Ignoring biodiversity could put businesses at risk

- Ignoring biodiversity in a business's ESG strategy can destabilise supply chains, increase operational costs, and expose businesses to financial and reputational risks.
- The majority of ESG investments focus on carbon reduction, while biodiversity conservation remains underfunded, receiving less than one percent of ESG assets under management.
- Businesses can adopt several tools to assess biodiversity risks, while partnerships with grassroots conservation groups can help restore ecosystems and build climate resilience.
- The views in this commentary are those of the author.

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Imagine you are an executive at a global food and beverage company. The business is at its peak, and the company is making millions every month and working with farmers and producers in the world's most fertile lands. One morning, you wake up to discover that a key agricultural region you rely on has suffered massive crop failure, not because of pests, not even drought alone, but because a once-thriving ecosystem has collapsed. Pollinators like bees have disappeared. Soil fertility has degraded. The regional average temperature has risen two degrees Celsius due to the loss of natural forest cover nearby.

Your supply chain is broken, and you must find alternate sources. Commodity prices have skyrocketed. You're facing questions from investors about your sourcing risk and sustainability claims. You realise that in your Environmental, Social, and Governance (ESG) strategy, your business has prioritised emissions and energy but ignored biodiversity.

This is not an unimaginable scenario — it's already happened. In 2017, when Cyclone Enawo hit Madagascar, it wiped out nearly 30% of the country's vanilla crops, triggering a global supply shock. Madagascar supplies around 80% of the world's natural vanilla. The cyclone's impact, combined with years of deforestation, degraded biodiversity, and over-reliance on monoculture farming, sent vanilla prices to over $600 per kg. Major global buyers, from food giants to luxury fragrance brands, were caught off guard. They faced raw material shortages, skyrocketing input costs, and intense scrutiny over the fragility of their sourcing strategies. The crisis revealed how dependent businesses are on ecosystems functioning well, and how biodiversity loss can turn climate risks into full-blown supply chain disasters.

This is not limited to one crop. Several crops, such as coffee and cocoa, depend heavily on pollinators like bees. It is well recognised that pollinator populations are declining due to the intensive use of agrochemicals, climate change, and habitat loss. This has a profound impact on crop yields and also on businesses that depend on these products.

Such risk is not limited to the agriculture sector. Fashion retailers depend on cotton, beauty brands rely on plant-based ingredients, beverage companies are sourcing water from forest-fed aquifers, and financial institutions are underwriting climate-sensitive investments — all vulnerable to ecosystem collapse. When biodiversity vanishes, it is not just farmers who suffer — businesses across sectors risk losing access to critical raw materials, seeing operational costs skyrocket, and facing reputation-damaging backlash.

Biodiversity refers to the variety of species, ecosystems, and genetic material present in an environment. This variety is critical for ecosystems' stability, resilience, and long-term sustainability. It is "...directly related to business activities. Most sectors have a direct or supply-chain connection with ecosystem services sustained by biodiversity, and more than half of global GDP is dependent on nature," says a recent study published in Resource, Conservation, and Recycling. This means this network keeps raw materials stable, business operations secure, and consumers fed. And yet, it remains one of the most underfunded components of environmental strategies worldwide.

In recent years, a few multinational companies have begun integrating biodiversity into their Environmental, Social, and Governance (ESG) planning. However, the majority of industries do not fully understand how their business affects and depends on nature.

Biodiversity left behind in the race to net zero

Despite its undeniable role in sustaining economies, biodiversity is often ignored. Businesses focus on carbon credits and emission reduction targets because of more measurable ESG metrics.

Companies and investors focus on decarbonisation but neglect ecosystem health, which is just as critical, if not more. The unintended consequence is that while industries pursue net-zero emissions, they damage natural habitats.

