

Business and Mainstreaming Biodiversity

A Workshop Summary

May 2021

STAP

SCIENTIFIC AND TECHNICAL
ADVISORY PANEL

*An independent group of scientists that advises
the Global Environment Facility*



UN 
environment
programme

Summary of the STAP workshop on Business and Mainstreaming Biodiversity (5-6 May 2021)

1. Abstract

Over the past five years, new scientific evidence has highlighted the importance of biodiversity as a vital resource that supports the proper functioning of our planetary systems. It has also emphasised the urgency for mainstreaming biodiversity, by demonstrating how biodiversity is closely linked with climate change, human health, the production of goods and services, and global finance. Biodiversity, which with a total allocation of US\$1.4bn (equal to 32% of total GEF funding) was the biggest focal area of the GEF7 replenishment cycle, has three main objectives: i) mainstreaming biodiversity in production land and seascapes; ii) addressing the direct drivers of biodiversity loss to protect habitats and species; and iii) further developing biodiversity policy and institutional frameworks. The Scientific and Technical Advisory Panel (STAP) to the GEF provided advice on biodiversity mainstreaming in 2005 and 2015, which needs to be updated to take account of new scientific knowledge. A [GEF Independent Evaluation Office report](#) also recently stated that “the GEF biodiversity mainstreaming portfolio is highly relevant to the private sector”, and that “engaging the private sector remains a challenge for the GEF”. A workshop was therefore convened to look at how the GEF could promote nature-positive development in concert with the private sector. This note summarises the discussions and conclusions from the workshop. As a next step, STAP will look more in-depth at how Natural Capital accounting has been used in GEF projects and explore usage by countries and business.

2. Context and background

Nature plays a critical role in providing essential resources that are fundamental to human existence. These include food, energy, medicines, and genetic resources, as well as a variety of materials fundamental for humanity’s physical well-being and cultural identity. Nature also provides a range of ecosystem services such as clean air, freshwater, productive soils, crop pollination, and a stable predictable climate upon which humanity depends for its existence (IPBES, 2019¹; Dasgupta, 2021²). There is also increasing evidence that nature plays an essential role in the sustainability of the global economy (WEF, 2020³; Dasgupta, 2021) and that biodiversity loss is a major risk across economic sectors (WEF 2021)⁴.

At the same time, economic activities and particularly resource-based production sectors such as agriculture, logging and mining, have significant direct impacts on ecosystems through land and sea-use change, pollution, habitat fragmentation and overexploitation (IPBES, 2019; UNEP, 2021). Food production is now the biggest direct driver of terrestrial biodiversity loss (Dasgupta, 2021). In addition, there are indirect effects associated with pollution and climate change, including the loss of pollinators and the proliferation of invasive species⁵.

¹ IPBES (2019) Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. E. S. Brondizio, J. Settele, S. Díaz, and H. T. Ngo (editors).

² Dasgupta, P. (2021) The Economics of Biodiversity: The Dasgupta Review. (London: HM Treasury)

³ WEF (2020) *The Future of Nature and Business*. World Economic Forum, Geneva, Switzerland.

⁴ WEF Forum (2021) *Global Risks Report 2021, 16th edition*. World Economic Forum, Geneva, Switzerland

⁵ United Nations Environment Programme (2019) *Global Environment Outlook – GEO-6: Healthy Planet, Healthy People*. UNEP, Nairobi. United Nations Environment Programme (2021) *Making Peace with Nature: A scientific blueprint to tackle the climate, biodiversity and pollution emergencies*. UNEP, Nairobi. (<https://www.unep.org/resources/making-peace-nature>)

One of the ways to transform the relationship between different economic sectors and biodiversity, in order to reduce and mitigate impacts, is through the process of biodiversity mainstreaming.

The GEF defines “biodiversity mainstreaming” as: “the process of embedding biodiversity considerations into policies, strategies, and practices of key public and private actors that impact or rely on biodiversity, so that it is conserved and sustainably used both locally and globally⁶”. Mainstreaming has been a goal of the GEF investments since 2004.

