

## **Business Briefing**

# Ahead of the curve: A preparatory guide on nature for the agri-food sector

supported by



# The University of Cambridge Institute for Sustainability Leadership

CISL is an impact-led institute within the University of Cambridge that activates leadership globally to transform economies for people, nature and climate. Through its global network and hubs in Cambridge, Cape Town and Brussels, CISL works with leaders and innovators across business, finance and government to accelerate action for a sustainable future. Trusted since 1988 for its rigour and pioneering commitment to learning and collaboration, the Institute creates safe spaces to challenge and support those with the power to act.

#### **Authors**

Edmund Dickens and Harry Greenfield

#### **Citing this report**

University of Cambridge Institute for Sustainability Leadership (CISL). (2024). *Ahead of the curve: A preparatory guide on nature for the agrifood sector*. Cambridge, UK: Cambridge Institute for Sustainability Leadership.

#### Acknowledgements

We would like to acknowledge the insights and information provided by the following organisations, which informed the preparation of this report: Asda, ABP Food Group, Allied Bakeries, Arla Foods Ltd and IPL Ltd.

## Copyright

Copyright © 2024 University of Cambridge Institute for Sustainability Leadership (CISL). Some rights reserved. The material featured in this publication is licensed under the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International Licence (CC BY-NC-SA 4.0).

# Contents

Introduction	4			
1. Why the nature agenda is shaping business strategies5				
2. The farming and nature nexus: agriculture's dependence and impact on nature	7			
3. What this means for business – how to prepare now	9			
Assessing your readiness for nature positive action	9			
Navigating different nature frameworks	10			
Overview of TNFD and science-based targets (SBTs) for nature	11			
Where to start: preparation, scoping and assessment	12			
4. Key success factors for becoming nature positive	. 14			
Success factor 1: getting the right nature-related data	14			
Success factor 2: engaging with key stakeholders across the value chain	17			
Success factor 3: embedding nature action within a holistic strategy	19			
5. No-regret actions for nature for the food and agriculture sector	. 20			
Further resources	. 21			
Starting	21			
Developing	21			
Advancing	21			
Leading	22			
Appendix: overview of nature frameworks and initiatives	. 23			
References	. 25			

# Introduction

Our economy is highly dependent on nature, something that is particularly clear for the food sector, but human activity is leading to the loss of nature and accompanying risks for businesses and society. Governments, citizens and financial institutions are turning their focus towards addressing this problem through regulations, global policy and many voluntary initiatives aimed at businesses. This short guide aims to help businesses within the agri-food sector prepare to engage in the nature agenda. The reasons for doing this are outlined in *Chapter 1: Why the nature agenda is shaping business strategies.* 

*Chapter 2: The farming and nature nexus* dives deeper into the role of agriculture in this story. Farming is at the sharp end of nature risks and impacts, something that no food business can afford to ignore. But the structure of agricultural value chains makes this difficult, with both visibility over nature-related issues from further up the value chain and levers to drive action limited.

*Chapter 3: What this means for business – how to prepare* focuses on two of the most prominent emerging nature frameworks: the Taskforce on Nature-related Financial Disclosures (TNFD) and the Science Based Targets Network's (SBTN) nature targets. After an overview of both frameworks the chapter sets out how to prepare to engage with them and what the initial stages of using both look like.

Finally, *Chapter 4: Key success factors for becoming nature positive* examines three areas that are vital for any food business looking to engage with nature: getting the right nature-related data, engaging with key stakeholders across the value chain, and embedding nature action within a holistic strategy.

This work has been informed by discussions with Asda and four of their key suppliers: ABP Food Group, IPL, Allied Bakeries and Arla. Through a series of deep dives with suppliers, we have identified some of the challenges facing businesses that want to take the next step on their nature journey and insights from those who are already making progress. These insights are interspersed within the document to illustrate the concerns of agri-food businesses and how industry peers could respond to these.

The overarching message of this briefing is that any business, whatever their past engagement with nature, should take action now to understand their risks, impacts and dependencies on nature. While this can seem a daunting task, it can begin with small steps. Early consideration of how to approach this and some of the key success factors should set businesses on the right path. Business action on nature will play a key role in reversing the decline of global biodiversity, and the insights, resources and immediate actions suggested in this briefing are a critical first step to setting organisations on the path to nature positive.

# **1. Why the nature agenda is shaping business strategies**

Nature is critical to the long-term resilience of corporate activity, especially for businesses operating in the agri-food sector, where the impacts and dependencies on nature are particularly acute. Nature, defined as "all non-human living entities and their interaction with other living or non-living physical entities and processes"<sup>1</sup>, can be split into four elements – land, freshwater, oceans and climate – each underpinned by biodiversity, the variability among living organisms. Nature provides a range of essential ecosystem services<sup>\*</sup> to humans, including crop pollination, maintaining healthy soil, provision of clean water, flood management and carbon dioxide absorption.<sup>2</sup>

But the natural world and its ecosystems are in crisis. Biodiversity loss and ecosystem collapse is recognised by the World Economic Forum as one of the greatest risks facing humanity over the next ten years, surpassed only by climate-related risks (though nature restoration is also one of the key tools in the fight against climate change).<sup>3</sup> Business activities, particularly those of food producers and processors, are one of the main drivers of nature loss, including changes in land, water and sea use; natural resource exploitation; and climate change and pollution.<sup>4</sup>

As the nature crisis has unfolded and our understanding of the causes has increased, so too have calls for a transformative approach to reverse these trends and become nature positive. The Kunming-Montreal Global Biodiversity Framework (GBF), agreed in 2022, is driving forward these efforts, with a global goal to restore nature globally by 2050 and interim targets to halt and reverse nature loss by 2030.<sup>5</sup> Momentum is building across businesses, governments and financial institutions to deliver this goal, with the solutions likely to affect almost all parts of the economy and society.

