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EXECUTIVE SUMMARY

The interlinked climate and biodiversity crises are now posing increasing environmental, social, and economic risks to society. Businesses contribute substantially to these crises and are today under unprecedented pressure from different sources to take various measures to lower their environmental footprint.

In this report, CDP and IUCN jointly analyze the extent to which companies reporting to CDP go beyond climate, forests and water to also consider broader nature-related risks, impacts, opportunities, and responses.

The key findings are as follows:

1. **Disclosing companies are reporting greater risks from climate than nature**
   Companies are largely aware of how environmental issues may pose risks to their operations. Among the disclosing companies that identified risks that could have a substantive financial or strategic impact on their businesses, 68% identified climate and nature-related risks, with the vast majority identifying climate-related risks, rather than nature-related ones.

2. **Disclosing companies report few nature-related opportunities**
   The majority of companies do not see potential benefits of working with the environment, with only 22% of disclosing companies identifying climate and nature-related opportunities. Of these, 66% identify climate-related opportunities and 15% identify nature-related opportunities.

3. **Disclosing companies experience detrimental impacts from both climate and nature, but report less so from nature**
   71% of companies reporting detrimental impacts identified climate and nature-related primary impacts, again with the vast majority from climate. Compared to 69% reporting climate-related detrimental impacts, only 6.5% reported nature-related detrimental impacts.

4. **Companies rarely consider nature in their responses to detrimental impacts**
   Among companies reporting on how they responded to the above detrimental impacts, only 11% identified nature-related responses.

Cumulatively, these findings demonstrate that businesses need to do much more to fully incorporate nature-related considerations in their assessments and reporting of environmental risks, opportunities, impacts and responses.

A selection of case studies illustrates some of the steps that some companies participating in CDP’s disclosure systems are currently taking to integrate nature within their operations. While these are welcome, it is too early to say to what extent these deliver true Nature-based Solutions (NbS), as defined and recognized by IUCN.

The following recommendations are outlined:

- Businesses should aim to identify and report on nature-related risks, opportunities, impacts and responses more systematically within their corporate environmental disclosures.
- More businesses need to take concrete steps now to put in place science-based nature-positive net-zero strategies.
- Businesses should implement their nature/NbS-related plans and actions based on the best available international standards and guidance, including by systematically applying the IUCN Global Standard for NbSTM.
- Governments can encourage greater action and ambition by businesses, both by establishing policies to ensure more stringent corporate environmental disclosures on nature, and by ensuring greater alignment across all nature-related policy processes.
The challenges we face

The world today is facing two critical interlinked challenges – the climate crisis and the biodiversity crisis, the latter being expressed through the irreversible loss of nature and habitats. This is clearly evident through the recent assessments conducted by both the Intergovernmental Panel on Climate Change (IPCC) and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). The ‘IPCC Sixth Assessment Report: The Physical Science Basis’, published in August 2021, highlights with unprecedented clarity the scale, speed, and severity of the ongoing climate crisis, and the need for rapid, sustained, and large-scale greenhouse gas emission (GHG) reductions across all sectors of the global economy. Similarly, the ‘2019 IPBES Global Assessment Report on Biodiversity and Ecosystem Services’ and the ‘2021 IPBES-IPCC co-sponsored workshop report on biodiversity and climate change’ underline the grave threat that is confronting the world’s ecosystems, and how this is integrally interlinked with the climate challenge. Furthermore, as the ‘2021 Dasgupta Review on the Economics of Biodiversity’ notes, our economies, livelihoods and well-being are all fundamentally dependent on nature, and our failure to act on biodiversity and ecosystem losses, which both exacerbate and are exacerbated by climate change, is posing real and increasing environmental, social and economic risks to society today.

Addressing this combined challenge requires measures eliminating nature loss, with restoration well underway by 2030, moving us to a nature positive economic system by 2050.

The role of business

The role of businesses across different sectors of the global economy (agriculture, energy, transportation, industries, etc.) in contributing to these twin global challenges of climate change and biodiversity loss is well known and documented – and does not require repetition here. But what is important to note is that there is unprecedented pressure on businesses worldwide today, especially those engaged in the most environmentally damaging sectors – for example, fossil fuel-based energy extraction and commercial large-scale farming – to minimize the adverse effects of their operations on both climate and nature. This pressure – which is emanating from multiple sources – including through government regulation, judicial rulings, civil society activism, and investor and consumer action – is now leading to companies taking a range of measures to address their environmental footprint. These include, among others, adopting voluntary net-zero GHG emission goals and nature-positive targets, and joining corporate greening initiatives and efforts such as the We Mean Business Coalition, Business for Nature, Race to Zero, and others. Notably, companies themselves are also increasingly feeling the negative impacts of climate change and ecosystem degradation on their own operations and supply chains. However, we also know that the vast majority of companies are still not treating climate change and other environmental risk factors as core business concerns.

The importance of corporate disclosure

A prominent, immediate, and important way in which businesses can demonstrate and track their progress in systematically considering and addressing the environmental dimensions of their operations is through the disclosures that they make. This is typically done either in response to legal or regulatory requirements, or, voluntarily, as a demonstration of good corporate practice and behavior. In either case, by generating greater transparency both on the environmental risks that companies face, and the environmental impacts that they have, corporate environmental disclosure and reporting systems help to set concrete baselines against which their future progress can be measured, monitored and assessed. Regular disclosure also helps to build greater internal knowledge, awareness and capacity within the companies to support even higher levels of environmental ambition and action over time.

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4 According to a report by the Energy and Climate Intelligence Unit (ECIU) and Oxford Net Zero, one in five of the world’s 2,000 largest publicly listed companies, for example, have now committed to a “net-zero” emissions target (Black, R., Cullen, K., Fay, B., Hale, T., Lang, J., Mahmood, S., Smith, S.M. (2021). Taking Stock: A global assessment of net zero targets. Energy & Climate Intelligence Unit and Oxford Net Zero).
Given the urgency of the environmental crises facing the world today, there is increasing consensus that companies and financial institutions must disclose the environmental dimensions of their work, and also the progress that they make in achieving their stated environmental commitments and targets. For example, 71% of companies disclosing to CDP agree that disclosure “Helps my organization to track the progress of our environmental strategy”. Corporate disclosures of environmental risks, opportunities, impacts, and responses – if done in a comparable, consistent, and quantifiable manner – can become the foundation of transformation change. Such disclosure helps all stakeholders – including investors, large buyers, policymakers, regulators, civil society and consumers – to make better informed decisions and have clearer expectations of companies with respect to their sustainability efforts. In turn, better informed stakeholders can support companies in their efforts to act more progressively, including by ambitiously integrating environmental considerations within their strategic decisions and operations. Equally, ambitious corporate action can send strong signals from businesses to governments of their willingness to act, and help provide greater assurance to the latter to develop and support more ambitious environmental policies on their part – thereby constructing a mutually-reinforcing and upward-moving ambition loop.

