



Starting the Journey: Companies Collaborate for Beef Sustainability at Scale

This report is part of a global study on private sector engagement at landscape and jurisdictional scale initiated by the Tropical Forest Alliance (TFA) and conducted in collaboration with Proforest, CDP and others. The study aims to advance understanding of the use of landscape and jurisdictional approaches as a key corporate strategy and to map the way forward to mobilize more private sector action and multi-stakeholder collaboration at scale.

Through interviews and desktop research, the study explores why and how manufacturers, retailers, traders and integrated companies have used landscape and jurisdictional approaches to address deforestation driven by palm oil, soy, beef, pulp, paper and packaging, and cocoa. It also delves into other possible uses of these approaches, including to meet corporate nature, climate and people goals, and explains how companies can leverage their efforts and collaborate with others to accelerate progress. The papers will be made available on the [the Jurisdictional Approaches Resource Hub](#).

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SUMMARY NUMBERS & RECOMMENDATIONS

STUDY FINDINGS IN NUMBERS

5

Companies* taking landscape-scale action

7

Landscape and jurisdictional initiatives supported by companies

5

Landscape and jurisdictional initiatives with more than one commodity

6

Landscape and jurisdictional initiatives supported by more than one company

* Downstream, midstream and integrated companies that have taken landscape-scale action in beef producing areas.

RECOMMENDATIONS FOR COMPANIES

1. Continue and increase landscape-scale action
2. Enhance collaboration with peers, suppliers and buyers at landscape scale
3. Link companies' sustainability programmes with landscape and jurisdictional initiatives
4. Collaborate with buyers of other cattle products, soy and other commodities
5. Support multi-stakeholder processes and platforms

RECOMMENDATIONS FOR LANDSCAPE & JURISDICTIONAL APPROACHES' PROPONENTS

1. Engage sectoral coalitions to promote multi-stakeholder collaboration at landscape scale
2. Direct sources of funding to committed and progressing jurisdictions
3. Find shared goals and narratives that resonate with local stakeholders

WHAT ARE YOU INTERESTED IN?

How companies have engaged with landscape and jurisdictional initiatives

SECTION 3.1 

How many companies are taking landscape-scale action

SECTION 2.2 

Why companies take landscape-scale action for beef

SECTION 2.3 

Examples of landscape-scale action companies have taken

SECTION 3.2 

Opportunities to accelerate progress

SECTION 4.1  SECTION 4.3 

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ABBREVIATIONS AND ACRONYMS

ACTO

Amazon Cooperation Treaty

CGF FPCOA

Consumer Goods Forum's Forest Positive Coalition of Action

CAR

Rural Environmental Registry

CNA

Confederation of Agriculture and Livestock of Brazil

EUDR

European Union Deforestation Regulation

GHG

Greenhouse Gases

GRSB

Global Roundtable for Sustainable Beef

IBAMA

Brazilian Institute of Environment and Renewable Natural Resources

LEAF

Lowering Emissions by Accelerating Forest Finance

PCI

Produce, Conserve and Include

PPCDAM

Prevention and Control of Deforestation in the Legal Amazon

SBTI

Science Based Target initiative

TFA

Tropical Forest Alliance

WWF

World Wild Fund for Nature



1. BEEF PRODUCTION AND SUSTAINABILITY

1.1 PRODUCTION CONSUMPTION AND TRADE

Cattle production, with its diverse products including beef, leather and dairy, accounts for more than 40% of the global agricultural GDP (FAO 2018) and creates thousands of jobs, directly and indirectly (Embrapa 2022). Nearly three-fifths of the world's agricultural land is used for cattle (UCS 2012).

Just 20% of all beef produced is exported (USDA 2023; Table 1), meaning local supply chains and domestic consumers have more influence on the sector than the international market does. Other products from the beef industry are diverse, with different parts of the carcass going to different industries, such as leather for the manufacture of handbags and collagen from the skin for cosmetics (Embrapa n.d.). Beef consumption is projected to increase by 5.9% globally by 2030 (OECD and

FAO 2020), driven by increasing global population, rising wealth, urbanization, and the westernization of diets in emerging nations (Ceres 2022). To meet this growing demand, Brazil plans to increase its production by 16.2% between 2020 and 2030 (Fiesp 2019), while Argentina plans a 20% increase by 2030 (Ministerio de Economía 2022).

Brazil has the highest number of cattle at 224,602,000, but the lowest slaughter ratio (the proportion of cattle slaughtered in relation to the total cattle stock) at 12%. In contrast, China has the highest slaughter ratio at 78%, and has 60,361,000 cattle, due to the intensification of its livestock production, while the EU has 75,655,000 cattle and a ratio of 31%, Argentina 53,416,000 and 24%, and Mexico 35,999,000 and 24% (FAOSTAT).

