meridian Institute's understanding and analysis of the proceedings of the October 2023 convening in Oslo, the Meridian team recommends the following actions to advance work on the design of the fund:

- A. Discuss the potential of having multiple funding streams originating from a common fund with different beneficiaries. This conversation will depend on how much money is in the fund. The allocation of benefits to these different streams will also need to be discussed.
- B. Determine the funding priorities of the fund (e.g., activities, entities, geographies). This may be best accomplished by using the funding streams discussed in this document as working assumptions and subsequently prioritizing which streams to implement based on scenarios of different volumes of money in the fund (e.g., small, medium, and large).
- C. Incorporate systems thinking and systems change theory into the design of the global fund, and likely the DSI multilateral mechanism, especially with respect to determining disbursement of benefits. Funding multiple efforts in a target area with the ability to impact different parts of the ecosystem and peoples in a particular geography would be more effective than traditional, one-off grants.
- D. Provide support for negotiator-to-negotiator exchange on the innovative financial mechanisms and disbursement practices which surfaced during discussions about a DSI fund and are captured in this report, including how they might relate to Resource Mobilization more broadly. This could be done, for example, by exploring how to leverage pre-purchase commitments, biodiversity credits, and other innovative financial mechanisms identified by BIOFIN.
- E. Build on the ideas presented in this document about how to create an adequate governance structure. The activities and entities to which funds will be disbursed should inform the governance structure design. For instance, the governance structure should include representatives from all stakeholder groups intended to benefit from the fund, including IPs and ICs
- F. Determine a target volume for the fund or, at a minimum, devise and attach prospective target amounts to the different existing proposals for payment schema.
- G. Consider further how to best align the fund with the benefit sharing mechanisms from the other international instruments dealing with DSI. This could be done through an analysis of the pros and cons of creating a unified system or more specialized systems.

Introduction

Meridian Institute convened an informal meeting in Oslo, Norway on 2-4 October 2023 to inform thinking on the design of the digital sequence information (DSI) global fund mentioned in decision 15/9 of the UN Convention on Biological Diversity (CBD) at COP15. Comprising individuals from government, the finance sector, industry, civil society organizations, philanthropy, and academia, discussions explored perspectives on foundational attributes of the fund, including its objectives and desired impact; the governance of the global fund; and disbursement and financial mechanisms. The group also generated ideas about payment schemas for populating the fund. The group raised additional topics at the meeting including Resource Mobilization at the CBD and the multilateral mechanism for DSI.

Foundational Attributes

This section discusses the foundational attributes upon which the design of the global fund could be based, including its objectives, desired outcomes, beneficiaries, and principles. It is important to note that the topics discussed in this section and those discussed in subsequent sections are interrelated.

OBJECTIVES

Integral to the conversation about the DSI fund(s) are the purpose and objectives (we will use these terms interchangeably throughout this report) of the fund. The discussion of the fund objectives, which took place at various points throughout the meeting, was largely grounded in the text of the GBF and related decisions from CBD COP15. Of particular importance are paragraphs 16 and 10 of decision 15/9, in which the Conference of the Parties:

"Decides to establish, as part of the Kunming-Montreal Global Biodiversity Framework, a multilateral mechanism for benefit-sharing from the use of digital sequence information on genetic resources, including a global fund."

"Recognizes that the monetary and non-monetary benefits arising from the use of digital sequence information on genetic resources should, in particular, be used to support conservation and sustainable use of biological diversity and, inter alia, benefit Indigenous Peoples and local communities;"

Goal C of the Kunming Montreal Global Biodiversity Framework also states:

"The monetary and non-monetary benefits from the utilization of genetic resources and digital sequence information on genetic resources, and of traditional knowledge associated with genetic resources, as applicable, are shared fairly and equitably, including, as appropriate with Indigenous Peoples and local communities, and substantially increased by 2050, while ensuring traditional knowledge associated with genetic resources is appropriately protected, thereby contributing to the conservation

and sustainable use of biodiversity, in accordance with internationally agreed access and benefit-sharing instruments."