The [draft post-2020 Global Biodiversity Framework](#) (GBF) just published by the Convention on Biological Diversity (CBD), one of the Conventions the GEF serves, recognizes the urgency of transforming economic, social, and financial models that have exacerbated biodiversity loss in recent decades. The goal of the Global Environment Facility’s (GEF) [draft biodiversity strategy](#)⁷ for 2022-26 (GEF-8) is: “*globally significant biodiversity conserved, sustainably used and restored*”. On biodiversity mainstreaming, the GEF strategy has three main elements: spatial and land-use planning to ensure that land and resource use is appropriately situated to optimize production without undermining or degrading biodiversity; improving and changing production practices to be more biodiversity-positive with a focus on sectors that have significant biodiversity impacts, and; developing policy and regulatory frameworks that remove perverse subsidies and provide incentives for biodiversity-positive land and resource use that remains productive but that does not degrade biodiversity. As part of biodiversity mainstreaming, the GEF supports Natural Capital Accounting⁸ (NCA) to help national government agencies in making specific target decisions or responding to policy questions, however, there has been limited take-up by countries.

The GEF Independent Evaluation Office ([IEO, 2019](#)), reviewed the implementation of mainstreaming biodiversity in the GEF portfolio between 2004 and 2016 and found that:

- a) Mainstreaming biodiversity takes time, making the sustainability of institutional, financial, and human resources over longer time frames critical;
- b) Features that facilitate mainstreaming biodiversity include aligning interventions with national development objectives; long-term partnerships with nationally recognized organizations; engagement with key stakeholder groups; and the presence of good governance;
- c) GEF projects have successfully mainstreamed biodiversity conservation into institutions, policies, and territories with globally significant biodiversity;
- d) Engaging the private sector remains a challenge for mainstreaming biodiversity. The GEF and its partners have found it difficult to engage with large-scale commercial enterprises in biodiversity mainstreaming projects.

STAP provided [guidance on mainstreaming biodiversity](#) to the GEF in 2005 and 2015. However, since then there has been a substantial amount of new evidence published on the environmental and economic aspects of biodiversity mainstreaming, even though the main emphasis of mainstreaming literature over the past few years has focused on operational efficiencies and analyses of successful interventions. This includes seminal studies on the value and the current state of global biodiversity (WWF, 2018⁹; IPBES, 2019), the interconnected nature of climate and biodiversity (Pörtner et al. 2021¹⁰), and risks to the global

⁶ GEF, 2016. Biodiversity Mainstreaming in Practice.

https://www.thegef.org/sites/default/files/publications/GEF_MainstreamingBiod_11.28.16.pdf

⁷ pg. 158-81.

⁸ Natural Capital Accounting is the process of calculating the total stocks and flows of natural resources and services in a given ecosystem or region. Accounting for such goods may occur in physical or monetary terms.

⁹ WWF (2018) *Living Planet Report - 2018: Aiming Higher*. Grooten, M. and Almond, R.E.A.(Eds). WWF, Gland, Switzerland.

¹⁰ Pörtner, H.O., Scholes, R.J., Agard, J., Archer, E., Arneth, A., Bai, X., Barnes, D., Burrows, M., Chan, L., Cheung, W.L., Diamond, S., Donatti, C., Duarte, C., Eisenhauer, N., Foden, W., Gasalla, M. A., Handa, C., Hickler, T., Hoegh-Guldberg, O., Ichii, K., Jacob, U., Insarov, G., Kiessling, W., Leadley, P., Leemans, R., Levin, L., Lim, M., Maharaj, S., Managi, S., Marquet, P. A., McElwee, P., Midgley, G., Oberdorff, T., Obura, D., Osman, E.,

economy arising from biodiversity loss, which has featured consistently among the top five most significant risks in terms of likelihood and impact identified by a leading international index over the past few years (WEF, 2019¹¹; WEF, 2020¹²; WEF 2021¹³). The role of business in protecting biodiversity was further highlighted in a number of recent landmark publications (Dasgupta, 2021; OECD, 2020¹⁴; UNEP, 2021; UNEP 2021a¹⁵).