CDP and corporate environmental disclosure

CDP has been at the forefront of corporate environmental disclosure for more than 20 years, playing a central role in the mainstreaming of ESG disclosure and driving corporate action. Over these years, it has supported companies in making their environmental (climate, water and forest-related) risks and impacts more transparent to stakeholders and in helping them better understand how they can reduce their adverse impacts and move towards becoming corporate environmental leaders. CDP has the world’s largest, most comprehensive set of companies’ self-reported environmental data, which is utilized by investors, policymakers and purchasing organizations to make informed decisions and drive action. As of 2021, over 13,000 companies worth 64% of global market capitalization disclosed their environmental efforts through CDP’s climate, water and forests questionnaires, and over 590 investors, worth over US$110 trillion, support CDP in requesting companies for data.

5 CDP corporate disclosure survey, 2020
Addressing the missing gap on nature

CDP’s disclosure cycle has its roots in climate change. Its approach to environmental disclosure has been broadened in recent times by the addition of questionnaires on forests and water security. But climate change has remained the key focus. Until now no systematic assessment was conducted on the extent to which nature-related risks, opportunities, impacts and responses are reported on by companies across all of the three CDP’s questionnaires (on climate, forests and water). This report seeks to address this important gap.

In recognition of the need to adopt a more holistic approach to address the climate challenge, as well the importance of other environmental challenges in their own right, CDP is now looking to increase the ability of its questionnaires to capture the interconnectedness of environmental themes, with an expanded focus on nature. This is a process that it is now initiating jointly with IUCN, which is the global authority on the status of the natural world and the measures needed to safeguard it.

In this report, CDP and IUCN aim to set the baseline for future assessments by analyzing, through the 9,617 companies responding to the CDP’s questionnaires on climate, forests and water in 2020, the extent to which reporting companies are currently considering nature-related risks, opportunities, impacts and responses. Through a selection of case-studies, the report also aims to identify some of the steps that companies have already begun to take to enhance nature within their own operations.

This effort comes in the context of the growing international recognition of not only the range of risks that are posed by a deteriorating climate and nature, but also the increasing appreciation worldwide that investing in nature and nature-based solutions (NbS) can help to tackle both the climate and biodiversity crises in an integrated manner. This was seen, for example, in the 2019 United Nations Climate Action Summit, the 2020 Leaders Pledge for Nature, and, more recently, in the ministerial communiques on environment and climate released at the 2021 G7 and G20 summits. Business leaders, on their part, are also increasingly appreciating the reliance that their operations and supply chains have on healthy ecosystems, and the contribution that the latter can make in building their resilience.

There is today an enormous opportunity for all actors, including companies, to effectively deploy NbS to help address major societal challenges, such as climate change, human health, water and food security, and disaster risk reduction. A key way to connect business directly with nature can be through the implementation of NbS. It has been estimated, for example, that transitioning to a nature-positive economy can unlock annual business opportunities worth US$10 trillion by transforming the food, land, and ocean use systems that are responsible for almost 80% of nature loss, whilst creating 395 million new jobs by 2030. These jobs are also more likely than jobs in business-as-usual corporate models to be resilient and offer the opportunity for better livelihoods. Indeed, a number of companies have already begun to implement or support initiatives that simultaneously help protect, manage and restore the natural environment while delivering tangible and sustainable benefits for people and their bottom-lines. But, as this report concludes, there is still a significantly long way to go.

The remaining sections of the report are structured as follows: Section 2 analyzes the 9,617 responses made through CDP’s 2020 questionnaires and presents the key findings. Section 3 presents some case studies of potential NbS implementation by CDP respondents to date. Section 4 presents the main conclusions. Finally, section 5 presents some recommendations to help guide future action.
CLIMATE AND NATURE-RELATED RISKS, OPPORTUNITIES, IMPACTS AND RESPONSES

DATA FROM CDP’S DISCLOSURES

Whilst business generates the majority of jobs and economic activity, business-related activities also often cause direct negative impacts on climate and nature through their supply chains and different industry operations. Degradation of natural capital, overexploitation of land and sea use, increased carbon emissions and biodiversity loss are now perceived as threats that can no longer be overlooked; thus, a business-as-usual approach is unsustainable. As outlined in the Future of Nature and Business report from the World Economic Forum (WEF), over half the global GDP (US$44 trillion) is potentially at risk because of the dependence of business on nature and its services.10

Businesses face serious nature-related risks due to the significant dependencies that their economic activities have on the natural environment and its services. Together, the three largest sectors that are highly dependent on nature generate close to US$8 trillion of gross value added (GVA): construction (US$4 trillion); agriculture (US$2.5 trillion); and food and beverages (US$1.4 trillion). Therefore, business leaders have a crucial role to play in putting nature at the core of their corporate processes and decision-making and systematically identifying, assessing, mitigating, and disclosing nature-related risks to avoid severe consequences.11

With proper planning, design and implementation, businesses can build resilient green supply chains and generate jobs and achieve people- and nature-positive development that can help strengthen the resilience of our societies and economies in the face of future environmental, economic, and health shocks.

How does disclosure lead to action?

Corporate disclosure of comparable and consistent environmental information is the foundation for transformative action. It can help accurately account for both risks and impacts of economic activities and in so doing, support the green transition. Such information helps stakeholders including investors, large buyers, policy actors, civil society and consumers make smarter decisions and increase their expectations of companies with respect to their environmental performance. This in turn compels companies to act.

CDP’s corporate data is shared across multiple investment platforms, as well as with top global purchasers. This means that by reporting to CDP, companies are able to show their investors, their buyers and their customers that they are preparing for the future, cutting costs and building resilience, and comply with environmental regulation. With greater insight, these companies are taking early action to tackle climate change, deforestation and water security, and the risks of continuing business as usual. Environmental disclosure is a fundamental tool for tracking the global economy’s shift towards a sustainable future and providing the knowledge and the confidence to further raise our collective ambition.

This section analyses the responses made by 9,617 companies to CDP’s questionnaires on forests, water security, and climate in 2020 to provide an overview of the current trends and patterns in corporate disclosure on nature. To reach the results presented below, we selected questions with similar themes across all questionnaires, identified climate and nature-related response options, and analyzed them. A more detailed description of the methodology used in this report is provided in Annex 1.

10 Ibid.
Key findings

1. Disclosing companies are reporting greater risks from climate than nature

CDP asked companies to identify risks12 with the potential to have a substantive financial or strategic impact on their business13. Some of these identified risks are climate and nature-related, such as those indicated in Table 114. Other types of risks that companies reported on are, for example, regulatory, such as increased difficulty in obtaining operations permits, or reputational, such as negative media coverage.

Among the 4,367 companies that identified risks with the potential to have a substantive financial or strategic impact on their business, 68% identified climate and nature-related risks. This shows that the companies that are assessing their risks are largely aware of how environmental issues may pose risks to their business operations.

Among the companies that identified climate and nature-related risks, by far the most commonly disclosed risks were climate-related risks such as ‘extreme weather events/natural disasters’, with 65%, followed by ‘changes in precipitation and variability in weather patterns’ at 19%, and ‘rising temperatures’ at 11%.

