

Annex A. Biodiversity-related risks to businesses

Biodiversity-related risks to businesses are categorised as:

- Ecological risks, i.e. risks related to biodiversity-related ecological impacts and dependencies, linked to biodiversity loss or ecosystems degradation
- Liability risks, where parties who have suffered biodiversity-related loss or damage seek compensation for those they hold responsible
- Risks related to achieve transformative change for biodiversity, including regulatory risks, market risks and financial risks.

Ecological risks on operations

Businesses and financial organisations (including banks, insurers and investors) can face important ecological risks because of their biodiversity impacts and dependencies. Such risks are mainly operational risks associated with resource dependency, scarcity and quality. They can be linked to increased raw material or resource costs (e.g. limited natural resources like timber or fresh water), deteriorated supply chains (e.g. because of resource scarcity or more variable production of key natural inputs), or disrupted business operations (CBD, 2019^[1]) (Natural Capital Coalition, 2016^[2]). In the agri-food business, for instance, biodiversity for food and agriculture is declining, including at genetic, species and ecosystem levels (FAO, 2019^[3]). This creates risks for agriculture and food businesses: the share of livestock breeds at risk of extinction is rising, and the diversity of genetic crops used in farmers' fields has reduced. In addition, businesses face the risk of clean up and compensation costs associated with biodiversity loss or disruption of ecosystems.

Liability risks

Businesses can also face liability risks linked to biodiversity. Lawsuits with implications for businesses on biodiversity include:

- The 2010 Deepwater Oil Spill Case, which cost USD 65 billion to British Petroleum and the Exxon Valdez Case on oil spills' devastation of natural resources and marine biodiversity (Bousso, 2018^[4]).
- The Sierra Club versus Morton Case on preservation of national parks and forests (Shaw, 2016^[5]).
- Lawsuits to protect spotted owls against logging. In 1991, a U.S. federal court ruling protected the Northern subspecies of spotted owl under the Endangered Species Act, thereby restricting much of the Northwest forests to logging. Those lawsuits illustrate both the power of the species-protection law and the cautionary tale against it, as the ruling proved insufficient to protect spotted owls against other challenges like barrel owls (Welch, 2009^[6]).

As transparency increases through enhanced disclosure and reporting on companies' biodiversity impact assessments, especially at site-level, the risk of legal suits may increase. While the risk of litigation can serve to encourage businesses to take positive steps to avoid or mitigate impacts on biodiversity, it may also deter companies from voluntarily disclosing site-level impact assessments.

In addition, under the *OECD Guidelines for Multinational Enterprises*, a National Contact Point (NCP) can handle “specific instance” complaints against companies and contribute to their resolution (OECD, 2011^[7]). Cases to the NCPs involving environmental issues account for 20% of all submissions since 2001 (i.e. 88 cases, including 38 cases in mining and quarrying, and 7 cases in agriculture, forestry and fishing). Examples of NCP cases with specific references to biodiversity include: a copper mining in Ecuador (2013); Barrick Gold Corporation and FOCO case in Argentina (2011); and a nickel project in the Philippines (2009) (OECD, 2018^[8]).

Regulatory risks

As policy makers scale up policy action on biodiversity, businesses and financial institutions need to anticipate and respond to regulatory changes in a timely manner, or risk being caught out. Regulatory risks include restrictions on land and resources access (e.g. in ecologically sensitive areas for threatened biodiversity resources); clean up and compensation costs (see Chapter 3); procurement standards; and licensing and permitting procedures (e.g. for infrastructure) or moratorium on new permits. For instance:

- Several Asia-Pacific countries have imposed total or partial bans on logging in natural forests, or similar restrictions on timber harvesting, such as Indonesia’s 2011 two-year forest moratorium on new concessions to convert primary natural forests and peat lands to oil palm and timber plantations and selective logging areas, which was renewed and expanded since.
- In March 2019, the Solomon Islands Environment Advisory Committee revoked a development consent for a bauxite-mining project, notably based on the grounds of unacceptable impacts to the environment and local population, inconsistency with the CBD and the Declaration on the Rights of Indigenous Peoples.

As policy makers and businesses scale up action on biodiversity, businesses and financial actors may face broader risks linked to changes in policy, law, technology or markets. Regulatory, market and technological change (such as greening of agricultural value chain) may create a change in demand for forest-related commodities, and a loss of value for producers of unsustainable forest commodities (Rautner et al., 2016^[9]).

Reputational risks

Businesses face increasing pressure from investors, consumers, shareholders, policy makers and civil society to assess, report and manage environmental, social and governance (ESG) risks, including biodiversity risks. According to UEBT Biodiversity Monitor (2018^[10]), the awareness and understanding of biodiversity is growing globally, especially among youth. Respecting people and biodiversity in purchase behaviour is of growing concern for consumers, and people expect companies to respect biodiversity, but do not trust that they do. In France, for instance, 77% of French consumers interviewed believe that companies have a moral obligation to make sure they have a positive impact on society, people and biodiversity. However, only 26% of French respondents are confident that companies pay serious attention to “ethical sourcing” of biodiversity (UEBT, 2018^[11]).¹ Consumer preferences can even lead to product or natural resources boycotts, e.g. on Bluefin tuna or palm oil. Civil society campaigns against business activities can increase not only reputational risk but also financial risk, e.g. in the garment and footwear sector (Natural Capital Coalition, 2016^[12]). In addition, several industry and infrastructure sectors often need to secure an informal “license to operate” from local communities and civil society through stakeholder engagement (e.g. in infrastructure provision and mining).