It was in the context of this changing environment that STAP held a workshop on 5 and 6 May 2021 to examine biodiversity mainstreaming from the business perspective, and to consider two questions: *how do selected companies address nature and biodiversity in their business strategies and planning, investment decisions, and operations?* and *what could national governments and the GEF do to advance nature-positive development by business?*

Over 50 invitees participated in the workshop, which included representatives from: companies such as BASF and BP; investment firms such as BlackRock and HSBC; academia, including the Natural Capital Project at Stanford University; philanthropic organisations such as the Gordon and Betty Moore Foundation; and NGOs such as the Wildlife Conservation Society. A range of representatives from the GEF partnership, including GEF agencies, the GEF Secretariat, the Independent Evaluation Office, and STAP were also in attendance.

3. Summary of discussions from day 1: how does business address nature and biodiversity in decision-making?

Business does not have a uniform approach to biodiversity. Different companies take different approaches informed by several factors, including: how dependent a company is on natural resources; geography; political concerns; socio-economic issues; availability of resources (both financial and human); capacity to implement and monitor interventions; and a company's philosophy, values, and ethical stance. For some businesses, there has been a transition from an approach based on social and environmental responsibility, to one in which biodiversity is regarded as core to business processes and could offer a competitive advantage. More broadly, there is a recognition that some companies want to deliver for both conservation and development, while others are more focused on risk avoidance and avoiding harm.

Some companies are beginning to regard biodiversity as an integral part of doing business, and therefore core to their business processes, rather than a risk to be avoided or mitigated. Companies that disregarded biodiversity were more likely to face regulatory, reputational, and operational risks and impacts.

Companies experience a wide range of challenges related to biodiversity, including: socio-economic pressure, weak legal enforcement, lack of resources and capacity, land-tenure issues, difficulties in being able to monitor the impact of their operations on biodiversity, and government regulation.

Pandit, R., Pascual, U., Pires, A. P. F., Popp, A., Reyes- García, V., Sankaran, M., Settele, J., Shin, Y. J., Sintayehu, D. W., Smith, P., Steiner, N., Strassburg, B., Sukumar, R., Trisos, C., Val, A.L., Wu, J., Aldrian, E., Parmesan, C., Pichs-Madruga, R., Roberts, D.C., Rogers, A.D., Díaz, S., Fischer, M., Hashimoto, S., Lavorel, S., Wu, N., Ngo, H.T. 2021. IPBES-IPCC co-sponsored workshop report on biodiversity and climate change; IPBES and IPCC. DOI:10.5281/zenodo.4782538.

¹¹ World Economic Forum (2019): *The Global Risks Report 2019, 14th Edition*. WEF Geneva.

¹² World Economic Forum (2020): *The Global Risks Report 2020, 15th Edition*. WEF Geneva.

¹³ World Economic Forum (2021): *The Global Risks Report 2021, 16th Edition*. WEF Geneva.

¹⁴ Organisation for Economic Cooperation and Development (2020): *A Comprehensive Overview of Global Biodiversity Finance*. OECD Paris.

¹⁵ United Nations Environment Programme (2021a). *Adapt to Survive: Business transformation in a time of uncertainty*. UNEP, Nairobi.

Many companies are taking positive action on biodiversity and nature of their own volition, for example, by internalizing the cost of conservation and restoration into their final unit costs. However, **the current level of effort is not sufficient to effect the necessary transformation within the required timescale** without a systemic acceleration and expansion in scale. Furthermore, collective action may be beyond the capability of individual companies and will likely require higher-level convening and coordination.