The vital role of the private sector in delivering the GBF's goal represents both a challenge and an opportunity for businesses. As is happening with climate change, businesses will increasingly be held to account on nature, expected to understand their nature impacts and risks, set targets and take action to improve. Some elements of current business models and value chains will require substantial change to align with the nature agenda, and the transition to nature positive will require bold leadership, investment and collaboration. But doing this could also bring commercial benefits. For example, the World Economic Forum estimated that there is the potential for \$10.1 trillion of annual business opportunities and 395 million jobs by 2030 from transitions across food, land and ocean use; infrastructure and the build environment; and energy and extractives.<sup>6</sup>

Policymakers are also turning their attention towards this problem – setting global and national targets for nature as well as beginning to roll out regulations and incentives to help achieve these goals. Mandatory corporate assessment and disclosure of nature risks is an early candidate for regulators, following momentum around COP15 in 2022.<sup>7</sup> The Taskforce on Nature-related Financial

<sup>\*</sup> Ecosystem services are defined as the benefits people obtain from ecosystems. These include provisioning services such as food and water; regulating services such as regulation of floods, drought, land degradation and disease; supporting services such as soil formation and nutrient cycling; and cultural services such as recreational, spiritual, religious and other nonmaterial benefits. (Millenium Ecosystem Assessment, https://www.millenniumassessment.org/en/Condition.html)

Disclosures (TNFD) is expected to become mandatory, as its climate counterpart, the Task Force on Climate-Related Financial Disclosures (TCFD), already has in some jurisdictions including the UK, EU, Japan, Singapore and Switzerland<sup>8</sup>. Meanwhile, the European Sustainability Reporting Standards (ESRS) under the Corporate Sustainability Reporting Directive (CSRD) will impact all companies operating in the EU.

Legislators are making efforts to implement the GBF and to promote the protection and restoration of nature, such as the EU's Nature Restoration Law and nature targets in the UK's 2021 Environment Act. Experience from the climate change agenda shows that national and international environmental goals depend on changes in the real economy, meaning we can expect policies to encourage or require businesses to play their part in the nature positive agenda.

Momentum on nature is likely to increase as the impacts of nature degradation are felt more widely and the interactions between nature loss and climate change lead to increasing and more unpredictable risks. Investors, lenders, regulators, other businesses in the value chain and citizens all increasingly expect businesses to be aware of their impacts on nature and the risks they face from its degradation and to have plans in place to address these.<sup>9</sup>

#### Business insight 1: navigating a complex and evolving nature landscape

The emerging and rapidly evolving landscape of nature frameworks, tools and guidance can feel confusing or overwhelming for businesses. A focus on aligning and highlighting common ground between different initiatives is one solution (such as by using the <u>ACT-D framework</u>). Another is using a sectoral lens to make it clearer how nature is relevant to specific types of business.

Experience gained from implementing measures to address climate risks and impacts could be a double-edged sword: while it means businesses are familiar with some of the concepts and skillsets required (such as corporate disclosure and value chain engagement), if processes and approaches have been heavily focused on carbon and climate to date then the scope of these activities will need to be expanded and re-focused towards nature in response to regulatory, competitive and reputational pressures (among others).

One of the key messages is that the time for business to act on nature is now. While many uncertainties and challenges remain, there is sufficient knowledge and enough tools and resources for businesses to make a start on their nature journey.

# 2. The farming and nature nexus: agriculture's dependence and impact on nature

Businesses within the food and agriculture sector have a particularly important role to play in the nature positive agenda. The current global food system is a major contributor to nature loss and climate change, bringing both risks and opportunities for the sector. As one analysis puts it: "Food systems are to nature loss what energy systems are to climate change"<sup>10</sup>, meaning it is the area where we can expect to see the biggest transformation to address the nature crisis, but also where some of the most significant impacts to natural systems currently lie.

The agri-food sector is **highly dependent** on natural systems and is therefore highly exposed to risks associated with the decline of nature. Some examples illustrating this dependency include:

- Seventy-five per cent of globally important crops are directly dependent on pollination to sustain yields, but wild pollinators are in decline across the world.<sup>11</sup>
- Productive agriculture depends on healthy soil, with soil erosion a significant risk to crop production. Research shows that 33 per cent of soils globally are degraded.<sup>12</sup>
- Predictable rainfall and resilient water catchments are vital to agriculture. Farms account for 70 per cent of global water consumption, much of which is lost due to poor management of water catchments.<sup>13</sup>

These are just a few examples showing that the natural systems upon which agriculture has relied for millennia are becoming increasingly unreliable. Extreme weather, drought, wildfire, herbicide resistance, and increased pests and diseases have all been identified as risks facing the sector, and in many cases the risk level is increasing.<sup>14</sup>

Agriculture also has a significant **impact** on nature, at times degrading the very natural systems on which it relies and contributing to greenhouse gas emissions, pollution and degradation of soil, water and air. Land use conversion to agriculture can impact biodiversity by removing or damaging wildlife habitats, an especially acute problem when demand for agricultural products drives deforestation. Furthermore, the destruction of peatlands, mangroves and tropical forests for agriculture and other uses contributes to 13 per cent of total human CO<sub>2</sub> emissions, continuing to exacerbate the effects of climate change.<sup>15</sup>

Campaigners, legislators and analysts often focus on certain high-risk commodities, such as those responsible for rainforest loss, but agriculture's problems run deeper than this. The sheer extent of farming (occupying half the planet's habitable land<sup>16</sup>) means that the cumulative impact of mainstream, but ultimately unsustainable, agricultural practices is pushing environmental systems to breaking point. As noted in the report *Farming with Biodiversity*, "The current food system is responsible for a third of greenhouse gases, 80% of deforestation, 70% of terrestrial biodiversity loss, and has been linked to a dramatic rise in our exposure to zoonotic diseases, such as Ebola, SARS, and COVID-19".<sup>17</sup>

The close connection between nature and agriculture also represents an **opportunity** for the sector. Farmers and land managers are stewards of nature and ecosystems, putting them in a prime position to benefit from the nature positive agenda. The World Economic Forum estimates that there is a \$3.5 trillion economic benefit from land, food and ocean use change globally,<sup>18</sup> while another study suggests a 15 per cent return on investment for farmers investing in regenerative agriculture<sup>19</sup> as an alternative to harmful production practices. Whether sequestering carbon in soils, restoring biodiversity or managing watersheds sustainably, there are numerous actions that can deliver financial benefits to the business while also increasing resilience. A UK report into the livestock sector highlights the combined economic and environmental benefits from seeking "Maximal Sustainable Output" – which may involve reducing both inputs and outputs but increasing margins.<sup>20</sup>

Some of the above changes are already happening, but there is a vital role for the value chain to support the scale-up and spread of these practices so that agriculture can become regenerative and nature positive.

