# Assessing and acting on

Assessing and acting on nature-related issues:

Insights from business case studies in the agri-food system (through the lens of the ACT-D framework)

# SUSTAIN

Strengthening Understanding and Strategies of Business to Assess and Integrate Nature

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# **1. Introduction**

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# **1. Introduction**

# 1.1. About the SUSTAIN project and this document

The **SUSTAIN** – Strengthening Understanding and Strategies of Business to Assess and Integrate Nature – project aims to provide businesses, financial institutions, and regulatory bodies with the knowledge and resources to better understand, assess, and monitor the dependencies and impacts on nature from activities across different sectors of the economy.<sup>1</sup>

This document offers practical insights that build on existing resources, including the **Roadmaps to Nature Positive: Foundations for all businesses** and **Taskforce on Nature-related Financial Disclosures (TNFD) LEAP** (Locate, Evaluate, Assess, Prepare) approach. Its aim is to enhance understanding of how companies can strategically identify and manage nature-related issues.<sup>1</sup> This is illustrated through real company examples.

This document presents case studies of businesses in the agri-food system, which accompany similar documents focusing on energy and the built environment. Each of these documents presents how companies are working to identify and assess nature-related issues in alignment with the **Highlevel Business Actions on Nature to Assess, Commit, Transform and Disclose (ACT-D)** framework. While all four steps of ACT-D are addressed, the primary focus is on the initial step, Assess, emphasizing the importance for companies to systematically address relevant nature-related dependencies, impacts, risks and opportunities (DIROs). By doing so, a company is more likely to develop a credible strategy on nature, in line with the **Now for Nature** campaign, and be on the right path towards contributing to the **Global Goal for Nature** – to halt and reverse nature loss by 2030 on a 2020 baseline, and achieve full recovery by 2050.

This document on the **agri-food system** presents two agri-food company case studies showcasing through the strategic steps of ACT-D framework: **Nutrien** and **Olam Agri**. Each case study is different, as there is no 'onesize-fits-all' approach: the case studies are included to inform and inspire action in other companies. Given the evolving nature of sustainability practices, it is advisable to continuously review and update strategies in line with emerging industry standards, regulatory changes, and evolving best practices.

## Who is this resource for?

Sustainability and nature teams within companies, civil society organizations working with the business community, financial institutions (investing in the focus sectors) can all use this document to deepen their understanding how to start identifying and assessing nature-related issues, and to apply further strategic steps. It provides an opportunity to learn about the challenges, risks, and opportunities experienced by peers.



<sup>1</sup>Nature-related issues: organisations have dependencies and impacts on nature, which give rise to nature-related risks and opportunities (TNFD, 2023)

# **1.2.** The business-nature loss nexus and the role of the agri-food system

# **Nature and business**

All businesses depend on nature and its services, whether through direct operations or their value chains.<sup>III</sup> This means every sector is **exposed to nature risk**, either directly or indirectly, due to reliance of economic activities on the stock of natural capital and the ecosystem services that flow from it. This impact extends to all stakeholders (see Figure 1).<sup>IIII</sup>

In 2022, the Kunming-Montreal Global Biodiversity Framework (GBF), also now known as The Biodiversity Plan was adopted by 196 countries, setting the global mission of 'halting and reversing biodiversity loss by 2030'. Governments together with other stakeholders, including business, need to play their role to ensure the achievement of the global plan's 4 goals and 23 targets.<sup>iv</sup>

By proactively managing **nature-related risks**, companies can prepare for impending policy and regulatory requirements and identify priority actions that reduce negative impacts on nature, while unlocking opportunities across the value chain.<sup>v</sup>

Furthermore, **climate and nature are interconnected**: restoring nature and protecting biodiversity is a mutually supporting goal to address the climate crisis. Climate change is the third major driver of nature loss by order of impact. Conversely, the loss of nature and unsustainable use and management of natural resources represents the second largest source of carbon emissions and is a key driver of climate change. Addressing one crisis necessitates addressing the other simultaneously.<sup>vi</sup> Figure 1: Nature impacts and dependencies create nature-related risks



Source: Adapted from TNFD, BloombergNEF (2023)

# Role of the agri-food system

The global agri-food system<sup>2</sup> is one of society's biggest challenges and greatest opportunities to halt and reverse nature loss.<sup>vii</sup> The agri-food system cannot function without biodiversity and healthy ecosystems. Food production is the largest driver of deforestation, water consumption, biodiversity loss and soil degradation – with agriculture alone being an identified threat of 86% of species at risk of extinction. *Figure 2* illustrates key typical nature-related impacts and dependencies for the agri-food system.<sup>3 viii</sup>

Fortunately, the agri-food system also provides the best chance for a nature-positive transformation. Nowhere are the fundamental connections across nature, climate and people clearer than on the farm, where all three must align to produce abundant, nutritious food to feed the world.