Given its genesis, the fund should contribute to and align with the three pillars of the CBD—conservation of biodiversity; sustainable use of biodiversity; and the fair and equitable sharing of the benefits arising from the use of genetic resources—and advance the priorities of the GBF. Participants reflected nuanced differences in their understanding of the relative importance of the three pillars. Some saw benefits sharing as an objective in and of itself and on par with conservation and sustainable use, while others understood it as a means through which to achieve the other two pillars. Still others saw benefits sharing as the primary objective of the fund, with conservation and sustainable use as secondary objectives that would largely be addressed by other parts of the CBD's broader Resource Mobilization effort. These distinctions indicate the need for parties to gain clarity on the specific purpose of the fund and multilateral mechanism.

DESIRED OUTCOMES

Almost all understandings of the desired outcomes and activities of the fund surfaced at the meeting are based on the idea that the fund will unlock sustained and perpetual private sector contributions to support efforts aimed at biodiversity conservation and sustainable use around the world. However, participants expressed a range of ideas about the kinds of actions this fund should support.

One vision was for the fund to primarily, if not exclusively, support capacity development and technology transfer for the use of DSI. Those who supported this view felt that allocation of the fund should be tied specifically to building capacity for DSI knowledge generation, interpretation, and use in provider countries. From this perspective, the fund's purpose is to help close the capacity gap and enable people across all countries to analyze and derive benefit from genetic information about the natural environment. This capacity development would then, in theory, contribute to conservation and sustainable use.

Other participants conveyed a vision for the fund to support larger and more systemic efforts to conserve biodiversity and advance sustainable use projects along with supporting DSI capacity development and technology transfer. Ultimately, the breadth of the fund's purpose and scope of its objectives will be closely tied to the amount of money generated for the fund and how that amount contributes to and fits into the CBD's overall Resource Mobilization strategy.

BENEFICIARIES

The group also discussed who should be beneficiaries of fund-supported activities. Suggested beneficiaries and locations included:

- Least Developed Countries and Small Island Developing States (LDCs and SIDs);
- Non-developed megadiverse countries; and
- Indigenous Peoples and local communities irrespective of geographic location, including in developed countries.

Again, the questions of where and to whom the funds would be deployed and how allocations would be prioritized are related to the envisioned size as well as governance of the fund. These beneficiaries need

not be mutually exclusive. Depending on the amount of money in the fund, funds could potentially be allocated (via different funding streams) across these different beneficiaries and locations based on a corresponding decision criterion.

PRINCIPLES

The conversation around the fund's purpose was informed by and intertwined with design principles. During the meeting we used the principles noted in paragraph 9 of Decision 15/9 as a starting point, as follows:

"...that a solution for fair and equitable benefit-sharing on digital sequence information on genetic resources should, inter alia:

- (a) Be efficient, feasible and practical;
- (b) Generate more benefits, including both monetary and non-monetary, than costs;
- (c) Be effective;
- (d) Provide certainty and legal clarity for providers and users of digital sequence information on genetic resources;
- (e) Not hinder research and innovation;
- (f) Be consistent with open access to data;
- (g) Not be incompatible with international legal obligations;
- (h) Be mutually supportive of other access and benefit-sharing instruments;
- (i) Take into account the rights of Indigenous Peoples and local communities, including with respect to the traditional knowledge associated with genetic resources that they hold;"

Given that the fund idea originates from the CBD and will be built from the framework of 15/9, the design of the fund needs to take the principles above into account. The group in Oslo discussed these principles and suggested the following revisions and additions to further enhance the principles from 15/9:

- **Trust-based**. Trust building will support the design of the fund (and multilateral system). Some felt that trust is an emergent property of a well-functioning system, rather than a design principle; trust is built over time based on transparency and honesty rather than assumed from the start. In this view, trust can be a metric for evaluation.
- Not hinder research. Some wanted to see this language, which comes directly from 15/9, framed more positively to invoke a spirit of fostering research. This reframe would bring the principle closer to recognizing DSI and research as benefits in their own rights as reflected in the decision on DSI from the Intergovernmental Conference on Marine Biodiversity of Areas Beyond National Jurisdiction (BBNJ).¹ Additionally, promoting (or not hindering) research is a principle that may apply more to the design of the multilateral system than the fund itself (see page 18).