TABLE 1 BEEF AND VEAL PRODUCTION, CONSUMPTION AND EXPORTS

COUNTRY	Production (2022, 1,000mt of carcass weight equivalent)	Domestic consumption* (2022, 1,000mt of carcass weight equivalent)	Exported (2022, 1,000MT of carcass weight equivalent)	Exports (2022, %)
United States	12,890	12,220	1,604	12
Brazil	10,350	7,524	2,898	28
China	7,180	10,662	0	0
European Union	6,730	6,483	648	10
India	4,350	2,908	1,442	33
Argentina	3,140	2,324	823	26
Mexico	2,180	1,950	395	18
Australia	1,878	667	1,239	66
Canada	1,395	1,026	583	42
Russia	1,320	1,525	0	0
Others	9,120	7,924	784	9
Total	59,348	57,376	12,040	20

* Some domestic consumption in producer countries is supplied by imports not shown in this table.

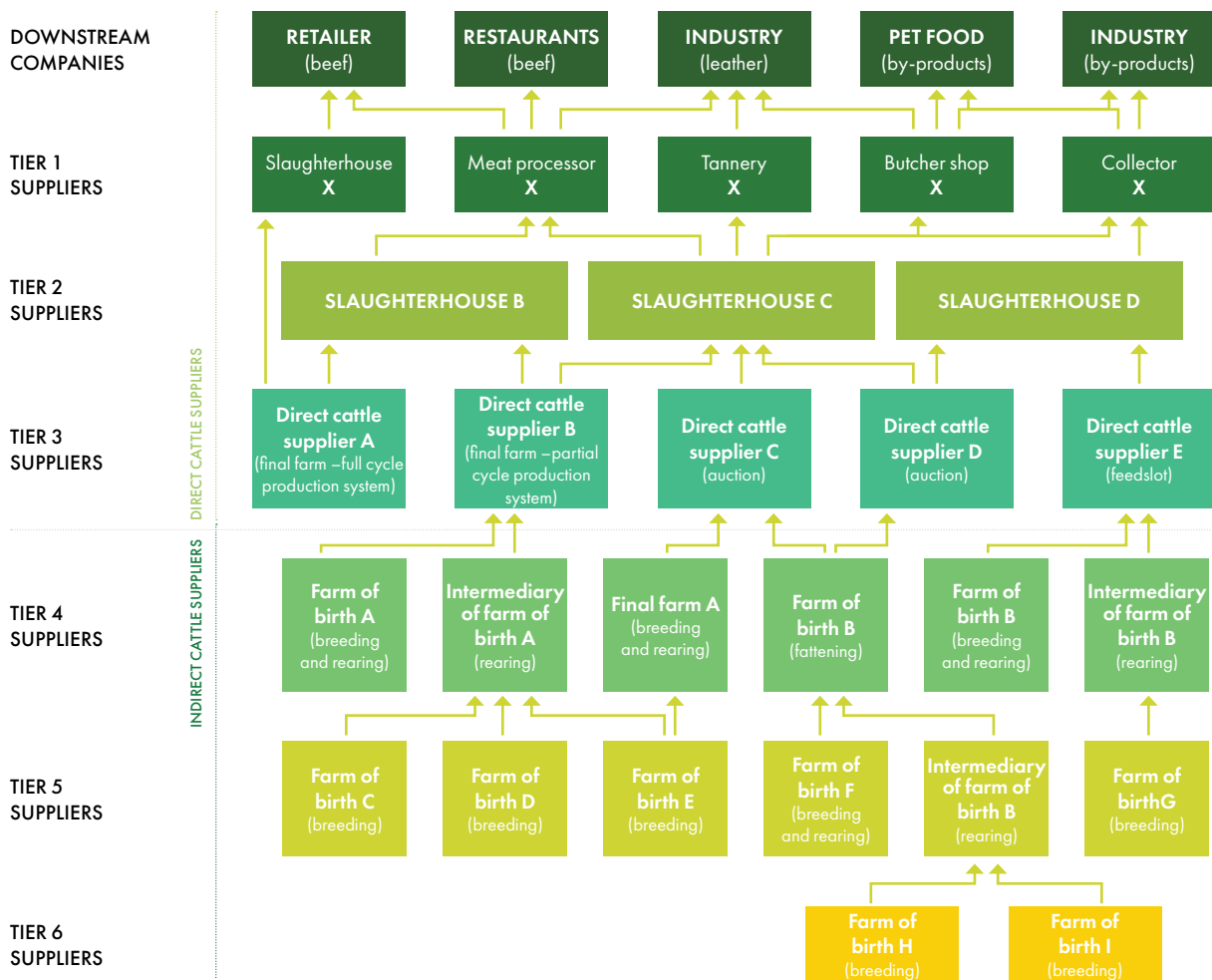
Source: USDA 2023

1.2 BEEF SUPPLY CHAIN AND SUSTAINABILITY CHALLENGES

The beef supply chain is long and complex – from the birth of an animal to use as an end product can take between one and a half to four years – and usually different farms are responsible for different

stages of the life cycle, from birth to fattening. Farmers who breed, feed and/or raise cattle to sell to others who supply the meat factories are called indirect suppliers.