There are two other aspects to agriculture which further complicate engagement by corporates: **its social and cultural context** and **the influence of public policy on farming and land management**.

Farming has a deep-rooted cultural and social history, encompassing the cultural importance of food and farming to rural and indigenous communities. Attempts to drive change for good economic and environmental reasons will need to be careful to avoid a social backlash (as has been seen recently with farmers protesting against policy changes across Europe<sup>21</sup>). Respect for indigenous rights, rural communities and a just transition for the agriculture sector are all important for businesses to bear in mind.

Agriculture and land use are often heavily regulated sectors which can have a significant impact on farmer behaviour. Historically, governments have encouraged and subsidised food production, without always accounting for the environmental impacts. While this is still the case in many regions, it has changed in some areas in recent years. Policy measures such as the Common Agricultural Policy in the EU and post-Brexit agricultural policy in the UK, including England's Environmental Land Management schemes (ELMs), aim to strike a balance between farming and the environment. This additional set of drivers on agricultural practice is not always well aligned with commercial drivers – farmers can be on the sharp end of experiencing the effects of nature loss as well as being buffeted by the demands of the value chain, the state and the general public.

#### Business insight 2: the impact of changing policy on UK livestock farms

Changes in agricultural policy in the UK have the potential to move farming in a more sustainable direction by providing government incentives for nature-friendly farming practices. This presents risks for those farmers that are most dependent on government support, which includes the livestock sector.

In the UK these farms often have the potential to deliver significant gains for nature, but a just transition that values farmers' livelihoods is needed to ensure that suppliers can deliver the dual objectives of food security and nature positive outcomes in a changing world.

# 3. What this means for business – how to prepare now

#### Assessing your readiness for nature positive action

The scale of the necessary response to the nature challenge, and the complexity of the topic, especially in the agri-food sector, can make taking action seem daunting. Companies can start with small steps, depending on where they are and what they have already done to date. Organisations will be at different maturity levels on their journey to understanding nature. Outlined below are four levels of maturity, taken from the World Business Council for Sustainable Development (WBCSD) analysis of public corporate disclosures on nature:<sup>22</sup>

**Starting**: The company identifies nature-related issues and presents stand-alone actions for nature.

**Developing**: The company assesses its impacts and dependencies and has set a high-level ambition or targets for nature.

**Advancing**: The company integrates nature into strategy, sets measurable commitments for nature and implements strategic actions along priority parts of the value chain.

**Leading**: The company assesses impacts and dependencies for all potentially relevant realms, structuring business models and value chains in ways that address their impacts and dependencies and are commensurate with the achievement of global nature goals.

Considering your organisation's maturity level will aid in determining the next steps for engaging with the nature agenda and inform which tools or frameworks are most appropriate.

#### Navigating different nature frameworks

Several organisations have developed tools and frameworks outlining the various steps in this process (see Appendix for a comprehensive list). This document focuses on two: the **Taskforce on Nature-related Financial Disclosures** (TNFD), which allows organisations to disclose nature-related risks, impacts and dependencies,<sup>23</sup> and the Science Based Targets Network's (SBTN) **science-based targets (SBTs) for nature**, which provide a framework for companies to set targets for reducing their impacts on nature.<sup>24</sup> While the TNFD is focused largely on identifying and managing risks, SBTs for nature go beyond identifying issues and require organisations to set targets for improvement. The first stages of both are similar, based on identifying the organisation's interface with nature.

TNFD reporting and SBTs for nature are both comprehensive frameworks which can take a company from a position of little engagement with nature, to undertaking a thorough assessment of nature issues, embedding nature within company strategy and taking action towards becoming nature positive. Both have undergone extensive consultation in their development and have ties to widely used climate action frameworks (TCFD and SBTs for climate). This has given them a leading reputation among businesses, government and financial institutions.

TNFD and SBTs for nature have been developed to align with each other, sharing common elements and approaches. They also align with other relevant frameworks such as the International Sustainability Standards Board's (ISSB) IFRS Sustainability Standards. While the approach of different stakeholders to nature action may differ according to their own commercial priorities and regulatory jurisdictions, the links between nature frameworks means that businesses considering adopting them can undertake similar preparation regardless of which one(s) they choose.

For some companies, engaging with TNFD could act as a precursor to setting targets for nature. Going through a comprehensive TNFD disclosure process would make it easier to later engage with SBTs for nature. Setting nature targets may be a logical endpoint for organisations trying to address the risks and impacts identified through TNFD.

The table below provides a high-level overview of the two frameworks and their main areas of overlap.

## Overview of TNFD and science-based targets (SBTs) for nature<sup>25</sup>

	TNFD	SBTs for nature	
Overall goal	Framework for businesses and financial institutions to report on nature-related risks.	Framework for businesses to set clear, science-based targets for nature.	
Outputs	<ul> <li>A series of 14 recommended disclosures that companies should make, structured around four pillars:</li> <li>Governance</li> <li>Strategy</li> <li>Risk and Impact Management</li> <li>Metrics and Targets.</li> </ul>	Setting, implementing and tracking progress on science-based targets for nature across freshwater, land, biodiversity, ocean and climate.	
How it works	<ul> <li>TNFD uses the LEAP approach covering four stages of assessment in an organisation, preceded by a scoping stage:</li> <li>Scope your assessment</li> <li>Locate your interface with nature</li> <li>Evaluate your dependencies and impacts on nature</li> <li>Assess your nature-related risks and opportunities</li> <li>Prepare to respond to nature-related risks and opportunities and report on your material nature-related issues.</li> </ul>	<ul> <li>SBTs for nature uses a five-step approach:</li> <li>Assess: Materiality screening and value chain assessment</li> <li>Interpret and prioritise: Determine target boundaries, rank and prioritise target areas</li> <li>Measure, set and disclose: Measure baseline and set targets</li> <li>Act: Avoid; Reduce; Restore and Regenerate; Transform</li> <li>Track: Monitor, Report and Verify.</li> </ul>	
Areas of overlap	Eight common outputs to TNFD and SBTs for nature		
	TNFD Locate and Evaluate phases	SBT Assess step	
	<ul> <li>Define the location of corporate activities and the interface with nature</li> <li>Estimate the environmental footprint based on dependencies and impaired</li> <li>Identify issues and locations that require management targets</li> <li>Prioritise a list of locations for action, based on state of nature and corport</li> </ul>	acts	
	TNFD Assess phase	SBT Interpret and prioritise step	
	Identify risks and opportunities to inform enterprise risk management and financial impact assessment		
	TNFD Prepare phase	SBT Measure, set and disclose step	
	<ul> <li>Undertake baseline measurement for targets</li> <li>Determine and disclose target ambition levels</li> <li>Create action plans to meet and report on targets</li> </ul>		

#### Where to start: preparation, scoping and assessment

This section dives deeper into the start of the nature positive journey for companies new to TNFD and SBTN, drawing on the initial phases of both frameworks. The summary below gives a high-level overview of the first stages of each framework.