Table 1: Types of climate and nature-related risks identified by disclosing companies

<table>
<thead>
<tr>
<th>Risk Category</th>
<th>Number of Occurrences</th>
<th>Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extreme weather events or natural disasters</td>
<td>1948</td>
<td>65.4%</td>
</tr>
<tr>
<td>Changes in precipitation and variability in weather patterns</td>
<td>566</td>
<td>19.0%</td>
</tr>
<tr>
<td>Rising temperatures</td>
<td>345</td>
<td>11.6%</td>
</tr>
<tr>
<td>Water stress or scarcity</td>
<td>43</td>
<td>1.4%</td>
</tr>
<tr>
<td>Rising sea levels</td>
<td>41</td>
<td>1.4%</td>
</tr>
<tr>
<td>Ecosystem vulnerability</td>
<td>16</td>
<td>0.5%</td>
</tr>
<tr>
<td>Water quality</td>
<td>11</td>
<td>0.4%</td>
</tr>
</tbody>
</table>

Source: CDP 2020 data

With mounting evidence today that these risks are increasing in both frequency and intensity due to climate change15, these responses show that the private sector recognizes that climate change is a core challenge for the future viability of their business operations. However, what is noteworthy here is that in contrast to over 97% of these total responses identifying climate-related risks, only 0.5% of the total responses identified a more explicitly nature-related risk (i.e. ecosystem vulnerability) as having a substantial strategic or financial impact on their business. While this may be due, in part, to the fact that more companies made disclosures under the climate questionnaire than the forests and water security questionnaires, and to the specific options that respondents were offered, it nevertheless suggests the greater recognition amongst the reporting companies, at this point, of the potential strategic or financial impact that climate-related risks, rather than nature-related risks, can have on their businesses.

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12 CDP’s questionnaire uses the specific term ‘risk driver’ to describe the cause of the risk. For example, floods are a risk driver, and the economic and financial losses resulting from them are the risk to the company.

13 Substantive financial or strategic impact is defined individually by each company, in a corresponding question in CDP’s questionnaires.

14 Risks, as well as opportunities, impacts and responses in the subsections below, that could not be clearly identified as climate or nature-related have been classified as “other”.

2. Disclosing companies report few nature-related opportunities

As with risks, CDP also asked companies to identify opportunities with the potential to have a substantive financial or strategic impact on their business. Examples of climate and nature-related opportunities included those listed in Table 2. Other opportunities that could be reported were, for example, increased shareholder value, increased security of production system, shift in consumer preferences, among others.

Among the 2,570 companies disclosing any type of opportunity, **22% reported climate and nature-related opportunities.** This shows that, while companies recognize environmental risks to their business, they are largely still not fully appreciating the potential benefits of working with nature. Companies in some sectors which have a high impact and high dependency on nature, such as Food, Beverage and Agriculture (39%), and Materials (30%), are more active in reporting climate and nature-related opportunities. But even in these sectors, there is a lot of room for a stronger reflection of nature-related opportunities16.

Within the subset of companies disclosing climate and nature-related opportunities, ‘increased resilience to impacts of climate change’ (66%) is the most commonly reported opportunity by companies, followed by ‘reducing water consumption’ (17%) and ‘sourcing sustainable materials’ (14%). As can be seen in Table 2, companies disclosing nature-related opportunities, by contrast, account for just over 15%, showing that even among companies recognizing environmental opportunities, nature-related opportunities remain largely unreported, if not untapped. As with risks, this could be a consequence of more companies disclosing under the climate questionnaire, but it nevertheless indicates a trend of companies largely overlooking nature-related opportunities to date.

Table 2: Types of climate and nature-related opportunities identified by disclosing companies

<table>
<thead>
<tr>
<th>Opportunity Category</th>
<th>Number of companies17</th>
<th>Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased resilience to impacts of climate change</td>
<td>543</td>
<td>66.5%</td>
</tr>
<tr>
<td>Reduced water usage and consumption</td>
<td>140</td>
<td>17.1%</td>
</tr>
<tr>
<td>Increased demand for certified or sustainable materials</td>
<td>111</td>
<td>13.6%</td>
</tr>
<tr>
<td>Sustainable agricultural intensification</td>
<td>7</td>
<td>0.9%</td>
</tr>
<tr>
<td>Increasing green investment</td>
<td>4</td>
<td>0.5%</td>
</tr>
<tr>
<td>Enabling natural resource management/ reducing consumption</td>
<td>3</td>
<td>0.4%</td>
</tr>
<tr>
<td>Preventing deforestation and reducing emissions</td>
<td>2</td>
<td>0.2%</td>
</tr>
</tbody>
</table>

Source: CDP 2020 data

16 It should be noted that nature-related opportunities make up a small proportion of the number of total opportunities in the CDP questionnaire (for example, in the water questionnaire, only 1 of 20 options is a nature-related opportunity); this limits the options companies can select and must therefore also be kept in mind.

17 The same company might report more than one opportunity.
3. Disclosing companies experience detrimental impacts from both climate and nature, but report less so from nature than climate

Companies disclosing to CDP’s forests and water security questionnaires can report on the detrimental impacts they experience and their responses to those impacts. Climate and nature-related impacts included those listed in Table 3. Examples of impacts not classified as climate or nature-related included changed product standards and uncertainty in market signs.

Out of the 31818 companies that reported experiencing detrimental impacts, **71% identified climate and nature-related issues as primary impacts**. Within this group, the most commonly reported impacts are ‘flooding’, ‘droughts’ and ‘severe weather events’, as seen in Table 3 below. These results are in line with the companies’ risk identification above, demonstrating that companies not only acknowledge the risks posed by climate-driven natural hazards but also that these cause tangible detrimental impacts to business, albeit in smaller numbers. Nature-related detrimental impacts that were identified as having immediate negative consequences on affected companies were forest fires, ecosystem vulnerability, pests/invasive species and soil degradation. But, again, **compared to 69% of responses reporting climate-related detrimental impacts, only 6.5% reported nature-related detrimental impacts**.