Thriving ecosystems and photosynthesis underpin the stable climate system that enables life. Likewise, humans are a living part of the world's interconnected biophysical systems. The Sustainable Development Goals (SDGs) and The Biodiversity Plan clearly identify these linkages, which are a core focus of leading nature-related frameworks for corporate assessment, target-setting and disclosures, and global and jurisdictional policies.<sup>ix×</sup>

Additionally, investors, lenders, insurers and landowners all play critical roles throughout the value chain – their engagement with agri-food companies that influence global food production practices and own the means of production is a key lever for naturepositive system transformation.<sup>xi</sup> Figure 2: Key typical nature-related impacts and dependencies of the agri-food system



Source: Adapted from Business for Nature, Sector Actions Towards a Nature-Positive Future (2023)

<sup>3</sup>The summary represented in this document focuses on land-based agricultural industries within the global agri-food system (falls under SICS code FB.1). However, the impacts, dependencies and risks outlined are also highly relevant to processed foods, food retailers and distributors and restaurants due to their use of land-based agri-food products.

<sup>&</sup>lt;sup>2</sup>The agri-food system encompasses all activities related to the inputs, production, processing, distribution, consumption and disposal of food globally.

# Examples of common risks in the agri-food system

## **Physical risks:**

- Damage to crops and variability of crop yields, such as from heat, drought, flooding, disease or other pressures resulting in revenue loss
- Increased operational costs (e.g. increased need for inputs and irrigation) due to degraded soil and exacerbated pest problems

## **Transition risks:**

- Market and Reputation: loss of sales or reduced access to market, damage to (or loss of) community license to operate
- Financing: increased cost of capital or reduced access to financing
- Policy: cost of jurisdictional compliance penalties
- Stranded assets linked with any or all of the above.<sup>xii</sup>



Learn more in detail about DIROs for the agri-food system: Roadmap to Nature Positive: Foundations for the agri-food system Dependencies & impacts (p. 19-22) Risks & opportunities (p. 23-26)

Additionally, see here **12 sector-specific overviews**<sup>4</sup> that outline the key dependencies and impacts on nature and biodiversity and set out the priority actions that businesses in each sector should take now to credibly contribute to a nature-positive future.

<sup>4</sup> Produced by Business for Nature, WBCSD and WEF.

# **1.3.** Understanding what is material – a key step for a credible strategy to address nature loss

# **ACT-D** approach

To coordinate business efforts and to have a consistent approach to accelerate nature action, leading organizations<sup>5</sup> developed the high-level business actions on nature, also known as **ACT-D framework**. ACT-D framework builds on existing action frameworks and guidance and guides businesses through the various tools, frameworks and initiatives to support in assessing their relationships with nature, committing to goals and target setting, transforming their direct operations and beyond, and disclosing nature-related information.

#### Assess:

Measure, value and prioritize your impacts and dependencies on nature to ensure you are acting on the most material ones.

#### Commit:

Set transparent, time-bound, specific, scienceinformed/based targets to put your company on the right track towards operating within the Earth's limits.

#### Transform:

Avoid and reduce negative impacts, restore and regenerate, collaborate across land and seascapes, shift business strategy and models, and advocate for policy ambition.

#### Disclose:

Track performance and prepare to publicly report material nature-related information throughout your journey.<sup>xiii</sup>





Source: Business for Nature (2022)

Implementation of the ACT-D approach will be different in each company, based on their maturity on nature. To explore more in detail how it looks like for different levels of maturity, see **Roadmaps to Nature Positive: Foundations for all businesses** maturity tables for the high-level actions (p. 47-53)

<sup>5</sup> Capitals Coalition, Business for Nature, WBCSD, TNFD, Science Based Targets Network, WEF and WWF

# Assess step – importance of identifying and assessing nature-related issues

Understanding material nature-related dependencies, impacts, risks and opportunities is at the heart of an impactful nature journey as it enables a business to further identify priority nature issues in their operations and value chains that should be addressed through targets and actions.<sup>5</sup> Furthermore, evaluating risks and taking advantage of available opportunities enables a company to stay ahead of emerging issues that could impact the future success of the organization and enhance stakeholder engagement.

Assess step involves identifying:

- where to focus, both within the value chain and geographically
- what to focus on, both nature-related dependencies and impacts
- why these focus areas and topics matter for the organization and stakeholders in terms of risks and opportunities

# For more details on Assess step and company experience, see page 12.

Importantly, the **EU Corporate Sustainability Reporting Directive (CSRD)**, which is mandatory for around 50,000 companies within the EU and many more worldwide with subsidiary businesses in Europe, prescribes a double materiality approach to reporting.<sup>xiv</sup>



**Double materiality** means that organizations need to identify which sustainability matters (including naturerelated issues) are most material to the organization and its stakeholders by evaluating their impact on environmental and social factors (impact materiality), while also considering how these factors influence the organization and create financial risks (financial materiality).<sup>xv</sup>

Tools as Exploring Natural Capital Opportunities, Risks and Exposure (ENCORE)<sup>xvi</sup> and the Science Based Targets Network (SBTN) Materiality Screening Tool<sup>6</sup> can be used as the first step to understand potential nature-related impacts and dependencies linked to economic activities.