Businesses work within regulatory and other frameworks provided by governments but were generally reticent about what they actually wanted government to do on biodiversity. There was discussion about the role of legislation and regulation, and about partnerships between government and business to encourage nature-positive development. Representatives from the business community were clear in expressing their lack of desire for further regulation.

Trade-offs between biodiversity and business activities often occurred at scales beyond the ability of an individual company to resolve. Private sector companies in all sectors, including multinational corporations, are not always directly in control of their entire supply-chains, which are often partly managed through intermediary agents. This can create situations where companies at the top of the supply chain are unable to determine specific outcomes. For example, in agriculture, farmers are expected to produce food at affordable prices, reduce harmful inputs, and improve water quality, which may involve trade-offs with biodiversity conservation. These trade-offs require resolution beyond the farmers' sphere of influence. Some companies reckoned that farmers could be relied upon to do "the right thing", which could also be in their own best interests. Other companies mentioned the problem of dealing with a 'fragmented' supply-base involving a large number of small-scale producers, with the outcome for biodiversity determined by the decisions of many individual farmers. Farmers can employ both sustainable and unsustainable practices for a wide variety of reasons, ranging from lack of knowledge and resources to perverse incentives and pressure from intermediary agents. Labeling can be part of the solution to address some of these issues, but it has its own inherent limitations. For example, in remote and vast regions such as the Amazon, or forested areas in SSA and Indonesia, illegal loggers have devised ingenious means to 'launder' illegal timber; the same has happened with 'blood diamonds' and illegally caught fish.

Biodiversity is now better understood and, as a result, becoming more widely appreciated by both governments (outside of environment ministries and agencies) and business, including the importance of biodiversity for human well-being. However, international policy and governments' efforts to tackle biodiversity issues are about 15-20 years behind climate change. For example, the IPCC¹⁶ was established in 1988 and is now completing its 6th assessment report (AR6), whilst IPBES¹⁷ was established in 2012 and had only published its 1st global assessment report in 2019. Similarly, the UK Government commissioned the Stern Review on the Economics of Climate Change in 2005, whilst the Dasgupta Review on The Economics of Biodiversity was commissioned (also by the UK Government) in 2020.

From a business perspective, mainstreaming biodiversity¹⁸ was easier at smaller spatial scales. More specifically, it was pointed out that in developing countries it is often easier to implement biodiversity mainstreaming activities and projects at the sub-national and local level.

¹⁶ IPCC: [Intergovernmental Panel on Climate Change](#).

¹⁷ IPBES: [Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services](#).

¹⁸ In the field of business, the practice of mainstreaming of biodiversity can be defined as integrating or including actions related to conservation and sustainable use of biodiversity at every stage of the planning, investment or production cycle.

Natural Capital Accounting (NCA) can provide a framework for developing policy and making decisions, though it took considerable time and effort to do. NCA could also provide a mechanism for business and governments to work together in valuing the ecosystem services that underpin human and economic sustainability.

Circular economy concepts can be useful in thinking about biodiversity, for example, in agriculture and food production which directly intersect with nature and biodiversity. A significant aspect of climate change and environmental degradation is linked to materials extraction, processing, use, and disposal. A circular economy approach offers an opportunity to tackle climate change and deliver other environmental and socio-economic benefits with a focus on maintaining resources in use for as long as possible, extracting the maximum value while in use, and recovering and recycling products and usable materials at the end of their serviceable life (STAP, 2021)¹⁹.

4. Summary of discussions from day 2: nature-positive development.

4.1. What could the GEF do?

The **GEF has considerable convening power which could be used to facilitate constructive conversations between government and businesses,** for example, on politically sensitive issues, where it could be difficult for an individual company to speak out.

The GEF could facilitate coordination between government ministries to promote biodiversity practices, for example, decisions about agricultural production and technical assistance and training for farmers are made by agriculture ministries but have significant implications for environment ministries.

