Just Nature

How finance can support a just transition at the interface of action on climate and biodiversity

Sabrina Muller and Nick Robins

LSE

Grantham Research Institute on Climate Change and the Environment

Centre for Climate Change Economics and Policy

The Grantham Research Institute on Climate Change and the Environment was established in 2008 at the London School of Economics and Political Science. The Institute brings together international expertise on economics, as well as finance, geography, the environment, international development and political economy to establish a world-leading centre for policy-relevant research, teaching and training in climate change and the environment. It is funded by the Grantham Foundation for the Protection of the Environment, which also funds the Grantham Institute – Climate Change and the Environment at Imperial College London. **www.lse.ac.uk/grantham**

The Centre for Climate Change Economics and Policy (CCCEP) was established in 2008 to advance public and private action on climate change through rigorous, innovative research. The Centre is hosted jointly by the University of Leeds and the London School of Economics and Political Science. It is funded by the UK Economic and Social Research Council. **www.cccep.ac.uk**

About the authors

Sabrina Muller is a Sustainable Finance Policy Analyst at the Grantham Research Institute. Nick Robins is Professor in Practice for Sustainable Finance at the Grantham Research Institute.

Authors' acknowledgements

The authors would like to thank the following for their inputs and inspiration: Naïm Abou-Jaoudé, Pat Brown, Tom Burston, Monica Castillo, Helena Colle, Brendan Curran, Pauline Descheemaeker, Peter Elwin, Tony Greenham, Maria-Pia Kelly, Margaret Kuhlow, Hans Peter Lankes, Maikel Lieuw-Kie-Song, Rob Macquarie, Nick Moss, Elizabeth Robinson, Camilla Roman, Bas Ruter, Alison Tate, Beate Triantafilidis, Wim Van Hyfte, and Helena Wright.

The authors would also like to thank Georgina Kyriacou for editing the report and Natalie Pearson for production.

This report was made possible through financial support from the Candriam Institute for Sustainable Development. The authors declare no conflict of interest in the writing of this report. The views in this report are those of the authors and are independent of the funding institutions. All errors and omissions remain the authors' own.

CANDRIAM INSTITUTE
FOR SUSTAINABLE DEVELOPMENT

This paper was first published in August 2022 by the Grantham Research Institute on Climate Change and the Environment and the Centre for Climate Change Economics and Policy.

Suggested citation: Muller S and Robins N (2022) *Just Nature: How finance can support a just transition at the interface of action on climate and biodiversity*. London: Grantham Research Institute on Climate Change and the Environment and Centre for Climate Change Economics and Policy, London School of Economics and Political Science.

Contents

SASINT, PIXABAY

Summary

Efforts to deliver the just transition need to be expanded to include sectors that affect and are affected by nature.

To date, efforts to deliver a just transition have focused on the shift to net zero in the energy system. However, the imperative of decent work and social inclusion applies equally to the transformations that lie ahead to deliver net zero in terms of agriculture, forests and land-use, and for strengthening the conservation of biodiversity. We call this a 'just nature transition'.

The just transition is a critical factor for the implementation of the Paris Agreement, the Sustainable Development Goals and the forthcoming Post-2020 Global Biodiversity Framework. Not placing people at the centre of the process of transformation risks holding back progress towards these shared global goals. Making progress happen will require an unprecedented increase in investment during this decade: the Intergovernmental Panel on Climate Change estimates that annual net zero investment flows need to grow by 10 to 29 times in agriculture, forestry and land use alone by 2030. This makes the role of the financial sector in supporting a just nature transition absolutely crucial.

Based on international agreements and emerging experience, we have identified three summary principles that the financial sector can apply to guide its work to achieve the just transition at the interface of climate and biodiversity:

1. Integrate human rights and labour standards across climate and biodiversity action.
2. Anticipate, analyse and address the social risks and opportunities of the transition to sustainability across sectors for workers, suppliers, communities and consumers.
3. Ensure meaningful participation and partnership through social dialogue with workers as well as wider engagement with other affected stakeholders. This will often involve empowering groups excluded from decision-making, whether by income, gender or race.

What do we mean by the 'just nature transition'?

We define the 'just nature transition' as one delivering decent work, social inclusion and the eradication of poverty in the shift to a net zero and climate-resilient economy that simultaneously delivers biodiversity goals in agriculture, forestry, land-use and the oceans.

Although an understanding of the just energy transition is becoming well-established among policymakers, business and finance and civil society, as yet there is no equivalent clarity in the nature arena.

To increase recognition and action, we examine four priority areas:

Delivering sustainable agriculture and food systems

The transition in this sector will be crucial for decreasing global greenhouse gas emissions and reversing biodiversity loss but will need to be shaped by social factors including the significant number of people involved in these industries across the world, a baseline of often poor social conditions, and the need for changes in food consumption to be inclusive.

Ending deforestation

The conversion of forest lands is often connected to human rights violations, including land-grabbing and violence – affecting Indigenous Peoples in particular – as well as accelerating the speed of climate change and biodiversity collapse.

Scaling up nature-based solutions

Nature-based solutions such as reforestation can play a key role in reaching net zero and promote human wellbeing, but must be co-developed with local communities and Indigenous Peoples.

Restoring ocean ecosystems

Oceans are home to a wealth of biodiversity but are under increasing threat from human activity – while jobs in fishing and aquaculture are often dangerous and poorly paid.

The role of the financial sector

Financial institutions such as commercial banks and institutional investors have been increasing their efforts to support a just transition in the energy system. This needs to be extended to the nature dimension through strategic commitment, corporate engagement, capital allocation and policy dialogue to reform the system conditions. In each of the four priority areas for the just nature transition there are already examples of relevant initial practices from financial institutions, from investor statements calling on governments to set emissions reduction targets for agriculture to green loans for sustainable salmon fishing. However, even where financial institutions are starting to address the net zero transition beyond the energy sector, the integration of the social dimension lags behind. Explicit reference to the need for a just transition remains rare.

Failure to make the just transition a reality will risk undermining the ability of governments, business and finance to meet their net zero and biodiversity goals. There is a long way to go to get adequate commitment and real action for the just nature transition. Far greater attention will need to be paid to a range of cross-cutting social priorities to accelerate the just transition. These include strengthening the enforcement of human rights and labour standards, making land tenure more inclusive, advancing the rights of Indigenous Peoples, empowering women and promoting gender equality, as well as ensuring meaningful social dialogue and stakeholder inclusion. Across all of these, improving access to sustainable finance is a critical need, particularly in terms of creating operational models of success that can become universally available. This will often involve a greater role for place- and community-based financial institutions such as cooperatives.

Recommendations for the financial sector

Financial institutions should:

1. **Include just transition principles in their own plans for net zero, nature and biodiversity**. The just transition also needs to be incorporated into collective finance initiatives such as those aiming to promote sustainable agriculture, end deforestation, expand nature-based solutions and restore the oceans.
2. **Set just transition expectations of the businesses they lend to and invest in**, based on international standards, and ensure these are included in the net zero and biodiversity plans of nature-exposed companies. They should then engage with companies impacted by the nature transition to signal good practice, ensure transparency and improve performance in line. Financial institutions could also work with business and trade unions, policymakers and civil society to establish common just transition frameworks for agriculture, ending deforestation, nature-based solutions and ocean restoration.
3. **Purposefully channel finance to companies committed to and making progress to support a just nature transition for workers, suppliers, communities and consumers**. This includes the development of innovative financial solutions to attract capital towards activities that benefit nature and people.
4. **Engage with policymakers to reform agricultural, forestry and nature policies so that they support a just transition** and provide the incentives, rules and catalytic public finance that is needed to scale up private investment.
5. **Work to ensure that social and just transition factors are effectively included in key frameworks for reporting and transparency**, such as the Task Force for Nature-related Financial Disclosures (TNFD). Financial institutions themselves should publicly disclose strategies, policies and performance on social issues in the transition to sustainability beyond the energy sector.

Securing clear commitment for the just nature transition

The 'just nature transition' remains a new, complex and challenging area for policy and practice. The emerging agenda contains real opportunities for delivering environmental progress through decent work and social inclusion. But there are a number of tough issues to contend with around awareness and respect for people's needs, mitigating potential negative impacts, negotiating solutions and practical delivery. Clear commitments and explicit strategies are now required from governments, businesses and trade unions, financial institutions and civil society to accelerate action on climate and biodiversity with workers, communities and consumers at the heart.

BERNARDO O'HIGGINS NATIONAL PARK, CHILE | MARCOCARLI,, PIXABAY

> "Clear commitments and explicit strategies are now required to accelerate action on climate and biodiversity with workers, communities and consumers at the heart.

Social risks

At over **93%** globally, the agriculture sector has the highest level of informal employment, with much of this in developing countries.[1]

Agriculture provides work for around **1 billion-plus** people globally and accounts for over **60%** of employment in low-income countries.[2]

The net zero transition in agriculture could translate into **120 million** fewer jobs than in a business-as-usual scenario globally.[3]

Almost **25%** of the global population, many of them vulnerable groups, depends on forests for their livelihoods.[4]

30% of the population in tropical countries are highly dependent on nature for basic human needs.[5]

Around **1.6 billion** people live within **5 km** of forests worldwide, **71%** of them in low- and middle-income countries.[6]

Globally, only **18%** of land is formally recognised as owned by or designated for Indigenous Peoples and local communities.[7]

Indigenous Peoples make up just **5%** of the global population, but they make use of **a quarter** of the world's land, and safeguard around **80%** of the world's remaining biodiversity.[8]

91% of land managed by Indigenous Peoples and local communities is in 'good' or 'fair' ecological condition.[9]

Around **60 million** people work in fishing and aquaculture globally, most of them in low-income countries.[10]

Around **80%** of the world's poor live in rural areas and work primarily in farming, often with low pay and limited social protections.[11]

Women account for over **41%** of the workforce in agriculture, forestry and fishery in low-income countries, but often have restricted access to land, finance, training and decision-making.[12]

Social opportunities

Investments in ecosystem restoration provide on average **3.7 times** as many jobs as oil and gas production investments.[13]

A nature-positive transition could create **395 million** jobs by 2030.[14]

In the EU, **92,000** jobs could be created in a sustainable transition of the fishing sector and related industries including food, retail and services.[15]

---

[1] ILO, 2018a
[2] ILO, 2020
[3] ILO, 2018b
[4] IUCN, 2021
[5] Fedele et al., 2021
[6] Newton et al., 2020
[7] Rights and Resource Initiative, 2015
[8] World Bank, 2021
[9] WWF et al., 2021
[10] FAO, 2020
[11] World Bank, 2014
[12] ILO, 2017
[13] WRI et al., 2021
[14] WEF, 2020b
[15] Oceana, 2017

1. The need for a 'just nature transition'

Development of the just transition in the climate change context

All sustainability transitions have human consequences, bringing environmental benefits while also changing existing patterns of employment, production and consumption. The just transition is increasingly recognised as a critical component for delivering ambitious climate action, not least because of its inclusion in the Paris Agreement (2015) and reinforcement in the Glasgow Climate Pact (2021).[1] It is now widely accepted among public and private actors alike that the social impacts of climate action need to be taken into account to ensure benefits of the net zero transition are shared fairly and no one is left behind.

The International Labour Organization (ILO) is a forerunner on addressing these issues. It launched the *Guidelines for a just transition towards environmentally sustainable economies and societies for all* in 2015, with the focus on a series of mutually reinforcing policy areas that support workers and enterprises during the transition to a green economy. The ILO's guiding principles are listed in the Appendix. The Guidelines provide a framework for all countries to achieve the goals of decent work and social inclusion, reduced inequality and the eradication of poverty as they deliver the Sustainable Development Goals (SDGs) through to 2030. Meeting the SDGs, which cover social, climate and broader environmental targets, requires complex system change and the just transition is essential to achieving it.

Based on international agreements and experience with climate action to date, we have identified three high-level principles which summarise the core meaning of the just transition for the financial sector so that it can support a people-centred approach for workers, suppliers, communities and consumers, as outlined in Box 1.1.

[1] The Paris Agreement refers to "Taking into account the imperatives of a just transition of the workforce and the creation of decent work and quality jobs in accordance with nationally defined development priorities". The Glasgow Climate Pact calls for "targeted support to the poorest and most vulnerable in line with national circumstances and recognizing the need for support towards a just transition" and "the need to ensure just transitions that promote sustainable development and eradication of poverty, and the creation of decent work and quality jobs…".

BOX 1.1

Summary just transition principles to guide climate action by the financial sector

People need to be at the heart of a successful transition to net zero. To make this happen, the following three principles should guide action:

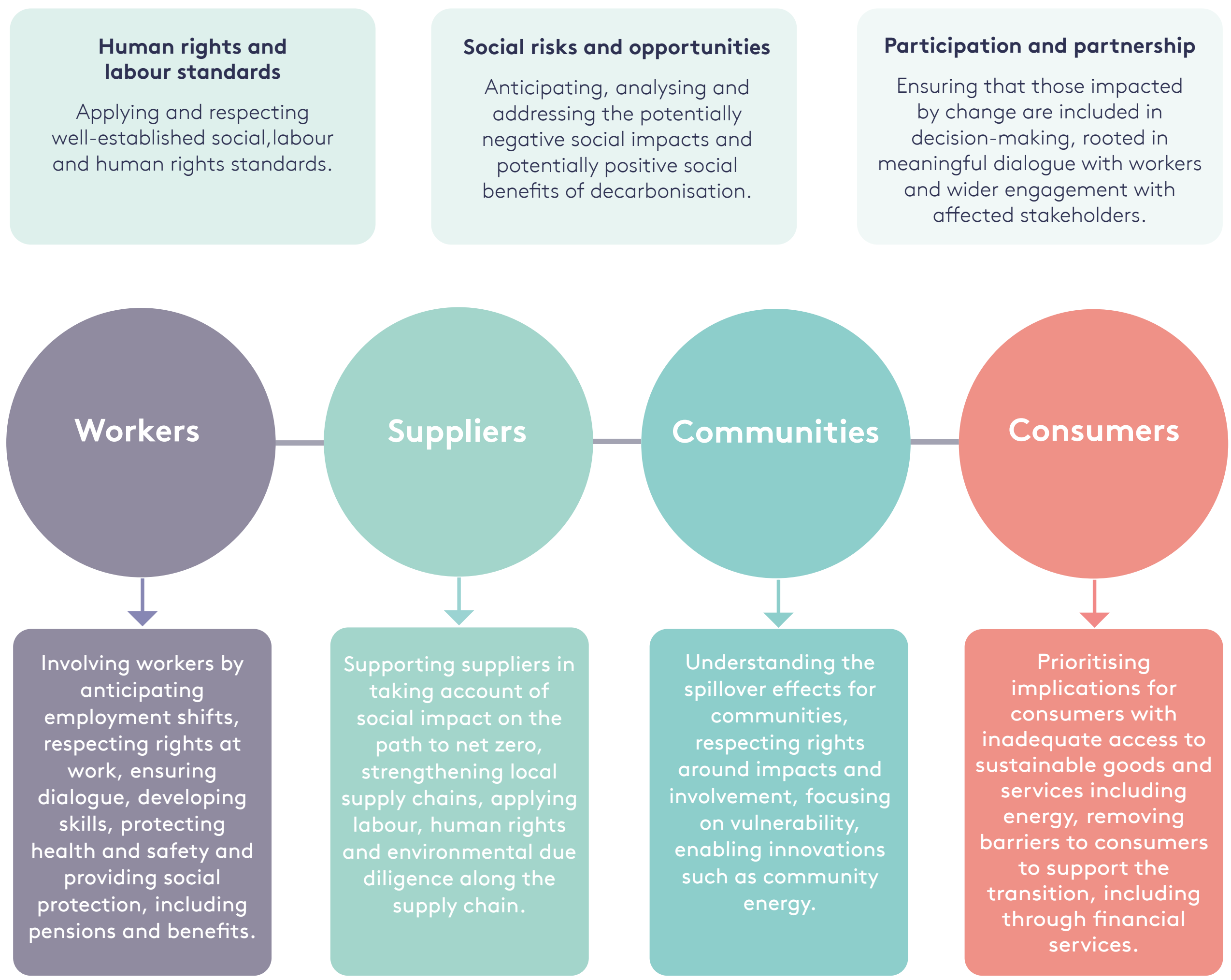
1. **Integrate human rights and labour standards:** The just transition is a way of connecting the environmental and social dimensions of the Sustainable Development Goals – for example, SDG13 on climate with SDG1 on poverty eradication, SDG5 on gender equality, SDG8 on decent work and SDG10 on reduced inequalities. The just transition focuses on making sure that the 'social' pillar of 'environmental, social and governance' (ESG) is incorporated into the climate activities of businesses and financial institutions. This means applying and respecting well-established social, labour and human rights standards to the net zero transition. These include the UN Guiding Principles on Business and Human Rights, ILO labour standards and the Organisation for Economic Co-Operation and Development (OECD) guidelines for multinational enterprises. Environmental sustainability needs to be science-based; the just transition needs to be rights-based.
2. **Address social risks and opportunities:** The just transition is about anticipating, analysing and addressing the potentially negative social impacts and potentially positive benefits of decarbonisation for workers, suppliers, communities and consumers. This focus on distributive and restorative justice is a particular priority for the needs of vulnerable and marginalised groups so that they do not bear the burden of change. The just transition can have both a reactive lens, focused on foreseeing and managing the consequences of climate

action to minimise risks, and a more proactive, transformational lens, identifying how net zero can be shaped to address long-standing priorities such as eradicating poverty and reducing inequality.