Before you begin: There are some actions that businesses can take immediately to prepare to engage more deeply with the nature agenda:

- Familiarise yourself with the core concepts relating to nature and ensure that senior sponsors and other key stakeholders understand the basics of nature.
- Be clear about motivations and links to existing commercial and sustainability strategies.

#### Business insight 3: motivations for setting SBTs for nature

Some companies are using the science-based targets framework to refresh their approach to nature within the business. For these companies, having a holistic approach and a full value chain focus is critical, to be able to make the right prioritisations through informed decision-making. Going through the target-setting process will provide a strong foundation to update existing nature strategies.

**Scoping:** This should agree which aspects of the business model and value chain are in scope; how much resource to be allocated to the work; and an initial idea of the nature-related issues the organisation might focus on. This phase is also a chance to secure senior management buy-in. TNFD Guidance suggests the following:<sup>26</sup>

- a high-level scan of internal and external data and reference sources to generate a hypothesis about the organisation's nature-related dependencies, impacts, risks and opportunities, and
- a determination of where likely skills and data gaps lie and how those gaps will be addressed to successfully complete the scoped assessment.

Locate and assess the organisation's interface with nature: The table below summarises the first two phases of the TNFD LEAP approach and the first step in setting SBTs for nature. This gives an indication of the types of assessment required to get started with each framework. Undertaking the steps outlined below will allow organisations to get a better overview of their nature-related issues and to prioritise areas for action, based on both importance to the business and material impact/dependency on nature.

Framework stage	What?	How?
TNFD Locate	Understand the span of the business model and value chain.	Use existing and/or new data to identify the organisation's activities by sector, value chain and geography.
		<b>Example:</b> List the direct operation sites (eg stores or processing facilities) and key value chains (eg fresh produce, dairy products).
TNFD Locate	Understand the organisation's impacts and dependencies on nature within	Use SBTN's Materiality Screening Tool and High Impact Commodity List.
	direct operations and across the value chain.	<b>Example:</b> For 'food and beverage retail' likely pressures include water use, water pollution and soil pollution. Beef, dairy and palm oil are among products on the High Impact Commodity List.
TNFD Locate	Identify organisation's interface with nature.	Map the location of value chains and operations with potentially moderate and high dependencies against TNFD's list of biomes and ecosystems.
		<b>Example:</b> Sourcing beef from the UK; nuts from West Africa. Over time more detailed geographic information will be useful.
TNFD Locate	Identify any ecologically sensitive areas that the organisation operates in.	Use TNFD's list of criteria and metrics for sensitive locations to identify operations and value chains active within these areas.
		<b>Example:</b> Lettuce production in a water-stressed region of Spain; arable production in an East of England site used by the rare stone curlew.
TNFD Evaluate	Develop an understanding of the organisation's potentially material dependencies and impacts on nature.	A more detailed description and evaluation of the sectors, value chains and locations identified in the Locate phase. Use TNFD's list of impact drivers (eg land use change, water pollution) and find those associated with specific business activities. Identify dependency pathways that show how a particular business activity depends on ecosystem services or specific features of the natural environment.
		Example: Reliance on freshwater supply for crop irrigation.
SBTN Step 1: Assess	Assess organisation's impacts and dependencies on nature by conducting a materiality and value chain assessment.	<ul> <li>Sector-level materiality assessment using SBTN's Materiality Screening Tool.</li> <li>Value chain hotspot assessment to estimate impacts and dependencies throughout the value chain.</li> <li>Refine these outputs based on business specifics and priorities.</li> </ul>

# 4. Key success factors for becoming nature positive

There are various drivers of success that will aid organisations in their nature positive journey. Three key success factors are highlighted below: getting the right nature-related data; engaging with key stakeholders across the value chain; and embedding nature action within a holistic strategy.

## Success factor 1: getting the right nature-related data

Getting a complete picture of the environmental issues facing an organisation, especially those that are beyond the organisational boundary, will depend on the level of information and transparency across the value chain. Organisations will need to consider what data is needed to measure, monitor and improve their impact on nature; who is able to access and share this data; how it will be used; and the balance between cost, ease of reporting and the robustness and relevance of the data.

The nature-related data landscape is evolving rapidly, with new innovations, such as the use of artificial intelligence and remote sensing, regularly emerging and improving.<sup>27</sup> But these innovations may take time to scale up and to cover the entire value chain, particularly in the agricultural sector.

Companies will need to develop their processes and capabilities for data-gathering from value chain partners over time, but in the interim, a phased approach will be needed. **Organisations can prioritise areas of their value chain where the most nature-related issues have been identified**.<sup>28</sup>

#### Business insight 4: building value chain visibility

Understanding their nature-related issues may motivate companies to gather data about their value chain for the first time, including a detailed understanding of the location of suppliers. For some sectors and supply chains, information may be hard to come by, with challenges due to the use of multiple intermediaries or the lack of record-keeping by those upstream in the chain.

This information may be available in the value chain but not accessible to those upstream, such as distributors and retailers. Limited touch points with suppliers (such as via purchase orders) are not always suitable for gathering complex data about nature.

Lessons can be learned from other areas where suppliers are used to providing information, such as on farm assurance and food safety.