Table 3: Types of climate and nature-related detrimental impacts identified by disclosing companies

<table>
<thead>
<tr>
<th>Impact Types</th>
<th>Number of responses</th>
<th>Percentage of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flooding</td>
<td>102</td>
<td>30.2%</td>
</tr>
<tr>
<td>Drought</td>
<td>64</td>
<td>18.9%</td>
</tr>
<tr>
<td>Severe weather events</td>
<td>52</td>
<td>15.4%</td>
</tr>
<tr>
<td>Pollution incident</td>
<td>26</td>
<td>7.7%</td>
</tr>
<tr>
<td>Increased water scarcity</td>
<td>20</td>
<td>5.9%</td>
</tr>
<tr>
<td>Declining water quality</td>
<td>17</td>
<td>5.0%</td>
</tr>
<tr>
<td>Increased water stress</td>
<td>12</td>
<td>3.6%</td>
</tr>
<tr>
<td>Forest fires</td>
<td>11</td>
<td>3.3%</td>
</tr>
<tr>
<td>Changes in precipitation patterns</td>
<td>9</td>
<td>2.7%</td>
</tr>
<tr>
<td>Ecosystem vulnerability</td>
<td>7</td>
<td>2.1%</td>
</tr>
<tr>
<td>Rising mean temperatures</td>
<td>6</td>
<td>1.8%</td>
</tr>
<tr>
<td>Seasonal supply variability/interannual variability</td>
<td>4</td>
<td>1.2%</td>
</tr>
<tr>
<td>Pests/invasive species</td>
<td>3</td>
<td>0.9%</td>
</tr>
<tr>
<td>Rupture of tailings dams and toxic spills</td>
<td>2</td>
<td>0.6%</td>
</tr>
<tr>
<td>Scarcity of land resources</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>Reduction in underground water levels</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>Soil degradation</td>
<td>1</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

Source: CDP 2020 data

Notably several of the reported detrimental impacts were also closely tied to water security, which also have negative impacts on nature, people, and economies.

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18 The number of responses is lower here because this finding refers only to companies responding to the Forests and Water Security questionnaires.
4. Companies also rarely consider nature in their responses to those impacts

CDP’s questionnaires also allowed companies to disclose how they address the detrimental impacts that they identify. As can be seen in Figure 1 below, **only 11% of the companies that disclosed some type of response to detrimental impacts identified nature-related responses.** Responses not classified as nature-related included, for example, new product/technology development and market expansion.

**Figure 1: Most commonly disclosed responses to detrimental impacts**

Thus, nature-related responses still represent a small proportion of companies’ responses to address the detrimental impacts that they presently report on.
CASE STUDIES OF COMPANIES IMPLEMENTING POTENTIAL NATURE-BASED SOLUTIONS (NBS) AND OTHER NATURE-RELATED INTERVENTIONS

The findings of the previous section indicate that there is still much to be done for businesses to strengthen recognition of nature-related considerations in their assessments and reporting of environmental risks, opportunities, impacts and responses. Some companies, however, are developing important initiatives towards better integrating nature in their operations. Without further examination, it is not possible to say to what extent these may represent true Nature-based Solutions (NbS), in the way that IUCN defines and recognizes them. But the cases below nevertheless provide a useful illustration of how some of the companies participating in CDP’s disclosure systems are embarking on or supporting actions that support nature as part of their operations, some of which may also be incipient or potential NbS interventions.

It is important to note that NbS approaches should not only be understood solely through the lens of climate; biodiversity underpins the delivery of many ecosystem services in the short term and supports the health and resilience of ecosystems in the long term and must therefore be a key element of all NbS alongside human well-being, as also called for in the IUCN definition. When appropriately designed, managed, and governed, NbS for water, for instance, can provide approximately 1.4 billion people with clean and safe drinking water, saving US$140 billion/year. NbS can be an effective way of strengthening natural systems’ capacity to process a range of wastes and pollutants, not just greenhouse gases. They can also be an effective way of protecting and restoring natural systems that underpin economic activity, for example.

CASE STUDY 1: WATER STEWARDSHIP IN SOUTH AFRICA

Mondi PLC

<table>
<thead>
<tr>
<th>Type of activity</th>
<th>Water stewardship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where is implementation taking place?</td>
<td>South Africa</td>
</tr>
<tr>
<td>Environmental issues addressed</td>
<td>Increased water demand, degraded wetlands, impact of upstream land users, and Mondi’s own forestry operations on water quality.</td>
</tr>
<tr>
<td>Environmental and other benefits reported</td>
<td>Maintenance of critical ecosystem services provided by wetlands; support to landowners on how to assess, manage and rehabilitate wetlands.</td>
</tr>
<tr>
<td>Reported results</td>
<td>First reflooding of wetland in 60 years, return of species to project areas.</td>
</tr>
<tr>
<td>Drivers of project implementation</td>
<td>Compliance with company voluntary commitments</td>
</tr>
<tr>
<td>Main partnerships and engagement</td>
<td>WWF</td>
</tr>
</tbody>
</table>

19 In addition to its definition of NbS (see footnote 7), IUCN has also developed a global standard to support the coherent design, execution and evaluation of nature-based solutions, which includes eight specific criteria and 28 indicators; see IUCN (2020). IUCN Global Standard for Nature-based Solutions: A user-friendly framework for the verification, design and scaling up of NbS. First edition. Gland, Switzerland: IUCN.
20 The source of the information contained in this section are the disclosures of the companies to CDP’s 2020 questionnaires.
23 CDP awards disclosing companies an annual score from D- to A. CDP scoring measures the comprehensiveness of disclosure, awareness and management of environmental risks and best practices associated with environmental leadership, such as setting ambitious and meaningful targets.
Motivation for action

In South Africa, where Mondi owns and manages plantation forests, freshwater resources are under critical stress, with water demand expected to exceed supply by 17% by 2030 if current trends continue. This is a risk for land users and places pressure on South Africa’s (SA) economy. For freshwater ecosystems, the main risk is the hydrological impact of Mondi’s forestry’s water use (water quantity) and the impact of upstream land users and Mondi’s own forestry operations on water quality. For this reason, Mondi has voluntarily sponsored the previously named Mondi Wetlands Program since 2001. The partnership played a key role in catalysing government-led Working for Wetlands Program in the early 2000s. Working with conservation agencies, Mondi became the first large landowner to work on rehabilitating degraded wetlands in the country.

Implementation

Mondi currently manages about 15,000 ha of wetlands within its own and leased land properties in South Africa. In 2014, Mondi extended the relationship with WWF through a global partnership (2014-2020), broadening its work from wetlands conservation to promoting freshwater stewardship beyond the boundaries of its own plantations to include the agricultural sector and small forest growers. Now renamed the WWF-Mondi Water Stewardship Partnership (WWF-MWP), it aims to maintain or enhance the values and resilience of ecological infrastructure (rivers, wetlands, and ecological networks) at a landscape scale in strategic water source areas. This integrated, landscape-based approach will help develop improved policies and management practices and help address conflicts over land and water use while maintaining critical ecosystem services in the landscape. Over the past three years, WWF and Mondi have worked collaboratively with farmers and government in the uMhlathuze catchment to strengthen water security for the Richards Bay city. While this project is ongoing, its initial success has supported WWF, Mondi and other partners to begin adapting the uMhlathuze model for the uMkhomazi catchment, which ultimately provides water to one of South Africa’s largest cities, the economic hub of Durban.