3. **Ensure meaningful participation and partnership:** The just transition is both an outcome and a process, so that those affected by change are included in decision-making that affects them. This focus on procedural justice means making sure that meaningful social dialogue exists for workers along with wider engagement with other affected stakeholders. This can often require proactive efforts to empower excluded groups that have traditionally been under-represented in decision-making, for example in terms of income, gender or race. A place-based approach to participation is often needed as the impacts of the transition can be highly specific to local contexts. Inclusion can provide the basis for the partnerships that will be critical to deliver the just transition to net zero at the local, sectoral, national and global levels.

The Paris Agreement emphasised the imperative of the just transition for the global workforce and the creation of decent work and quality jobs, focusing on both the negative and positive impacts the shift to net zero can bring for workers. According to the ILO, the decent work agenda covers the promotion of productive work (including skills and training), rights at work, social protection and social dialogue, with gender equality as a cross-cutting priority. These apply to a company's own workers as well as those in the supply chain. The just transition also addresses the implications of net zero for communities and consumers. The scope of the just transition thus covers four key groups of people: workers, suppliers, communities and consumers.

People-centred approach to the just transition



To date, most of the focus on the just transition has been on the energy system and the implications for workers, communities and consumers of the shift away from fossil fuels and towards clean and efficient energy. In the words of the International Energy Agency, "the transition to net zero is for and about people" (IEA, 2021a) and it has developed a set of policy recommendations for a people-centred transition (IEA, 2021b).

One of the highlights of COP26 was the International Just Energy Transition Partnership between South Africa, the EU, France, Germany, the UK and the USA, which will provide $8.5 billion to support "a just transition to a low carbon, climate resilient society that promotes employment and livelihoods" (European Commission, 2021). Efforts are being made towards similar partnerships with Indonesia, India, Senegal and Vietnam (G7, 2022).

Businesses have produced a shared Just Energy Transition framework, developed by the Council for Inclusive Capitalism (Council for Inclusive Capitalism, 2021). The energy sector is also the arena where financial sector action for the just transition has been most prominent. The just transition is now incorporated into leading investor initiatives such as the Climate Action 100+, which focuses mostly on energy and industrial firms. Shareholder engagement has also been a tool of choice to stimulate corporate action, notably in the utility sector (see RLAM, 2022; Robins et al., 2021).

Expanding the just transition beyond the energy sector to nature

The just transition is equally essential for climate action beyond energy, in sectors dependent on or impacting nature. In our 2021 report *From the Grand to the Granular*, we set out how investors could support a just transition, applying our framework to five companies in the utility sector (Robins et al., 2021). In this report we apply a similar approach to what we call the nature transition – as defined in Box 1.2. Overall, we find that the importance of a just nature transition is starting to gain traction in policy, business and civil society, and emerging practice can be observed in the financial sector.

But it is clear that a step change in commitment and action is now needed. The Intergovernmental Panel on Climate Change has estimated that annual investment flows for climate change mitigation in agriculture, forestry and land use alone need to increase by 10 to 29 times by 2030 (IPCC, 2022b). This makes the role of the financial sector essential to a just nature transition.

BOX 1.2

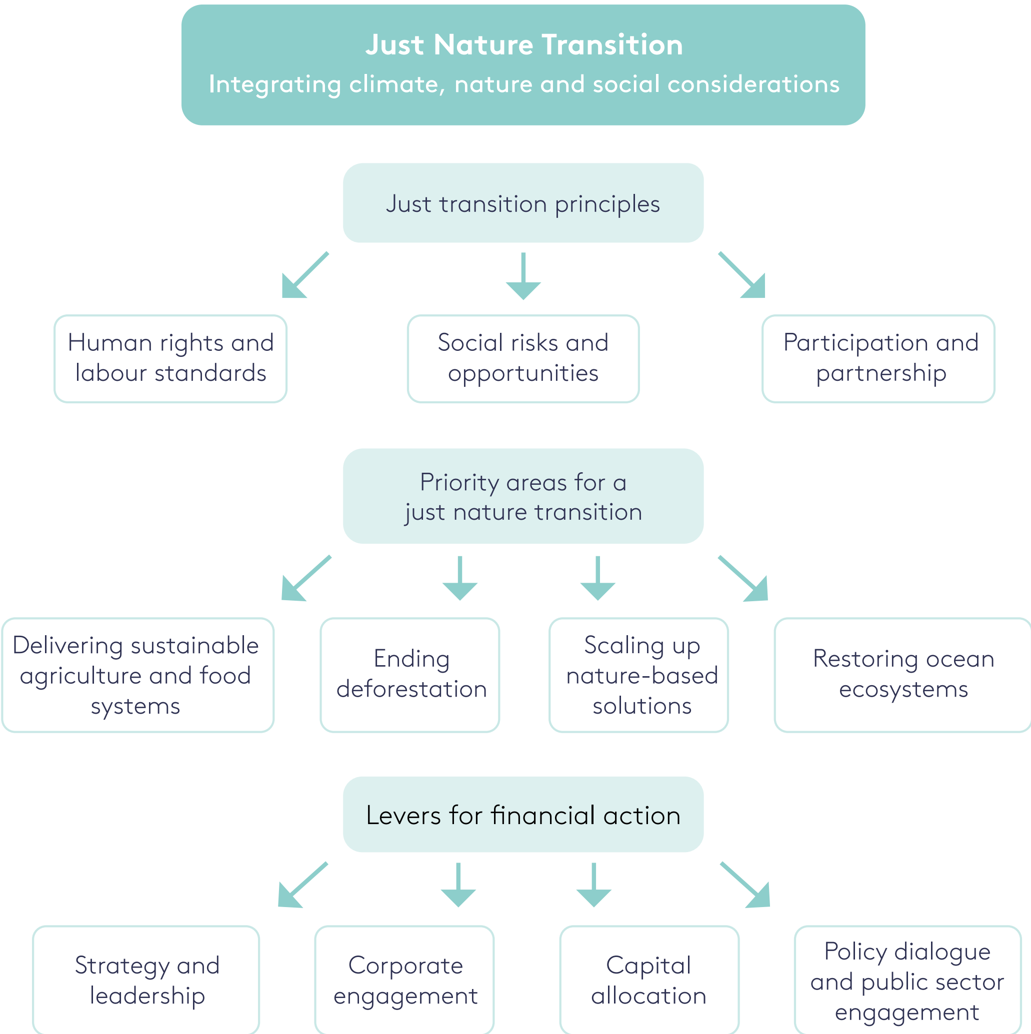
Defining the just nature transition

We define the 'just nature transition' as one delivering decent work, social inclusion and the eradication of poverty in the shift to a net zero and climate-resilient economy that simultaneously delivers biodiversity goals.

This means realising a shared set of just transition principles: first, to integrate human rights and labour standards across climate and biodiversity action; second, to anticipate, analyse and address the social risks and opportunities of the nature transition for workers, suppliers, communities and consumers; and third, to ensure meaningful social dialogue exists for workers along with wider engagement with other affected stakeholders, which will often involve empowering groups excluded from decision-making, whether by income, gender or race.

The nature transition centres on achieving net zero and climate-resilience in agriculture, forestry and land-use, as well as strengthening the conservation of land- and ocean-based biodiversity.

Figure 1.1. The just nature transition and the role of finance



BOX 1.3

Four levers for finance to make a positive impact in the just nature transition

1. **Strategy and leadership:** Financial institutions should embed the just transition into their strategies and plans to achieve their climate and biodiversity goals – and take leadership in signalling this commitment internally and externally.
2. **Corporate engagement:** Financial institutions should integrate the just transition into their equity and debt engagement with business, setting expectations, requiring disclosure and pressing for performance in line with international standards.
3. **Capital allocation:** Financial institutions should actively seek to finance those companies committed to positive social impact for workers, suppliers, communities and consumers in the delivery of climate and biodiversity goals.
4. **Policy dialogue and public sector engagement:** Financial institutions should advocate that governments introduce effective policies to support the just transition, and engage on public finance priorities, such as sovereign bonds and blended finance, in order to achieve impact.

For all of these levers, it is important that financial institutions include the just transition in the way they measure the performance and impact of their climate and environmental activities, and report these to their clients and stakeholders.

We have identified four levers for financial institutions – see Box 1.3 – and four priority areas for the just nature transition, set out in Figure 1.1. Sections 2–5 cover each of the priority areas in detail and also profile early-stage financial practice across the four key levers of change (see list of examples on p14).

Nature is essential for the delivery of net zero goals. Agriculture, forestry and other land use contribute around 23% to global greenhouse gas emissions from human activities (IPCC, 2019). The just transition is crucial for success in these critical areas and the social risks and opportunities need to be taken into account. The just transition will also be vital for conserving and restoring biodiversity and the wider shift to a nature-positive economy – one that enhances the resilience of our planet and societies by enriching biodiversity, storing carbon, purifying water and reducing pandemic risk (Holdorf et al., 2021). An estimated $44 trillion of the world's economic activity is dependent on nature, amounting to more than half of global GDP (WEF, 2020a).

Nature is also a crucial foundation for the livelihoods of billions of people. Agriculture, for example, is estimated to provide work for more than 1 billion people globally and to account for over 60% of employment in low-income countries (ILO, 2020). Women account for more than 30% of the workforce in agriculture, forestry, hunting and fishing globally, exceeding the share of male workers which stands at 28% (ILO, 2017). The share of female workers is particularly high in low- and middle-income countries.

Biodiversity conservation is potentially approaching its 'Paris moment'. The Post-2020 Global Biodiversity Framework is set to be agreed at the UN Biodiversity Conference (CBD COP15) in December 2022, and the draft agreement acknowledges biodiversity as "fundamental to human well-being" (CBD, 2021). Just as for climate change, addressing nature loss will entail the transformation of a range of sectors, which presents considerable opportunities but also risks for workers, communities and consumers. These will need to be addressed if progress is to be accepted and sustained. According to one estimate, the nature-positive transition could generate up to $10.1 trillion in annual business value and create 395 million jobs by 2030 across food, land and ocean use; infrastructure and the built environment; and energy and extractives (WEF, 2020b). To achieve a just transition, these will need to be decent jobs that uphold human and labour rights.

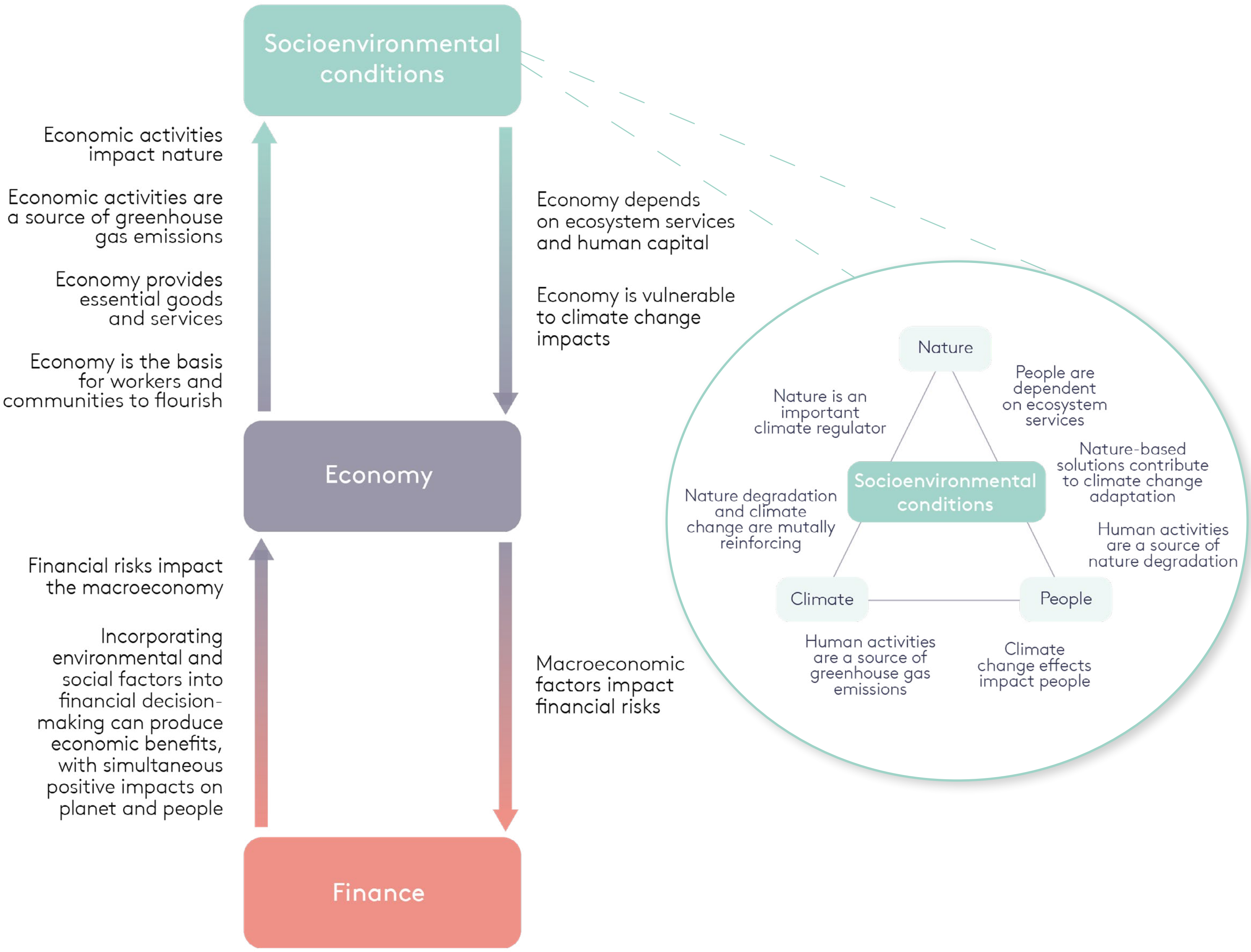
> " Climate, natural and human systems are inextricably linked, making a just transition essential for progress towards sustainable development.

In sum, climate, natural and human systems are inextricably linked, making a just transition essential for progress towards sustainable development. The 2021 joint report by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) and the Intergovernmental Panel on Climate Change (IPCC) makes this triangle of connections crystal clear. IPBES highlights the need to treat "climate, biodiversity and human society as coupled systems," in order to minimise trade-offs and maximise co-benefits (IPBES and IPCC, 2021). If this is not done, there is a likelihood of catastrophic tipping points for biodiversity loss and climate change, which will also have profound negative consequences for human beings. Equally, the report notes that "positive social tipping interventions can help attain desirable biodiversity-climate interactions" (ibid.). Examples of such interventions include structural system changes such as the phase-out of harmful fossil fuel subsidies and the spread of social norms such as community co-design of plans that benefit both environment and society. The 2022 IPCC report on impacts, adaptation and vulnerability to climate change found that climate change has already caused substantial damage to natural and human systems, becoming increasingly irreversible (IPCC, 2022a).