The GEF could also build improved multi-stakeholder partnerships between governments, the private sector, civil society, and multilateral agencies to drive change at the required scale and rate. More specifically, the GEF could help facilitate dialogue between government agencies and private sector actors at different points of the value chain, which can help engender 'collective action' at scale. Involving civil society groups and community stakeholders in the process could also provide more transparency for consumers, who are more interested in knowing what private sector companies are doing to protect nature, ecosystems, and biodiversity.

The GEF could provide technical assistance and capacity building where it is most needed. The lack of technical skills and implementation capacity, as well as insufficient financial and human resources, are recurring issues for both governments and Micro, Small & Medium Enterprises (MSMEs) in developing countries. For example, the GEF could provide support for the development of policies and technical guidelines to be issued by government ministries and agencies for businesses to implement. It could also help governments develop specific indicators to measure the progress and success of specific interventions.

4.2. Data Needs

Enable better data sharing and aggregation. Businesses collect massive amounts of data for their own purposes, e.g. management and production data. There is a lack of publicly available good-quality biodiversity data, especially at the landscape level. Some data collected by business could be combined with other publicly-held data to inform decisions about conservation, for which a mechanism would be

¹⁹ <https://www.stapgef.org/resources/advisory-documents/circular-economy-and-climate-mitigation>.

needed. There is a growing number of data platforms²⁰, but challenges exist, especially about interoperability and compatibility. Governments may be reluctant to share data which is regarded as politically sensitive, for example, on deforestation. Similarly, businesses may be unable to share data that contains proprietary information or belongs to third parties (e.g. farmers).

Metrics are required to measure and track the impacts of business actions on biodiversity (both positive and negative), which can help in assessing risks, and provide greater transparency. There has been substantial progress in the development of quantitative metrics at the site or project level, but corporate level reporting remains a challenge²¹, in part due to a lack of agreed and standardized measurement approaches and accounting frameworks²². Standardized metrics, facilitating data collection, and providing better access would all be useful. Existing initiatives such as the Task Force for Nature-Related Financial Disclosure (TNFD) could provide a suitable basis for this work.

Voluntary standards for industry can contribute but are often limited in scope. A number of biodiversity certification standards have been developed in sectors such as mining, forestry and agriculture, and for products ranging from wood and paper products, to palm oil, beef, soy, and cocoa. Under the right conditions, certification standards can work well and contribute to the achievement of specific biodiversity objectives. However, their efficacy is limited by a range of factors, including uptake among primary producers, effectiveness of monitoring and compliance verification systems, and variability in the stringency and scope of the requirements for certification²³.

4.3. Natural Capital

Natural Capital Accounting (NCA)²⁴ can be used to improve planning. Only a few countries have implemented NCA (e.g. Costa Rica and China) and the pace of adoption is slow. However, NCA can be an effective tool to help government departments allocate financial resources, to inform the design of policies and legislation that value ecosystem services, and to manage risk. The GEF could help develop streamlined methods of NCA that could be less complex to use and could thus be adopted more readily by a larger number of countries.

NCA provides a useful framework but to be effective needs good quality data covering a wide number of areas ranging, for example, from forest cover to freshwater sources and viable agricultural land. For example, China collects data on the impact of farming practices on water quality, on carbon, on biodiversity, and other key environmental indicators.

China is pioneering the use of **Gross Ecosystem Product (GEP)**, which has been introduced in 5 provinces, 13 cities, and more than 100 counties, where it is used to measure the performance of government officials: to reveal the contribution of ecosystems to the economy and human well-being, show the ecological connections between regions, and as a basis to compensate the suppliers of ecosystem services. (In March 2021 GEP was approved by the UN Statistical Commission as part of the System of Environmental-Economic Accounting (SEEA) Framework).

²⁰ Some examples of the data platforms that are emerging and/or being curated include: (http://shift.tools/contributors/573?contributor_list_id=67); (<https://www.businessfornature.org/act>); (<https://www.cdp.net/en/data>).