Furthermore, using guidance from SBTN, TNFD's LEAP approach, The Natural Capital Protocol and WBCSD's Roadmaps to Nature Positive can support with further process of assessing and acting on nature-related issues.

<sup>6</sup> SBTN Materiality Screening Tool is based on ENCORE knowledge database

**2. Business practice in the agri-food system** Examples of a strategic approach on nature through the lens of the ACT-D framework

# 2. Business practice in the agri-food system

Examples of a strategic approach on nature through the lens of the ACT-D framework

This section highlights practical examples of how two agri-food companies are undertaking specific steps of ACT-D framework. The emphasis is on the Assess step and in particular the identification and assessment of nature-related issues, as a critical step, with additional contextual information on Commit, Transform and Disclose to illustrate the interconnectedness of the steps.

As there is no 'one-size-fits-all' approach and the case studies are specific to the context of the respective companies, they are included to inform and inspire action in other companies. Case study content presented below is developed together with the companies **Nutrien** and **Olam Agri** (hereinafter referred to as "Olam").

🍑 Olam Agri

**Olam Agri** 

agriculture

agri-business

Sector: Food and

Value chain: Global

Nutrien

Sector: Agriculture

Value chain: Retailer

of crop inputs and

services, operating

a global network of

fertilizer production

and distribution assets

Nutrien

Feeding the Future"



Disclose

**High-level** 

Business Actions on Nature



Source: Adapted from WBCSD (2023). Roadmap to Nature Positive: Foundations for the agri-food system

# 2.1. Why agri-food companies are taking action on nature

# Common insight from the case studies on reasoning behind taking action

I Integrating nature into business strategy: Companies believe that regenerative<sup>7</sup> agriculture provides numerous benefits. Companies are deepening their understanding of nature as part of their business.



# Nutrien's rationale

**Deepening understanding on nature:** The nature assessment will help the company better understand its dependencies and impacts on biodiversity and water specifically as preestablished material sustainability topics.

Nature as part of the business: Nutrien's aim is to understand how its nature assessment can support and amplify current and future initiatives related to nature as part of each manufacturing business units' operational needs and match those to appropriate internal and external considerations. The business focus is on efficiently serving the needs of its grower customers.



## **Olam Agri's rationale**

To deliver value for the business and for resilient value chains: Olam sees the use and preservation of natural resources in locations where it operates as fundamental to value chain resilience. By accounting for and addressing issues that are material to its business, Olam has found that this has improved its access to capital and the creation of long-term value for the company and its stakeholders.

**Priority actions & programs:** Olam's goal is to transform agriculture into an industry that restores the living world. It is building a naturepositive business by transforming operations, value chains and farms by working in partnership with farmers, partners and collaborators. A key focus is enabling regenerative agriculture across the value chains where it operates. The company does this by implementing regenerative farming practices with farmers, working with partners and end-customers throughout the value chain to create market value from regeneratively grown crops.



<sup>7</sup> Regenerative agriculture is a method of farming that improves the resources it uses, rather than destroying or depleting them, this includes soil health, biodiversity, and water resources

# 2.2. Strategic approach: Step 1 – Assess

This section describes how the companies have assessed and are continuing to deepen their assessment of dependencies, impacts, risks and opportunities (DIROs). Commonly used approaches for organizations looking to identify and assess their nature-related issues as part of the Assess step are the *TNFD LEAP approach* and *SBTN* step 1a and 1b, as also summarized and presented in the *Roadmaps to Nature Positive: Foundations for all businesses*:

- Scope and Locate to identify the company's main sectors and sub-sectors and key parts of the value chain and their location.
- Evaluate dependencies and impacts to prioritize potentially high impacts and dependencies on nature typical for the business and associated value chains for further assessment.
- Assess risks and opportunities to identify risks and opportunities for the business and stakeholders and prioritize further action.

High-level Business Actions on Nature

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# Common insights from the case studies on Assess step

**Holistic nature assessments:** Companies see the need to expand and adapt nature assessments based on evolving knowledge and stakeholder expectations, since they do guide internal and value chain actions, reducing business risks and enhancing brand value.

**Frameworks supporting the process:** Following the **TNFD LEAP** approach as part of the materiality assessment can simplify the process and bring more clarity of what steps should be taken and what is important to focus on.