Clear commitments to the just transition are needed to achieve the Paris Agreement, the Post-2020 Global Biodiversity Framework and the SDGs. Not bringing people along in the transition risks progress towards these shared global goals. Finance can play a key role by mainstreaming these objectives in decision-making and directing finance flows to accomplishing the targets in these Agreements. By taking a holistic approach to the climate–biodiversity–society nexus, financial institutions can address the social harms resulting from nature degradation and climate change. They can also help to shape the nature transition so it delivers positive social impacts in terms of the quality and quantity of jobs, empowerment of rural communities and respect for fundamental human rights. In the words of the IPCC Working Group on climate mitigation: "Accelerated international financial cooperation is a critical enabler of low-GHG [greenhouse gas] and just transitions, and can address inequities in access to finance and the costs of, and vulnerability to, the impacts of climate change" (IPCC, 2022b).

The interlinkages between socioenvironmental conditions, the economy and finance are illustrated in Figure 1.2.

Figure 1.2. How socioenvironmental conditions, the economy and finance interlink



Examples of early-stage financial practice across the key levers of change provided in the report (see boxes in Sections 2–5)

Sustainable agriculture

1. Strategy and leadership: *PRI Guidelines for Responsible Investment in Farmland* | p18
2. Corporate engagement: *PRI collaborative engagement on fair labour practices in agricultural supply chains; Climate Action 100+* | p19
3. Capital allocation (blended finance): *The AGRI3 Fund; The Tropical Landscapes Finance Facility; The Acumen Resilient Agriculture Fund* | p20
4. Capital allocation (commercial): *Better Life Farming* | p21
5. Policy dialogue and public sector engagement: *'Where's the beef?' investor statement* | p22

Deforestation

6. Strategy and leadership: *COP26 Financial Sector Commitment Letter on Eliminating Commodity-Driven Deforestation* | p24
7. Corporate engagement: *Investor Initiative for Sustainable Forests* | p25
8. Capital allocation: *Innovative Finance for the Amazon, Cerrado and Chaco initiative* | p25
9. Policy dialogue and public sector engagement: *Investors Policy Dialogue on Deforestation* | p26

Nature-based solutions

10. Strategy and leadership: *Gold Standard; Voluntary Carbon Markets Initiative; WWF* | p28
11. Corporate engagement: *Ceres and IIGCC engagement tool for investors on natural climate solutions* | p30
12. Capital allocation: *The Livelihoods Carbon Funds; Rabobank* | p31

Restoring ocean ecosystems

13. Strategy and leadership: *UNEP FI's Sustainable Blue Economy Finance Initiative* | p35
14. Corporate engagement: *Sustainable Fisheries Partnership, Aviva and PRI questions for engagement with fishing companies; PRI Guide for Investor Engagement on Labour Practices in Agricultural Supply Chains* | p36
15. Capital allocation: *Rabobank's green loan for sustainable salmon in Chile* | p37

2. A just transition in agriculture and food systems

Agriculture, the environment and livelihoods

Transforming agriculture and the global food system is essential to building a nature-positive economy. Agriculture poses a threat to around 86% of species at risk of extinction (Ritchie and Roser, 2021). The agri-food sector accounts for over 30% of human-made greenhouse gas emissions globally, with pre- and post-production processes in the food supply chain (such as fertilizer manufacturing, food processing and food waste disposal) set to become the largest contributors to this in many countries, ahead of on-farm crop and livestock production and land use change (Tubiello et al., 2021).

A just nature transition for agriculture and food systems will need to be shaped by a number of pressing social realities, among them the significant number of people involved in these industries across the world (notably in low- and middle-income countries), a baseline of often poor social conditions, a profound gender dimension, the potential employment impacts of the nature transition, and the need for changes in food consumption to be socially inclusive.

The people dependent on agriculture are also among the most vulnerable to the effects of climate change and nature loss, including drought, heat and heatwaves, flooding, water scarcity, pollination issues and soil quality deterioration, which pose far-reaching risks to rural livelihoods and food security. This is particularly true for low- and middle-income countries as their economies tend to be more dependent on agriculture, and climate change impacts are often already more severe there. Poorer communities reliant on environmental resources are particularly affected. Around 80% of the world's poor live in rural areas and work primarily in farming (World Bank, 2021). Therefore, if agriculture can be transformed to withstand the challenges and contribute to a nature-positive economy, there is potential for the sector to alleviate poverty but for that to happen it must also address job security, social protection and pay. Agriculture is the sector with the highest level of informal employment, particularly in low- and middle-income countries and standing at over 93% of agricultural workers globally (ILO, 2018a), meaning job security and social protection can be limited, and it is among the lowest paid sectors in the world (Jaeger et al., 2021).

Agriculture is the largest sector for women's employment in some regions (Oceania, Southern Asia and sub-Saharan Africa [UN, 2015]), which means there is a profound gender dimension to the just transition of the sector. Women can face restrictions in some countries regarding access to land, finance, training and decision-making. These imbalances can also make women farmers more vulnerable to climate change impacts than men (World Bank, 2011).[2] The COVID-19 pandemic has also starkly highlighted the decent work deficits in food production, not least for meat processing workers who suffered from raised health and safety risks and strong pressure to maintain production volumes in a labour shortage context (Figaredo and Jones, 2021).

Globally, the ILO has found that the net zero transition in agriculture could translate to 120 million fewer jobs than in a business-as-usual scenario by 2030 compared with 2014, particularly in Africa (-3.5% or around 20 million fewer jobs) and Asia and the Pacific (-2.2% or around 100 million fewer jobs) (ILO, 2018b). Managing potential negative employment impacts in the sector in a way that is fair and inclusive will be crucial to successfully delivering sustainable food supply chains.

Impacts of imbalances in food consumption and security on people and nature

A just nature transition will also need to address fairness in food consumption. As the report of the EAT-Lancet Commission has emphasised, "food is the single strongest lever to optimize human health and environmental sustainability on Earth" (EAT, 2019). The

[2] The WECCA Project [Women Entrepreneurs in Climate Change Adaptation] looks to identify barriers to adaptation for female-led businesses in sub-Saharan Africa and develop gender-specific pathways to manage the risks of climate change. See www.lse.ac.uk/granthaminstitute/women-entrepreneurs-in-climate-change-adaptation/.

Commission found that it is possible to feed a future population of 10 billion people a healthy diet within planetary boundaries, but this will require large-scale transformations of eating habits, improvements in food production and reduction of food waste.

Excessive consumption and use of resources by the wealthy is a major contributing cause of nature loss and negative climate impacts. Deforestation for the expansion of agricultural land, including for growing animal feed, is detrimental for both biodiversity and climate. This is set to continue, with global meat consumption projected to increase by 14% by 2030, mostly as a result of income and population growth (OECD and FAO, 2021). Lack of legal protection for forests and uncultivated lands exacerbates the problem.

Global conflicts put further strain on food security. Food price crises in 2007–08 and 2010–12 particularly affected low-income countries and consumers, leading to marked social tensions. The war in Ukraine also poses significant risks in this context as Russia and Ukraine are large exporters of certain key crops, for example accounting for 28% of global wheat exports in the 2021/22 (July – June) trade year (U.S. Department of Agriculture, 2022). Countries such as India are imposing export bans on wheat to address rising prices domestically, which contributes further to rising prices globally. The UN Food and Agricultural Organization (FAO) Cereal Price Index was 56.2% higher in May 2022 than in May 2021, driven by wheat prices that stood 11% above their previous record high in March 2008 (FAO, 2022). Food shortages and price spikes impact vulnerable and poor social groups in particular. Coupled with increasing climate change impacts, the case for building resilient food systems is now stronger than ever and a just nature transition can help make important progress to achieve this.

ELIASFALLA, PIXABAY

Transforming the agri-food system and achieving a just transition

A transformation of the agri-food system is needed for it to fulfil its potential to become beneficial for the environment and support the livelihoods of farmers.

On the production side, agroecology, focused on creating harmony between people and the environment in the production of food, is one strategy that can bring positive economic, environmental as well as social impacts. Enhancing the diversity of plants and reducing the reliance on herbicides and pesticides can have important benefits for biodiversity conservation, carbon sequestration, soil fertility, crop resistance and human health (Jaramillo, 2021). A recent report has argued that, in the UK, agroecology can help achieve this while also supporting improved farming incomes, higher employment and more resilient farms and rural areas (Greenham and Link, 2020).

On the consumption side, strategies to tackle issues arising from overconsumption will need to be designed to be inclusive at all levels of income, to ensure a just transition. Solutions will need to take account of regional contexts. For example, many in low- and middle-income countries are dependent on steady meat consumption for vital nutrients and protein, and there may not be readily available or affordable alternatives for consumers. High-income countries on average consume more meat than is healthy, meaning a reduction in consumption would entail health co-benefits for society.

> " Agroecology, focused on creating harmony between people and the environment in the production of food, is one strategy that can bring positive economic, environmental as well as social impacts.

A number of frameworks and initiatives are starting to set out how the just transition could be achieved in agriculture. For example:

- ActionAid has released a set of Principles for a Just Transition in Agriculture, which describe how a socially equitable transformation of the sector will need to address inequalities; work for people, nature and climate; ensure inclusiveness and participation; and be based on a comprehensive policy framework (ActionAid, 2019).
- The Just Rural Transition (JRT) initiative, launched at the UN Climate Action Summit in 2019, is bringing together governments, companies, civil society, farmers groups and Indigenous Peoples for a transformation in land use aligned with achieving the Paris Agreement temperature goals, halting rapid nature loss and accelerating delivery of the SDGs. JRT's initiatives include work with businesses to ensure living incomes across the supply chain and its Agri-SME Digital Finance Platform, which leverages the role of small- and medium-sized agricultural enterprises as key drivers of equitable livelihoods in agricultural value chains.
- The International Union of Food, Agricultural, Hotel, Restaurant, Catering, Tobacco and Allied Workers' Associations (IUF) trade union has defined a set of just transition principles for livestock production, aimed at trade unions:
  - **Transition as transformation:** A transition of the food system is possible, but it cannot be accomplished without deep restructuring of the global economy.
  - **Representation:** Agricultural workers, rural farmers, food processing and hospitality workers must have a voice in shaping change and redesigning the food system. Planning and implementation of the transformation must involve negotiation among those worst affected – through tripartite negotiations (governments, employers and unions) and through workplace collective bargaining.

- **Jobs guarantee:** Transforming the food system will affect jobs. As production of intensive livestock is shifted, livelihoods will be affected, and in some industries, jobs will be lost. But workers should not have to pay for the climate crisis. It needs to be ensured that any changes do not disadvantage workers.
- **Skills training:** New methods of farming and production need to be backed up by proper investment to ensure that workers have the skills in new 'green' jobs and industries.
- **Social protection and compensation:** Workers should not bear the burden of the transition. Government-provided support and safety nets are needed to ensure that the livelihoods of workers are safeguarded in the transition.
- **Public investment and policies:** Transformation of the global food system cannot take place without proper investment and policy support from governments. Governments need to provide resources and public policy to manage and facilitate the transition (IUF, 2022).

How financial institutions can deploy their levers of change to support a just transition in agriculture

i. Strategy and leadership

A starting point for financial institutions is to adopt clear strategic commitments to support a just nature transition in agriculture and food systems.

Principles and standards for financing agriculture in a sustainable way go back a long way, but their implementation has lagged behind. As early as 2010, a group of UN institutions and the World Bank joined forces to develop their Principles for Responsible Agricultural Investment that Respects Rights, Livelihoods and Resources (FAO et al., 2010). The scope of the guidance covers both public and private investments. A similar approach is taken in the Principles for Responsible Investment in Agriculture and Food Systems from the Committee on World Food Security (2014).

For institutional investors in particular, the Principles for Responsible Investment (PRI) Guidelines for Responsible Investment in Farmland provide a high-level framework to support a socially equitable transition to a nature- and climate-positive agriculture sector (see Example box 1). The PRI has also published a responsible investment due diligence questionnaire for farmland investors, intended to be used in conjunction with investor dialogue (PRI, 2019). The OECD-FAO Guidance for Responsible Agricultural Supply Chains can also be used as a framework for strategy setting, followed by company engagement and due diligence (OECD and FAO, 2016).

The principles established in these examples can be a useful starting point from which financial institutions can develop clear, strategic commitments to support a just nature transition in agriculture and food supply chains. These commitments then need to be translated into granular action with real world impact. Levers of change include corporate engagement and capital allocation, as described below.

EXAMPLE BOX 1

Sustainable agriculture |
Strategy and leadership

PRI Guidelines for Responsible Investment in Farmland

The top-level guidelines are:

- Promote environmental sustainability
- Respect labour and human rights
- Respect existing land and resource rights
- Uphold high business and ethical standards
- Report on activities and progress towards implementing and promoting the Principles.

Source: PRI, 2015

ii. Corporate engagement

Engagement can be a very effective tool for financial institutions to guide companies to design their transition to more sustainable practices in a way that is fair and inclusive. It involves setting out clear expectations of business, making the connections between sustainable agricultural practices and the delivery of human rights and key social standards, requiring disclosure and pressing for improved performance.

Example box 2 describes how PRI and Climate Action 100+ are catalysing engagement on sustainable agriculture.

iii. Capital allocation

Investments in sustainable agriculture often exceed the risk appetite of many financial institutions, especially in low- and middle-income countries. In addition, the social groups most in need of funding for the transition of their farming systems, particularly smallholders, can be hard to reach for mainstream investors and banks. Blended finance[3] instruments which are designed efficiently to target the underlying obstacles (e.g. risk-oriented guarantee and first-loss structures)[3] can enable the needed risky or pioneering projects and crowd in essential private finance (Lankes, 2021).

EXAMPLE BOX 2

Sustainable agriculture | Corporate engagement

PRI collaborative engagement on fair labour practices in agricultural supply chains

Since 2013, the Principles for Responsible Investment has led a targeted collaborative engagement initiative between 29 of its signatory investors and 33 companies on labour risks in the sectors of beverages, food and drug retail, food producers and general retail. A 2020 evaluation report found that across all categories assessed, the companies improved over the course of the engagement, both in terms of the relevant policies and processes they have put in place and on their implementation and performance. Indicators cover issues such as supplier code of conduct, supply chain disclosures on labour practices and preferential treatment of suppliers with better labour performance.

Source: PRI, 2020

Climate Action 100+

The investor-led initiative Climate Action 100+ (CA100+), which is focused on engagement with the world's largest corporate greenhouse gas emitters, is currently developing a just transition indicator. The indicator can serve as an important basis of information for investors looking to support their portfolio companies to move to more environmentally and socially sustainable practices. Although it is mostly focused on the energy system, CA100+ assessments also cover eight companies operating in food and beverage and forest supply chains (including Bunge, Danone, Nestlé, PepsiCo, The Coca-Cola Company, Unilever, Walmart, and Woolworths Group), along with other particularly nature-relevant companies in the broader consumer goods and services, chemicals, mining and paper sectors. Nestlé is one company that has made an explicit commitment to the just transition in its recent Human Rights Framework and Roadmap, where it sets out a plan for the company to support a just transition towards a regenerative food system (Nestlé, 2021). Nestlé is also investing $1.3 billion in regenerative agriculture, including funding 'agripreneurship' programmes that upskill farmers (FAIRR, 2021b). This speaks to the distributional component of the just transition, ensuring that social groups negatively affected by the shift to net zero are not left to bear the cost of change, such as having to fund their own retraining (ibid.). These examples of leadership can help to set the standard for other firms in the sector, which investors can promote.

[3] The IFC describes blended finances as "the use of relatively small amounts of concessional donor funds to mitigate specific investment risks and help rebalance risk-reward profiles of pioneering investments that are unable to proceed on strictly commercial terms." See www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/bf.

EXAMPLE BOX 3

Sustainable agriculture | Capital allocation (blended finance)

The AGRI3 Fund

The AGRI3 Fund, born out of a partnership between UN Environment, Rabobank, the Dutch Development bank (FMO) and IDH Sustainable Trade Initiative, aims to support the transition to more sustainable and climate-smart agricultural systems. By providing guarantees and subordinated loans, it looks to mobilise $1 billion in additional capital from commercial banks, development finance institutions (DFIs), and impact and institutional investors. The relationship between climate, biodiversity and people is core to the Fund's purpose, with objectives covering the prevention of deforestation, contribution to sustainable agricultural production, and improvement of rural livelihoods. Fund-level impact key performance indicators include indicators such as i) number of farmers included in supply chains and trained, and ii) median household income increase. The Fund also incorporates a Technical Assistance Facility to offer support to farmers to transition to sustainable agriculture and support project design and implementation. AGRI3 covers a wide range of commodities and works in middle- and lower-income countries. With an initial focus on Brazil, Indonesia and India, it aims to cover a wider range of crops and agricultural commodities across South-East Asia, Sub-Saharan Africa and Latin America over time.