Reported results

The first significant wetland rehabilitation success was measured at Mondi’s Zoar wetland in 1999, which had been drained for dryland agriculture and remained unflooded for 60 years. The partnership initiated a major rehabilitation operation. Once completed, in less than a month the entire wetland area of 450 hectares had flooded for the first time in six decades. Conservationists witnessed the return of white-faced ducks, the endangered crowned cranes, and other wetland birds, while wetland plant species sprouted. The partnership has helped develop various technical and social tools to enable wetland management practices, such as providing guidance to landowners with practical information on how to assess, manage and rehabilitate their wetlands.
CASE STUDY 2: REGENERATIVE AGRICULTURE

Danone

<table>
<thead>
<tr>
<th>Type of activity</th>
<th>Regenerative agriculture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where is implementation taking place?</td>
<td>United States, France, Morocco, Kenya, Spain, Mexico</td>
</tr>
<tr>
<td>Environmental issues addressed</td>
<td>Soil quality, fertilizer runoff, water quality</td>
</tr>
<tr>
<td>Environmental and other benefits reported</td>
<td>Soil and water protection; biodiversity preservation; reduced carbon emissions (mitigation); carbon sequestration (mitigation); increased climate change resilience (adaptation); water scarcity resilience; watershed protection reduced water contamination; strengthened water retention in soils; sustainability of supply of agricultural products; reduced exposure to price volatility; protecting farmers’ yields and increased productivity with fewer inputs; reduced water intensity for crops; Increased drought resistance.</td>
</tr>
<tr>
<td>Reported results</td>
<td>In Kenya, France, and Spain, increase of time resistance of crops to droughts up to 5 or 6 weeks. In Mexico, 15% increase in the biofertilizer ratio and 15% reduction in pesticide use, 30% average net income increase for the farmers.</td>
</tr>
<tr>
<td>Drivers of project implementation</td>
<td>Climate-related risks, such as changes in precipitation patterns and extreme variability in weather patterns. Opportunities to increase resilience and production capacity, generating increased revenues. Increased consumer demand for more sustainable products.</td>
</tr>
<tr>
<td>Main partnerships and engagement</td>
<td>French Government, Cornell University</td>
</tr>
</tbody>
</table>

2020 CDP Scores

**Climate**

**Water security**

**Forests**

**Timber**

**Soy**

**Palm oil**

**Motivation for action**

Danone’s businesses are directly related to major agricultural commodities. Climate change, through changes in weather patterns, more variability in seasonal weather, increasing temperatures, etc., can induce changes in resources, leading to reduced availability of key commodities including raw materials such as milk, which is the main raw material purchased by Danone on a value basis. As a response to climate and water security-related risks and as a response to increased consumer demand for more sustainable products, Danone is currently engaged in the implementation of regenerative agriculture (RA) practices within its supply chain, with actions focused mainly on soils and water.

**Implementation**

RA is an approach that regenerates soil, increases biodiversity, protects water in terms of quantity and quality, and enhances carbon sequestration in the soil, notably through fertilizer management. Danone works directly with farmers to co-manage action plans and promote farming practices that make it possible to limit the use of mineral fertilizers, pesticides, and other chemical products. The company reported carrying out RA activities in the United States, France, Morocco, Kenya, Spain, and Mexico. Danone has the ambition to source 100% of ingredients produced in France from RA by 2025.
The company is working to build regenerative models of agriculture that are based on healthy and resilient soils. Soil health is a key component of Danone's RA model, and the company is carrying out three main RA activities related to soils: i) In 2017, Danone joined the French government’s ‘4 per 1000 initiative on healthy soils’ (4p1000.org), in which public and private stakeholders show that agriculture and agricultural soils can play a crucial role for food security and climate resilience. ii) In 2018, Danone teamed up with experts from Cornell University to identify ways to regenerate soils and store more carbon in the ground. iii) In 2019, Danone joined Gold Standard’s ‘Value change interventions’ program aimed at establishing a methodology for measuring soil carbon sequestration.

The company is also working with suppliers to help them develop RA systems that are more water-efficient and improve productivity. RA practices help to preserve the water cycle, notably in the highest-risk areas of its supply chain, maximizing water efficiency and preserving quality. RA also has a role to play in the reduction of water contamination by reducing the usage of fertilizers and pesticides. In Mexico and Morocco, two of the most important production areas for strawberries, Danone is promoting regenerative agriculture practices with farmers. Training, technical support, and financial incentives to improve water management at farm level are provided to reduce the quantity of water used and secure the right quality.

Reported results

By transitioning to RA practices, like reducing soil tillage, covering soil by crops all year long, and crop association to continuously improve it, farmers can take all benefits of a healthy soil to sustain good productivity with fewer inputs. Danone also identifies RA as an opportunity to increase resilience and generate more revenues through increased production capacity. Scaled-up RA pilots in the US, France, and Mexico show strong potential impact in reducing the volatility of commodity prices, lower need for chemical intrants, better crops rotations, and stronger resilience against water scarcity. These actions also contribute to protect farms’ yield. Additionally, The Danone Ecosystem Fund supports the transformation of agricultural practices in the company’s supply chain through 36 projects across the world. For example, the ‘Les 2 Pieds sur Terre’ initiative aims to help farmers in France reduce their carbon footprint while increasing revenue and leveraging innovative financing tools.

Regenerative agriculture practices in Kenya, France, and Spain for instance, show an increase of time resistance of crops to droughts up to five or six weeks, protecting farms’ yield and securing supply even in times of water scarcity. In Mexico, Danone helped farmers improve water quality by reducing fertilizer run-off in ground and surface water, with a 15% increase in the biofertilizer ratio and a 15% reduction in pesticide use. Livelihoods have improved as a result, with an average 30% net income increase for the farmers. These practices improve farmers working conditions and relationships with their ecosystem and result in a more sustainable farming activity and water management.
**CASE STUDY 3: MANGROVE CONSERVATION AND RESTORATION IN THAILAND**

**Charoen Pokphand Foods PCL**

<table>
<thead>
<tr>
<th>Type of activity</th>
<th>Ecosystem conservation and restoration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where is implementation taking place?</td>
<td>Thailand</td>
</tr>
<tr>
<td>Environmental issues addressed</td>
<td>Potential loss of mangrove areas</td>
</tr>
<tr>
<td>Environmental and other benefits reported</td>
<td>Mangroves conservation; biodiversity loss reduction; watershed protection; food security and income improvements; strengthening of community ownership of resources.</td>
</tr>
<tr>
<td>Reported results</td>
<td>Biodiversity recovery in project regions.</td>
</tr>
<tr>
<td>Drivers of project implementation</td>
<td>Voluntary commitments; improve community relations.</td>
</tr>
<tr>
<td>Main partnerships and engagement</td>
<td>Department of Marine and Coastal Resources, and the Biodiversity-Based Economy Development Office (Public Organization), along with various local organizations and communities.</td>
</tr>
</tbody>
</table>

**Motivation for action**

Mangrove forests provide a wide range of environmental and societal benefits, for example, as a food source for a diverse species of animals; as breeding and nursing grounds for aquatic animals; as carbon sinks and protection against extreme weather events and tsunamis; and as food and income sources for humans. Furthermore, mangrove forests have the capacity to absorb and store pollutants that are emitted from agricultural, industrial, and household activities. Recognizing the importance of coastal waters and the benefits provided by mangrove forests, Charoen Pokphand Foods PCL (CPF) started the CPF Grow-Share-Protect Mangrove Forestation Project in 2014. The project is carried out in conjunction with the Department of Marine and Coastal Resources, and the Biodiversity-Based Economy Development Office (Public Organization), along with various local organizations and communities.
Implementation