¹ https://www.un.org/bbnj/

• **Incorporate systems thinking.** One of the opportunities for this fund could be to bring a systems-based approach to its grants or investments. Many felt that funding multiple efforts in a target area with the ability to impact different parts of the ecosystem and peoples in a particular geography would be more effective than traditional, one-off grants.

Disbursement and Financial Mechanisms

DISBURSEMENT MECHANISMS

One of the main topics of conversation at the meeting was how funds would be disbursed. This included questions about the characteristics of recipient or intermediary institutions, how money would flow from the fund to the ultimate beneficiaries, and which financial mechanisms would be used to structure and enable the transactions.

For the purposes of this discussion summary, the terms "disbursement vehicle" and "disbursement mechanism" refer broadly to institutions and processes through which money would flow from the fund to beneficiaries. "Financial mechanism" and "financial vehicle" refer to the instruments that structure how the money flows (e.g., via grants, debt lending, or equity investments). Infused throughout the discussion were the themes of systems thinking and innovative finance. Participants discussed the following types of mechanisms:

- Country-level disbursement. National governments would receive funds to address their national biodiversity and conservation priorities. Governments, or decision-making boards made up of national actors, would decide which ministries, projects or organizations in their countries to fund on the ground. This approach respects national sovereignty, can easily integrate with existing initiatives to develop and execute National Biodiversity Strategies and Action Plans (NBSAPs), and could solve a portion or all of the funding needs called for in the National Biodiversity Finance Plans (NBFPs). On the other hand, disbursement to national governments is a less direct way to get funding into the hands of frontline biodiversity protectors. This mechanism may also preclude funds from reaching IPs in countries which do not recognize IPs or their rights within their territory. Further, nationally focused disbursement could miss important opportunities for common eco-regional priorities such as transnational forests, mountain ranges or bodies of water.
- Eco-regional or landscape-scale intermediary funds. Eco-regional funds could serve as intermediary bodies to receive money from the fund and redistribute it to address landscape-scale priorities. These types of funds have a greater degree of knowledge about the ecological complexities of the region in which they work and often have strong connections to local organizations and communities that would be the ultimate beneficiaries. In addition, regional funds have the potential to drive systems change at a landscape scale by strategically deploying funds to a suite of projects that can have synergistic effects. Regional funds can be governed at and disburse funds across different scales. Some operate at the country level (e.g., the Amazon

Fund in Brazil²), and some are transboundary and encompass all of the territories across a given ecosystem (e.g., the Congo Basin Forest Fund³).

- Indigenous-led intermediary funds. Per decision 15/9, the fund is supposed to benefit, inter alia, IPs and LCs. However, it is often difficult for large, global donors—whether they be philanthropic, private sector, or multilaterals—to effectively channel funds to IPs and LCs. This challenge may be due to several factors including the time and trust-building required to establish strong partnerships with IPs; the potentially small size of some investments; lack of capacity among IP and LC organizations to engage with complex, global bureaucracies; language barriers; and different funding needs of IPs and LCs relative to other types of grantees.
 - Indigenous-led funds can help overcome some of these traditional hurdles by aggregating money from larger granting agencies and regranting it to Indigenous communities or organizations with whom they have relationships for specific projects. Furthermore, there is growing recognition that traditional philanthropic models of funding and reporting are often poorly suited for IPs. Progressive philanthropies are shifting their approach accordingly to incorporate measures such as giving grants with longer timeframes; modified reporting requirements, including the option to report in oral rather than written form; offering greater general overhead support; and providing IP and LC organizations the flexibility to determine their own priorities and build organizational capacity.
- Small-grants program. A small grants program could be nested within any of the disbursement mechanisms above to try to ensure that money reaches actors on the ground. These programs typically offer smaller amounts of funding compared to larger grants, often with the intention of empowering local communities, grassroots organizations, or smaller-scale initiatives to address specific issues or challenges. Small grants programs are often designed to be accessible and flexible, making it easier for recipients to apply for and receive funding for projects that can have a meaningful impact at the local or community level. Some participants expressed concerns that, in order to be effective at the scale needed to conserve and sustainably use biodiversity, small grants programs would need to use a systems-based approach with the goal of yielding greater change than can be achieved via one-off grants.