## Organisational activity data

The starting point for any nature framework is to have information about the company operations and value chain, including what is produced, procured or traded and in what volumes. Data about organisational activities can be used to develop an initial materiality assessment.<sup>29</sup> Using standard international classifications, the organisation's core economic activities can be identified and used in

existing tools such as SBTN's Materiality Screening Tool to understand the likely pressures and dependencies on nature.

## State of nature data

As well as knowing what an organisation (and its value chain) does, it is important to know where it does it. Nature is context- and place-specific, with nature-related risks, impacts and dependencies varying according to the ecosystem in which activities take place. Unlike climate change, where the location of emissions does not affect their impact on the climate, knowing where an organisation's operations and those within its value chain take place will be vital to gain an accurate picture of the state of nature. Location data can be overlaid with existing information about the ecosystem or biome at that location and on nature-related issues in the area.

Initially, regional or country-level location data may be enough to make high-level decisions, with sample data, industry averages and/or commodity averages used to estimate dependencies and impacts. For example, knowing that palm oil comes from an at-risk region could be enough to spur actions such as changing sourcing policies or implementing certification requirements.<sup>30</sup>

Start by identifying locations in the value chain that are of particular importance for biodiversity or ecosystem service provision or those that are at high risk of decline. High-risk locations (eg peatland or forest areas at risk) and ecologically sensitive areas (eg national parks, protected areas, World Heritage Sites) can be a priority for further investigation, data gathering and supplier engagement.

Data already gathered for existing initiatives, such as certifications, value chain traceability, climate-related disclosures or other environmental initiatives and due diligence may all be useful sources for nature-related data.<sup>31</sup>

#### Business insight 5: the value of granular farm-level data

While relying on average data or regional locations may be enough to do an initial assessment and prioritise areas of focus, suppliers are keen to understand nature issues in more detail.

There is a knowledge gap around measuring nature positive actions that are already occurring in the value chain. Farmers have often not been asked to supply this information up the value chain and so it is not counted. Doing so will help identify, celebrate and spread good practice.

One reason this is challenging is the lack of baseline data from which to measure improvement in the state of nature. Businesses sometimes skip this step – moving from identifying high-risk sectors or geographies to implementing change, without taking the time to measure an accurate baseline. This makes quantifying and evaluating improvements more challenging, and is an area stakeholders should be focusing on as they begin to consider nature-related risks in more detail.

## Nature and agricultural production

The interaction between agriculture and nature is complex and depends on both the location of the production site and the practices used. A fully accurate assessment of the state of nature and monitoring

of improvement to this state resulting from organisational actions would require a granular picture of what is happening at the farm level.

Significant variation can exist between farms, with agricultural practices which are sustainable in one context being potentially damaging in a different context. To take the example of beef production, several variables determine its impact on nature such as whether cattle are reared indoors or outdoors, whether it uses land capable of producing human-edible crops, where feed and water is sourced from, and how waste is disposed of. And each of these will produce a different result for nature depending on where the farm is and the ecosystems surrounding it.

#### Business insight 6: developing consistent reporting requirements

Suppliers are facing multiple demands from customers to increase sustainability reporting, driven by regulation and voluntary efforts by companies and financial institutions. Some are concerned that this will put additional burden on them, particularly if reporting requirements are not aligned.

While many of these frameworks and initiatives remain voluntary, the onus is on sectors, value chains and regulators to ensure alignment. Previous examples of alignment around agreed reporting standards, such as for sustainable soy and palm oil, provide a good model to follow.

#### Start now – and evolve the data picture over time

The overall message for businesses is that you do not need to wait until you have all the data to build a perfect picture of your nature-related issues. An initial assessment can rely on high-level, indicative or average data – for example identifying commodities or geographic regions that are known to be high risk. Many of the TNFD's recommended disclosures are qualitative rather than quantitative and include areas such as governance and internal capacity building.

This allows organisations to start with the data they do have and consider how to improve data robustness over time, putting in place the structures to build up a more detailed picture of their interface with nature. The level of detail needed will depend on the motivations of the organisation and what outputs are needed to make capital allocation or other decisions.<sup>32</sup>

# Success factor 2: engaging with key stakeholders across the value chain

Businesses in the food sector often have wide areas of influence which they should seek to understand. As outlined above, agriculture has particularly high impacts and dependencies on nature, so those in the food value chain need to look early on at the nature-related issues across that value chain. This process will be familiar to organisations that have looked at their scope 3 (indirect) emissions as part of their response to climate change.

#### Business insight 7: accounting for value chain structure

The structure of the value chain will influence how easy it is to engage with stakeholders. In sectors where commodities are bought at market with no contracts, there is often limited scope for the buyer to fully understand or influence the value chain. Incentives, certification and building relationships may help to bridge this gap.

Other value chains may be vertically integrated, allowing closer contact with the farm level, or based on farmer co-operatives. This allows for more direct engagement, whether for the purposes of gathering information or implementing change.

#### Challenges when engaging with the agricultural value chain:

- Less visibility down the value chain: often there are multiple links in the chain, so while a large proportion of the environmental footprint of a food retailer, for example, will come from the primary production stage, they may not have direct relationships with or visibility of this sector.
- Nature does not respect boundaries, so activities on one land area can have knock-on impacts for habitats, water catchments or other ecosystems in the surrounding area. Multiple stakeholders may have influence on the same area or be affected by the same nature risks or impacts. This makes it important to encourage collaboration between those with similar nature issues in a specific location.
- As organisations gain greater understanding of the nature-related issues they face, there may be insights that can be shared with other stakeholders. For example, nature-related risks identified by an organisation undertaking TNFD reporting may also be relevant risks for their value chain. This may require sensitivity when communicating impacts and risks to stakeholders, especially if there is an expectation of change (eg to de-risk the value chain). Ideally, reducing nature-related impact and risk should be a shared responsibility across the value chain.

#### Business insight 8: moving from understanding to engagement

Retail companies may understand where some of the risks and opportunities are for nature but can struggle to move from this stage to engaging directly with suppliers. Depending on the relationship between different actors in the value chain, there may be risks from presenting problems without solutions. For example, the results of a nature materiality assessment that identify specific risks or impacts from farms.

It will be important to engage in open and honest dialogue, sharing experience and ideas. A buyer may need to set nature-related requirements for their suppliers, but doing so on the basis of a partnership approach may have more value in the long term.