FIGURE 1 BEEF SUPPLY CHAIN



Source: Beef Toolkit 2023

Smallholders play an important role in cattle production. In Brazil, a smallholder is typically a family farmer and is defined as someone who has less than four fiscal modules of land (the size of a fiscal module varies from to municipality), relies on family labour and earns, at least, half of their gross income from activities such as agriculture, livestock or forestry (República Federativa do Brasil 2006). In the latest census in Brazil, 80% of the more than 2.5 million farms with cattle were smallholders (IBGE 2017). Usually, a cattle smallholder

specializes in either breeding – the dominant occupation of cattle smallholders – rearing or fattening.

Sustainability issues in cattle farming include deforestation and conversion, land grabbing, speculation and tenure and cattle laundering. Beef production is responsible for 41% of deforestation globally (Ritchie 2021), and in Brazil illegal deforestation represents 98% of total conversion (MapBiomass 2021). Cattle ranching occupies about 80% of the deforested parts of the

Brazilian Amazon and has led to the conversion of nearly 200 million acres (81 million ha) of Brazil's Cerrado habitat (WWF 2017). Cattle ranching is also viewed as a vehicle through which to hold land until prices rise and, in the meantime, earn income (Roebelin and Hendrix 2010).

Land grabbing and speculation is an issue in Brazil due to the high percentage of public land that has not been designated by the government to a land tenure category (Azevedo-Ramos et al. 2020). About 60% of the Brazilian Amazon is public land, while in the remainder of the country 12% of land is public (Climate Policy Initiative 2023a). Land grabbing most affects smallholder farmers (Land Portal 2021) and Indigenous communities (IWGIA 2017), who are often displaced by the expansion of beef cattle into their areas (Climate Policy Initiative 2021). Brazil lags in providing secure property rights, including in relation to land titling, in remote forest areas of Brazil, such as the Amazon (Senado 2019).

A further issue is cattle laundering. Suppliers that have recently converted or are not in compliance with other sustainability commitments frequently sell to an intermediary, who mixes the non-compliant cattle into the supply chain (Repórter Brasil 2021). Monitoring typically occurs at the level of the meat-packers and traces the commodity only to the farm selling directly to that meatpacker and not all of the farms that the cattle passed through (Repórter Brasil 2021).

Beef production is also a significant source of GHG emissions, not only from land clearing for new pastures, but also via the cattle's digestive and waste processes, and feed production. Cattle are one of the three top drivers of emissions from the forest, land and agriculture sector (TFA 2022). Emissions of CO₂ from beef production in 2010 were seven times greater than from chicken and twenty times higher than from soybeans (WRI 2022).

1.3 SUPPLY CHAIN ACTION TO ADDRESS SUSTAINABILITY ISSUES

Multiple efforts to address sustainability challenges across the beef supply chain are taking place, led by companies, farmers, civil society and governments. Unlike in other commodities like cocoa, palm oil, and pulp and paper, certification is not a key tool to ensure sustainability (see below).

CERTIFICATION

There is no global certification standard for beef, though there are initiatives at national level. A sustainability standard provided by Rainforest Alliance is the only global cattle standard to have operated. It launched in 2010 but ended in 2020, with only half a dozen operations certified in Brazil and Colombia in its first eight years (Rainforest Alliance 2020). Marfrig was the first slaughterhouse certified (Marfrig 2015).

National beef certification schemes exist in countries including Brazil, [Canada](#) and [Australia](#). In Brazil, the Confederation of Agriculture and Livestock of Brazil has set up an institute responsible for certification and traceability programmes, which it calls [Voluntary Adhesion Traceability Protocols](#). Each traceability protocol has its own requirements and responsible entity (CNA 2023). The [Sustainable](#)

[Production of Calves Protocol](#) was developed by IDH and partners under the landscape initiative in Mato Grosso and was approved by the CNY Institute in March 2022 (Brazilian Farmers 2022). It is focused only on calf production and participation is voluntary.

SECTORAL SUSTAINABILITY COMMITMENTS

In response to growing concerns around the social and environmental impacts of beef production (Varijakshapanicker et al. 2019) and intense pressure from the international market, stakeholders and consumers (Blog da Carne 2021) companies made sustainability commitments and took action.