Many participants felt there is significant potential and merit in the idea of the fund comprising multiple streams of funding which could be channeled through different disbursement mechanisms and be used to address different priorities. In addition, many stated the importance of ensuring that IPs and LCs are beneficiaries and are able to determine how to use the benefits received.

FINANCIAL MECHANISMS

One of the objectives of the Oslo meeting was to bring a mixture of novel perspectives from the finance sector into the discussion about DSI. Because the fund is not yet established, there is an opportunity to bring creative thinking and innovation into the dialogue about how the fund can finance activities that will advance its objectives. As part of this element of the meeting, the TransCap Initiative presented case examples on revolving finance credit facilities; concessionary loans; conservation bonds; and mobile, distributed, and community-led finance. In addition, the group discussed the following financial

² https://www.amazonfund.gov.br/en/home/

³ https://climatefundsupdate.org/the-funds/congo-basin-forest-fund/

mechanisms that could inform the design of the global fund and/or the broader conversation on resource mobilization:

- Biodiversity credits. According to UNDP, biodiversity credits are assets whose value is
 "determined by the measured and verified progress made in improving the overall well-being of
 an ecosystem and/or the quantity of target species in the predefined territory." The sale of
 these credits could be a part of the potential streams of capital going into a fund. IUCN has
 conducted market scoping on biodiversity credits.4
- Tiered private sector engagement. One expert felt that companies should be able to engage in
 the global fund at varying levels. The base level would be contributing to the fund per one of the
 schemes described in the payment schemes section below, while higher levels of engagement
 could include purchasing biodiversity credits (see above) and/or additional financial or nonmonetary commitments to protecting biodiversity.
- **Pre-purchase commitments.** These commitments would allow companies to agree on trigger points for increased payment amounts based on what is achieved by the fund. There may be a commitment to pay the minimum amount to operate with a DSI license, but any industry player might commit to more based on either the impact of the fund, or the ability of the fund to raise a pre-determined amount of money. This would be a way to de-risk contributions into the fund for corporate players wary of being the first or only contributors to a fund. Seed funding from donor countries or philanthropy for example, might contribute a pre-determined amount as a trust-building mechanism. Once that threshold has been reached, industry, having precommitted to an additional amount of its own, would then contribute the higher amount. In this way, both donor countries and industry would limit the risk of being the first or only contributors. Key to this system is the publishing of commitments in advance, so that all stakeholders can know what they are signing up for and see what others have committed to.

Some of these innovative financial approaches go beyond the traditional grant-based model of benefits sharing. With respect to the revolving credit facility specifically, the group discussed whether the fund should have an investment mechanism (or mechanisms) that would provide financial return on investment to the fund itself. Some felt this would allow for more people and entities to invest in biodiversity conservation and restoration and provide for different kinds of capital for biodiversity conservation beyond grants. Return on investment would be a way to replenish and sustain the fund. Returns would not yield dividends to industry, as such an arrangement would be misaligned with the idea of benefits sharing. Some feel that a combination of grant-based and investment-based funding would allow the fund to enable more innovative and systemic approaches to solving the biodiversity crisis.

While not directly related to the fund per se, some ideas emerged related to the financial sector and biodiversity conversation more broadly. There are two areas within the finance system that should be analyzed to determine how they can best tip the system into positive feedback loops of biodiversity conservation and restoration. These include:

⁴ GIBIP. 2019. Global inventory of biodiversity offset policies (GIBOP). International Union for Conservation of Nature, The Biodiversity Consultancy, Durrell Institute of Conservation & Ecology. Available from https://portals.iucn.org/offsetpolicy/

- Creating standardized green investment criteria to clarify how investments might affect biodiversity. These could be based on existing indices, such as the Agricultural Biodiversity Index, or there could be investment in creating new indices.
- Understanding the willingness to pay for biodiversity. This would require conducting market analyses to determine how investors, consumers, and the private sector value biodiversity.