The project aimed to increase mangrove forest areas and conserve mangrove forests in five strategic locations across Thailand, including in areas that are near the Company’s operations, in Samut Sakhon, Rayong, Chumphon, Phang Nga, and Songkhla provinces. A mangrove learning center was also established to share knowledge about mangrove ecosystems with the public. In 2017, the mangrove conservation and restoration efforts were further developed into the promotion of ecotourism and community tourism in two locations: the Paknam Prasae Community in Rayong Province, and the Bang Ya Praek Community in Samut Sakhon Province. The communities were ultimately selected as tourism routes under the Amazing Thailand Unseal Local 2018 initiative, while the Paknam Prasae Community in Rayong Province was also selected as a tourism route under the Local Life & Learn Project of the Tourism Authority of Thailand. In 2018, the company handed the Mangrove Fund to the working groups of two communities, who became responsible for the management of the fund, which is funding the development of the community’s products and services and generating additional income. Furthermore, the fund can be spent on further mangrove conservation and restoration initiatives.

Reported results

Fishermen in the Bang Ya Praek community in Samutsakhon Province reported seeing marine species such as oriental angel’s wings, which have not been seen for more than a decade while, also witnessing the increase of other marine lives including cockles, mullets, fiddler crabs, and sesarma crabs.
CASE STUDY 4: ECOSYSTEM RESTORATION AND WATER SPRING PROTECTION IN BRAZIL

Suzano Papel & Celulose

<table>
<thead>
<tr>
<th>Type of activity</th>
<th>Ecosystem restoration, water spring protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where is implementation taking place?</td>
<td>Brazil</td>
</tr>
<tr>
<td>Environmental issues addressed</td>
<td>Deforestation</td>
</tr>
<tr>
<td>Environmental and other benefits reported</td>
<td>Biodiversity loss reduction; protection of springs; support to environmental awareness in communities.</td>
</tr>
<tr>
<td>Reported results</td>
<td>32,855 ha of restored forests. 151 springs under restoration, 960 seedlings planted with 543 people engaged.</td>
</tr>
<tr>
<td>Drivers of project implementation</td>
<td>Regulatory compliance, certifications, and voluntary commitments.</td>
</tr>
<tr>
<td>Main partnerships and engagement</td>
<td>The Nature Conservancy (TNC)</td>
</tr>
</tbody>
</table>

**Motivation for action**

The Brazilian Forestry Code (Law 12.651 / 2012) requires the restoration of protected areas of the properties that possess Permanent Preservation (APPs) and Legal Reserve (RLs) areas. In order to adhere to legal requirements and its certifications and voluntary commitments, Suzano launched an Ecological Restoration Program in 2010. The Program contemplates projects in the biomes of the Atlantic Forest, Cerrado, and Amazon.

Additionally, since 2017, Suzano has been voluntarily conducting a natural regeneration project known as Nascentes do Mucuri (Mucuri River Springs). The Muciri river originates in the northeast region of the state of Minas Gerais and discharges in the South of the state of Bahia, extending for 446 kilometers in an area of approximately 15,400 square kilometers and a population of 537,000.

The activities of Suzano’s ecological restoration program are grouped into implementation and maintenance packages. In general, there are five different restoration methods employed in all units. There may be adaptations to these methodologies, according to the particularities of the units, so that the operationalization of the methodologies is used in applicable procedures. They are: planting native species; conducting natural regeneration; exotic/invasive control; isolation. After carrying out the key activities in the “to be restored” areas, these are transferred to the status “in the process of being restored” and are subject to the monitoring and maintenance process. The determination of the need to carry out maintenance activities comes from the operational and ecological monitoring of the areas, carried out by specialized teams. Maintenance activities include the phase between the implementation of the
reforestation and the formation of a forest environment and comprise all the activities carried out after the first month of the implantation of the area until it is considered “restored”. The maintenance package includes activities such as covering fertilization and maintenance, chemical weeding, mowing, crowning, ant control, replanting, eliminating weeds, and adaptive management (thickening and enrichment plantations), among others.

The Mucuri Springs project encourages the protection of the springs of the Mucuri River and its surroundings, while promoting the resilience of the water resources that are valuable to maintain the ecosystem services in the region. It also promotes environmental education and training of local producers to consolidate a culture of preservation in the region. The project has also supported more than 20 families to start the Agroecological Transition Plan, a methodology of Suzano’s Rural Land Development Programme (PDRT - Programa de Desenvolvimento Rural Territorial). The PDRT aims to generate greater economic, food, and environmental security in properties in the Northeast situated in the state of Minas Gerais. The project has implemented participation of several relevant organizations such as The Nature Conservancy (TNC), which monitors Forest Restoration projects, together with other multi-leaders from the private sector, NGOs, government agencies. It also involves individuals from local communities to stimulate the restoration and culture preservation of the Mucuri River Basin.

Reported results

Until 2020, Suzano reported a total of 32,855 ha of restored forests in its restoration projects, or 47% of their 2035 target. The Mucuri River Springs project has achieved 151 springs under restoration, 960 seedlings planted with 543 people engaged.
CASE STUDY 5: COMMUNITY DEVELOPMENT IN INDONESIA

Asia Pulp & Paper

<table>
<thead>
<tr>
<th>Type of activity</th>
<th>Community development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where is implementation taking place?</td>
<td>Indonesia</td>
</tr>
<tr>
<td>Environmental issues addressed</td>
<td>Deforestation, forest fires</td>
</tr>
<tr>
<td>Environmental and other benefits reported</td>
<td>Forest conservation; biodiversity conservation; forest fire prevention; community engagement; women empowerment; improved income; for communities.</td>
</tr>
<tr>
<td>Reported results</td>
<td>Better incomes for families due to the greater diversification of livelihoods, fewer forest fires.</td>
</tr>
<tr>
<td>Drivers of project implementation</td>
<td>Voluntary commitments</td>
</tr>
<tr>
<td>Main partnerships and engagement</td>
<td>Yayasan Konservasi Alam Nusantara (YKAN)</td>
</tr>
</tbody>
</table>

Motivation for action

APP recognizes the importance of engaging with local communities to work together to protect the environment. Consequently, the company established in 2015 a program called Desa Makmur Peduli Api (DMPA) to work towards that goal by improving the welfare of the communities living in and around forest areas, while at the same time reducing the risks of illegal logging, forest fires, and land disputes.