Source: AGRI3 Fund, n.d.

The Tropical Landscapes Finance Facility

The Tropical Landscapes Finance Facility (TLFF) is a blended finance mechanism founded by ADM Capital, BNP Paribas, UN Environment and the World Agroforestry Centre. It aims to bring long-term finance to projects in companies in Indonesia that stimulate green growth and improve rural livelihoods. The TLFF coordinates among government, the private sector and communities in Indonesia to mobilise private finance for sustainable land use, including in agriculture and ecosystem restoration, and for investments in renewable energy. It is accompanied by a grant facility providing technical assistance and co-funding project development costs. In 2018, TLFF issued a multi-tranche, long-dated sustainability bond, arranged by BNP Paribas, to support the production of climate-smart, wildlife-friendly and socially-inclusive natural rubber on heavily degraded land in two provinces in Indonesia. The project has established an Environmental and Social Action Plan based on the IFC Performance Standards on Environmental and Social Sustainability. Target impact indicators include the creation of 16,000 fair-wage jobs for employees and value creation for 24,000 smallholders.

Source: TLFF, 2021

The Acumen Resilient Agriculture Fund

The Acumen Resilient Agriculture Fund (ARAF) is a $58 million blended finance fund focused on supporting adaptation solutions to climate impacts for smallholder farmers. It invests equity in early and early-growth stage agribusinesses in several African countries. The Green Climate Fund is providing first-loss protection, with investors and funders including Dutch development bank FMO, the Children's Investment Fund Foundation and the IKEA Foundation. An example investment is SunCulture, a Kenya-based solar irrigation company that designs, assembles, finances and services solar-powered water pumps. The pumps enable farmers to grow crops year-round, including drought periods.

Source: Acumen, 2021

Example box 3 above describes instances of how this has been applied in initial practice. These efforts can provide a basis to draw on when further developing models that comprehensively uphold established social and environmental standards.

Decentralised change in agriculture and food systems can only be successful if solutions are commercially viable and the millions of relevant actors, including smallholders, industrial-sized farms and the food supply chain, have an incentive to transform the way they operate. A commercial example of capital allocation is Better Life Farming, highlighted in Example box 4.

iv. Policy dialogue and public sector engagement

Policy reform is a critical precondition for a successful shift to agroecology and sustainable food systems. Historically, agricultural policies have often provided perverse incentives that have caused damage to natural ecosystems. The FAO estimates that government support to agricultural producers amounts to around $540 billion annually, with over two-thirds of this being price-distorting and environmentally harmful (FAO et al., 2021). It assesses this support as "biased towards measures that are harmful and unsustainable for nature, climate, nutrition and health, while disadvantaging women and other smallholder farmers in the sector". These harmful measures should be

EXAMPLE BOX 4

Sustainable agriculture | Capital allocation (commercial)

Better Life Farming

Better Life Farming is a joint venture between Bayer, Netafim and the International Finance Corporation (IFC), focused on empowering smallholder farmers who lack access to resources to enable them to grow profitably and sustainably. It provides access to high-quality agricultural inputs, offers training with certification programmes, and promotes sustainable farming methods. Better Life Farming's three core commitments include:

1. **Develop rural communities:** enable smallholder farmers to sustainably increase food production and generate more profits within their communities.
2. **Promote gender- and generation-smart approaches:** Focus on women and their needs in rural communities, and make rural farming attractive to future generations.
3. **Drive environmental sustainability:** Make the latest agri-innovations and farming knowledge accessible to rural smallholders to ensure the long-lasting health of our planet.

Source: Better Life Farming, n.d.


DODO PHANTHAMALY, PEXELS

phased out and repurposed to enable a just transition towards sustainable agriculture and food systems.

COP26 brought some signs of progress, not least in the form of the Global Methane Pledge: more than 100 governments committed to reduce methane emissions by at least 30% by 2030. As livestock farming is a considerable contributor to methane emissions, this commitment will particularly affect the sector. Food systems are also increasingly embedded in countries' nationally determined contributions (NDCs) to meeting the Paris Agreement. Analysis of 37 selected NDCs reveals that 90% mentioned agriculture and 50% mentioned livestock (WWF et al., 2020). The Policy Action Agenda for Transition to Sustainable Food and Agriculture launched at COP26 sets out crucial recommendations for policy action towards delivering healthy diets and resilient livelihoods within planetary boundaries and enabling a just rural transition. Agriculture, and particularly smallholder farmers, is also one of the focus areas of the UN-initiated Race to Resilience, aiming to drive action by non-state actors to build the resilience of vulnerable groups and communities to climate risks.

Financial institutions can play a key role through their policy dialogue and advocacy to support ambitious public policy reforms that incentivise the achievement of sustainable agriculture through a just transition. By correcting market and policy failures, these reforms would enable financial actors to scale up capital allocation for sustainable agriculture and food systems. As outlined in Example box 5, cases of policy dialogue are emerging, focused on the environmental dimension of agricultural policy, but the incorporation of social factors is only nascent.

EXAMPLE BOX 5

Sustainable agriculture | Policy dialogue

'Where's the beef?' investor statement

Ahead of COP26, investors representing $12 trillion in assets under management called on governments to set concrete emissions reduction targets for agriculture and establish frameworks for a transition to more sustainable diets in line with the guideline established in the EAT-Lancet Commission report. The investors voiced concern about the climate-related financial risks to assets in the agriculture sector, while also emphasising the significant investment opportunities the transition to net zero in the sector brings. The statement recognised the key role of the global food system and animal agriculture to reach global environmental targets and climate change goals and stressed the investors' intention to encourage relevant companies to shift more rapidly towards a net zero business model.

Source: FAIRR, 2021a

" The FAO estimates that government support to agricultural producers amounts to around $540 billion annually, with over two-thirds of this being price-distorting and environmentally harmful.

FAO et al., 2021

3. A just transition away from deforestation

The global importance of ending deforestation, for nature and people

Forests currently absorb around one-third of CO_2 emissions from burning fossil fuels annually, and they host around 80% of the planet's terrestrial biodiversity (IUCN, 2021). Almost 25% of the world's population depends to some extent on forests for their livelihoods, many of them vulnerable groups (ibid.). Around 1.6 billion people live within 5 km of forests worldwide, 71% of them in low- and middle-income countries (Newton et al., 2020). Indigenous Peoples make up just 5% of the global population, yet own, occupy or make use of a quarter of the world's land (World Bank, 2021). Furthermore, they safeguard around 80% of remaining biodiversity (ibid.), and thanks to their profound connection with land and nature can be powerful drivers of positive change. A recent report has shown that global biodiversity goals cannot be reached without full inclusion of Indigenous Peoples and local communities. It found that 91% of land managed by Indigenous Peoples and local communities is in 'good' or 'fair' ecological condition and that these lands cover at least 36% of the global land area covered by 'Key Biodiversity Areas', which are critical sites for the persistence of biodiversity (WWF et al., 2021). The conversion of forest lands is often connected to human rights violations, including land-grabbing and violence, disproportionally affecting Indigenous Peoples in particular.

Global forests are increasingly under threat, both from deforestation and from climate change impacts such as higher temperatures, droughts and wildfires. Because of this, the Amazon rainforest recently shifted from being a net absorber (sink) to a net source of carbon emissions (Gatti et al., 2021).

Achieving progress to end deforestation is thus crucial from both an environmental and a social standpoint and was a key theme at the 2021 Glasgow Climate Summit (COP26). Over 140 nations came together to sign the Glasgow Leaders' Declaration on Forests and Land Use, pledging to "halt and reverse forest loss and land degradation by 2030" (COP26, 2021a). The agreement covers over 90% of the world's forests. The Declaration was accompanied by the Global Forest Finance Pledge, in which 12 developed market signatories committed $12 billion of public climate finance to low- and middle-income countries in 2021–2025 for the protection, restoration and sustainable management of forests (COP26, 2021b). A further pledge was made at COP26 of $1.7 billion to support Indigenous Peoples' and local communities' forest tenure rights, recognising the crucial role Indigenous Peoples and local communities play as "guardians of forests and nature" (COP26, 2021c). However, contrasted with the $203 billion annual investment needed in forest solutions (UNEP, 2021), these efforts can only be the beginning.

How financial institutions can deploy their levers of change to support a just transition away from deforestation

i. Strategy and leadership

Private financial actors increasingly view deforestation as a source of financial risk and responsibility. A case in point are the growing numbers of companies and financial institutions who sign on to voluntary sustainability frameworks such as the Human Rights and Social Standards by the Roundtable on Sustainable Palm Oil. At COP26, financial institutions supported a commitment letter on eliminating commodity-driven deforestation, discussed in Example box 6.

To date, most financial institutions have not made a strategic commitment to just transition principles as part of the move to end deforestation. Forest 500, a project of environmental NGO Global Canopy, carries out annual assessments of the 350 companies and 150 financial institutions that have the greatest influence on deforestation in commodity supply chains. Its assessments published in 2022 have found that only 57 of the 150 financial institutions have a deforestation policy on investments and lending, and of these only 23 report on their progress towards implementing their policy. Even fewer financial institutions have human

EXAMPLE BOX 6

Deforestation | Strategy and leadership

COP26 financial sector commitment letter on eliminating commodity-driven deforestation

At COP26, over 30 financial institutions with over $8.7 trillion in assets under management pledged to use best efforts to eliminate agricultural commodity-driven deforestation risks in their portfolios and financing activities by 2025. The group highlights weakening environmental and human rights standards in the sector as a growing source of risk to their business.

The signatories each commit to developing organisational plans, milestones and incentives. By the end of 2022 they need to assess exposure to deforestation risk through financing or investment in clients/holdings, establish investment/lending policies addressing exposure to agricultural commodity-driven deforestation, deepen or begin engagement with the highest-risk clients/holdings on deforestation and engage on policy to support an enabling environment for businesses to avoid deforestation risks and impacts. By 2023 the financial institutions need to disclose deforestation risk and mitigation activities in portfolios, including due diligence and engagement. And by 2025 the signatories need to publicly report credible progress on the milestones to eliminate forest risk/agricultural commodity-driven deforestation through successful company engagement, only provide finance to clients that have met risk-reduction criteria and increase investment in nature-based solutions.

To increase the likelihood that this initiative will be successful, it needs to incorporate explicit just transition factors and commitments so that the shift to deforestation-free commodity chains is achieved with respect for human rights and promotes social development.

Source: Race to Zero, 2021

rights policies, and these only cover subsets of relevant human rights issues in commodity supply chains. Ultimately, none of the 150 financial institutions that have been assessed fulfil the criteria of a "strong deforestation policy", which Global Canopy defines as "including conversion of natural ecosystems and associated human rights, specifically land rights, labour rights, and free prior and informed consent" (Burley and Thomson, 2022). This is a priority area for improvement.

ii. Corporate engagement

Based on the aforementioned and other strategic commitments, investors are stepping up their engagement with companies to reduce and eliminate deforestation. Some are including environmental priorities and social aspects, as discussed in Example box 7.

iii. Capital allocation

Innovative financial mechanisms can play an important role in building the right incentives for allocating capital to projects that help to end deforestation. Capacity-building among financial institutions and dissemination of examples of successful practice are key to scaling up financial mechanisms targeted at decreasing deforestation. Example box 8 explores an initiative active in this space.

iv. Policy dialogue and public sector engagement

As with sustainable agriculture, achieving a just transition away from deforestation requires policy reform. Financial institutions can directly engage with governments to put in place policies nationally and internationally to end deforestation. Supply chain regulations are becoming increasingly important here. The European Commission has proposed a regulation to curb EU-driven deforestation through mandatory due diligence rules for companies looking to place specific commodities (including soy, beef, palm oil, wood, cocoa and coffee) on the EU market (EU Commission, 2021). Other jurisdictions are developing similar legislation, e.g. the UK.

EXAMPLE BOX 7

Deforestation | Corporate engagement

Investor Initiative for Sustainable Forests

The Investor Initiative for Sustainable Forests, led by the Principles for Responsible Investment and non-profit organisation Ceres, supports investors to deepen their understanding of the materiality of deforestation risk in cattle and soybean supply chains. The initiative is coordinating collaborative investor engagement with companies that have either a direct or indirect exposure to commodity-driven deforestation, while also addressing other ESG issues related to soft commodity production, such as poor working conditions, land rights and impact on Indigenous Peoples. In the context of the initiative, a number of PRI signatories have endorsed investor expectations of companies in the cattle and soybean supply chains, around i) awareness and governance, ii) risk management and traceability, iii) strategy and risk mitigation, and iv) metrics and monitoring.

The initiative is coordinating a coalition of 44 investors with $6.8 trillion in assets under management, who have so far engaged with 43 companies across the cattle and soybean value chains. Some progress can be observed among engaged companies on commitments, policies and their implementation (e.g. the number of companies with a commodity-specific deforestation policy increased by 9% between 2018 and 2020), but progress on performance is lagging. The initiative has also drawn on the collective voice of investors, for example through letters to companies in the cattle and soy supply chains calling for traceability commitments.

Source: PRI, 2022a

EXAMPLE BOX 8

Deforestation | Capital allocation

Innovative Finance for the Amazon, Cerrado and Chaco (IFACC) initiative

The IFACC initiative, led by UN Environment, the Nature Conservancy and the Tropical Forest Alliance, acts as a knowledge hub for companies, banks and investors looking to expand innovative finance for deforestation- and conversion-free beef and soy in these regions. In particular, the initiative aims to scale up mechanisms such as farm loan products, farmland investment funds, corporate debt instruments and capital market offerings through deep engagement with local farmers, banks, supply chain companies and concessionary capital groups. While the social dimension is not the focus of the initiative, IFACC's environmental and social approach includes a requirement for borrowers and investees to ensure alignment with the ILO Fundamental Conventions (which cover subjects considered to be fundamental principles and rights at work) and that there are no violations of land, cultural or natural resource rights of Indigenous Peoples and local communities.

Source: IFACC, n.d.

BOBULIX, FLICKR

Alongside this direct policy dialogue, investors can also engage with governments, as holders of sovereign bonds, on ending deforestation (Pinzon and Robins, 2020). This could include arguing in favour of specific issuances that would incentivise government behaviour, for example through deforestation-linked sovereign bonds, which would tie interest payments to progress in reducing deforestation (Elwin et al., 2021).

Drawing on the strong investor demand for sustainable financial instruments, there is potential for sovereigns to gain access to cheaper finance on the condition they meet their targets on deforestation.

There are instances of policy dialogue being structured as a tool for ending deforestation, as set out in Example box 9.

EXAMPLE BOX 9

Deforestation | Policy dialogue

Investors Policy Dialogue on Deforestation

The Investors Policy Dialogue on Deforestation (IPDD) was set up in 2020 by and for investors to engage with governments, public actors and industry bodies to promote sustainable land use and forest management and respect for human rights. It is based on the recognition of the critical role forests play in tackling climate change, protecting biodiversity and ensuring ecosystem services, and the relevance this has for the long-term interests of beneficiaries and thereby fiduciary duty. Increasing deforestation in some parts of the world, along with weakening environmental and human rights standards and lack of related enforcement, are creating reputational, operational and regulatory risks.

The first country the IPDD has engaged in is Brazil, responding to the increasing rates of deforestation observed in the country. Through the IPDD investors are urging the Brazilian government to make clear commitments on eliminating deforestation and protecting the rights of Indigenous Peoples to enable them to continue investing in the country. In particular, the IPDD is calling for:

- Significant reduction in deforestation rates, i.e. showing credible efforts to comply with the commitment set down in Brazil's Climate Law, Article 19.
- Enforcement of Brazil's Forest Code.
- Reinforcement of Brazil's agencies tasked with implementing environmental and human rights legislation, and avoidance of any legislative developments that may negatively impact forest protection.
- Prevention of fires in or near forest areas, in order to avoid a repetition of fires on the scale of those in 2019.
- Public access to data on deforestation, forest cover, tenure and traceability of commodity supply chains.

First signs of impact of the dialogue are emerging, including from the country's central bank and government on climate action. Government authorities have signalled that the exchange has improved their understanding of sustainable investments. The initiative aims to act as a model for further sovereign engagement.

Indonesia is another focus country of the initiative and steps have been taken there to engage with federal representatives, foreign governments and other key stakeholders such as NGOs and academic institutions.