DISCUSSION TAKEAWAYS

The choice of disbursement and financial mechanisms will depend on the purpose, activities, and beneficiaries that negotiators ultimately decide are appropriate for a global fund from the use of DSI. As is the case with the purpose and beneficiaries of the fund, the application of certain disbursement and financial mechanisms are not mutually exclusive. There could be different streams of funding that address varying needs for biodiversity conservation and sustainable use around the world through different financial mechanisms. The choice and/or potential combination will, again, be highly dependent on the amount of money in the fund. Likewise, there could also be a combination of different ways in which the fund is populated (see payment schema section below).

Governance

GOVERNANCE PRINCIPLES

The group heard a presentation on lessons learned from other fund governance structures, which preceded the release of an official study commissioned by the CBD secretariat. Spurred by this presentation, the group discussed principles for consideration in the governance of the global fund. The group was generally enthusiastic about the principles from 15/9 and talked in more depth about the following additional governance principles:

- Iterative and promoting learning. Research on other funding mechanisms has shown that learning efforts programmed too late in the life cycle of a fund can calcify practices and limit the ability to improve processes and outcomes. Creating mechanisms to allow the fund decision-making body to learn from successes and failures right from the beginning would allow for more agile adaptation of their funding strategy and project criteria.
- Adaptive, responsive and flexible. Like the principle of being iterative and promoting learning, there was a desire for the fund to have 'structures not shackles,' with flexibility built into the design of the fund. One specific suggestion was for the fund to allow a higher percentage of projects to "fail" in delivering desired outcomes or in generating return on investment (if it is decided that the fund can generate ROI) than most funds are typically comfortable with. This leniency could allow the fund to support projects that are more responsive to the needs of potential beneficiaries, such as IPs and LCs. This would also allow for money to get out the door more easily than traditional funds. There would need to be an understanding that there will be inevitable missteps along the way but that the tradeoff of getting money to front line conservation efforts more quickly would be worth the risk of the occasional poor investment or grant.

• **Promoting engagement with stakeholders**. The fund should be responsive to and proactively engage with stakeholders and rightsholders, including but not limited to IPs and LCs.

GOVERNANCE STRUCTURE

Building on the governance principles, the group generated a few rough proposals of potential governance structures. These ideas are in preliminary stages of development and will require additional conversation at future meetings. The following potential structures were suggested:

- Fund governing body → countries. In this simple governance structure, a subset of the parties to the CBD (or the eventual parties to a decision on a DSI multilateral mechanism) would rotate through a decision-making body to broadly oversee the spending of funds through disbursement to countries. The decision-making body would have to decide how to apportion the money to the global regions and then to the individual countries within the regions. The countries would then determine their own spending based on their NBSAPs and NBFPs. It would be up to countries to determine how best to involve rightsholders and stakeholders in their decisions.
- Fund governing body → regional bodies. A governing body comprised of a rotating subset of
 parties to the CBD (similar to the model proposed above) would oversee fund disbursement to
 regional governing bodies who would set priorities for and disburse monies within their regions.
 IPs and LCs would sit on the regional governing boards, which would provide more certainty that
 benefits were being distributed to IPs and LCs. These regional bodies could also involve the
 private sector or other user representation.
- Inter-fora group → fora parties/rightsholders/stakeholders → regions or countries. This model was suggested as a solution to the potential problems of having multiple instruments collecting DSI benefits in parallel. This model envisions a high-level inter-fora strategic body supported by regional or otherwise decentralized advisory bodies. The highest governing body would be comprised of parties (and potentially rightsholders and stakeholders) to all the fora that deal with DSI (WHO-PIP, ITPGRFA, BBNJ, WIPO, CBD, etc.). This body would set the objectives of benefits sharing related to DSI and coordinate accordingly. Decision-making power would then flow back down to fora-specific bodies to be dispersed to regions or countries in a manner similar to the ones articulated above. It is also plausible that the highest-level governance could feed into regional or country-level structures that cut across the fora.

This model presupposes some sort of alignment between DSI access and benefits sharing schema across the fora. Benefits could be collected at one point for all instruments, or each instrument could send on a portion or all of its benefits to this fund, recognizing the importance of coordinating benefits sharing. This idea is very much in its infancy and is an initial sketch of how to manage the complexity of DSI across instruments. It is also worth noting that some view the interfora, multistakeholder body as too complex, and advocate instead for an interagency body comprised solely of parties.