¹¹ I.e. to ensure companies incorporate Ethical BioTrade practices into their systems for sourcing and innovating natural ingredients; UEB, 2019.

Market risks

Changes in consumer preferences (towards products with reduced biodiversity impacts) or purchaser requirements (e.g. biodiversity safeguards in supply chain requirements) can create market risks for companies (Girvan et al., 2018^[13]). Consumers' awareness and understanding of biodiversity is also increasing globally, according to the Biodiversity Barometer (Table 4.1) (UEBT, 2018^[10]). A majority of consumers (79%) feel that companies have a moral obligation to have a positive impact on biodiversity and people in their sourcing of natural ingredients (CBD and UEBT, 2018^[14]).

Financial risks

Businesses, banks and investors may also face financial risks. First, they can face insurance risks, e.g. linked to higher insurance premiums from biodiversity loss (e.g. coral reefs in Cancun, Mexico), insurance claims or lower returns on investments caused by extreme weather events worsened by environmental degradation. Second, financial risk can be linked to access to capital, due to higher cost of capital or lending requirements from negative impacts or dependencies on biodiversity. Third, corporations and investors may face loss of investment opportunities, as investors increasingly adopt impact investing or exclusion strategies that would prioritise investments that reduce adverse impacts on biodiversity or even support positive impacts (Girvan et al., 2018^[13]).

As biodiversity-related ecological risks to businesses increase, business and financial organisations may face value depreciation of assets, e.g. in agriculture and food production. Indeed, ecological risk factors and pressures (such as land degradation, biodiversity loss, increased risk of agricultural disease, virus and pests, and climate change) may create risks to both ecological or “physical” assets in operations (e.g. degradation of forests through drought and heat, or damage to physical infrastructure) and financial assets (e.g. loss of value for forestry and infrastructure owner) (Caldecott and McDaniels, 2014^[15]). Business and financial organisations might also face the risk of value depreciation of “stranded assets” linked to regulatory risks (e.g. regulatory risks in agriculture and food production), although to a smaller extent than for climate change (e.g. coal assets) (Rautner et al., 2016^[9]) (Baron and Fischer, 2015^[16]).

Materiality of risks

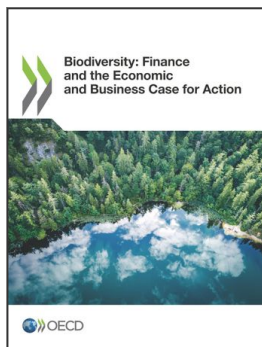
An increasing number of initiatives and stakeholders recognise that biodiversity loss can create a “material” risk to the profitability of businesses and investors (Dempsey, 2013^[17]). Businesses, investors and regulators are beginning to recognise the materiality of biodiversity impacts and dependencies, although to a lesser extent than for climate change:

- The company Unilever identified the need to reduce environmental impact for deforestation and agricultural sourcing (including biodiversity) as very high priority issues in its 2017-18 materiality assessment (Unilever, 2019^[18]).
- California public pension fund CalPERS recognised in 2018 deforestation as a material risk in its investment portfolio (Friends of the Earth (FOE), 2018^[19]).
- The Dutch central bank DNB published in 2019 a new report on the risks that environmental and social challenges such as raw material scarcity and biodiversity loss pose to financial institutions. The report called on improved risk management to identify how challenges that have a material impact on the balance sheets or operations of financial institutions can be taken into consideration (DNB, 2019^[20]).

Several OECD instruments and other international guidelines calls on businesses and financial actors to assess the materiality of biodiversity impacts. The *OECD-FAO Guidance for Responsible Agricultural*

Supply Chains for instance specifically calls on companies and investors to consider biodiversity impacts in conducting supply chain due diligence and to take steps to maintain biodiversity and limit ecosystem degradation (OECD/FAO, 2016^[21]).

Assessing the materiality of biodiversity issues for companies however, remains extremely challenging, especially at project and site-level (Alliance for Corporate Transparency Project, 2019^[22]). More work is needed to integrate biodiversity considerations into risk management and integrated reporting (including through aggregation tools to reflect local materiality issues at corporate group level or portfolio level), as well as accountability at the board and management level. Chief financial officers (CFOs) need to participate more actively in integrated materiality assessment, to help them understand biodiversity and other sustainability challenges, and assess the scale of their impacts and dependencies on business and integrate these considerations into the financial aspects of business operations (CEF and WEC, 2015^[23]).



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