**Internal expertise to validate the assessment:** Tools are not tailor-made to the specific needs and context of the organization, hence, additional customization and involvement of internal site experts is needed to reflect the unique situation of the organization.

Note: The following case study examples are structured around the above mentioned sub-steps and are illustrative in nature and not intended to represent full implementation of the different assessment frameworks.

Useful tools used by case study companies at this step:

- Exploring Natural Capital Opportunities, Risks and Exposure (ENCORE) tool and STBN Materiality Screening Tool – to identify potential impacts and dependencies, validated in combination with regional sector assessments and internal expertise to reflect the reality of the company's activities.
- SBTN High Impact Commodities List to identify high impact commodities associated with the business
- IUCN Red List of Threatened Species, Integrated Biodiversity Assessment Tool (IBAT), World Wildlife Fund (WWF) Biodiversity Risk Filter, Protected Planet – to identify sensitive locations and biodiversity hotspots
- WWF Water Risk Filter, World Resources Institute (WRI) Aqueduct Water Risk Atlas – to identify water risk areas
- Species Threat Abatement and Restoration (STAR) Metric to determine the relative opportunities for positive biodiversity action at sites
- **TNFD recommendations** to improve risk analysis and to better understand nature-related risks and opportunities

Nutrien Feeding the Future

For the first step of ACT-D, Assess, Nutrien took guidance from the **TNFD LEAP** approach, including the Locate, Evaluate and Assess portions of the process.

# Scope assessment and potential relationship with nature

Nutrien first determined the scope of the assessment, which work to date has been on the operational footprint of its fertilizer mining and manufacturing sites (collectively, "manufacturing sites"). Its Retail business unit (downstream side of its business) was not included in this assessment. It located each manufacturing site and then proceeded to identify the nature-related DIROs. For those manufacturing operations in scope, the company assessed and evaluated dependencies and impacts at a business unit level; for risks and opportunities, it focused on the manufacturing site level. Nutrien selected the tools to identify DIROs based on discussions to understand the experiences of fellow WBCSD member companies and other peers in the agri-food sector, as well as ease of access to and use of the tools.

# Nutrien's approach on Assess



# Locate; Evaluate impacts and dependencies; Assess risks and opportunities

- Nutrien started by identifying potential dependencies and impacts from the sector-level screening tool ENCORE, which offers a useful, high-level first step for companies to assess their sector-specific impacts and dependencies. To cover the selected scope, the company considered outputs from the synthetic fertilizer production and mining production processes in the tool.
- Nutrien then identified the risks for each manufacturing site using the WWF Risk Filter Suite, which supports identifying biodiversity and water-related risks across regions globally. Nutrien focused on the physical and reputational risks at each of the manufacturing sites in scope (Step 1 in Figure 6).
- The company then assessed the identified dependencies, impacts and risks, either aggregating the outputs of the screening tools across a sector globally, or applying them generally to the region assessed. The outputs do not account for how individual companies operate and therefore require environmental subject matter specialists at the manufacturing sites to interpret and validate the results to understand the relevance for each manufacturing site. For example, the tools identified where Nutrien's manufacturing sites may be at higher water stress risk, which they then contextualized to the operational needs of each manufacturing site for a fuller understanding of risks (Step 2 in Figure 6).



- Nutrien collaborated with site-based teams with local knowledge and expertise to understand their perspective on the initial screening and identified nature-related opportunities by manufacturing site. It also sought to understand the nature-related actions currently being taken and new opportunities that may be undertaken to mitigate site risks, fulfill business needs or benefit the site/community (Step 3 in Figure 6).
- Throughout this process, there has been and will continue to be ongoing internal communication to make sure that internal stakeholders have the information they need. This is important to ensure Nutrien is leveraging internal expertise, while building capacity and knowledge more broadly across the organization on naturerelated matters.

This approach has included ongoing discussions with manufacturing business unit (BU) leaders and the sustainability governance structure (including Sustainability and Stakeholder relations (SSR)). The organization has shared background materials on what it is doing and why, process development and results as they are formulated.





# **Olam Agri's approach on Assess**

As part of its pilot TNFD project, Olam has started assessing nature-related dependencies, impacts, risks and opportunities (DIROs) in line with the TNFD LEAP approach.

# Scope assessment and potential relationship with nature

The scope of the analysis includes some 160 locations for eight commodities: wood, rubber, cotton, rice, wheat, soy, maize and palm oil. Both direct operations and sourcing locations are included in the scope of the analysis.

Under the Locate (L) phase, it is identifying 1. high-priority locations in accordance with the TNFD framework's definition: locations that are material (based on nature-related impacts and dependencies) or sensitive (areas important for biodiversity, ecosystem integrity, physical water risk, etc.). It identifies material locations based on impacts and dependencies using SBTN's High Impact Commodity List and Materiality Screening Tool, ENCORE tool and business operations data. Olam identifies sensitive locations using multiple third-party nature and biodiversity sources, including IBAT Key Biodiversity Areas, Protected Planet, IUCN Red List of Threatened Species, WRI Aqueduct, WWF Water Risk Filter, etc.