²¹ Addison, P. F. E., Carbone, G., McCormick, N. (2018) The development and use of biodiversity indicators in business: an overview. Gland, Switzerland: IUCN.

²² UN Environment Programme World Conservation Monitoring Centre 2020. Biodiversity Measures for Business: Corporate biodiversity measurement and disclosure within the current and future global policy context. Cambridge.

²³ Franziska Haupt, Charlotte Streck, Haseebullah Bakhtary, Katharina Behm, Alan Kroeger, and Ingrid Schulte (2017): *Zero-deforestation Commodity Supply Chains by 2020: Are We on Track?* Background Paper prepared for the Prince of Wales' International Sustainability Unit

²⁴ Natural Capital accounting is a tool to measure the changes in the stock of natural capital at a variety of scales and to integrate the value of ecosystem services into accounting and reporting systems at international and national level.

Spatial planning is fundamental to understanding natural capital and can help governments and other stakeholders, including business, to identify high-value biodiversity areas. Sustainable development plans offer investment opportunities for nature-based climate mitigation and adaptation. For example, in Belize, spatial development plans have been used to harmonize conservation and development goals and to inform lending decisions by the Inter-American Development Bank.

Annex 1

List of participants in the STAP workshop on Business and Mainstreaming Biodiversity

Institution/ Company	Name of attendee
Conventions	
Convention on Biological Diversity	Emanuel (Oliver) Hillel
Convention on Biological Diversity	Yibin Xiang
GEF Agencies	
Conservation International	Rosimeiry Portela
International Union for Conservation of Nature	Sheila Aggarwal-Khan
The Nature Conservancy	Linda Krueger
UNEP-WCMC	Corli Pretorius
UNEP-WCMC	Matt Jones
World Bank	Olga Gavryliuk
GEF IEO	
GEF Independent Evaluation Office	Anupam Anand
GEF Independent Evaluation Office	Juha Uitto
GEF Independent Evaluation Office	Geeta Batra
GEF Secretariat	
GEF Secretariat	Avril Benchimol
GEF Secretariat	Adriana Goncalves Moreira
GEF Secretariat	Claude Gascon
GEF Secretariat	Hannah Fairbank
GEF Secretariat	Jean-Marc Sinnassamy
GEF Secretariat	Jurgis Sapijanskas
GEF Secretariat	Matthew Reddy
GEF Secretariat	Mohamed Bakarr
GEF Secretariat	Paul Hartman
GEF Secretariat	Sarah Wyatt
Institutional	
Business For Nature	Eva Zabey
CDP	Catherine Moncrieff
CDP	Marcelo Gonçalves de Lima
International Institute for Environment and Development	Dilys Roe
Gordon and Betty Moore Foundation	Aileen Lee
Gordon and Betty Moore Foundation	Kristina McNeff
South African National Biodiversity Institute	Kristal Maze
Stanford University	Mary Ruckelshaus
Wildlife Conservation Society	Sandy Andelman
World Resources Institute	Carolina Genine
Private Sector	
APRIL Asia Group	Lucita Jasmin
APRIL Asia Group	Craig Tribolet
BASF SE	Andrew David Beadle

BlackRock	Carole Crozat
BlackRock	Eve Velikova
BP	Mark Johnston
HSBC Pollination Group	Carter Ingram
HSBC Pollination Group	Yasmina Elshafei
Kelloggs	Kate Schaffner
Neste	Kavickumar Muruganathan
Nutrien	Michael Nemeth
STAP	
STAP	Chris Whaley
STAP	Graciela Metternicht
STAP	John Donaldson
STAP	Rosina Bierbaum
STAP	Tom Lovejoy
STAP Secretariat	Alessandro Moscuzza
STAP Secretariat	Annie Linden
STAP Secretariat	Guadalupe Duron
STAP Secretariat	Sunday Leonard