The IPDD is supported by 58 global institutional investors with $8.5 trillion in assets under management.

Source: Tropical Forest Alliance, n.d. and PRI, 2022b

4. A just transition towards nature-based solutions

The importance of nature-based solutions and shortfall in investment

In March 2022 the United Nations Environment Assembly adopted the multilaterally agreed definition of nature-based solutions for supporting sustainable development as "actions to protect, conserve, restore, sustainably use and manage natural or modified terrestrial, freshwater, coastal and marine ecosystems which address social, economic and environmental challenges effectively and adaptively, while simultaneously providing human well-being, ecosystem services, resilience and biodiversity benefits," while also adhering, for example, to social safeguards for local communities and Indigenous Peoples (UNEP, 2022a). Examples of such activities include reforestation, natural forest management, cropland nutrient management and peat restoration.

If designed robustly, nature-based solutions can play a key role in the net zero transition with estimates showing their potential to contribute 37% of the emissions reductions needed by 2030 for a 2°C global warming scenario (Griscom et al., 2017). They can also have important benefits in terms of increasing resilience to climate change impacts. For example, the rewetting of wetlands can reduce the risk of peat fires and reforestation can have flood control benefits. Some positive impacts of protected areas for climate, biodiversity and people, along with their relevance for finance, are discussed in Box 4.1.

BOX 4.1

Protected areas in the Post-2020 Global Biodiversity Framework

The current draft of the Post-2020 Global Biodiversity Framework proposes ensuring that at least 30% of land and sea area globally is conserved by 2030, "through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures" (CBD, 2021) – the '30-by-30' goal. Currently, only around 17% of land and inland water ecosystems and 8% of coastal waters and oceans are designated protected areas (UNEP-WCMC and IUCN, 2021). The Framework in its finalised iteration due later this year is set to focus on how to reduce threats to biodiversity, meeting people's needs through sustainable use and benefit-sharing, and developing tools and solutions to integrate biodiversity considerations into policies, regulations, planning and investment decisions. For these efforts, it will be particularly important to engage in meaningful stakeholder dialogue with local communities, who in the past have not been sufficiently involved in decision-making. Potential negative social impacts will need to be assessed and mitigated depending on the kind of protected areas that are established, for example if there are restrictions to economic activities or resettlements.

Finance will be key to achieving the 30-by-30 goal, while its implementation will also have implications for the economy and thereby the financial system. One likely impact would be the stranding of some economic assets. A study by the Dutch Central Bank (De Nederlandsche Bank) estimated that in the scenario of 30% of terrestrial and freshwater areas becoming protected, the Dutch financial system would face €28 billion in exposure to companies that operate in these areas – a significant increase from the current €15 billion exposure – which may face restrictions in economic activities (van Toor et al., 2020). This would cover around 13% of total national lending by large Dutch banks.

At the same time, protected areas can induce economic activity and help to reduce risk from global nature loss and climate change. Setting aside dedicated land to preserve and restore whole ecosystems makes an important contribution to nature conservation while in some cases also acting as a basis for people's livelihoods and flourishing local communities (e.g. through the creation of national parks). Protected areas also have a role to play in sequestering carbon and adapting to the effects of climate change (e.g. the protection afforded by mangrove habitats to low-lying coastlines at risk from flooding and erosion).

UNEP recently estimated that annual investments in nature-based solutions by G20 countries need to reach $285 billion by 2050 to achieve agreed biodiversity, climate and land degradation targets (UNEP, 2022b). Current spending stands at only $120 billion and, crucially, only 2% of this is official development assistance (ODA) to low- and middle-income countries, where the shortfall in needed investment for nature-based solutions is even greater than in G20 countries. The private sector only accounts for $14 billion annually (ibid.), illustrating its potential role in closing the gaps in net zero and nature-positive investments.

Social risks and opportunities

As a number of jobs in nature-based solutions tend to require minimal training, the sector can offer opportunities with low barriers to entry for low-skilled workers and have great job creation potential. Investments in ecosystem restoration provide on average 3.7 times as many jobs as oil and gas production investments (WRI et al., 2021). However, particularly in low- and middle-income countries, many jobs are informal which can limit job security, wage levels, social protections and occupational safety in a sector that is exposed to significant health and safety risks (Jarvis et al., 2011). Formalising employment has been identified as a core factor in meeting the SDGs (ITUC and ILO, 2019).

Social risks and opportunities are emerging as a key issue when it comes to nature-based solutions such as carbon offsets. These have been criticised for giving those able to pay the opportunity to continue emitting carbon, while also potentially creating conflicts around land rights and benefit-sharing. For example, the practice of using offset funds to plant trees in tropical countries requires meaningful dialogue with local stakeholders to ensure community and Indigenous rights are protected. Deep engagement with local communities will also need to be ensured in high-income countries, where some smaller farmers have voiced concern about not being able to compete with large companies buying land for offsetting carbon (BBC, 2022).

EXAMPLE BOX 10

Nature-based solutions | Strategy and leadership

Gold Standard

The Gold Standard defines assessment questions and project requirements across the following nine safeguard principles:

Social:

- Principle 1 – Human rights
- Principle 2 – Gender equality and women's rights
- Principle 3 – Community health, safety and working conditions
- Principle 4 – Cultural heritage, Indigenous Peoples, displacement and resettlement
- Principle 5 – Corruption

Economic:

- Principle 6 – Economic impacts

Environmental and ecological:

- Principle 7 – Climate and energy
- Principle 8 – Water
- Principle 9 – Environment, ecology and land use

Source: Gold Standard, 2019

Voluntary Carbon Markets Initiative

The initiative recommends that:

- Activities should (a) "not discriminate on the basis of identity, gender, race, ethnicity, income, or any other social status, and (b) protect rights related to gender, labor, health, education, adequate living standards, background, and personal security and safety. The principles of Free Prior and Informed Consent (FPIC), with an emphasis on transparency and participation, are foundational to ensuring these rights in the context of natural resource management."
- "In addition, rights relating to land, food, and Indigenous Peoples must be respected in private-sector climate actions. This means that stakeholders

cont...

must function as partners (and Indigenous Peoples as rightsholders)— and not merely beneficiaries — both through active participation in market design and governance as well as in project design and implementation. It also means respect for the rights of Indigenous Peoples and local communities to the free use of and property rights for lands, territories, waters, and resources, according to their customary sustainable use."

- "Carbon credit purchases and the activities they support should result in positive outcomes for local communities and adhere to social safeguards to avoid, reduce and mitigate adverse impacts, with specific attention to vulnerable populations. Whenever possible, co-benefits across the Sustainable Development Goals should be maximized and reflect the concept of a 'just transition' toward low-carbon and climate-resilient development that aligns with the latest climate science and maintains social and environmental standards (like those of the United Nations Development Programme), in addition to protecting basic rights. Benefits should be equitably shared."

Source: VCMI, 2022

WWF

WWF has published several guidance documents on nature-based solutions and carbon offsets. In its 2020 Blueprint for Corporate Action on Climate and Nature, it sets out the following just transition-relevant criteria for nature-based solution investments:

i) Investments should benefit both climate and nature:

- To benefit the climate, companies should first reduce their emissions within and adjacent to their value chain, before compensating for remaining emissions. To benefit nature, companies should make sure their supply chains include no deforestation or land conversion, prior to investing in compensatory activities.
- Interventions should be part of a broader landscape/seascape action plan. They should achieve multiple outcomes across nature and climate, including the promotion of nature's contributions to people.

ii) Investments should benefit people:

- Interventions should promote improvements in human wellbeing, including livelihoods, quality of life, and food security and energy access, particularly for the most vulnerable people and communities.
- Interventions should ensure that benefits are distributed fairly, and human rights are respected and strengthened.
- Interventions should put in place appropriate safeguards to limit unintended social or environmental outcomes, following WWF's Environmental and Social Safeguards Framework.

iii) Investments should support inclusive and credible governance processes:

- Interventions should be locally 'owned', supported by and implemented with a shared vision of success. Best practice includes decision-making across inclusive, transparent and multi-stakeholder lines that takes into account the needs of diverse actors.

In the joint WWF, Environmental Defense Fund and Öko-Institut guide *What makes a high-quality carbon credit?*, the organisations include the following social objectives:

- Enhancing positive and preventing negative environmental and social impacts:
    - Assessment of environmental and social impacts.
    - Contribution to improving adaptation and resilience.
    - Supporting the poorest and most vulnerable and those affected by climate change.

How financial institutions can deploy their levers of change to support a just transition towards nature-based solutions

i. Strategy and leadership

Market guidance for nature-based solutions is starting to take account of the social dimension at the national and international levels. For example, all carbon offset projects certified under the Gold Standard must disclose and, if necessary, work to mitigate potential environmental and social impacts (Gold Standard, 2019). The Voluntary Carbon Markets Initiative (VCMI) recommends applying proper environmental and social safeguards and ensuring that projects realise social or environmental benefits beyond mitigation: in so doing, it is one of the few nature-related initiatives to explicitly mention the just transition (VCMI, 2021; VCMI, 2022). The upcoming draft Core Carbon Principles by the Integrity Council for the Voluntary Carbon Market (ICVCM) will play a role in building the market standard and should incorporate the range of relevant social considerations. Research and advocacy organisations, such as the WWF, have also been vocal about the need to incorporate social factors into decision-making around nature-based solutions. The Gold Standard, VCMI and WWF guidance are described further in Example box 10.

ii. Corporate engagement

Through engagement, financial institutions can contribute to ensuring that companies use nature-based solutions in a way that has integrity and truly delivers environmental and social benefits. Engagement guidance, as per Example box 11, can help financial institutions focus on the most salient issues in their interactions with management.

EXAMPLE BOX 11

Nature based-solutions | Engagement

Ceres and IIGCC engagement tool for investors on natural climate solutions

Ceres and the Institutional Investors Group on Climate Change (IIGCC) have produced guidance for investors on how to approach natural climate solutions (NCS), which they define as a subset of nature-based solutions and are most often used as offsets. The briefing outlines how institutional investors can engage with companies in their use of NCS in corporate climate strategies. The guidance is formed around three core recommendations:

1. Companies should use NCS in a way that raises the ambition of their climate commitments.
   a. NCS must provide credible climate change mitigation.
   b. NCS must provide social and environmental benefits.

Guidance on social aspects to using NCS focus on protecting the rights of and delivering benefits to local communities. NCS that comply with the guidance should exhibit:

- Clear land title or delineation of land rights in the project location.
- Continual active participation of local and Indigenous communities.
- Equitable sharing of monetary and non-monetary benefits.
- Accessible mechanisms for redress in the case of accidental harm inflicted upon Indigenous or local communities.
- Access to legal counsel.

Source: Ceres and IIGCC, 2021

iii. Capital allocation

Financial institutions increasingly recognise the opportunities that nature-based solutions can offer. The Natural Capital Investment Alliance, launched at the One Planet Summit for Biodiversity in 2021, aims to raise $10 billion by the end of 2022 to support the restoration of biodiversity, especially via carbon offsets (Sustainable Markets Initiative, 2021). The Nature+ Accelerator Fund, led by the International Union for Conservation of Nature (IUCN), Mirova, the Coalition of Private Investment in Conservation and the Global Environment Facility, aims to develop a $200 million scalable project portfolio in the sector. HSBC and Pollination have created the joint venture HSBC Pollination Climate Asset Management, aiming to create the world's largest natural capital manager and to mainstream natural capital as an asset class (HSBC, 2020). However, within these growing finance initiatives explicit consideration is lacking of issues such as human and labour rights, job quality, gender equality, Indigenous rights and community voice.

A limited number of financial institutions are starting to incorporate social considerations in new nature-based solutions funds, often focusing on leveraging the potential benefits for smallholders and local communities, in how carbon credits are used; see Example box 12.

Financial institutions can also contribute to bridging the investment gap for nature-based solutions through philanthropic approaches. The Candriam Institute, for example, backs WeForest in the reforestation of degraded land, with related carbon credits supporting WeForest and local communities, rather than flowing back to Candriam.

EXAMPLE BOX 12

Nature based-solutions | Capital allocation

Livelihoods Carbon Funds

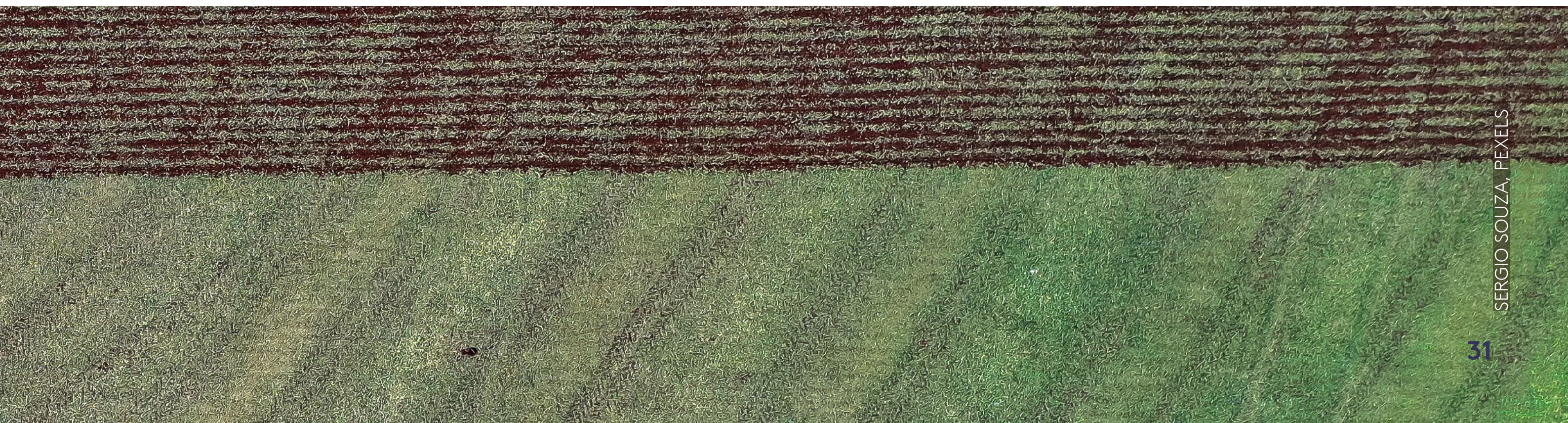
The Livelihoods Carbon Funds aim to improve the living conditions of agricultural and rural communities Large-scale projects in Africa, Asia and Latin America seek to empower smallholder farmers and rural communities to earn stable incomes through sustainable practices, restore ecosystems and contribute to climate action, for example through restoring mangroves or developing agroforestry. Investors in turn receive carbon credits. Fund partners include Crédit Agricole and Caisse des Dépôts, who have both supported the project since its launch in 2011.

Source: Livelihoods Funds, n.d.

Rabobank

Rabo Carbon Bank, set up by Rabobank in 2021, looks to tap into the growing corporate and investor appetite for carbon credits to support farmers to transition to more sustainable practices. Beyond the revenues from sequestered carbon, Rabobank aims for projects to have benefits for soil health, biodiversity, water management, food supply resilience and nutrition. Rabobank's Acorn project seeks to enable smallholder farmers who sequester carbon on their land using agroforestry techniques to participate in the carbon marketplace and earn financial benefits. It aims to bring together smallholder communities to build a global, transparent carbon removal system with positive impacts for climate preservation, land renewal and food security.

Source: Rabobank, n.d.



SERGIO SOUZA, PEXELS

iv. Policy dialogue and public sector engagement

The public sector has a crucial role to play in scaling up public finance for nature-based solutions and crowding in private finance. Government intervention can also ensure that these activities deliver real environmental and social benefits and are rooted in deep engagement with affected local stakeholders. Some countries are starting to make progress in developing frameworks and investment principles, such as Scotland (see Box 4.2). Financial institutions can contribute to this agenda by engaging with governments and public finance institutions to drive policy reforms and the development of innovative financial mechanisms.

> " The public sector has a crucial role to play in scaling up public finance for nature-based solutions and crowding in private finance.

BOX 4.2

Financing nature-based solutions through a just transition in Scotland

In Scotland, a coalition between the Broadway Initiative, Finance Earth and the Green Finance Institute published a framework for 'Financing Nature Recovery UK' with the aim of unlocking private investment in nature (Young et al., 2022). The just transition is firmly anchored in the document, with a particular emphasis on benefitting local communities. In March 2022 the Scottish Government laid out its Interim Principles for Responsible Investment in Natural Capital, which include social considerations as a core dimension. Value sharing and stakeholder engagement are key components, along with compliance with Scotland's policies on Just Transition, Fair Work, Land Rights and Responsibilities and Global Capital Investment (Scottish Government, 2022).