- 2. As the next steps, under the Evaluate (E) phase, Olam will select up to 25 sites based on priority locations identified under the L phase to evaluate dependencies and impacts on nature, using geographical information systems and thirdparty data sources, including satellite imagery.
- For the Assess (A) phase, Olam will identify material risks and opportunities and develop strategies to mitigate risks and seize opportunities, in alignment with the Global Biodiversity Framework's 2030 targets.
- 4. For the Prepare (P) phase, the company will identify metrics to track progress against targets and develop a TNFD-aligned report incorporating findings from the L, E and A phases. It will use core metrics (land/ freshwater/ocean-use change, pollution, waste management, use of natural resources including freshwater) and additional sector metrics (soil pollution, fertilizer/pesticides, etc.).

# Locate – preliminary identification of priority areas and biodiversity hotspots

Prior to the issuance of TNFD, Olam started its naturerelated risk analysis journey by identifying priority areas to expand its regenerative agriculture efforts. In 2022, the company engaged the consultancy firm Altus Impact to identify land degradation hotspots in sourcing regions for several commodities in seven countries. The analysis harnessed geospatial tools and looked at indicators for climate, biodiversity threats, soil moisture, NDVI (Normalized Difference Vegetation Index), soil organic carbon, fire frequency and canopy cover loss. It identified land degradation hotspots by assessing the trend of each indicator from 2016 to 2021. If any indicator has a statistically significant negative trend in the landscapes, it signals that there is potential land degradation where the company sources the product. A statistically significant positive trend indicates that there is land regeneration.

With this analysis, Olam has identified the areas that are at risk due to land-use practices and areas where soil health is considered to be in danger. Looking ahead, Olam will conduct ground-level studies in identified hotspot areas and develop contextspecific regenerative agriculture practices for nature-positive impact. As a preliminary analysis, Olam and Olam Group (OGH) assessed 88 owned or controlled sites across their businesses for biodiversity risk using the **Integrated Biodiversity Assessment Tool (IBAT)** – Pro Multisite Reporting tool. The assessed sites comprise large and small processing facilities and large warehousing facilities that Olam or OGH own or operate. They did not include smaller warehousing spaces and corporate offices in the assessment, except where they overlap with the locations above.

Key reporting metrics from the IBAT:

- Counts of protected areas and key biodiversity areas (KBAs) within the selected 10-km radius of operational sites;
- Counts of critically endangered, endangered and vulnerable IUCN Red List species that are potentially found within a 50-km radius;
- Scores associated with the Species Threat Abatement and Restoration (STAR) metric to allow users to determine the relative opportunities for positive biodiversity action at sites.

Of the 88 sites, Olam found that 41 are within 10 km of a nationally or internationally recognized protected area and 18 sites are within 10 km of a key biodiversity area. Of those sites, 4 are considered high risk, 35 are considered medium risk and 49 are considered very low or extremely low risk, when categorized according to the IBAT STAR score.





# **Evaluate impacts and dependencies – preliminary identification**

While Olam has taken the necessary steps to adopt the TNFD, it is still in the process of pinpointing dependencies, impacts, risks and opportunities based on priority locations. Nonetheless, in the interim, the company is actively addressing predefined dependencies and impacts.

- Land degradation and soil health: Olam recognizes that the longstanding extractive model of intensive agriculture comes at a large cost to nature and the climate. One of the biggest challenges facing the industry is the state of the soil. Unsustainable farming practices, including overuse of fertilizers, deplete soils of minerals and microbes. Restoring long-term soil health and productivity is critical to increasing crop yields and to protecting food security without adding further pressure on the land.
- Climate change: Climate risks threaten farmer prosperity and food systems. Farmers are experiencing the negative impacts of climate change and extreme weather on crop yields, income and even human health. At the same time, global food systems account for nearly one-third of total greenhouse gas emissions. A significant amount of these emissions occur in upstream value chains where the company operates.

Water scarcity: Water availability is a material issue in Olam's supply chains (directly impacting crop yield and quality) and direct operations (affecting its ability to operate facilities with water-dependent processes). These factors ultimately impact farmer livelihoods and natural ecosystems. In particular, the company recognizes that its key businesses of rice and cotton are highly water-intensive. Furthermore, climate change will likely exacerbate water stress, which will affect different locations in contextspecific ways.