Launched in 2020, the [Beef on Track platform](#), developed by Imaflores and Brazil's Federal Public Prosecutor's Office, is a platform that sets and monitors commitments against 11 criteria for cattle and bovine products in the Amazon biome. JBS, Marfrig and Minerva – the top three meatpackers in Brazil – have all signed up to the criteria (Imaflores 2023). The [Monitoring Protocol for Cattle Suppliers in the Amazon](#), called the Amazon Protocol, are guidelines which participating companies in the cattle sector, such as meatpackers and retailers, agree to

follow. They undertake not to acquire products from farms involved in deforestation, invasion of Indigenous lands or slavery, and those embargoed by the Brazilian Institute of Environment and Renewable Natural Resources, known as IBAMA (Amazon Protocol 2021). To meet these commitments, the companies have enhanced their practices and established individual programmes to monitor their direct cattle suppliers from Amazon.

Similarly, the [Voluntary Monitoring Protocol for Cattle Suppliers in the Cerrado](#), called the Cerrado Protocol, proposes a range of responsible sourcing criteria and parameters for meatpackers, direct cattle suppliers, downstream buyers and investors (Cerrado Protocol 2023). The protocol is being developed by Proforest and Imafloa, with support from Mars, McDonalds, the Global Environment Facility through the World Wild Fund for Nature (WWF), and the National Wildlife Federation (Cerrado Protocol 2023). It is still being finalized – the latest draft can be read [here](#) – and the final version is expected by the end of 2023 (Cerrado Protocol 2023).

JBS and Marfrig are among 13 of the world's largest agri-commodity traders and processors to have developed and signed the [Agriculture Sector Roadmap to 1.5°C](#) in 2022 (TFA 2022). The companies committed to eliminating deforestation from their supply chains for beef sourced from the Cerrado and Brazilian Amazon biomes by no later than 2025.

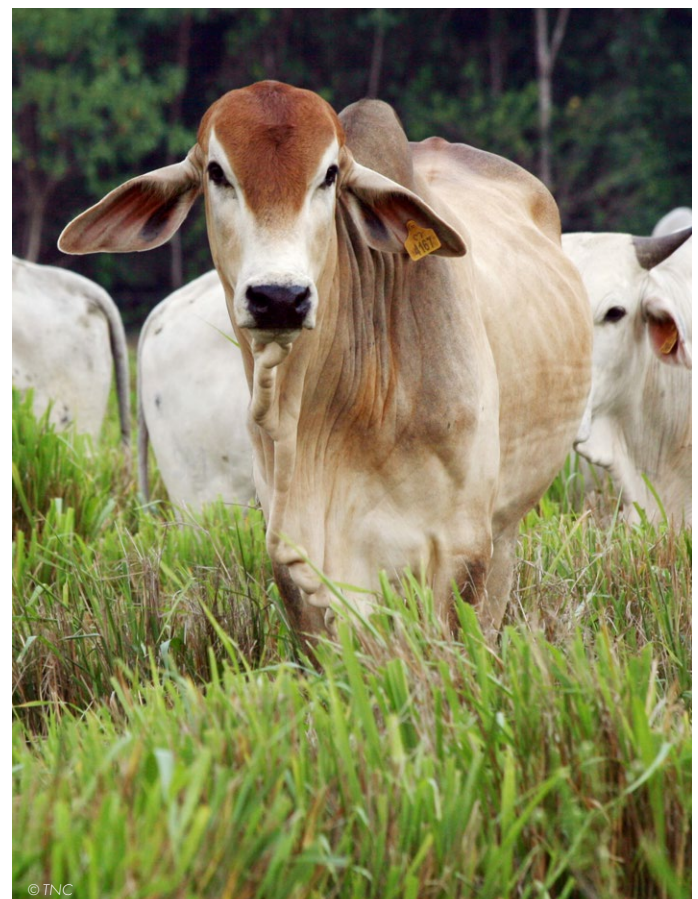
CORPORATE SUSTAINABILITY COMMITMENTS AND PROGRAMMES

Companies have also put in place their own sustainability programmes. For example, Mars, via its [Beef Action Plan](#), aims to stop deforestation and conversion of natural ecosystems by 2025 in its direct cattle supply chains in Latin America (Mars n.d.). Mars is also a member of the Brazilian Roundtable on Sustainable Livestock and a signatory of the [Statement of Support for the Cerrado Manifesto](#) (Mars n.d.), which recognizes the need to prevent further conversion of the Cerrado Biome.

In the case of retailers, [Carrefour](#) has committed to reduce the volume of beef sourced from Amazon deforestation in high risk areas by 100% by 2026

for private labels and 2030 for national brands (Carrefour n.d.). Retail giant [Walmart](#) has stated that 100% of its fresh South American beef will be sourced as deforestation- and conversion-free by 2025 (Walmart 2023).