"Oceans have key linkages to climate change. They can play an important role in sequestering carbon, and are negatively affected by climate change impacts.

TOMAS ANUNZIATA, PEXELS

5. A just transition in the restoration of ocean ecosystems

The importance of and threats to oceans

Oceans are home to a wealth of biodiversity, provide the basis for the livelihoods of many coastal communities, and are an essential part of global food systems. Around 60 million people are estimated to work in fishing and aquaculture globally, most of them in low- and middle-income countries (FAO, 2020). Today, overfishing, illegal, unreported and unregulated fishing, pollution and damage to marine habitats pose considerable threats to these ecosystems. Oceans also have key linkages to climate change. They can play an important role in sequestering carbon, and are negatively affected by climate change impacts. Changes in water temperature and ocean acidification, for example, contribute to rising sea levels and loss of marine biodiversity, including the bleaching of coral reefs. This further threatens the continued provision of the marine ecosystem services that many communities, consumers and businesses depend on.

Improving jobs in the blue economy through a just and sustainable transition

The fishing and aquaculture sector is characterised by harsh and dangerous working conditions, often with long working hours, high injury and fatality rates, and limited access to medical care. While there are clear regional differences in the adherence to human rights standards in fishing, the sector has been connected to severe abuses, including forced labour, child labour and human trafficking (ILO, 2013). Of the approximately 60 million people working in the sector, 14% are female, but when including post-harvest operations, this figure climbs to around 50% of workers (FAO, 2020).

The blue economy – which includes preservation and regeneration of the marine environment as well as exploitation – has the potential to spur sustainable development and provide decent jobs, while supporting healthy marine ecosystems. By consciously integrating the social dimension, the move to environmentally-friendly practices in fishing and aquaculture can simultaneously deliver vital job quality improvements. It could also be beneficial for job *quantity*: a study on the EU estimated that 92,000 jobs could be created in a sustainable transition of the region's fishing sector and related industries such as food, retail and services (Oceana, 2017). This is because fish stocks are already significantly depleted and recovering and managing them well could considerably improve the productivity of ocean resources. However, it is important to note that these results come in the context of a comparatively heavily regulated fishing industry and may not translate in other regions. Anticipating and addressing job losses and ensuring that new jobs created provide decent employment opportunities form a core part of the just transition.

How financial institutions can deploy their levers of change to support a just transition in ocean restoration

i. Strategy and leadership

The finance sector can play an important role in ensuring that the transition to sustainable fishing and aquaculture brings benefits for people and planet. Applying existing standards and principles, such as those outlined in Example box 13, can be a crucial first step.

ii. Corporate engagement

Financial institutions can have a critical impact in encouraging responsible business conduct through shareholder or client engagement. The Sustainable Fisheries Partnership, together with Aviva and PRI, has developed a set of questions for investors to use in interactions with companies exposed to seafood supply chains, outlined in Example box 14. The questions are designed to be used in tandem with established guidance on human rights risks in food supply chains such as the PRI Guide for Investor Engagement on Labour Practices in Agricultural Supply Chains, which built the basis for the PRI collaborative engagement outlined in Example box 2 in the Agriculture section.

EXAMPLE BOX 13

Restoring ocean ecosystems | Strategy and leadership

UNEP Finance Initiative's Sustainable Blue Economy Finance Initiative

UNEP FI's Sustainable Blue Economy Finance Initiative works to ensure investment, underwriting and lending activities contribute to rebuilding ocean prosperity, restoring biodiversity and regenerating ocean health. Its Sustainable Blue Economy Finance Principles, launched in 2018, provide guidance for banks, insurers and investors and recommend, for example, social impact assessments and stakeholder engagement for ocean-related investments. One of its 14 principles is the need for blue economy finance to be inclusive:

"We will support investments, activities and projects that include, support and enhance local livelihoods, and engage effectively with relevant stakeholders, identifying, responding to, and mitigating any issues arising from affected parties."

UNEP FI has also discussed the relevance of social equity issues to the finance sector in its 'Financing a Just Transition to a Sustainable Blue Economy' podcast episode.

Source: UNEP FI, n.d.

" The blue economy has the potential to spur sustainable development and provide decent jobs, while supporting healthy marine ecosystems.

QUANG NGUYEN VINH, PEXELS

EXAMPLE BOX 14

Restoring ocean ecosystems | Corporate engagement

Sustainable Fisheries Partnership, Aviva and PRI's questions for engagement with fishing companies

Questions for wild caught fish

1. Does the company have a policy regarding the sustainable management of the seafood resources it uses in its business?
2. Has the company assessed the current management status of all the stocks of wild fish that are part of its business?
3. Does the company have traceability systems in place that ensure the avoidance of illegally caught fish? What sanctions have been adopted when illegal raw material has been detected?
4. What is the company policy towards producing/purchasing wild seafood that is certified sustainable?
5. What is the company policy towards producing/purchasing seafood from fisheries engaged in fishery improvement projects?
6. What is the company policy regarding the disclosure of source fisheries that produce raw material for the business?

Questions for farmed fish

1. What is the company policy towards producing/purchasing farmed seafood that is certified as responsible?
2. What is the company policy towards producing/purchasing seafood from fish farms engaged in aquaculture improvement projects?
3. Does the company have a policy to assess the environmental and social risks of the fisheries used to produce fishmeal and fish oil for aquaculture feed?
4. What is the company policy towards transparency and reporting around aquaculture operations?

Source: Sustainable Fisheries Partnership, Aviva and PRI (2016)

PRI Guide for Investor Engagement on Labour Practices in Agricultural Supply Chains

Selected illustrative questions:

- Does the company have a public supplier code of conduct that: i) reflects international standards, including health and safety and working conditions; ii) includes at least a longer term target for a living wage; iii) applies to all suppliers and sub-suppliers; iv) specifically applies to labour brokers and recruiters?
- Does the company act in cases where suppliers are identified as not complying with the code?
- In the last three years, has the company conducted at least one risk assessment that examined social issues in the supply chain focused on a specific commodity or region?
- Does the company incentivise supplier good practice, e.g. does it i) give preference to suppliers with better labour performance? ii) build long-term partnerships with socially compliant/ outperforming suppliers?
- Is the company able to provide evidence that it builds capacity regularly and systematically, including at sub-supplier level and through training of workers?

Source: PRI (2016)

iii. Capital allocation

Innovative financial instruments that combine the environmental and social dimension can have an important role to play in driving positive change towards the sustainable use of ocean resources. The International Finance Corporation's *Guidelines for Blue Finance* stipulate that for an investment to qualify as a "blue project" it must have minimum ESG safeguards in place and pose only limited risk to other themes of the Sustainable Development Goals, including those focused on social aims (IFC, 2022). For businesses, there are established eco-certification standards for the seafood industry that include social components and that financial institutions can incorporate into their capital allocation decision-making. An instance of how this has been applied in practice is outlined in Example box 15.

iv. Policy dialogue and public sector engagement

The importance of moving towards sustainable fishing practices is widely recognised and is encapsulated in SDG14, Life Below Water ("Conserve and sustainably use the oceans, seas and marine resources for sustainable development"). Important policy foundations include the ILO Work in Fishing Convention (2007) and the Work in Fishing Recommendation (2007), which aim to ensure decent work conditions for fishers, defining minimum requirements for work on board, conditions of service, accommodation and food, occupational safety, health protection, medical care and social security. The FAO has initiated its Blue Growth Initiative, which looks to assist countries in developing and implementing blue economy and growth agendas, as well as to act as a catalyst for investment and innovation. Investors and other financial institutions can support these policy reforms and encourage innovative financial approaches that address the human dimension of a shift to sustainable ocean management, building on the inaugural Sovereign Blue Bond launched by the Seychelles in 2018.

EXAMPLE BOX 15

Restoring ocean ecosystems |
Capital allocation

Rabobank's green loan for sustainable salmon in Chile

Rabobank recently provided a green loan to Agrosuper, one of the world's largest salmon producers, to finance acquisitions in its Chilean salmon supply chain. The structure of the instrument includes objective and measurable environmental and social conditions that were developed in partnership with WWF, including elements of the NGO's social policy guidelines and social criteria in the Aquaculture Stewardship Council (ASC) standard for sustainable salmon farming.

Agrosuper is aiming for 100% ASC certification of its salmon production centres. The certification contributes to transparency on how a farm performs on sustainability issues such as impacts on biodiversity and nearby ecosystems, including supply chain components such as responsible sourcing of feed. On the social side, ASC certification requirements are based on the core principles of the ILO, such as prohibitions of child and forced labour. Among the social criteria are also payment of decent wages, regulated working hours, development of a policy ensuring social compliance of suppliers and contractors, and consultation with Indigenous and broader local communities.

Sources: Rabobank, 2019; ASC, 2019

6. Conclusions and recommendations

This report has aimed to outline the main contours of what a 'just nature transition' could involve and where financial institutions could act in support. It is designed as an initial scoping exercise to set down some of the key features of a just transition agenda beyond the energy sector, to include agriculture and food, deforestation, nature-based solutions and the oceans, and to provide a basis for further dialogue, analysis and action by governments and international organisations, businesses and trade unions, financial institutions and civil society. The aim is to deliver a transition to sustainability in a way that benefits workers, communities and consumers.

Taking stock of the just nature transition

The just transition is not yet widely embedded in efforts to deliver net zero in nature-related sectors or in actions to restore biodiversity, but individual examples from policy, trade unions, civil society, business and finance are starting to emerge. More broadly, many of the finance sector examples cited in this report do make clear links with established human rights and labour standards. Other frameworks such as the Equator Principles and the IFC's Environmental and Social Performance Standards can also provide a useful starting point for the financial sector to take forward the just transition. Strengthening the enforcement of human rights and labour standards needs to be recognised as an essential part of delivering climate and biodiversity goals.

Compared with the energy transition, a striking feature of the nature transition is its potential size, not least in terms of the number of affected workers, with an estimated 1 billion workers in agriculture alone. There is a profound geographical dimension to this, with low- and middle-income countries more dependent on nature for their development and having far larger agricultural workforces and affected stakeholders. Overall, nature-related jobs tend to be characterised by higher job informality, particularly in low- and middle-income countries, which can translate to weak job security, wage levels, social protections and working conditions. Health and safety risks can also be significant, with insufficient protection for workers. In addition, women face inequalities in their access and treatment in labour markets, particularly in low- and middle-income countries, including facing harassment and violence at work, as well as restrictions to access to education, training, decision-making and finance. The gender dimension will need to be incorporated systemically in policy and finance. The transition to a nature-positive and climate-resilient economy provides a clear opportunity to improve labour conditions.

The just transition has both a distributional dimension and a crucial procedural aspect, not least in terms of how governments, trade unions and employers' organisations are involved in decisions that affect workers. The informal nature of some jobs in agriculture, forestry and other land use provides a particular challenge. Formalising employment, along with improving informal jobs and strengthening social dialogue in the informal economy, will be key to delivering a just transition with decision-making based on meaningful social dialogue.

Indigenous Peoples and other rural communities can also play a crucial role in the nature transition. However, their land rights are often not acknowledged, with only 18% of land formally recognised as owned by or designated for Indigenous Peoples and local communities globally (Rights and Resource Initiative, 2015). Power differences often leave these groups disadvantaged when competing with companies for land ownership. It has been shown that the costs of securing land rights for Indigenous communities can generate a multiple of economy, social and environmental value (Ding et al., 2016). Securing community land tenure can enable long-term investment and have benefits for accessing finance to manage land sustainably, contributing to climate change and sustainable development goals (Veit, 2019).

Involving communities in decision-making is a core pillar of the just transition. Traditions of engagement in nature-related sectors vary, but tend to be particularly weak between large global businesses and local stakeholders.

When designing economic restructuring, it will be crucial that those affected by change, including for example Indigenous Groups, vulnerable communities, women and youth, are involved in shaping it.

Considerable investment is needed to deliver the shift to a net zero and nature-positive economy. However, access to finance can be a significant barrier, sometimes excluding those most in need of financial support. Vulnerable groups, including smallholders in low- and middle-income countries, women and Indigenous Peoples, are often particularly affected. Innovative financial mechanisms considering place-based challenges and needs will be essential to closing these gaps, as will be financial institutions with a cooperative structure. In addition, there is a clear need for operational models of what good practice looks like. The lack of these success models is an obstacle to mainstreaming just nature transition considerations into financial decision-making. Incentivising pioneers and amplifying key lessons can contribute to a more speedy and efficient delivery.

One promising area is the growth of quantified assessments of corporate just transition policies and practices. Climate Action 100+ focuses mostly on companies impacted by the energy transition, but the assessment of its just transition indicator will also provide a useful tool for financial institutions to engage with companies involved in food, forestry and land-use. The World Benchmarking Alliance includes social inclusion, nutrition and environment scores in its Food and Agriculture Benchmark (WBA, 2021). It is also currently working on assessing 1,000 companies across 22 industries against its Nature Benchmark, which includes issue-specific indicators on social inclusion and community impact, along with core social indicators on human rights and decent work (WBA, 2022). The biodiversity counterpart of CA100+, Nature Action 100 – which is currently being designed – could also play an important role in mainstreaming the just transition.

Recommendations for financial institutions to support the just nature transition

Building on these conclusions, the next actions for financial institutions to support a just nature transition include stepping up across the four levers of change we have described in this report, as well as taking action on a cross-cutting theme around improving reporting and transparency.

i. Strategy and leadership

With over 500 members globally, the Glasgow Financial Alliance for Net Zero (GFANZ) has recognised the just transition as a key component for the transition plans of both the real economy and the finance sector. For example, GFANZ has recommended that financial institutions integrate the just transition in the underpinning foundations of their plans (GFANZ, 2022). It is critically important that this applies to the financial sector response to both the energy and nature transitions.

Recommendation 1: Financial institutions should include just transition principles in their own plans for net zero, nature and biodiversity. The just transition also needs to be incorporated into collective finance initiatives such as those aiming to promote sustainable agriculture, end deforestation, expand nature-based solutions and restore the oceans.

> " A striking feature of the nature transition is its potential size, not least in terms of the number of affected workers.

ii. Corporate engagement

Shareholder and client engagement has proven to be one of the most effective tools for financial institutions to drive corporate action on the just transition. Engagement efforts should be extended beyond energy and include engagement with multinational enterprises on social issues throughout their global supply chains.

> **Recommendation 2:** Financial institutions should set just transition expectations of the businesses they lend to and invest in, based on international standards, and ensure that these are included in the net zero and biodiversity plans of nature-exposed companies. They should then engage with companies impacted by the nature transition to signal good practice, ensure transparency and improve performance in line. Financial institutions could also work with business and trade unions, policymakers and civil society to establish common just transition frameworks for agriculture, ending deforestation, nature-based solutions and ocean restoration.

The Grantham Research Institute's framework for corporate engagement is outlined in Box 6.1 (p42).

iii. Capital allocation

There is a considerable shortfall in global financing to meet climate, biodiversity and land degradation targets, which has been estimated at $4.1 trillion by 2050 (UNEP 2021). This indicates the clear need to mobilise finance for net zero and nature-positive activities that have a positive impact for workers, communities and consumers. These considerations should be incorporated in the appraisal of potential investees and clients, including due diligence policies for investment and lending, as well as the design of innovative financial mechanisms that can meaningfully support the just nature transition.

> **Recommendation 3:** Financial institutions should purposely channel finance to companies committed to and making progress to support a just transition for workers, suppliers, communities and consumers. This includes the development of innovative financial solutions to attract capital towards activities that benefit nature and people.

iv. Policy dialogue and public sector engagement

The reform of public policies and public sector financing is essential to correct the policy and market failures that are holding back an inclusive implementation of net zero and biodiversity goals. This includes encouraging local and national government to provide the incentives, rules and contributions to blended finance to boost investment in net zero and nature-positive activities with simultaneous benefits for people. As this report has shown, investors have started to advocate for changes in the framework conditions, notably through the Investor Policy Dialogue on Deforestation (IPDD). This type of policy dialogue needs to become more universal and incorporate the just transition.

> **Recommendation 4:** Financial institutions should engage with policymakers to reform agricultural, forestry and nature policies so that they support a just transition and provide the incentives, the rules as well as the catalytic public finance that is needed to scale up private investment.