Global ESG assets surpassed $30 trillion in 2022, while global biodiversity finance is estimated at $208 billion annually, around 0.69% of total ESG assets, underscoring a significant imbalance in funding allocation. Annual funding gap to protect biodiversity is estimated at $700 billion, as per the United Nations Environment Programme (UNEP), while Bloomberg NEF estimates, "A five-fold increase is needed by 2030 to hit the $1.15 trillion needed." Similar concerns are highlighted by the Paulson Institute's Financing Nature report, which underlines the need for around a five-fold increase in current global investments in nature. The study has estimated $722–967 billion is needed annually by 2030 to reverse biodiversity decline.

This finance gap is even more stark when compared to carbon markets. With heavy corporate investment, the world carbon credit market is worth around $850 billion. According to the International Energy Agency (IEA), global investment in clean energy is expected to reach $2 trillion in 2024, which includes renewables, electric vehicles, grids, storage, and efficiency measures. Meanwhile, biodiversity restoration, which underpins climate resilience, struggles to secure even 20% of what is needed annually to halt ecosystem degradation.

According to MSCI, a U.S. based finance company, biodiversity-related funds account for less than 2% of total assets under management in sustainable funds globally. This disproportionate allocation underscores the urgent need to integrate biodiversity conservation more effectively into sustainable finance strategies.

Biodiversity is usually given secondary importance in ESG systems, emphasising carbon metrics because they are quantifiable. Companies, therefore, prefer to invest in carbon credits over integrated environmental protection. It has led to unsustainable practices, such as monoculture plantation initiatives that are supposed to counteract emissions but end up hurting biodiversity by using non-native, fast-growing trees to replace native species.

One of the significant challenges is the lack of biodiversity impact measurement tools. Unlike carbon accounting, biodiversity impacts are more complex to measure, so they become a lower priority in ESG reporting. Besides this, short-term corporate goals overlook long-term ecosystem damage, as companies seek quick wins through carbon offset purchases rather than investing in sustained biodiversity restoration.

Investor pressure also plays a critical role, and financial institutions prioritise high-return ESG investments, which favour carbon markets over nature-based solutions. But this approach risks undermining broader ecological stability, highlighting the need for more comprehensive environmental strategies in corporate sustainability efforts.

Measuring what matters with nature-focused tools

Several tools are available for companies looking to integrate biodiversity into their ESG models to measure and offset environmental risks. The Taskforce on Nature-related Financial Disclosures (TNFD) enables companies to measure and report financial risks associated with biodiversity. The Biodiversity Risk Filter by the World Wide Fund (WWF) also enables them to determine their vulnerability to biodiversity loss. Moreover, the Science-Based Targets for Nature (SBTN) offers a systematic framework for companies to establish quantifiable biodiversity targets, and the Global Biodiversity Score (GBS) enables organisations to measure their biodiversity impact and monitor progress.

Corporations alone cannot restore biodiversity. The corporations should establish strategic and long-term alliances with grassroots, scientific, and conservation organisations. Grassroots conservation and civil society organisations are key in connecting local people to large-scale conservation efforts. They facilitate community-based conservation by empowering farmers, local communities, and rural communities. They also promote coexistence approaches like buffer zones, agroforestry, and sustainable farming practices that reduce human-wildlife conflict.

In addition to direct conservation initiatives, these organisations influence policy advocacy to ensure governments and corporations incorporate ecosystem well-being into their ESG practices. They supply scientific studies and data to help investors accurately quantify biodiversity's effect. With the incorporation of solid assessment tools and collaboration with community-based organisations, companies can go beyond carbon-centric ESG practices and make meaningful contributions towards global biodiversity protection.

Rethinking ESG for a nature-positive future

For the ESG framework to truly drive sustainability, it must evolve beyond a narrow carbon-centric approach and incorporate biodiversity as a central pillar. Overlooking biodiversity risks compromises long-term sustainability objectives, exposing businesses to environmental shocks and regulatory changes. By resetting ESG strategies to prioritising ecosystem health, companies and investors can access more resilience, innovation, and value creation while preserving the world's natural capital for generations to come.

Biodiversity loss isn't just an environmental crisis — it's an economic and human crisis. If we continue focusing solely on carbon reduction, we risk losing the ecosystems that sustain life. Now is the time to shift the ESG paradigm and recognise that a thriving planet means thriving businesses and communities.