JBS, Marfrig and Minerva are the largest meatpackers and exporters in Brazil (Chain Reaction Research 2020). Marfrig is aiming for full traceability and 100% deforestation-free supplies from the Amazon by 2025, and for Cerrado and other biomes in which it operates by 2030 (Marfrig 2022a). In 2020, the meatpacker set up the [Marfrig Verde+](#) project with IDH to accelerate beef sustainability (Marfrig 2022a). JBS has developed 19 Green Offices, centres located at meatpacking plants that provide cattle farmers throughout Brazil with free technical assistance (JBS 360 n.d.). Minerva began the [Minerva Renove Program](#) in 2021, aiming to reduce emissions in beef production by 30% by 2030 (compared to 2020) through forest conservation, restoration and better cattle management. Work is underway in Brazil, Argentina, Colombia, Paraguay and Uruguay (Minerva Foods 2023).



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CORPORATE COALITIONS AND MULTI-STAKEHOLDER SPACES

Companies have also set up coalitions through which to collaborate to address shared challenges. The [Global Roundtable for Sustainable Beef](#), created in 2012, is an initiative with 500 members that aims to advance beef sustainability through dialogue (GRSB 2022). In Brazil, other associations include the [Brazilian Roundtable on Sustainable Livestock](#), created in 2007, the [Brazilian Beef Exporters Association](#), and the [Brazilian Retailers Association](#). Retail meat suppliers have also set up a voluntary traceability, monitoring and auditing system with Imaflores.

At the global scale, the Consumer Goods Forum Forest Positive Coalition of Action (CGF FPCoA) has brought together 21 retailers and manufacturers to leverage collective action to remove deforestation and natural ecosystem conversion from commodity production, including through collaboration with stakeholders at landscape scale. In 2022, the Coalition published the [Beef Roadmap](#), building on the policies of individual members and best practices for cattle-derived products (CGF FPCoA 2022a).

POLICIES OF CONSUMER COUNTRIES

In the second quarter of 2023, the EU adopted a new law to ensure beef and other forest-risk commodities entering the bloc will be free from deforestation occurring after 31 December 2020 (Council of the EU 2023). The EU Deforestation Regulation (EUDR) will come into effect at the end of 2024 and is likely to incentivize midstream and downstream companies to improve traceability and engage suppliers in showing that they have a deforestation-free supply (EC 2023). The United States is reviewing a similar bill to outlaw products linked to deforestation (McCarthy 2022).

PRODUCER COUNTRIES' POLICIES AND PROGRAMMES

This section focuses on government policies and programmes at national and subnational level in Brazil, because all of the landscape initiatives with company support identified in this study are in this beef-producing country (see [Chapter 2](#)). Brazilian federal law 12.651 of 2012, known as the Forest

Code, establishes rules to protect native vegetation. Farmers must preserve 80% of the vegetation if the land is located in a forest area, such as the Amazon biome, up to 35% if it is in Cerrado biome¹ and 20% if it is in the Campos Gerais area or elsewhere.

Areas that are not subject to preservation under this law can be legally deforested with governmental approval (República Federativa do Brasil 2012). Farmers are required to register their farms in the Rural Environmental Registry (CAR) and their location and the information they provide on native vegetation must be validated. Brazil uses the CAR to control, monitor and combat deforestation and clearing of other native vegetation, and to carry out environmental management of the property and the landscape where it is located (Climate Policy Initiative 2023b).

Another key policy instrument in Brazil is the Environmental Regularization Program, which is used to ensure the environmental compliance of rural properties (Observatório do Código Florestal 2018). It is a set of actions rural landowners undertake for environmental regularization of their property, such as restoring areas with environmental liabilities, whether there are permanent preservation, legal reserve or restricted use areas (Embrapa 2016). States and the federal district must create their own Environmental Regularization Program, and to join the programme a rural property must be registered in the CAR (Embrapa 2016).

[SeloVerde](#) is a Brazilian initiative in the states of Pará and Minas Gerais. The implementers monitor and evaluate the compliance of the beef supply chain and identify producers that contaminate the chain with illegal deforestation (GTFI 2023). It aims to promote environmental and land tenure regularization and provide traceability of agricultural production for cattle and soy (SeloVerde 2023).

The [Instituto Mato-Grossense da Carne](#) was created in 2016 and is an autonomous social agency aiming to promote beef from Mato Grosso state. It has a reintegration programme for embargoed cattle suppliers and supports traceability and compliance with environmental and social legislation (IMAC n.d.).

¹ 35% of forest conservation inside the states within the so-called Legal Amazon, namely states that include parts of Cerrado biome that are closer to the Amazon, and 20% outside the Legal Amazon.