# 2.3. Strategic approach: Steps 2 & 3 – Commit and Transform

Having completed the Assess step, companies have identified **priority dependencies**, **impacts**, **risks and opportunities which then inform their commitments** (Commit step) and **associated actions** (Transform step). This section illustrates how the companies are setting commitments as part of their nature-related strategy and implementing practical actions or starting to work towards that.<sup>xvii</sup>

**SBTN's Action Framework (AR3T)** provides a key framework to inform an approach on nature by defining the hierarchy of actions that companies can put in place: Actions to avoid future impacts, reduce current impacts, regenerate and restore ecosystems, and transform the systems in which companies are embedded.<sup>xviii</sup>



# Common insights from the case studies on Commit and Transform steps

Figure 7: SBTN's Action Framework (AR3T) as part of the Transform stage of ACT-D. Source: Business for Nature (2023)

Informing nature-related commitments with nature assessments: Companies are in the process of defining more specific nature-related commitments and plans for action that will align with the in-depth materiality assessment conducted.

**Nature-based solutions:**<sup>8</sup> Companies are exploring nature-based solutions with value chain partners with the aim of addressing physical and transition risks farmers face.



<sup>8</sup> Nature-based Solutions (NbS) are actions to address societal challenges through the protection, sustainable management and restoration of ecosystems, benefiting both biodiversity and human well-being. (IUCN, 2020)



# Approach to commitment setting

As Nutrien finalizes the initial step of its nature assessment for its operational footprint, it now seeks to understand how the information and lessons can support actions aligned with the **Global Biodiversity Framework (GBF)**.

- In the short-term, the company may reflect this in updates to its global position statements on **biodiversity** and **water**, which together form the basis of its strategic thinking on these topics.
- In the longer term Nutrien may look to develop a more holistic nature strategy to reflect other DIROs identified. Subject matter specialists from its Governance, Enterprise Risk Management, ESG Compliance, ESG Reporting, Legal, Safety Health & Environment Operations, and Sustainability and Stakeholder Relations teams will consider next steps based on internal and external considerations of the company's naturerelated risks and opportunities.

# Nutrien's approach on Commit and Transform



# Example of action on nature: water stewardship

Nutrien is incubating projects with value chain partners as it explores how to reduce negative impacts and create benefits for farmers, the value chain and the business from naturebased solutions. An example of this is the Lake Winnipeg Basin (LWB) Project, a collaborative water stewardship project demonstrating how on-farm management practices through a water stewardship lens can bring about multiple social, financial and environmental benefits.

Lake Winnipeg is the 11th largest freshwater lake in the world. Six organizations, spanning food, agriculture and environmental interests, have collaborated on a pilot project with four farms in Manitoba, Canada, to explore how water stewardship practices create benefits on and off the farm.

Using the Alliance for Water Stewardship (AWS) Standard as a guide, the project partners provided the farmers with support and resources to develop water stewardship plans for their operations. The farmers identified current water stewardship actions and explored additional practices that could be applied across the 34,000 acres of potatoes, grains and oilseeds that were included in the project's first phase. Throughout this pilot project, participating farmers broadened their knowledge of water stewardship and the connections their activities have to the watershed and surrounding communities. After developing water stewardship plans with the four participating farms, the partners engaged an environmental consultancy to assess the potential environmental, social, and economic impacts from water stewardship plan implementation.

The analysis showed that the farmers, environment and local communities can realize additional benefits from full implementation of water stewardship plans as developed in the pilot project.





# Approach to commitment setting

Olam runs extensive internal research with business leaders regarding relevant material areas that underpin its specific goals and targets. This process has informed its key nature-related goal to **advance regenerative agriculture in its direct supply chains and its own farms by 2030**. This will set the company on the path to delivering transformation at a global scale, while bolstering access to food, nutrition and necessities.

Olam Group is a signatory of the **Science Based Targets initiative** (SBTi), with approved targets (<2°C) since 2019 to reach net-zero emissions by 2050. It also supports the **Agriculture Sector Roadmap** to 1.5°C to address commodity-driven deforestation and ecosystem conversion.

Measures that support these commitments include advancing regenerative agriculture, building climate resilience for farmers, implementing water stewardship and protecting biodiversity and natural ecosystems where the company operates and sources agricultural products.

# Olam Agri's approach on Commit and Transform



# Example of action on nature: sustainable rice cultivation and natural capital valuation

Rice is a key commodity for Olam Agri's business and India, Thailand and Vietnam are among the top exporting countries of rice. Conventional rice production across Asia is water-intensive, produces high methane emissions (a potent GHG), and involves tens of millions of smallholder farmers.

Olam began with the vision of revolutionizing rice cultivation by implementing sustainability standards with farmers in its operating regions. **The Sustainable Rice Platform** (SRP) is a multi-stakeholder initiative that crafted the first global sustainable rice standard, incorporating environmental, economic and social indicators for measurable and comparable sustainable rice cultivation. Through capacity building and group management systems, it ensures the credibility and traceability of sustainability claims.