Crosscutting theme: improving reporting and transparency

Underpinning all these recommended actions is the need for improved reporting and transparency by companies, governments and financial institutions on the social dimension of the nature transition. Some progress is being made, but greater attention is needed to make sure that there is sufficient information for stakeholders to judge the contribution of business and financial institutions to the just transition in agriculture, forestry and nature conservation.

Corporate reporting provides an essential data basis for financial institutions to set targets and report performance. Of particular relevance is the International Sustainability Standards Board (ISSB), which is working to bring sustainability-related disclosure guidance into an overarching standard. Consultation documents for its proposed standards on climate-related disclosure and sustainability-related disclosure were released in March 2022. In June 2022 the Global Reporting Initiative launched its Agriculture, Aquaculture and Fishing Sector Standard, which covers some social issues such as food security, land and resource rights and living wage and income (GRI, 2022).

The most established climate reporting framework for financial institutions by the Task Force on Climate-related Financial Disclosures (TCFD) does not incorporate the social dimension. Its nature-focused equivalent, the Taskforce on Nature-related Financial Disclosures (TNFD), will be instrumental in developing a reporting framework for nature-related risks and opportunities that contributes to consistency and comparability. It will be important that this framework has the social dimension incorporated from the beginning to leverage co-benefits and avoid mutually detrimental effects. The second beta version of the framework was launched in June 2022. The document highlights social dimensions, including consideration of human rights, as a priority area for further development of the framework, which the TNFD aims to advance in consultation with Indigenous Peoples and local communities (TNFD, 2022). The TNFD is planning a total of four beta versions to be published before the final release of the recommendations in September 2023.

Biodiversity and social considerations form part of the EU's Sustainable Finance Disclosures Regulation (SFDR), and social safeguards are included in the EU Taxonomy, which covers biodiversity as an environmental objective. In France, article 29 of the "Loi Energie-Climat" covers climate as well as biodiversity, having prompted statements from a number of investors on how they address adverse sustainability impacts (including measures such as investment ESG screening, engagement and voting, and asset allocation). The current draft of the Post-2020 Global Biodiversity Framework includes the target that all businesses disclose their impacts and dependencies on biodiversity by 2030 (CBD, 2021). As this is finalised and then moves to implementation, it will be important to make sure that the human dimension is not left behind.

Just transition reporting by companies and financial institutions needs to be improved, in a way that provides comparability and ensures integrity. Incorporating the social dimension into established environmental disclosures, such as the TCFD, and encouraging companies to apply relevant standards, such as those by the Global Reporting Initiative, can contribute to consistency.

Recommendation 5: Financial institutions should work to ensure that social and just transition factors are effectively included in key frameworks for reporting and transparency, such as the Task Force for Nature-related Financial Disclosures (TNFD). Financial institutions themselves should publicly disclose strategies, policies and performance on social issues in the nature transition.

" The next actions for financial institutions to support a just nature transition include stepping up across the four levers of change described in this report, as well as improving reporting and transparency.

BOX 6.1

A framework of just transition expectations of business for use by financial institutions

1. Strategy

- Establish a company strategy and plan for the just transition in the context of delivering net zero and climate resilience goals, to be adopted at the Board level with clear Board oversight.
- Incorporate the just transition in remuneration, planning, risk management, scenario exercises and capital investment, as well as acquisitions and restructuring. This strategy should be based on established international frameworks and standards (including the Guiding Principles on Business and Human Rights [UNGPs], the Sustainable Development Goals, ILO labour standards and the OECD Guidelines for Multinational Enterprises). The strategy should cover themes 2–7 below.
- Ensure social dialogue and representation of workers and trade unions in company-level climate decision-making and implementation.

2. Workers

- Deliver good jobs and decent work in the transition and respect for worker and human rights (including, for example, pay and benefits, job formality and contract length, skills development and training, health and wellbeing, diversity and inclusion, freedom of association and collective bargaining).
- Promote and provide reskilling and retraining, redeployment or retirement support.
- Take a comprehensive approach beyond direct employees (for example, including living wages for all contractors).

3. Supply chain

- Support suppliers (including small and medium sized enterprises) so they can prosper in the just transition through access to skills, finance and technology; this could include a place-based emphasis on suppliers and services.
- Apply labour, human rights and environmental due diligence and policies along the supply chain, particularly in low- and middle-income countries. Labour, human rights and sustainability standards that businesses commit to for their own operations should extend to the supply chain.

4. Communities

- Engage with local communities to address the social risks of transitions to regional economies and promote local wellbeing. This inclusion of community voice needs to be firmly rooted from project planning onwards and include a particular focus on vulnerable communities as well as wider sustainability considerations (such as biodiversity).
- Partner with local communities to share value in net zero and climate resilience investments (including community engagement and respect for Indigenous communities).

5. Consumers

- Support consumers, including vulnerable groups, in terms of improving access to key goods and services in the transition and ensuring they are affordable.
- Enable consumers to participate actively in the transition.

6. Policy and partnerships

- Advocate for the just transition within the context of supporting Paris-compliant decarbonisation targets in industry associations and in lobbying of government.
- Support partnerships for the just transition to net zero at the local, sectoral, national and global levels.

7. Transparency and disclosure

- Report on just transition policies and performance, including on the six themes above, e.g. through reporting using the recommendations of Task Force on Climate-related Financial Disclosures (TCFD) and the Task Force on Nature-related Financial Disclosures (TNFD).

BERNARDO O'HIGGINS NATIONAL PARK, CHILE | MARCOCARLI,, PIXABAY

Appendix

The International Labour Organization's guiding principles on the just transition

"The following principles should guide the transition to environmentally sustainable economies and societies:"

(a) Social consensus and dialogue: "Strong social consensus on the goal and pathways to sustainability is fundamental. Social dialogue has to be an integral part of the institutional framework for policy-making and implementation at all levels. Adequate, informed and ongoing consultation should take place with all relevant stakeholders."

(b) Rights at Work: "Policies must respect, promote and realize fundamental principles and rights at work."

(c) Gender: "Policies and programmes need to take into account the strong gender dimension of many environmental challenges and opportunities. Specific gender policies should be considered in order to promote equitable outcomes."

(d) Policy: "Coherent policies across the economic, environmental, social, education/training and labour portfolios need to provide an enabling environment for enterprises, workers, investors and consumers to embrace and drive the transition towards environmentally sustainable and inclusive economies and societies."

(e) Creation of more decent jobs: "These coherent policies also need to provide a just transition framework for all to promote the creation of more decent jobs, including as appropriate: anticipating impacts on employment, adequate and sustainable social protection for job losses and displacement, skills development and social dialogue, including the effective exercise of the right to organize and bargain collectively."

(f) Context: "There is no 'one size fits all'. Policies and programmes need to be designed in line with the specific conditions of countries, including their stage of development, economic sectors and types and sizes of enterprises."

(g) International cooperation: "In implementing sustainable development strategies, it is important to foster international cooperation among countries. In this context, we recall the outcome document of the United Nations Conference on Sustainable Development (Rio +20), including section VI on means of implementation."

Source: ILO, 2015, pp. 5–6

References

ActionAid (2019) *Principles for a Just Transition in Agriculture*. https://actionaid.org/publications/2019/principles-just-transition-agriculture

Acumen (2021) Acumen Closes $58 Million Impact Fund, the First to Drive Climate Adaptation for Smallholder Farmers. https://acumen.org/blog/acumen-resilient-agriculture-fund/

AGRI3 Fund (n.d.) Investment Offering. https://fount.eu/wp-content/uploads/2022/02/AGRI3-Fund_Brochure.pdf

ASC (2019) ASC Salmon Standard v1.3. https://www.asc-aqua.org/what-we-do/our-standards/farm-standards/the-salmon-standard/

Astell-Burt T, Feng X, Mavoa S, Badland H M and Giles-Corti B (2014) Do low-income neighbourhoods have the least green space? *A cross-sectional study of Australia's most populous cities*. BMC Public Health 14, 292. https://doi.org/10.1186/1471-2458-14-292

Batini N, Di Serio M, Fragetta M, Melina G and Waldron A (2021) Building Back Better: How Big Are Green Spending Multipliers? https://www.elibrary.imf.org/view/journals/001/2021/087/article-A001-en.xml

BBC (2022) Carbon offset: Fears tree plant schemes could price out farmers. BBC News online, 7 April. https://www.bbc.com/news/uk-wales-61020316

Better Life Farming (n.d.) Empowering smallholder farmers with resources for a brighter future. Web page. https://www.betterlifefarming.com/who-we-are/

Bian Z, Inyang H I, Daniels J L, Otto F and Struthers S (2010) Environmental issues from coal mining and their solutions. *Mining Science and Technology (China)* 20(2), 215-223. https://doi.org/10.1016/S1674-5264(09)60187-3

Burley H and Thomson E (2022) *A climate wake-up; but business failing to hear the alarm on deforestation*. Global Canopy, Oxford, UK. https://forest500.org/reports

Ceres, IIGCC (2021) *The Role of Natural Climate Solutions in Corporate Climate Commitments: A Brief for Investors*. https://www.ceres.org/resources/reports/role-natural-climate-solutions-corporate-climate-commitments-brief-investors

Committee on World Food Security (2014) *Principles for responsible investment in agriculture and food systems*. https://www.fao.org/3/au866e/au866e.pdf

Convention on Biological Diversity [CBD] (2021) First draft of the post-2020 Global Biodiversity Framework. https://www.cbd.int/doc/c/abb5/591f/2e46096d3f0330b08ce87a45/wg2020-03-03-en.pdf

COP26a (2021) Glasgow Leaders' Declaration on Forests and Land Use. https://ukcop26.org/glasgow-leaders-declaration-on-forests-and-land-use/

COP26b (2021) The Global Forest Finance Pledge. https://ukcop26.org/the-global-forest-finance-pledge/

COP26c (2021) COP26 IPLC Forest Tenure Joint Donor Statement. https://ukcop26.org/cop26-iplc-forest-tenure-joint-donor-statement/

Creamer T (2021) As Mpumalanga towns plot future beyond coal, workers express pain over mine closures. https://www.engineeringnews.co.za/article/as-mpumalanga-towns-plot-future-beyond-coal-workers-express-pain-over-mine-closures-2021-08-27

Ding H, Veit P, Gray E, Reytar K, Altamirano J and Blackman A (2016) *Climate Benefits, Tenure Costs: The Economic Case For Securing Indigenous Land Rights in the Amazon*. https://www.wri.org/research/climate-benefits-tenure-costs

EAT (2021) *EAT-Lancet Commission Summary Report*. https://eatforum.org/eat-lancet-commission/eat-lancet-commission-summary-report/

Elwin P, Robins N, Willis J and Cozzolino G (2021) *Brazil: roadmap to a sustainable future - Nature-based challenges, opportunities and solutions*. London: Planet Tracker and Grantham Research Institute on Climate Change and the Environment. https://www.lse.ac.uk/granthaminstitute/publication/brazil-roadmap-to-sustainable-sovereign-bonds/

European Commission (2021a) France, Germany, UK, US and EU launch ground-breaking International Just Energy Transition Partnership with South Africa. Press release, 2 November. https://ec.europa.eu/commission/presscorner/detail/en/IP_21_5768

European Commission (2021b) Proposal for a regulation on deforestation-free products. https://ec.europa.eu/environment/publications/proposal-regulation-deforestation-free-products_en

FAIRR (2021a) Where's the beef? Investor Statement. https://www.fairr.org/wheres-the-beef/

FAIRR (2021b) Appetite for Disruption – The Last Serving. Blog, 30 September. https://www.fairr.org/article/appetite-for-disruption-the-last-serving/

FAO, UNDP, UNEP (2021) *A Multi-Billion-Dollar Opportunity: Repurposing agricultural support to transform food systems*. https://www.unep.org/resources/repurposing-agricultural-support-transform-food-systems

FAO, IFAD, UNCTAD and World Bank Group (2010) *Principles for Responsible Agricultural Investment that*

Respects Rights, Livelihoods, and Resources. https://openknowledge.worldbank.org/handle/10986/24101

Fedele G, Donatti C I, Bornacelly I and Hole D G (2021) Nature-dependent people: Mapping human direct use of nature for basic needs across the tropics. *Global Environmental Change* (71). https://www.sciencedirect.com/science/article/pii/S0959378021001473

Figaredo C and Jones S (2021) Unpacking Labour Risk in Global Meat Supply Chains. https://www.fairr.org/article/global-investor-engagement-on-working-conditions-phase-1/

Garnett S T, Burgess N D, Fa J E, Fernández-Llamazares Á, Molnár Z, Robinson C J, Watson J E M, Zander K K, Austin B, Brondizio E S, Collier N F, Duncan T, Ellis E, Geyle H, Jackson M V, Jonas H, Malmer P, McGowan B, Sivongxay A and Leiper I (2018). A spatial overview of the global importance of Indigenous lands for conservation. *Nature Sustainability* 1, 369–374. https://doi.org/10.1038/s41893-018-0100-6

Food and Agriculture Organisation [FAO] (2022) FAO Food Price Index dips in May. Press release, 3 June. https://www.fao.org/newsroom/detail/fao-food-price-index-dips-in-may/en

Food and Agriculture Organisation [FAO] (2020) *The State of World Fisheries and Aquaculture 2020*. https://www.fao.org/documents/card/en/c/ca9229en

FSD Africa (2022) Leading financial institutions partner with UNECA and FSD Africa to form the African Natural Capital Alliance. Press release, 7 June. https://www.fsdafrica.org/news/anca-announcement/

G7 (2022) *G7 Leaders' Communiqué – Executive Summary*. https://www.g7germany.de/resource/blob/974430/2057928/1315842ed9de069fa1be82dab18dabb2/2022-06-28-leaders-communique-executive-summ-data.pdf?download=1

Gatti L V et al. (2021) Amazonia as a carbon source linked to deforestation and climate change. *Nature* (595), 388–393. https://doi.org/10.1038/s41586-021-03629-6

GFANZ (2022) *Recommendations and Guidance: Financial Institution Net zero Transition Plans*. https://assets.bbhub.io/company/sites/63/2022/06/GFANZ_Recommendations-and-Guidance-on-Net-zero-Transition-Plans-for-the-Financial-Sector_June2022.pdf

Global Reporting Initiative [GRI] (2022) GRI 13: *Agriculture Aquaculture and Fishing Sectors 2022*. https://www.globalreporting.org/standards/standards-development/sector-standard-for-agriculture-aquaculture-and-fishing

Greenham T and Link M (2020) *Farming Smarter: The case for agroecological enterprise*. https://ffcc.co.uk/library/farming-smarter-report

Griscom B W et al. (2017) Natural climate solutions. *Earth, Atmospheric, and Planetary Sciences* 114 (44). https://doi.org/10.1073/pnas.1710465114

Guldberg, O et al. (2021) *IPBES-IPCC Co-Sponsored Workshop Report on Biodiversity and Climate Change*. https://ipbes.net/events/ipbes-ipcc-co-sponsored-workshop-report-biodiversity-and-climate-change

Holdorf D B et al. (2021) What is 'nature positive' and why is it the key to our future? Blog, 23 June. https://www.weforum.org/agenda/2021/06/what-is-nature-positive-and-why-is-it-the-key-to-our-future/

HSBC (2020) *HSBC Pollination: Nature is capital*. https://www.assetmanagement.hsbc.co.uk/en/institutional-investor/news-and-insights/climateassetmanagement-uk

IFC (2022) *Guidelines for Blue Finance*. https://www.ifc.org/wps/wcm/connect/industry_ext_content/ifc_external_corporate_site/financial+institutions/resources/guidelines-for-blue-finance

iForest (2022) *Korba - Planning a just Transition for India's Biggest Coal and Power District*. https://iforest.global/wp-content/uploads/2022/02/Korba-Report.pdf

Innovative Finance for the Amazon, Cerrado and Chaco [IFACC] (n.d.) IFACC Environmental and Social Approach. https://www.tropicalforestalliance.org/assets/IFACC_ES_requirements.pdf

International Energy Agency [IEA] (2021a) *Net Zero by 2050: A Roadmap for the Global Energy Sector.* https://www.iea.org/reports/net zero-by-2050

International Energy Agency [IEA] (2021b) *Recommendations of the Global Commission on People-Centred Clean Energy Transitions*. https://www.iea.org/reports/recommendations-of-the-global-commission-on-people-centred-clean-energy-transitions