2. COMPANY ACTION AT LANDSCAPE SCALE IN BEEF PRODUCTION AREAS

2.1 GROWTH IN PRIVATE SECTOR ACTION AT LANDSCAPE AND JURISDICTIONAL SCALE



Companies have become increasingly interested in landscape and jurisdictional approaches as they look for tools to achieve sustainable production of agricultural and forestry commodities. They have realized that successful resolution of major challenges – deforestation, natural ecosystem conversion, land conflicts, illegal activities and human rights risks – requires the on-the-ground collaboration of multiple stakeholders, including the private sector, governments, farmers and communities, and that individual supply chain action, while critical, is insufficient (TFA 2019).

Some downstream companies, often without operations in commodity production areas or direct relationships with smallholders, are starting to engage at landscape and jurisdictional scale both individually

and collectively. The members of the CGF FPCoA have committed to transform to forest positive an area equivalent to their production-base footprint² by 2030 (CGF FPCoA 2021). More companies are also taking landscape-scale action; the number of companies disclosing landscape engagement through CDP's forest questionnaire quadrupled to 192 in 2022 from 47 in 2021.

In general, the business case for retailers and manufacturers to take action at landscape and jurisdictional scale includes cost efficiency, supply chain security, risk mitigation, improving the resilience of farmers, the possibility of achieving multiple ESG goals, meeting investor requirements and leadership in global disclosure platforms (CGF FPCoA 2022b).

² Production-base footprint is the total hectares of land needed to produce the commodities used by a company/coalition/other entity

BOX 1 DEFINITION OF LANDSCAPE APPROACHES

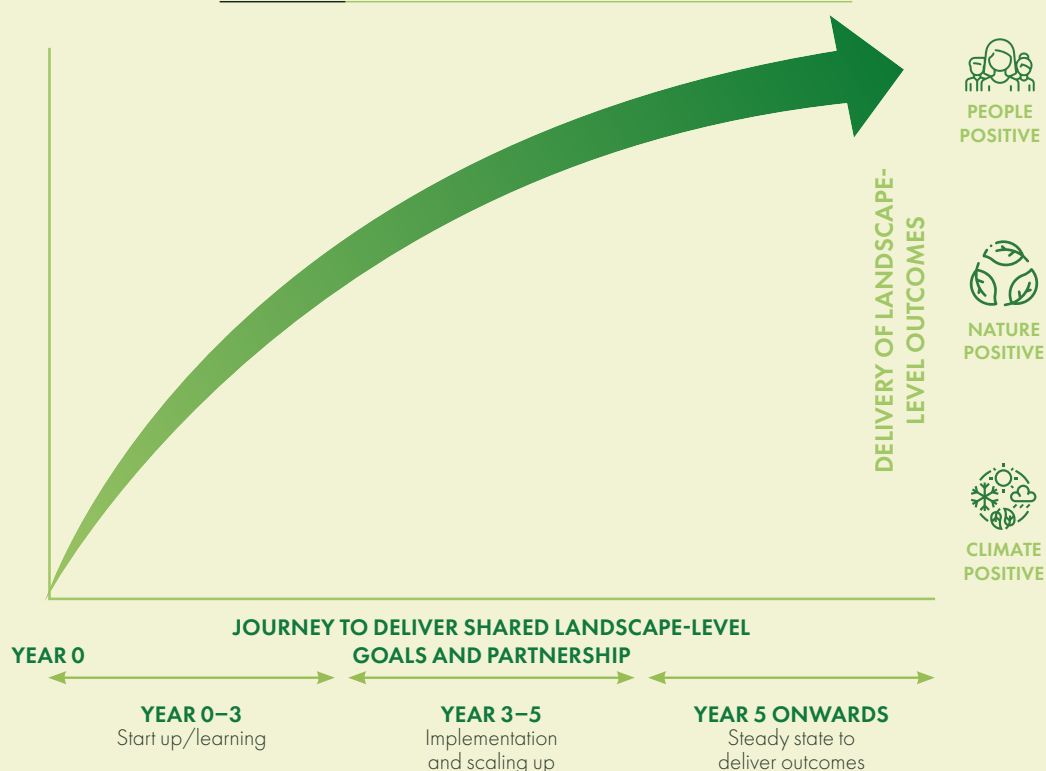
Landscape approaches involve the long-term collaboration of stakeholders within a defined natural or social geography, such as a watershed, biome, jurisdiction or company sourcing area. These management approaches seek to reconcile competing social, economic and environmental goals and build resilience through multi-stakeholder discussions to reach consensus among stakeholders and integrated landscape management (TFA et al. 2020; CDP 2022c). Sharing responsibilities between companies, producers, civil society, local governments and local communities on the ground means each can contribute according to their mandate and capacity. Outcomes are expected to be sustained in the long term as goals are determined together.

The **jurisdictional approach** is a type of landscape approach that operates within sub-national or national administrative boundaries and with active involvement of government. Similar approaches characterized by multi-stakeholder collaboration at scale include territorial or catchment approaches or integrated land-use management. For the purpose of this study, the authors use the terminology of landscape and jurisdictional approaches.