#### Successful value chain engagement:

- Developing the right relationships, processes and partnerships with others, both upstream and downstream, will help companies to understand their impacts and dependencies on nature, and will be invaluable when trying to move towards more nature positive outcomes.
- **Open communication and trust** will be an important foundation for future actions towards more nature positive business models. This is particularly important when the costs of reducing nature-related risks and impacts are borne by different parts of the supply chain.
- Many nature-related risks and impacts will affect multiple stakeholders, for example, all of those with operations in the same water catchment or ecosystem. **Understanding these overlapping areas of influence** can identify opportunities for collaboration.
- Launching partnerships with others in your value chain to identify particular challenges facing the sector and working together through sharing of best practice to overcome these. Partnerships may also involve collaboration to advocate nature-friendly policies and supporting producers of different sizes to pilot new approaches on their farms.<sup>33</sup>
- Working with farmers to actively manage, protect, restore and steward land through regenerative agricultural practices (eg growing of cover crops, no/low-till, rotational grazing) and ensuring that they are aware of the support available from industry groups, retailers, peers, government etc.<sup>34</sup>

#### Business insight 9: the role of certification schemes

For some companies, a certification or accreditation scheme can be a way to demonstrate a commitment to nature. They also provide one solution to the challenges of value chain visibility and influence. A set of minimum standards for sustainable production provide an agreed baseline which could reduce nature risk and impact. Adopting or expanding the use of certified sustainable products can also be one way to improve the nature status over time.

The design of standards such as the LEAF (Linking Environment and Farming) marque are rigorous and on-farm assurance is independent and outsourced. There may, however, be financial implications for buyers who pay a premium for a greener product which has higher costs of production.

#### Success factor 3: embedding nature action within a holistic strategy

Many organisations are already looking to address nature within their sustainability strategy. This could be in response to specific nature risks, such as deforestation, or indirectly through mitigating and adapting to climate risks such as drought and flooding. This can result in an ad hoc and fragmented approach, with focus on only some nature-related issues or business operations.

Many companies have undertaken nature work indirectly, either through the climate change agenda or in specific areas of the organisation. Often this results in sporadic efforts focused on information gathering to diagnose nature-related problems, and pilots or small projects to test solutions or improvements.

What is often missing is an approach that can identify the right areas to prioritise (rather than those that happen to be the focus of attention); evaluate actions taken; and scale up those that are most successful.

#### Business insight 10: bridging the gap between local and global action

There is a bridge needed between high-level targets (whether at global, national, sector or company level) and the impact of actions at the farm level. Often companies are engaging in good activity with their producers, but this is not necessarily strategically aligned with their nature goals (or they may not have set specific nature goals yet).

Even when nature or biodiversity is referenced within an organisation's sustainability strategy, many companies have been directing resources largely to climate-related action. This climate 'tunnel vision' can have negative consequences – missing opportunities for synergies from dealing with climate and nature together and potentially taking action on climate that is detrimental to nature.

This is not to downplay the relevance of climate strategies for nature. Businesses that have already engaged with climate regulation, policy, or voluntary initiatives will probably have already begun to address some of their nature-related issues. Action on nature can contribute to climate goals and the work of gathering and evaluating data, engaging with the value chain, and thinking critically about the environmental impact of business operations is common to both. There are synergies and benefits to taking a holistic approach to climate and nature, which could also reduce the effort of tackling both issues.

# 5. No-regret actions for nature for the food and agriculture sector

These no-regret actions can be taken by food and agriculture businesses at the very initial stages of their work on nature and will likely vary by industry. For agri-food, examples might include:

- 1. Aligning internal support and resourcing for taking action on nature, which could include: developing a nature strategy; incorporating nature into an existing sustainability strategy; assessing nature-related issues within the organisation.
- 2. Leveraging climate and sustainability experience to address nature by thinking about areas of climate activity that are relevant to nature, eg assessment of climate risks, value chain analysis and engagement, sustainability partnerships and initiatives.
- **3.** Considering what nature-related data you already have and what more you might need. Start to assess how much visibility you have over your operations and value chain that is decision-relevant for nature issues.
- 4. Adopting nature-based solutions to improve operational resilience, manage business risk and deliver wider benefits for nature. Actions such as reducing tillage, planting autumn cover crops, planting trees or creating floodplain meadows can all benefit nature while delivering business benefits.<sup>35</sup>
- 5. Reducing freshwater use by collaborating with farmers and other stakeholders to implement water management systems that maintain long-term water availability by optimising withdrawals and using efficient irrigation techniques.<sup>36</sup>
- 6. Considering the benefits of circularity, new technology and innovative products and practices such as capturing value from waste (eg manure), using renewable energy and experimenting with different crop varieties.<sup>37</sup>

## **Further resources**

Below are listed some resources that will be useful to those wanting a deeper understanding of nature issues in general and the specifics of the agri-food sector.

## Starting

- The ACT-D framework has <u>been developed</u> by a consortium of organisations working to help businesses understand and reduce their impacts on nature, and they provide many further resources that organisations may find useful as they embark on this journey.
- United Nations Environment Programme (UNEP) has recently <u>published a report</u>, Accountability for Nature: Comparison of Nature-related Assessment and Disclosure Frameworks and Standards, which compares nature-related assessment and disclosure frameworks and standards.

#### Developing

- **Get Nature Positive** is a campaign by the UK Council for Sustainable Business, convened by the UK Department for Environment, Food and Rural Affairs (Defra). The group has published sector-specific guidance for the <u>food retail</u> sector.
- **Business for Nature** is a global coalition of over 85 influential partner organisations and forwardthinking companies working to drive credible business action and policy ambition to achieve a nature positive economy for all by 2030. They have produced <u>sector-specific actions</u> for several industries, including agri-food, in partnership with the World Economic Forum and WBCSD.
- World Business Council for Sustainable Development (WBCSD) has published *Roadmaps to Nature Positive*, including a <u>guide specifically for the agri-food sector</u>. This guidance considers the full agrifood value chain, with a key focus on crop commodity production. Companies may find it particularly useful for the deep-dive case studies illustrating what nature positive action could look like in practice across diverse global contexts and crop rotations.