Implementation

DMPA aims to empower and involve communities in their sustainable operations, to achieve landscape-scale sustainable forest management, as well as to improve the protection and restoration outcomes across APP and supplier operations. This participatory community engagement program also aims to improve livelihoods, transfer knowledge, improve collaboration, and create a virtuous circle of forest management. The program focused on increasing the numbers of households participating in the program, within the villages that are already involved. It also focused on connecting the program to markets, to maximize commercial opportunities, boost incomes and ensure communities are benefiting. In 2019, it focused on linking the market to farmers, and if appropriate, in certain cases to buy products directly from the community, for example, compost which is then provided directly to pulpwood suppliers for forestry applications.
In September 2019, APP began working with Yayasan Konservasi Alam Nusantara (YKAN), the main partner of The Nature Conservancy in Indonesia. A program was established in the Sanggau District on the Indonesian island of Kalimantan. Core to this program is the ‘SIGAP’ approach, or the ‘communities inspiring actions for change’ which YKAN has been developing and supporting for almost 10 years in East Kalimantan, Indonesia. APP reports that the approach has been so successful that it has been adopted by the regional government. The program engages the local community on fire prevention and provides basic training and facilitation, with a focus on strengthening village governance (including improving village development and land use plans), improving livelihoods, and strengthening forest management. The work in improving village development plans is connected to the planning processes at the district and sub-district levels, creating a more holistic approach to sustainable development. Over the long-term APP hopes to be able to demonstrate improved community wellbeing, lowered poverty rate, and improved village development index (a metric used by the Government of Indonesia).

Reported results

By the end of 2019, 335 villages, with 21,907 households, had participated in the DMPA project. The encouragement of economic empowerment for women has attracted 82 women’s groups to get involved. Based on interim observations reported by the company, two-thirds of DMPA villages have experienced better incomes for families due to the greater diversification of livelihoods, fewer forest fires, and better relations with industries.
**Case Study 6: Natural Infrastructure, Reforestation with Native Species**

**Philip Morris International**

<table>
<thead>
<tr>
<th>Type of activity</th>
<th>Natural Infrastructure, reforestation with native species</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where is implementation taking place?</td>
<td>Malawi and Mozambique</td>
</tr>
<tr>
<td>Environmental issues addressed</td>
<td>Deforestation, forest degradation</td>
</tr>
<tr>
<td>Environmental and other benefits reported</td>
<td>Reduced deforestation; biodiversity enhancement.</td>
</tr>
<tr>
<td>Reported results</td>
<td>More than 80,800 live barns grown.</td>
</tr>
<tr>
<td>Drivers of project implementation</td>
<td>Voluntary commitments, brand damage risk</td>
</tr>
<tr>
<td>Main partnerships and engagement</td>
<td>Supply chain, suppliers and farmers</td>
</tr>
</tbody>
</table>

**Motivation for action**

Philip Morris International (PMI) developed deforestation risk maps for the countries which it buys tobacco from and where farmers use firewood for tobacco curing and where medium to high deforestation risks were identified. Internal company methods were used to assess risks associated with the use of timber for tobacco curing barn construction. One of the risk drivers of forest degradation in supplying regions is the demand for timber used to build barns for the air-drying of tobacco – timber poles are used in a simple thatched roof structure where tobacco leaves are hung to dry. As the wooden poles used in the barns are attacked by termites and other parasites typical of warm climates, they need to be replaced regularly.

**Implementation**

This issue is being addressed with the concept of the “live barn” — a structure of living trees that support the curing poles and remain in place for many years. PMI is working with its tobacco suppliers in Malawi and Mozambique, to prevent deforestation and contribute to compensate areas where past deforestation has taken place. This program will help tobacco farmers in these countries to better protect the environment while restoring biodiversity, promote efficiency on their farms, provide additional wood for their own use from annual pruning, and effectively reduce deforestation.
Reported results

Since 2014, PMI suppliers have grown more than 80,800 live barns with an exponential growth rate that brought close to 20,000 barns (19,949) to be planted in Malawi and Mozambique in 2020 alone. PMI suppliers provide the tree seedlings (from a range of local species), advice, and propagation materials to help ensure high tree survival rates and optimal growth rates. The growth of the barns is monitored and interventions are organized by PMI’s suppliers where support from farmers is needed. Bamboo seedlings are also provided so that bamboo poles can be used as horizontal supports and for the barn roof skeleton in the future. In 2020 over 20,000 (20,760) bamboo plants have been distributed by PMI’s supplier in Malawi.

The six cases presented above show how some leading companies are gathering valuable experience in implementing and supporting programs that aim at conserving and restoring nature, with benefits for biodiversity, climate, and human welfare. These initiatives can be seen as an indication that the private sector is keen to support nature as part of its sustainability efforts. But to what extent these go beyond pilot corporate social responsibility efforts to systematically hardwire nature and NbS within their core business operations and supply chains will require further examination and evaluation. In particular, for these to count as NbS, will required them to be assessed against the IUCN Global Standard for NbSTM (see Box 1 below).

Box 1: IUCN Global Standard on Nature-based Solutions™

The IUCN Global Standard on Nature-based Solutions™, launched in 2020, aims to ensure the application of NbS is done in a standardized and high-quality manner, and its uptake tracked and measured for adaptive management. This Standard, which has eight criteria and 28 indicators, aims to equip users with a robust framework for designing and verifying NbS that yield the outcomes desired, in relation to one or more of the societal challenge(s) that it is designed to address. Developed as a facilitative Standard, it purposefully avoids a rigid normative framing with fixed, definitive thresholds of what NbS ought to achieve. Rather it is designed to support users to apply, learn and continuously strengthen and improve the effectiveness, sustainability and adaptability of their NbS interventions.

CONCLUSION

By incorporating nature into their strategy, businesses can benefit through long-term viability of business models, cost savings, increases in operational efficiency, increased market shares, predictable and stable supply chains, better relationships with stakeholders and customers, and access to new markets, products and services\(^24\). It has been estimated, for example, that for every dollar spent on ecosystem restoration, between three and 75 dollars of economic benefits from ecosystem goods and services can be expected\(^25\).

However, this report finds – based on the responses currently made by companies to CDP’s questionnaires – that the recognition and incorporation of nature-related considerations is very low. This trend is consistent regardless of whether companies are identifying and reporting on: (i) the risks that may have a substantive financial or strategic impact on their business; (ii) the opportunities that may have a substantive financial or strategic impact on their business; (iii) the detrimental impacts that they experience; or (iv) in their responses to those detrimental impacts. This suggests a considerable overlooking of nature at a global scale by them at present, and also a significant opportunity to raise corporate awareness, knowledge and capacity on this topic.

Likewise, the case studies presented in this report also reflect a wide variation in the range of nature-related interventions and activities currently being undertaken by companies in CDP’s network. The current available data, on which this report is based, makes it difficult to evaluate the extent to which these go beyond pilot-interventions, and represent a true mainstreaming of nature into the core business operations and value chains of these companies. Similarly, it is also not possible to assess the extent to which some of these might actually deliver credible NbS, consistent with the requirements of the IUCN Global Standard. Nevertheless, what they do illustrate is the growing interest and seriousness with which some companies are beginning to more systematically consider and integrate the well-being of nature and local communities within their respective areas of operation.