Olam has established partnerships with organizations in these regions to execute sustainable rice cultivation training programs aligned to the SRP standard. These partners vary from international entities like the German development agency (GIZ) and the International Rice Research Institute (IRRI) to local governments. In each area, it has launched large-scale sustainable rice projects aimed at training smallholder rice farmers in climate-smart farming practices and boosting the production of sustainable, high-quality rice. This includes assisting farmers in implementing on-farm water use efficiency measures such as the alternate wetting and drying technique. As of 2023,



Olam and partners had reached over 35,000 farmers under these programs, resulting in reduced GHG emissions and up to a 20% increase in farmer incomes.

For both Thailand and Vietnam, the company tracked fertilizer use reductions over the course of three years of training on timely application of fertilizers, at optimum rates based on calendarized crop cycles and on methods to create customised fertilizer formulations. Olam used natural capital accounting methods to convert these results into financial terms (based on avoided water pollution and GHG emissions). The results show a **33% reduction** in the estimated natural capital impact of water pollution and GHG emissions associated with synthetic fertilizer use per metric ton of rice in Thailand and a **9% reduction** in Vietnam. For more information about this program and results, see here (p. 129-130).

In addition to implementing sustainable agriculture measures, Olam has also worked throughout the value chain to generate market value from sustainably grown rice. With farmers now equipped to produce safer, higher-quality rice while enhancing their yields, it has been able to tap into new export markets and establish partnerships that appreciate the value of sustainably grown rice. Consequently, it has been able to transfer this value to farmers, increasing their incomes from sustainable rice in the long term.

For more, please see **video** documenting Olam's sustainable rice work in India, as part of their participation in the Sustainable Markets Initiative.

# 2.4. Strategic approach: Step 4 – Disclose

Nature-related disclosures help companies communicate about the actions they are taking and progress towards targets. The Disclose step of the ACT-D framework recommends that companies align reporting with major reporting standards and to seek out independent validation and verification to enhance credibility of actions. Disclosures will contribute to the achievement of **The Biodiversity Plan Target 15** and will increasingly be required by both voluntary and mandatory accountability mechanisms. This section highlights how the companies are currently disclosing and planning to disclose.



# **Common insights from the case studies on Disclose step**

Companies work towards disclosing main impacts and dependencies on nature as well as progress towards actions to halt and reverse nature loss, aligned with **global frameworks** such as **TNFD** guidance

Companies measure and report according to global standards like: Global Reporting Initiative (GRI) and IFRS Sustainability Disclosure Standards



# Nutrien<sup>\*\*</sup>

### Nutrien's approach on Disclose

Nutrien supported the development of the **TNFD reporting framework** through participation in the TNFD pilot program. Nutrien's early participation allowed them to consider processes for internal biodiversity and water-related assessments with its manufacturing sites. A thorough understanding of the current disclosure landscape will help develop an appropriate approach to Nutrien's actions.



## **Olam Agri's approach on Disclose**

- Olam has been consistently disclosing its monitoring efforts and management of nature-related issues (including healthy ecosystems, healthy soils and water stewardship) in its **annual reports** and additional ESG disclosures. The company has been reporting against the **GRI** framework since 2016.
- As part of its commitment to be an early adopter of TNFD, Olam will disclose its nature-related dependencies, impacts, risks and opportunities in line with TNFD recommendations from financial year 2025. Olam have also begun preparations to align disclosures with the IFRS Sustainability Disclosure Standards.



# 2.5. Key challenges and lessons learned

Several key challenges arose as shared across the case studies, reflecting companies' common obstacles or barriers to assess and act upon nature-related issues. Likewise, several actions that could overall materially improve a company's approach are included below as lessons learned.

## Value chain positioning

### Challenges

The leading nature frameworks tend to focus more on direct operations and upstream value chains, with less guidance currently available for downstream considerations. Therefore, it is challenging to evaluate and assess indirect, downstream impacts because it is unclear what level of depth will be expected, i.e., whether a higherlevel assessment and prioritization of key issues will be acceptable or if the expectation will be for an indepth assessment everywhere the company's products are used.

#### **Lessons learned**

To date, the TNFD LEAP approach has helped to ask deeper questions regarding a company's downstream footprint. As companies look ahead to downstream considerations, they are collaborating with value chain members to understand how to best measure and report the environmental co-benefits of on-farm management practices on soil health, water, GHG reductions and removals and biodiversity that benefit growers and value chain members, the environment and the company.

### Data availability/ traceability

# Challenges

Attaining complete traceability for priority commodity supply chains down to sourcing locations is a challenge due to the nature of trading agricultural commodities.



#### **Lessons learned**

It is important to prioritize certain commodities for traceability and focus on largest suppliers by volume from priority regions and build up from there.