#### Advancing

- The Taskforce on Nature-related Financial Disclosures (TNFD) provides many resources alongside their main guidance, including <u>sector-specific guidance</u> for the food and agriculture sector on conducting a LEAP analysis (falling broadly under the 'assess' stage of ACT-D). Organisations in the agri-food value chain are likely to find this useful when trying to understand their primary nature-related impacts and dependencies.
- The Science Based Targets Network (SBTN) provides a <u>wealth of knowledge</u>, tools, technical guidance and other resources to help companies set science-based targets for nature (the 'commit' stage of ACT-D).
- WWF has explored the relationship between the agri-food sector and nature in depth, and <u>analysed</u> where many of the key impacts and dependencies within value chains are likely to lie. The 2023 version of WWF's <u>What's in Store for the Planet</u> report provides some interesting

insights into the emerging schemes and initiatives UK farmers and retailers are implementing (p. 34), while the <u>Land of Plenty</u> report provides some ideas on transforming our food system to reach climate and nature goals.

• The UK's Nature-Friendly Farming Network is a group of farmers aiming to farm profitably and in harmony with nature. Their report *Farming at The Sweet Spot* looks at how farm businesses can be productive, financially robust and deliver more to the environment.

## Leading

- The **World Economic Forum** works at an international level to support a rapid transition in our global food systems, primarily through the <u>Food Action Alliance</u>. Agri-food stakeholders may find their 'flagship' projects around the world sources of inspiration for action that could be taken to address sustainability challenges on nature and beyond.
- The World Benchmarking Alliance (WBA) has recently released the <u>Nature Benchmark</u>, assessing 350 key companies in the food and agriculture value chain (with more to come in 2024) and ranking them based on action being taken on nature. The full data set and methodology is publicly available for those wishing to understand how WBA assesses companies.

# **Appendix: overview of nature frameworks** and initiatives

#### Taskforce on Nature-related Financial Disclosures (TNFD) Framework

- What it is: An initiative aimed at providing financial institutions and companies with a framework to assess, manage and report on their dependencies and impacts on nature.
- What it covers: The framework covers methodologies for disclosing nature-related financial risks and opportunities.
- How it works: TNFD proposes a structured approach for organisations to disclose nature-related information in their financial reporting.
- How it links with others: TNFD complements other sustainability and financial disclosure frameworks like TCFD, ISSB and SBTi by focusing specifically on nature-related aspects.

#### Science Based Targets Network (SBTN) Target Setting Guidance

• **Explanation:** Provides companies and cities with guidance on how to set science-based environmental targets in line with the latest climate science.

#### Corporate Sustainability Reporting Directive (CSRD)

• **Explanation:** An EU directive that requires large companies to disclose information on their environmental and social impacts, governance and sustainability activities.

#### International Sustainability Standards Board (ISSB)

• **Explanation:** An international body that develops and approves global sustainability reporting standards for financial markets.

#### Task Force on Climate-Related Financial Disclosures (TCFD)

• **Explanation:** An industry-led group formed to develop a set of recommendations for voluntary climate-related financial disclosures that are consistent, comparable, reliable and clear.

#### Science Based Targets initiative (SBTi)

• **Explanation:** A partnership that champions science-based target setting as a powerful way of boosting companies' competitive advantage in the transition to a low carbon economy.

#### **CDP Disclosure System**

• **Explanation:** Formerly known as the Carbon Disclosure Project, CDP is an organisation that supports companies and cities to disclose the environmental impact of major corporations.

## European Sustainability Reporting Standards (ESRS)

• **Explanation:** A set of standards developed by the European Financial Reporting Advisory Group (EFRAG) aimed at enhancing and standardising sustainability reporting across the EU.

#### Global Reporting Initiative (GRI) Standards

• **Explanation:** An international independent standards organisation that helps businesses, governments and other organisations understand and communicate their impacts on issues such as climate change, human rights and corruption.

## International Sustainability Standards Board (ISSB) Standards

• **Explanation:** Standards issued by the ISSB to provide a global framework for sustainability disclosure, focusing on financial materiality.

## Natural Capital Protocol

• **Explanation:** A framework designed to help organisations identify, measure and value their direct and indirect impacts and dependencies on natural capital.

## References

<sup>1</sup> Science Based Targets Network, *SBTN Glossary of Terms* (SBTN, 2023), <u>https://sciencebasedtargetsnetwork.org/wp-content/uploads/2023/05/SBTN-Steps-1-3-Glossary\_2023.docx-1.pdf</u>.

<sup>3</sup> World Economic Forum, Global Risks Report 2023 (WEF, 2023), <u>https://www.weforum.org/publications/global-risks-report-2023/</u>.

<sup>5</sup> Convention on Biological Diversity, Kunming-Montreal Global Biodiversity Framework (CBD, 2022),

https://www.cbd.int/doc/c/e6d3/cd1d/daf663719a03902a9b116c34/cop-15-l-25-en.pdf.

- <sup>6</sup> World Economic Forum, The Future Of Nature And Business (WEF, 2020),
- https://www3.weforum.org/docs/WEF The Future Of Nature And Business 2020.pdf.

<sup>7</sup> "Make it Mandatory Campaign," Business for Nature, accessed February 27, 2024, <u>https://www.businessfornature.org/make-it-mandatory-</u> <u>campaign</u>.

<sup>8</sup> UL Solutions, n.d. "The Taskforce for Climate-Related Financial Disclosures" available at <u>https://www.ul.com/insights/taskforce-climate-related-financial-disclosures#:~:text=Brazil%2C%20Hong%20Kong%2C%20Japan%2C,reporting%20mandatory%20for%20certain%20entities.</u>, accessed 07/03/24.

<sup>9</sup> Graham, S. (2020). "The Influence of External and Internal Stakeholder Pressures on the Implementation of Upstream Environmental Supply Chain Practices." Business & Society, 59(2), 351-383. <u>https://doi.org/10.1177/0007650317745636</u>

<sup>10</sup> WWF, Bringing It Down To Earth: Nature risk and agriculture (WWF, 2021), <u>https://media.wwf.no/assets/attachments/WWF-2021-Bringing-It-Down-To-Earth-Nature-risk-and-agriculture.pdf</u>.

<sup>11</sup> Simon G. Potts et al., "Safeguarding Pollinators and Their Values to Human Well-Being," *Nature* 540, no. 7632 (December 2016): 220–229, <a href="https://doi.org/10.1038/nature20588">https://doi.org/10.1038/nature20588</a>.