DISCUSSION TAKEAWAYS

A common element of the various governance structure options outlined above is a tiered model in which decision-making power flows from a high-level body down to countries or regions. This tiering would look different depending on the objectives and disbursement mechanisms of the fund. The group

also discussed the need for the governing bodies to have decision criteria for the allocation of funds at both a gross level (e.g., to countries or regions) and a fine level (e.g., to specific projects or actors). Depending on the structure that is ultimately decided upon, there may be different decision criteria or degrees of specificity in the criteria for different tiers of governance.

Throughout all the models mentioned above, there are various points at which stakeholders and rightsholders can be involved in the governance. For example, IPLCs—and potentially private sector representatives as well—could sit on national or regional governing committees or could sit on or observe an envisioned interfora body. IPs and LCs as well as the private sector have stated a desire to be involved in the governance of the fund. The involvement of rightsholders can ensure that the fund benefits IPs, as is called for in the 15/9 decision. The case of REDD+ governance is a useful analogue in this case: the governing body of the REDD+ mechanism has seats for Indigenous representatives with veto power. The private sector hopes to be involved in governance of a fund; at minimum, they would like to be made aware of how funds are spent and ideally, they would like some say in governance of the strategic direction of the fund.

Payment Schemes and Populating the Fund

During the meeting, four proposals surfaced regarding who should pay into the fund and how much they should pay. Some of these proposals have already been formally discussed in the UN CBD process previously, and others were brought to the table for the first time during this meeting.

AFRICAN UNION PROPOSAL

This proposal, which was brought by the African Union to COP15, has the following characteristics:

- Voluntary 1% levy on all retail sales of products that use nature, paid by retailers into the fund.
- No international legally binding obligation for business for DSI benefits sharing.
- Legally binding reporting requirement from all retailers to disclose contributions.
- There is an open conversation about who should pay; previous versions of this proposal noted that developed countries' retailers should pay, while a more recent iteration would invite any retailer involved in the formal economy around the world to pay. This shift aims to capture the broadest base of payment while avoiding regressive taxation on the poorest of the world (who primarily use informal systems of commerce and trade).

PAYMENT ON TURNOVER

This proposal has the following characteristics:

- Users of DSI and/or physical genetic resources would be obligated to pay a certain percentage (as yet to be determined) of their past annual sales into a fund.
- Users, in return for paying, would be granted freedom to operate for all purposes without further benefits-sharing-related obligations.

- The mechanism would be tiered such that the minimum scope would be DSI-only, with the option for countries to include their physical genetic resources as well.
- Provider countries would only be eligible for benefits from the fund if they contribute their DSI.
- Provider countries would be eligible for more benefits if they also include their physical genetic resources.
- User payment amounts would increase from a given minimum for the DSI-only tier (according to a pre-determined scale) as more countries choose to put their physical genetic resources into the multilateral system. Payment amounts would further increase if/when countries choose to have this mechanism apply to all other international instruments dealing with genetic resources as well as the CBD.
- The pool of resources available to the fund would therefore grow both as more countries
 contribute their physical genetic resources into the mechanism and as its scope expands to a
 broad and universal system to cover all manner of genetic resources (and derivatives of all
 kinds, including DSI) covering all contexts and uses, as a one-stop-shop.
- Which entities are or are not considered "users" is an ongoing discussion, although users are envisioned to be only entities that make money from the use of DSI.

PAYMENT FOR DATABASE INFRASTRUCTURE

This proposal has the following characteristics:⁵

- It is based on the idea that a fund should have multiple revenue generating schemes to avoid overreliance on a single means of generating resources (the risks of which are illustrated by the experience of the ITPGRFA benefit fund). Payment for the data infrastructure could be one of the streams in combination with other streams.
- The scheme is a "subscriber pays" model for access to the databases which house DSI. In order
 to preserve open access, the model could follow a 'freemium' subscription scheme based on
 existing models for all kinds of services (e.g., Spotify, ChatGPT) whereby anyone can access the
 entire collection but may pay for higher quality services. For instance, the higher quality version
 of Spotify is advertisement free, and premium ChatGPT includes image generation and better
 processing. In the case of DSI, a premium subscription might include interpretation or filtering of
 data.
- Proponents of this approach note that continued, permanent public funding of international
 databases is not guaranteed. Therefore, part of the revenue could be used to support the data
 infrastructure and part could be used to achieve the goals and targets of the GBF.
- Initial modeling of the concept projects potential revenues of between one and ten billion dollars annually.