International Labour Organization [ILO] (2013) *Caught at sea: Forced labour and trafficking in fisheries*. http://www.ilo.org/wcmsp5/groups/public/---ed_norm/---declaration/documents/publication/wcms_214472.pdf

International Labour Organization [ILO] (2015) *Guidelines for a just transition towards environmentally sustainable economies and societies for all*. https://www.ilo.org/global/topics/green-jobs/publications/WCMS_432859/lang--en/index.htm

International Labour Organization [ILO] (2017) *World Employment and Social Outlook: Trends for women 2017*. https://www.ilo.org/global/research/global-reports/weso/trends-for-women2017/WCMS_557245/lang--en/index.htm

International Labour Organization [ILO] (2018a) Women and Men in the Informal Economy: A Statistical Picture 3rd edition. https://www.wiego.org/publications/women-and-men-informal-economy-statistical-picture-3rd-edition

International Labour Organization [ILO] (2018b) *World Employment and Social Outlook – Greening with jobs*. https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_628654.pdf

International Labour Organization [ILO] (2020) *COVID-19 and the impact on agriculture and food security*. https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---sector/documents/briefingnote/wcms_742023.pdf

International Union of Food, Agricultural, Hotel, Restaurant, Catering, Tobacco and Allied Workers' Associations [IUF] (2022) Fighting for our Future: An IUF Guide on Tackling the Climate Crisis in Intensive Livestock Production. https://www.iuf.org/news/editorial-fighting-for-our-future-iufs-first-climate-crisis-guide-for-affiliates/

IPBES and IPPC (2021) *IPBES-IPCC co-sponsored workshop report on biodiversity and climate change*. [Pörtner, H.O. et al. (eds.)] https://ipbes.net/sites/default/files/2021-06/20210609_workshop_report_embargo_3pm_CEST_10_june_0.pdf

IPCC (2019) Summary for Policymakers. *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. https://www.ipcc.ch/srccl/chapter/summary-for-policymakers/

IPCC (2022a) Summary for Policymakers. *Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [H.-O. Pörtner et al. (eds.)]. https://www.ipcc.ch/report/ar6/wg2/

IPCC (2022b) *Climate Change 2022 – Mitigation of Climate Change: Summary for Policymakers*. https://www.ipcc.ch/report/ar6/wg3/

ITUC and ILO (2019) *The contribution of social dialogue to the 2030 Agenda: Formalising the informal economy*. https://www.ituc-csi.org/social-dialogue-for-sdgs-formalising-informal-economy?lang=en

IUCN (2021) *Forests and climate change*. https://www.iucn.org/resources/issues-briefs/forests-and-climate-change

Jaeger J et al. (2021) *The Green Jobs Advantage: How Climate-Friendly Investments are Better Job Creators*. https://www.wri.org/research/green-jobs-advantage-how-climate-friendly-investments-are-better-job-creators?auHash=xUbfj6MM4_7TYo371Hb0k9899iRb_jv1j22av_GD1D0

Jaramillo J (2021) Opinion: Greener agriculture is a win for farmers, food companies and the environment. Blog, 9 March. https://news.trust.org/item/20210309165938-8iksz

Jarvis A and Varma A, Ram J (2011) *Assessing Green Jobs Potential in Developing Countries: A Practitioner's Guide*. https://www.ilo.org/global/publications/ilo-bookstore/order-online/books/WCMS_153458/lang--en/index.htm

Lankes H P (2021) *Blended finance for scaling up climate and nature investments*. London: Grantham Research Institute on Climate Change and the Environment, LSE. https://www.lse.ac.uk/granthaminstitute/publication/blended-finance-for-scaling-up-climate-and-nature-investments/

Livelihoods Funds (n.d.) The Livelihoods Carbon Funds. Web page. https://livelihoods.eu/lcf/

Martínez-Alier J (2002). *The Environmentalism of the Poor: A Study of Ecological Conflicts and Valuation*. Cheltenham: Edward Elgar Publishing. https://doi.org/10.4337/9781843765486

Nesbitt L, Meitner M J, Girling C, Sheppard S R J, Lu Y (2019) Who has access to urban vegetation? A spatial analysis of distributional green equity in 10 US cities. *Landscape and Urban Planning*, 181. https://doi.org/10.1016/j.landurbplan.2018.08.007

Newton P, Kinzer A T, Miller D C, Oldekop J A, Agrawal A (2020) The Number and Spatial Distribution of Forest-Proximate People Globally. *One Earth* 3(3). https://doi.org/10.1016/j.oneear.2020.08.016

Oceana (2017) Healthy fisheries are good for business: How better management of European fisheries will create jobs and improve the economy. https://europe.oceana.org/en/our-work/more-fish-more-jobs-more-money/overview

OECD (2014) The Policy Framework for Investment in Agriculture. https://www.oecd.org/investment/investment-policy/pfi-agriculture.htm

OECD and FAO (2016) OECD-FAO Guidance for Responsible Agricultural Supply Chains. https://www.oecd-ilibrary.org/agriculture-and-food/oecd-fao-guidance-for-responsible-agricultural-supply-chains_9789264251052-en

OECD and FAO (2021) OECD-FAO Agricultural Outlook 2021-2030. https://www.oecd.org/development/oecd-fao-agricultural-outlook-19991142.htm

Pinzon A and Robins N (2020) *The sovereign transition to sustainability: Understanding the dependence of sovereign debt on nature*. London: Grantham Research Institute on Climate Change and the Environment, LSE. http://www.lse.ac.uk/granthaminstitute/wp-content/uploads/2020/01/SUMMARY_The-sovereign-transition-to-sustainability_Understanding-the-dependence-of-sovereign-debt-on-nature.pdf

PRI (2015) Responsible investment in farmland. https://www.unpri.org/farmland/responsible-investment-in-farmland/716.article

PRI (2016) *From poor working conditions to forced labour – What's hidden in your portfolio? A guide for investor engagement on labour practices in agricultural supply chains*. https://www.unpri.org/sustainability-issues/environmental-social-and-governance-issues/social-issues/employee-relations

PRI (2019) *Responsible investment DDQ for farmland investors*. https://www.unpri.org/farmland/responsible-investment-ddq-for-farmland-investors/4247.article

PRI (2020) *From farm to table: ensuring fair labour practices in agricultural supply chains*. https://www.unpri.org/farmland/from-farm-to-table-ensuring-fair-labour-practices-in-agricultural-supply-chains/5800.article#Download_PDF

PRI (2022a) *Investor initiative for sustainable forests: engagement results*. https://www.unpri.org/collaborative-engagements/investor-initiative-for-sustainable-forests-engagement-results/9595.article

PRI (2022b) Storebrand Asset Management: Leading the Investors Policy Dialogue on Deforestation. https://www.unpri.org/active-ownership-20/storebrand-asset-management-leading-the-investors-policy-dialogue-on-deforestation/9980.article

Rabobank (2019) The global salmon supply is about to get more sustainable. https://www.rabobank.com/en/raboworld/articles/the-global-salmon-supply-is-about-to-get-more-sustainable.html

Rabobank (n.d.) Rabo Carbon Bank (webpage) and About Acorn (webpage). https://www.rabobank.com/about-us/carbon-bank; https://acorn.rabobank.com/aboutus/

Race to Zero (2021) Financial Sector Commitment Letter on Eliminating Commodity-Driven Deforestation. Webpage. https://climatechampions.unfccc.int/system/nature-and-tackling-deforestation/

Rights and Resource Initiative (2015) *Who Owns the World's Land? A global baseline of formally recognized Indigenous and community land rights*. https://rightsandresources.org/publication/whoownstheland/

Ritchie H and Roser M (2020) CO_2 and Greenhouse Gas Emissions. https://ourworldindata.org/co2-and-other-greenhouse-gas-emissions

Ritchie H Roser M (2021) Environmental Impacts of Food Production. https://ourworldindata.org/environmental-impacts-of-food#environmental-impacts-of-food-and-agriculture

Robins N, Muller S and Szwarc K (2021) *From the grand to the granular: translating just transition ambitions into investor action*. London: Grantham Research Institute on Climate Change and the Environment, LSE. https://www.lse.ac.uk/granthaminstitute/publication/from-the-grand-to-the-granular-translating-just-transition-ambitions-into-investor-action/

Royal London Asset Management [RLAM] (2022) *Just Transition engagement report 2021*. https://www.rlam.co.uk/institutional-investors/our-views/2022/just-transition-engagement-report-2021/

Scottish Government (2022) *Interim Principles for Responsible Investment in Natural Capital*. https://www.gov.scot/publications/interim-principles-for-responsible-investment-in-natural-capital/

Sustainable Fisheries Partnership, Aviva and PRI (2016) *Sustainable Seafood and Responsible Investment*. New York: UN Global Compact. https://www.unglobalcompact.org/library/4591

Sustainable Markets Initiative (2021) The Sustainable Markets Initiative's Natural Capital Investment Alliance announces 12 new members and plans to mobilise more than USD 10 billion of private capital. Press release, 2 November. https://www.sustainable-markets.org/ncia/activities/

Gold Standard (2019) *Safeguarding Principles and Requirements*. https://globalgoals.goldstandard.org/103-par-safeguarding-principles-requirements/

TNFD (2022) *The TNFD Nature-Related Risk and Opportunity Management and Disclosure Framework: Beta v0.2*. https://framework.tnfd.global/wp-content/uploads/2022/06/TNFD-Framework-Document-Beta-v0-2.pdf

Tropical Forest Alliance (n.d.) Investors Policy Dialogue on Deforestation (IPDD) Initiative. Web page. https://www.tropicalforestalliance.org/en/collective-action-agenda/finance/investors-policy-dialogue-on-deforestation-ipdd-initiative/

Tropical Landscapes Finance Facility [TLFF] (2021) South East Asia's First Sustainability Project Bond. Web page. https://www.tlffindonesia.org/project-pt-royal-lestari-utama-2020/

Tubiello F N et al. (2022) Pre- and post-production processes increasingly dominate greenhouse gas emissions from agri-food systems, *Earth Syst. Sci. Data* (14)4. https://doi.org/10.5194/essd-14-1795-2022

UNEP-WCMC and IUCN (2021) *Protected Planet Report 2020*. Cambridge, UK: United Nations

Environment Programme. https://livereport.protectedplanet.net/chapter-1

United Nations [UN] (2015) *The World's Women 2015: Trends and Statistics*. https://unstats.un.org/unsd/gender/downloads/worldswomen2015_report.pdf

United Nations Environment Programme [UNEP] (2021) *State of Finance for Nature: Tripling investments in nature-based solutions by 2030*. https://www.unep.org/resources/state-finance-nature

United Nations Environment Programme [UNEP] (2022a) *UNEP/EA.5/Res.5 Resolution adopted by the United Nations Environment Assembly on 2 March 2022: Nature-based solutions for supporting sustainable development*. https://www.unep.org/environmentassembly/unea-5.2/proceedings-report-ministerial-declaration-resolutions-and-decisions-unea-5.2?%2Fproceedings-report-ministerial-declaration-resolutions-and-decisions-unea-5_2=

United Nations Environment Programme [UNEP] (2022b) *The State of Finance for Nature in the G20 report*. https://www.unep.org/resources/report/state-finance-nature-g20-report

UNEP FI (n.d.) Sustainable Blue Economy Finance Principles. https://www.unepfi.org/blue-finance/the-principles/

U.S. Department of Agriculture (2022) Wheat Outlook: March 2022. https://www.ers.usda.gov/publications/pub-details/?pubid=103489

van Toor J et al. (2020). *Indebted to nature. Exploring biodiversity risks for the Dutch financial sector.* Amsterdam: De Nederlandsche Bank; Planbureau voor de Leefomgeving. https://www.pbl.nl/en/publications/indebted-to-nature

Veit P (2019) *Land Matters: How Securing Community Land Rights Can Slow Climate Change and Accelerate the Sustainable Development Goals*. https://www.wri.org/insights/land-matters-how-securing-community-land-rights-can-slow-climate-change-and-accelerate

Voluntary Carbon Markets Integrity Initiative [VCMI] (2022) *Provisional Claims Code of Practice*. https://vcmintegrity.org/publications/

Voluntary Carbon Markets Integrity Initiative [VCMI] (2021) *VCM Related Claims Categorization, Utilization, and Transparency Criteria*. https://vcmintegrity.org/publications/

World Bank (2011) *Gender and Climate Change: Three Things You Should Know*. https://openknowledge.worldbank.org/handle/10986/27356

World Bank (2021). Indigenous Peoples. Web page. https://www.worldbank.org/en/topic/indigenouspeoples#1

World Benchmarking Alliance [WBA] (2021) *Methodology for the Food and Agriculture Benchmark*. https://www.worldbenchmarkingalliance.org/research/food-and-agriculture-methodology/

World Benchmarking Alliance [WBA] (2022) Nature Benchmark Methodology. https://www.worldbenchmarkingalliance.org/research/2022-nature-benchmark-methodology/

World Economic Forum [WEF] (2020a) Nature Risk Rising: Why the Crisis Engulfing Nature Matters for Business and the Economy. Press release, 19 January. https://www.weforum.org/press/2020/01/half-of-world-s-gdp-moderately-or-highly-dependent-on-nature-says-new-report/

World Economic Forum [WEF] (2020b) *The Future of Nature and Business*. https://www.weforum.org/reports/new-nature-economy-report-ii-the-future-of-nature-and-business

WWF (n.d.) Deforestation and Degradation. Web page. https://www.worldwildlife.org/threats/deforestation-and-forest-degradation

WWF and Boston Consulting Group [BCG] (2020) *Beyond Science-Based Targets: A Blueprint for Corporate Action on Climate and Nature*. https://wwfint.awsassets.panda.org/downloads/beyond_science_based_targets___a_blueprint_for_corporate_action_on_climate_and_nature.pdf

WWF, Environmental Defense Fund and Oeko-Institut (2020) *What makes a high-quality carbon credit? Phase 1 of the "Carbon Credit Guidance for Buyers" project: Definition of criteria for assessing the quality of carbon credits*. https://www.worldwildlife.org/publications/what-makes-a-high-quality-carbon-credit

WWF (2020) Enhancing NDCs for Food Systems: Recommendations for Decision-Makers. https://wwfint.awsassets.panda.org/downloads/wwf_ndc_food_final_low_res.pdf

WWF et al. (2021) *The State of Indigenous Peoples' and Local Communities' Lands and Territories: A technical review of the state of Indigenous Peoples' and Local Communities' lands, their contributions to global biodiversity conservation and ecosystem services, the pressures they face, and recommendations for actions*. https://wwf.panda.org/wwf_news/?2822441/Global-biodiversity-goals-unattainable-without-full-inclusion-of-Indigenous-Peoples-and-Local-Communities-and-their-lands

Young D et al. (2022) *Scaling Up High-Integrity Environmental Markets Across the UK*. London: Financing Nature Recovery. https://www.financingnaturerecovery.uk/recommendations-and-roadmap#Reporthome

Efforts to deliver the just transition need to be expanded to include sectors that affect and are affected by nature. This report explores the role of the financial sector in supporting the 'just nature transition', a shift to a net zero and climate-resilient economy that delivers decent work, social inclusion and the eradication of poverty while simultaneously achieving biodiversity goals. It examines financial institutions' key levers of change across priority areas for the just transition in the nature arena.

The Grantham Research Institute on Climate Change and the Environment was established in 2008 at the London School of Economics and Political Science. The Institute brings together international expertise on economics, as well as finance, geography, the environment, international development and political economy to establish a world-leading centre for policy-relevant research, teaching and training in climate change and the environment. It is funded by the Grantham Foundation for the Protection of the Environment, which also funds the Grantham Institute – Climate Change and the Environment at Imperial College London.
www.lse.ac.uk/grantham

The Centre for Climate Change Economics and Policy (CCCEP) was established in 2008 to advance public and private action on climate change through rigorous, innovative research. The Centre is hosted jointly by the University of Leeds and the London School of Economics and Political Science. It is funded by the UK Economic and Social Research Council.
www.cccep.ac.uk

This report was published in August 2022 by:

Grantham Research Institute on Climate Change and the Environment
London School of Economics and Political Science
Houghton Street
London WC2A 2AE
United Kingdom

www.lse.ac.uk/granthaminstitute/

LSE

Grantham Research Institute on Climate Change and the Environment

Centre for Climate Change Economics and Policy