Various organizations have identified components necessary for a landscape or jurisdictional initiative to operate effectively and achieve optimal results. These components include engaged stakeholders, agreement on shared goals, multi-stakeholder governance, financing and investment, monitoring and reporting and, particularly in jurisdictional initiatives, planning and policy frameworks (ISEAL 2022; LTKL 2022; CDP 2022a). While some initiatives have made credible progress in developing these components, many are in the early stages.

Some initiatives are being developed under wider landscape- or jurisdictional-scale multi-stakeholder processes and are contributing to one of the components above or working towards one or more of the shared goals. Others do not have formal multi-stakeholder processes in place but engage different stakeholders and work towards multiple goals aligned with sustainable land-use practices. This study considers and reviews diverse landscape and jurisdictional initiatives focused on cattle at different stages of development, with the basic tenets that they seek and promote multi-stakeholder collaboration to achieve shared sustainability goals in the landscape or jurisdiction.

FIGURE 2 DEVELOPING LANDSCAPE INITIATIVES



2.2 COMPANIES’ LANDSCAPE-SCALE ACTION IN BEEF IN NUMBERS

This brief focuses on midstream and downstream companies sourcing cattle products, as well as integrated companies, such as slaughterhouses with their own farm operations. The authors collated information from desktop reviews; interviews with nine companies, seven landscape initiative implementers and two expert organizations; and submissions to CDP’s forest questionnaire of 2022 (see [Annex 1](#) for the research methodology). The first beef landscape initiative was developed in 2015, and since then on average one new landscape initiative has emerged per year.

Companies reporting to CDP in 2022 claimed engagement in 22 beef landscape initiatives. However, only four of these qualified as landscape initiatives according to the CDP criteria, up from two in 2021.³ Most of the non-qualifying initiatives lack the engagement of other stakeholders in the landscape, which is a critical component to realise the potential of landscape and jurisdictional approaches. Three companies reported to CDP engagement with landscape initiatives in 2022, but only two companies were engaged in qualifying landscape initiatives, the same number as in 2021. Desktop reviews and interviews identified a further three initiatives supported by four more companies.

In total, the study identified five downstream and midstream companies investing in seven qualifying landscape and jurisdictional initiatives in beef production regions (see [Annexes 2](#) and [3](#) for the lists of companies and initiatives). Of these, four initiatives are supported by more than one company. Only two landscape initiatives focus solely on beef; four also target soy and two targets cocoa.

The landscape initiatives supported by companies targeting cattle are all in Brazil. Five are in Mato Grosso, where the Produce, Conserve, and Include (PCI) shared goals were launched in 2015, a sixth has operated in Tocantins state since 2022, and a new initiative started in Pará state in 2023. Through interviews and CDP data, the research team identified three further companies, including one sourcing

leather, that plan to engage in cattle landscape initiatives in the next two years; one referred specifically to Brazil.

Interviews with CSO partners and the desktop review also found a further 14 landscape and jurisdictional initiatives targeting cattle sustainability that are operating without support from any downstream and midstream companies in the beef sector. While most are in Brazil, three are in Colombia and one each in Argentina, Mexico and Peru (see [Annex 3](#)).

FIGURE 3 BEEF LANDSCAPE INITIATIVES IDENTIFIED IN THIS STUDY



Sources: Interviews and published corporate reports; CDP forest questionnaire 2022

³ Recognizing that landscape engagement is relatively new for many companies, the CDP team reviewed all submissions to assess whether the programmes met the basic CDP criteria for landscape and jurisdictional initiatives. Qualifying landscape initiatives are those that provide evidence of multi-stakeholder processes and collective goals for a defined territory. See [Annex 1](#) on research methodology for more details.

2.3 WHY COMPANIES ENGAGE AT LANDSCAPE SCALE IN BEEF



Meatpackers, manufacturers and retailers have committed to take action to prevent deforestation and natural ecosystem conversion and to respect human rights in their supply chains (see [Section 1.3](#)). However, meeting these commitments is challenging because of the complexity of the supply chains, particularly given that cattle move between farms (see [Figure 1](#)). As such, midstream and downstream companies have started to take landscape-scale action as a complementary measure to supply chain action to meet their commitments.

This section discusses the two main reasons companies take landscape-scale action. Examples of companies' support and action are presented in [Chapter 3](#).

PREVENT DEFORESTATION IN THE AMAZON AND CONVERSION IN THE CERRADO BIOME

All companies interviewed and disclosing to CDP stated that their main reason for engaging in landscape initiatives is to reduce risks of deforestation and conversion of natural ecosystems for cattle production. All seven landscape initiatives identified in the study as being supported by downstream and midstream companies are in cattle production regions in the Amazon or Cerrado.