To overcome this challenge, different traceability and sustainability management platforms can be of great support. However, further enhancing traceability information and controls through better technology is needed.

#### **Materiality assessment**

### Challenges

The leading nature frameworks are typically global in scope. Areas of the world where regulatory standards are relatively stringent are likely to be outperforming other regions on managing nature-related risks, which should be kept in mind when evaluating outputs from tools and assessing opportunities.



#### Lessons learned

TNFD does not recommend that all information identified, assessed and evaluated using the LEAP approach be disclosed; similarly, not every action a company undertakes in the nature space will meet the company thresholds for public disclosure. It is essential to be mindful of business needs in the initial years of disclosure as the company gains an understanding of the reporting expectations and considers how best to fulfill them.

The TNFD LEAP approach should be tailored into the specific organizational context. This entails aligning metrics, terminologies, and internal frameworks accordingly.

Synergies through simultaneous implementation of the TCFD and TNFD frameworks allow organizations to make integrated and better-informed decisionmaking as it can allow companies to tackle climate and nature related risks and opportunities simultaneously and align their strategies accordingly.

It is important to engage with internal sitebased experts to supplement and build upon the general outputs from the existing global tools.

# Access to finance and investment case

## Challenges

Articulating the investment case for sustainability in a way that accounts for the immediate direct financial impacts for its business and partners, while valuing the intangible or longer term social, biodiversity and climate related impacts.

Access to finance for the over 500 million smallholder farmers who are fundamental to global food supply chains and few of whom have access to formal banking systems. Even fewer have access to newer opportunities such as premiums for sustainable, lowcarbon products or carbon credits if they implement, for example, agroforestry or soil carbon sequestration initiatives.



#### Collaboration and stakeholders

#### Challenges

There are complex challenges involved in reconciling economic trade-offs, food security and the long-term need to restore ecosystem functioning in agricultural areas, requiring careful consideration of feasibility and cost of implementation. Plans to achieve the GBF targets must engage local private and public sector stakeholders - including producers, agricultural groups and government – in policy development and implementation to ensure the agriculture sector's expertise in managing productive landscapes informs this process and supports pragmatic solutions.



#### **Lessons learned**

Working with value chain partners and local and regional NGOs and other organizations in exploring collaborative nature action pathways has been critical to developing an understanding of how and where to drive positive outcomes as part of a productive, profitable and resilient agri-food system.

Collective action on nature initiatives through collaborative projects can help address barriers to entry for some companies that may have concerns about credibility or not knowing where to start.

Collaboration between departments within the organization and engagement with stakeholders across the value chain are crucial. Such collaboration enhances understanding of the naturerelated risks and opportunities, ensuring a holistic assessment, and creates a space to address conflicting internal visions that may impede progress. Similarly, stakeholder engagement facilitates a sense of familiarity of and shared interest in the assessment results.



# **Annex 1: Tools and databases**

List of tools and databases recommended throughout the document and used by the case study companies.

Description		
A high-level screening tool that companies can use to aggregate and identify typical impacts and dependencies across different sectors and sub-sectors. <sup>7</sup>		
A tool that builds on ENCORE data to allow a more detailed assessment of impacts (but not as yet dependencies) across a combination of production processes.		
A non-exhaustive list of the most common environmental impacts associated with the production of major commodities (i.e., the direct operations stage). The pressure categories included in the HICL are aligned with those used in ENCORE and in the SBTN target-setting guidance for Step 1 and Step 2.		
A critical indicator of the health of the world's biodiversity to inform and catalyze action for biodiversity conservation and policy change, critical to protecting the natural resources. It provides information about range, population size, habitat and ecology, use and/or trade, threats, and conservation actions that will help inform necessary conservation decisions.		
A web-based map and reporting tool that provides fast, easy and integration access to three of the world's most authoritative global biodiversity datasets: IUCN Red List of Threatened Species, World Database on Protected Areas, and World Database of Key Biodiversity Areas.		
A corporate and portfolio-level screening tool to identify biodiversity risks and prioritise corporate action on biodiversity.		
A corporate and portfolio-level screening tool to identify water risks and prioritise corporate action on water.		
Open-source, peer reviewed data to map water risks such as floods, droughts and stress.		
Metric can help prioritize locations based on their potential to address species extinction and allows quantification of the potential contributions that species threat abatement and restoration activities offer towards reducing extinction risk across the world.		
Data source on protected areas and other effective area-based conservation measures (OECMs), updated monthly with submissions from governments, non-governmental organizations, landowners and communities.		

<sup>7</sup> Companies that are presented in this document have applied 2018-2023 version of the ENCORE knowledge base.

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#### Lead author:

Amanda Griniece, WBCSD

#### **Contributing authors:**

Nadine McCormick, *WBCSD* Eve Gleeson, *ShareAction* 

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