<sup>12</sup> FAO, Status of the World's Soil Resources: Main Report (Rome: FAO, 2015), <u>https://www.fao.org/documents/card/en?details=c6814873-efc3-41db-b7d3-2081a10ede50/</u>.

<sup>13</sup> TNFD, Draft Sector Guidance – Food and agriculture (TNFD, 2023), <u>https://tnfd.global/wp-content/uploads/2023/12/Draft\_Sector-Guidance\_Food-and-agriculture\_Dec\_2023.pdf?v=1701945325</u>.

<sup>14</sup> "WWF Risk Filter Suite, Biodiversity Risk Filter, Overview – Dependencies & Impacts," WWF, accessed February 27, 2024, https://riskfilter.org/biodiversity/inform/industry-overview.

<sup>15</sup> Gensuo Jia et al., "Land–Climate Interactions," in *Climate Change and Land: An IPCC Special Report on Climate Change, Desertification, Land Degradation, Sustainable Land Management, Food Security, and Greenhouse Gas Fluxes in Terrestrial Ecosystems* (IPCC, 2019), https://www.ipcc.ch/site/assets/uploads/2019/11/SRCCL-Full-Report-Compiled-191128.pdf

<sup>16</sup> WWF, Farming with Biodiversity (Gland, Switzerland: WWF International, 2021), p. 9,

https://wwf.panda.org/discover/our focus/food practice/sustainable production/farming with biodiversity/.

<sup>17</sup> WWF, Farming with Biodiversity, p. 5.

<sup>18</sup> World Economic Forum, *The Future Of Nature And Business*.

<sup>19</sup> Doug Petry et al., *Cultivating farmer prosperity: Investing in regenerative agriculture* (Boston Consulting Group and WBCSD, 2023), https://www.wbcsd.org/Projects/OP2B/Resources/Cultivating-farmer-prosperity-Investing-in-regenerative-agriculture.

<sup>20</sup> "New report finds up to 45% increase in commercial return for nature-friendly farms," Nature Friendly Farming Network, accessed February 27, 2024, <u>https://www.nffn.org.uk/resources/nffn-the-sweet-spot</u>.

<sup>21</sup> Gus Trompiz and Sybille De La Hamaide, "Why are farmers protesting in France and other parts of Europe?" Reuters, January 30, 2024, <u>https://www.reuters.com/world/europe/why-are-french-farmers-protesting-2024-01-29/</u>.

<sup>22</sup> WBCSD, Roadmaps to Nature Positive: Foundations for all businesses (WBCSD, 2023), p. 8,

https://www.wbcsd.org/contentwbc/download/17128/241711/1.

<sup>23</sup> Taskforce on Nature-related Financial Disclosures, *TNFD Recommendations* (TNFD, 2023), <u>https://tnfd.global/publication/recommendations-of-the-taskforce-on-nature-related-financial-disclosures/</u>.

<sup>24</sup> "The first science-based targets for nature," Science Based Targets Network, accessed February 27, 2024,

https://sciencebasedtargetsnetwork.org/how-it-works/the-first-science-based-targets-for-nature/.

<sup>25</sup> Adapted from: TNFD, Guidance for Corporates on Science Based Targets for Nature (TNFD, September 2023), <u>https://tnfd.global/wp-</u>

content/uploads/2023/09/Guidance for corporates on science based targets for nature v1.pdf?v=1695138398.

<sup>26</sup> TNFD, Guidance on the Identification and Assessment of Nature-related Issues: The LEAP Approach (TNFD, October 2023), p. 31,

https://tnfd.global/wp-content/uploads/2023/08/Guidance on the identification and assessment of nature-

related Issues The TNFD LEAP approach V1.1 October2023.pdf?v=1698403116.

<sup>27</sup> TNFD, *TNFD Discussion Paper* (TNFD, 2022), <u>https://framework.tnfd.global/wp-content/uploads/2022/03/220321-TNFD-Data-discussion-paper-FINAL.pdf</u>.

<sup>28</sup> TNFD, Draft Sector Guidance – Food and agriculture.

<sup>&</sup>lt;sup>2</sup> Wei Zhang et al., "Ecosystem Services and Dis-Services to Agriculture," *Ecological Economics* 64, no. 2 (December 2007): 253–260, https://doi.org/10.1016/j.ecolecon.2007.02.024.

<sup>&</sup>lt;sup>4</sup> Pedro Jaureguiberry et al., "The Direct Drivers of Recent Global Anthropogenic Biodiversity Loss," *Science Advances* 8, no. 45 (November 2022), https://doi.org/10.1126/sciadv.abm9982.

<sup>29</sup> Science Based Targets Network, *Technical Guidance Step 1: Assess* (SBTN, 2023), pp. 27–30, <u>https://sciencebasedtargetsnetwork.org/wp-content/uploads/2023/05/Technical-Guidance-2023-Step1-Assess-v1.pdf</u>.

<sup>31</sup> Science Based Targets Network, *Technical Guidance Step 1: Assess*.

<sup>32</sup> TNFD, The LEAP Approach.

<sup>33</sup> Business for Nature and Accenture, *Agri-food: Priority Actions Towards a Nature-Positive Future* (Business for Nature, September 2023), <u>https://static1.squarespace.com/static/5d777de8109c315fd22faf3a/t/64feb63ae59f0c0c0302c380/1694414400286/Agri-food+-</u> +Priority+actions+towards+a+nature-positive+future.pdf.

<sup>34</sup> Business for Nature and Accenture, *Agri-food*.

<sup>35</sup> University of Cambridge Institute for Sustainability Leadership (CISL), *Decision Making in a Nature-Positive World: Nature-based Solutions for the Food and Beverage Sector* (Cambridge, UK: Cambridge Institute for Sustainability Leadership, 2022), available at:

https://www.cisl.cam.ac.uk/news-and-resources/publications/decision-making-nature-positive-world-nature-based-solutions-sectors <sup>36</sup> Business for Nature and Accenture, *Agri-food*.

<sup>37</sup> Business for Nature and Accenture, Agri-food.

<sup>&</sup>lt;sup>30</sup> TNFD, The LEAP Approach.