PAYMENT USING "WATER" ON IMPORT TARIFFS

⁵ This proposal was originally published in the following paper: Oldham, P., & Kindness, J. (2022) Sharing Digital Sequence Information. Study for the European Commission. https://doi.org/10.5281/zenodo.6557191

This proposal surfaced at the meeting and is therefore in a very early stage. It is characterized by the following aspects:

- Developed countries (or another group to be agreed upon later) could use a percentage (as yet undetermined) of the "water" of their tariffs for relevant goods to collect funds for the global fund. "Water" is understood to be the difference between the legal limit at which countries can set their tariffs and the level at which they actually set them (most countries have "water," and in some cases a significant amount, to allow for flexibility in their tariff policy).
- The contents of containers are fairly easily referenced by ISO codes on ship manifests and materials relevant to CBD could therefore be relatively easily identified.
- Money derived from "water" from developed countries could be used to put into the global fund, while money derived from "water" in developing countries could be used to fund the national priorities set by a country's NBSAP.

The group did not discuss this proposal at length during the Oslo meeting. We look forward to hearing parties, stakeholders, and rightsholders engage further with this idea in the coming months. There is a study commissioned by the CBD whose aim is to determine funding potentials of different modalities. This document will be a critical element for the discussion of how to put money into the fund.

DISCUSSION TAKEAWAYS

There are essentially two potential modalities for payment: a) countries pay on behalf of their users, or b) users themselves pay into the fund. It is important to note that for DSI, the CBD has only issued decisions and as such has not created legally binding instruments. The enforcement of laws and regulations related to biodiversity and conservation ultimately lies with individual countries. Decisions from the CBD serve as a framework and guidance for nations to develop their own strategies and regulations to address biodiversity concerns, which may indirectly affect private sector activities. This presents a fundamental challenge to unilaterally obligating industry to pay into a fund. A group of countries could agree to pass similar national legislation which ends up obligating industry to pay (e.g., a sub-section of the EU), but this cannot be accomplished with a decision at the CBD COP alone.

It is possible to envision a solution on payment rates and trigger points that encompasses many of the ideas laid out in the various proposals. If and when parties agree to a solution at CBD, countries will, in most cases, need to translate those agreements into national (or regional) legislation to capture funds. These policy options might also allow for multiple revenue-generating schemes to hedge against overreliance on any single approach. Some participants pointed out that if multiple schemes were to be adopted, countries would need to avoid double taxation.

If parties decide they want a voluntary solution, there will need to be investment in social movements that motivate business to 'do better' and pay into the fund. This cannot happen through the CBD and will necessitate involvement from civil society. Voluntary payments from industry can exist alongside an obligatory mechanism and could potentially earn businesses some type of certification. Also, there could be a push to incorporate action on biodiversity conservation into financial risk disclosures and other investor-facing information about companies through Environmental Social Governance (ESG) or other Corporate Social Responsibility (CSR) reporting. That said, some participants in industry were concerned

that a voluntary mechanism would create an uneven playing field and disincentivize industry-wide participation.

Areas for Further Consideration

RESOURCE MOBILIZATION

Discussing how the fund will be populated and how much money it will amount to directly relates to the broader Resource Mobilization proceedings within the CBD, which the group discussed at length during the meeting in Oslo. This section captures highlights from that element of the discussions. CBD COP15 decision 15/7 in section C.1.c.iii reads:

"Increase international biodiversity-related financial flows and financial resources from all sources, mobilize additional resources including... Through the multilateral mechanism for benefit-sharing from the use of digital sequence information on genetic resources."