There is an enormous opportunity for companies to become a powerful catalyst for change by systematically incorporating nature-related considerations within their supply chains and business strategies, and by effectively deploying NbS wherever possible to help address major societal challenges, such as climate change, water and food security, and disaster risk reduction. But this should be done alongside ambitious corporate action to reduce overall GHG emissions and adhering to the best available environmental and social standards. It is also critical that companies have suitable internal accountability mechanisms in place, as well as inclusive local stakeholder engagement plans, that take into consideration the local context in which they operate.

In the face of the climate and biodiversity emergencies that are confronting humanity today, all actors have their part to play. Reducing impacts on nature and climate is a business imperative to ensure continued prosperity and well-being across the world. On their part, companies can and must raise their ambitions around nature and climate, in support of an inclusive net-zero and nature-positive world.


RECOMMENDATIONS

While it is possible to make several recommendations that can help increase corporate ambition on nature and NbS, we limit ourselves here to four specific recommendations.

1. Businesses should identify and report on nature-related risks, opportunities, impacts and responses more systematically within their corporate environmental disclosures.

   - As this report has shown, companies responding to CDP’s questionnaires do not, at present, appear to fully recognize or report on nature-related considerations in the overall risks, opportunities, impacts and responses that they identify.
   - This may be, in part, due to the way in which these questionnaires were designed. Going forward, future CDP questionnaires will aim, in consultation with IUCN, to engage on the nature-related dimensions of corporate disclosures in a more structured manner and to further support companies on this.
   - But companies need to also invest in collecting high-quality data on both their dependencies and impacts on nature.
   - The Taskforce on Nature-related Financial Disclosures (TNFD) is developing a risk management and disclosure framework for organizations to report and act on evolving nature-related risks, which aims to support a shift in global financial flows away from nature-negative outcomes and towards nature-positive outcomes. This will be important to contribute to and support.

2. More businesses need to take concrete steps now to put in place science-based, nature-positive, net-zero strategies.

   This will require businesses to:
   - Assess their impacts and dependencies on nature to ensure they are committing and acting on the most material ones.
   - Commit to ambitious goals on both climate and nature, including by setting science-based targets that are aligned with internationally agreed goals.
   - Disclose their actions and progress against stated goals and invite independent third-party verification. Tracking progress in a transparent way will ensure that corporate promises are being translated into action in a credible manner.

3. Businesses should implement their nature/NbS-related plans and actions based on the best available international standards and guidance.

   - It is critical that companies not only understand their natural capital dependencies, but also have a detailed understanding of the local context in which they plan to implement NbS, including through inclusive local stakeholder consultations and engagement.
   - In their efforts to implement NbS, companies should aim to apply and adhere to the IUCN Global Standard for NbSTM. This will help to ensure quality assurance and enhance the credibility of their NbS interventions, in terms of providing benefits for both human well-being and biodiversity.
Governments should put in place enhanced policies to ensure more and better corporate environmental disclosures.

- Corporate action needs to be transparently disclosed, communicated and tracked to measure and manage risk across the economy.
- Voluntary action is not enough, and needs to be supplemented by mandatory disclosure requirements. Due diligence requirements for forest risk commodities in consumer countries and regions, for example, could be an important step forward.
- Where appropriate, the importance of corporate disclosures could also be recognised in relevant international, regional, national and sub-national policy frameworks on climate change and biodiversity.
- This would also be supported through ensuring greater alignment and integration of the nature-related dimensions across different international policy processes,
REFERENCES


ANNEX 1

METHODOLOGY FOLLOWED FOR THE QUANTITATIVE ANALYSIS OF NATURE-RELATED ASPECTS IN CDP’S QUESTIONNAIRES

This analysis aimed at generating quantitative insights from selected questions in CDP’s 2020 questionnaires. The objective was to have an integrated analysis (across the forests, water security and climate change responses) of important aspects related to nature.

To do the analysis, the authors performed the following steps:

a) Selected the questions and data points which provide the most useful insights on how responding companies approach nature.

b) Selected which topics to analyse (risks, opportunities, impacts, etc.).

c) Grouped the questions from the different questionnaires in clusters of questions that approach the same or similar topics.

d) Formulated an overarching question that encompasses the topic being analysed, as in the example below:

How many companies identify nature-related opportunities with the potential to have a substantive financial or strategic impact on their business?

- Forests Questionnaire: (F3.2a) For your selected forest risk commodity(ies), provide details of the identified opportunities with the potential to have a substantive financial or strategic impact on your business.

- Climate Questionnaire: (C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

- Water Questionnaire: (W4.3a) Provide details of opportunities currently being realized that could have a substantive financial or strategic impact on your business.

e) Compiled the datasets from the three themes according to the clusters identified and performed a quantitative analysis of the responses. The percentages present in this report have been calculated based on the number of valid responses to the questions, meaning that companies whose responses are indicated as “Question not applicable” or were blank, were not part of the denominator.

It is important to highlight that, since it was not feasible to analyse the tens of thousands of free text response fields in CDP’s data set, this report presents an analysis based on pre-defined dropdown options in the questionnaire. The results presented in this report might, therefore, underestimate the extent of nature-related action by disclosing companies. In a few cases, companies may report nature-related actions in free text fields of the questionnaire, while choosing non-nature related response options. As a hypothetical example, in question W4.3a, a company may choose the response option "Increased sales of existing products/services", which is not classified as a nature-related answer. But in the free-text response field "Company-specific description & strategy to realize opportunity", the company might describe a nature-related action.

Another important caveat is that CDP’s questionnaires, even the forests and water security questionnaires, are still predominantly climate focused. As an example, there are no direct questions about NbS in the forests questionnaire. This is another reason why the figures reached by the analysis might underestimate, to some extent, the nature-related responses of companies. As the knowledge of the interdependencies between climate and nature evolves, CDP’s questionnaires will evolve to better capture them.
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**About CDP**

CDP is a global non-profit that runs the world’s environmental disclosure system for companies, cities, states and regions. Founded in 2000 and working with more than 590 investors with over US$110 trillion in assets, CDP pioneered using capital markets and corporate procurement to motivate companies to disclose their environmental impacts, and to reduce greenhouse gas emissions, safeguard water resources and protect forests. Over 14,000 organizations around the world disclosed data through CDP in 2021, including more than 13,000 companies worth over 64% of global market capitalization, and over 1,100 cities, states and regions. Fully TCFD-aligned, CDP holds the largest environmental database in the world, and CDP scores are widely used to drive investment and procurement decisions towards a zero carbon, sustainable and resilient economy. CDP is a founding member of the Science Based Targets initiative, We Mean Business Coalition, The Investor Agenda and the Net Zero Asset Managers initiative. Visit [cdp.net](http://cdp.net) or follow [@CDP](https://www.twitter.com/CDP) to find out more.

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**About IUCN**

IUCN is a membership Union composed of both government and civil society organisations. It harnesses the experience, resources and reach of its more than 1,500 Member organisations and the input of more than 18,000 experts. This diversity and vast expertise makes IUCN the global authority on the status of the natural world and the measures needed to safeguard it. Visit [iucn.org](http://iucn.org) and follow [@IUCN](https://www.twitter.com/IUCN) on Twitter.