The DSI fund has a dual purpose—to serve as the benefits sharing apparatus for the use of DSI and to contribute towards the larger Targets and Goals articulated in the GBF through the Resource Mobilization conversation. It remains unclear, however, how much the funds captured from the use of DSI might reasonably be expected to contribute to mobilizing the resources needed to fill the biodiversity conservation funding gap, which is estimated to be just over 700 billion dollars. The payment models discussed above range from potentially meeting the entire amount of resources needed, to more modest percentages of the whole.

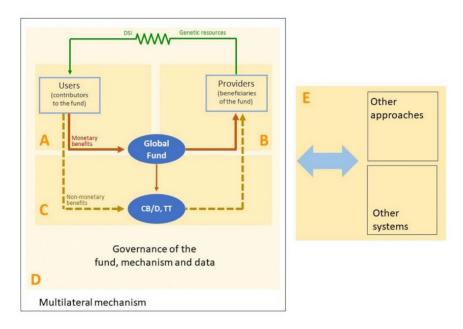
Given the range of potential funds that might be raised by the payment scheme proposals described above, it is difficult to consider the fund separately from the broader Resource Mobilization discussions. For this reason, it might be useful to bring some of the ideas discussed at the Oslo meeting, such as the application of systems-based investing and innovative financial mechanisms, to the broader Resource Mobilization community.

MULTILATERAL SYSTEM DESIGN

Another focus of some conversation of the meeting was how to discuss the fund independently from the DSI multilateral mechanism (called for in COP decision 15/9). In the narrowest sense, the fund is simply the bank account that facilitates the movement of money that is a part of the multilateral mechanism. Decision 15/9 draws some distinction between the two terms (e.g., noting that there needs to be further discussion of governance of a 'fund'), but does not outline where one ends and the other begins. Some parts of the conversation at the Oslo meeting—namely the ideas raised about objectives and governance—should be considered in conversations about the multilateral mechanism.

⁶ Deutz, A., et al. (2020) Financing Nature: Closing the global biodiversity financing gap. The Paulson Institute, The Nature Conservancy, and the Cornell Atkinson Center for Sustainability.

In the future, Meridian proposes that the multilateral system and the fund should be discussed in concert with one another or that conversations be structured more explicitly around the topics listed in the annex to CBD COP decision 15/9. The Meridian Team finds the graphic in "Overview of information gathered further to decision 15/9 and key points for consideration by the Ad Hoc Open-ended Working Group on Benefit-sharing from the Use of Digital Sequence Information on Genetic Resources" released by the CBD Secretariat on 10 October, especially useful when thinking about the areas of theoretical and practical overlap between the fund and the multilateral mechanism (see below).



Abbreviations: CB/D, capacity-building/development; DSI, digital sequence information on genetic resources; TT, technology transfer.

INTER-INSTRUMENT COLLABORATION

During the meeting, the group also discussed the importance of inter-instrument collaboration on DSI, as there are several international instruments for which DSI is highly relevant beyond the CBD. These include the:

- International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA);
- World Health Organization Pandemic Influenza Preparedness Framework (WHO-PIP) and the nascent Pandemic Instrument;
- World Intellectual Property Organization (WIPO); and
- Convention on the Law of the Sea Ocean Treaty's section on Biodiversity Beyond National Jurisdiction (BBNJ).

The CBD COP15 decision on DSI, the ITPGRFA treaty text, the BBNJ text, and the draft of the nascent WHO Pandemic Instrument all note the necessity of harmonizing approaches to DSI access and benefits sharing across instruments.

Some feel that the risk of independent and potentially contradictory or competing approaches to benefits sharing may incentivize avoidance of industry participation and/or spark country or stakeholder disputes over funding priorities of the different instruments. In addition, many users and providers noted that the more synergy there is between system(s), the higher the rate of compliance (and benefits shared) will be. Given this context, the global fund will, at a minimum, need to be compatible with other benefits sharing systems. To some, the ideal 'global fund' would include activities under all the international instruments. Stemming from the same logic, some feel that the governance of the fund should contain representatives from all instruments to which DSI pertains. Others felt that the specialized nature of the different instruments serves a purpose and should therefore remain separate from one another. Irrespective of the form the Fund ends up taking, it will be prudent to engage in cross-instrument conversations before and after CBD COP16.