The implementation of the Amazon and Cerrado protocols and Brazil's Forest Code has resulted in thousands of farmers being blocked from selling cattle to meatpackers. Through the landscape

initiatives, meatpackers expect to proactively engage with these suppliers to avoid more conversion connected to beef production, assist them to comply with regulations and protocols and bring them back into supply chains.

INCLUSION OF SMALLHOLDERS AND INDIRECT SUPPLIERS

The two companies disclosing qualifying landscape engagement to CDP listed smallholder inclusion as the second most important reason for taking landscape-scale action (see [Section 1.1](#) for definition of cattle smallholders). In interviews, three companies recognized the importance of engaging indirect suppliers and smallholders, including farmers involved in breeding, rearing or fattening. These supply chain actors often have limited access to the technology, resources and knowledge they need to implement sustainable farming practices and/or to comply with Brazil's Forest Code.

Several landscape initiatives focus on municipalities with a high concentration of indirect cattle suppliers, particularly breeders. This is the case in the Juruena Valley and Barra do Garças PCI compacts; in Mato Grosso, where IDH and partners implement a landscape initiative that aligns with the state's Produce, Conserve and Include (PCI) Strategy; and in an initiative called Transamazonica Connections (see [Box 3](#)), which is implemented in Novo Repartimento in Pará by Solidaridad, Imaflora and Proforest. See [Chapter 3](#) for examples of action taken.

3. HOW COMPANIES SUPPORT BEEF LANDSCAPE INITIATIVES

3.1 TYPE OF ENGAGEMENT

Companies generally engage in two ways with landscape initiatives in cattle production areas: they either provide individual support for an existing initiative or they establish partnerships with other supply chain actors to develop a new initiative.

SUPPORTING AN EXISTING JURISDICTIONAL PLATFORM

Five out of seven initiatives identified in this brief as being supported by companies sourcing beef are supporting shared goals developed under the PCI Strategy in the Brazilian state of Mato Grosso (see [Box 2](#)). Carrefour, through its corporate foundation, and IDH set up the Sustainable Production of Calves Program to support calf breeders. It was launched in 2018 in the state's Juruena Valley region alongside multi-stakeholder processes that include the setting of shared goals at municipality level. The

Sustainable Production of Calves Program provides breeding farmers with technical assistance and guidance in a set of socioenvironmental issues. The Center of Assistance to Producers, a key element of the PCI Compact established in the region, provides to all producers in the region, not only those in the programme, guidance on environmental and land tenure regularization, as well as information on farmer field support programs (IDH 2023).

By 2022, three regions in Mato Grosso – Juruena Valley, Araguaia Valley and Pantanal – had implemented the Sustainable Production of Calves Program, all with active corporate engagement and linked to the PCI Compacts implemented by IDH. A fourth initiative in Tangará de Serra is being developed; an MoU is expected to be signed in 2023 (IDH 2021 b).

BOX 2

MATO GROSSO'S PCI STRATEGY AS UMBRELLA FOR CORPORATE ACTION

Launched in 2015 during COP 21 in Paris, the Produce, Conserve and Include Strategy (PCI Strategy) is a jurisdictional initiative for the sustainable development of the state of Mato Grosso, the fifth-largest beef exporting state in Brazil (Trase 2020).

The PCI Strategy sets targets for 2030: the state will more than double cattle productivity, restore 2.5 million ha of degraded pasturelands, promote land registration of 70% of family farms and reduce deforestation by 90% in the Amazon and 95% in the Cerrado (PCI Institute 2023).

In 2018, the [PCI Corporate Action Group](#) was created, with members including large producers, meatpackers, soy traders, financial institutions, manufacturers and retailers. It aims to promote collaboration between companies to implement action that contributes to achieving the state's shared goals at subregional level (PCI Institute 2022).

In 2019, the PCI Institute was appointed by the state of Mato Grosso to support the government, private sector and civil

society in achieving the goals of the PCI Strategy by 2030. In 2023, the PCI Institute was registered as an independent, non-profit organization. The PCI Institute is tasked with:

- **Attracting resources** from partnerships and international cooperation
- **Connecting public and private initiatives** for efficient land use
- Helping ensure a **low-risk environment** for the private sector
- **Leveraging new business** in the jurisdiction
- Testing new **economic incentives** and financial mechanisms
- Testing and **sharing knowledge** on cattle intensification, best practices and forest restoration
- Ensuring transparent **monitoring** of PCI state-level goals
- Generating **intelligence** and collective knowledge for public and private action

More information can be found in a [case study](#) on the PCI Strategy and jurisdictional approach (CDP 2022b), as well as on the [PCI website](#).

Several companies interviewed said they were considering joining existing landscape initiatives contributing to the PCI Strategy in Mato Grosso due to its credibility and potential impact. Other cattle-producing regions in Brazil that have developed similar jurisdictional frameworks include Pará state with its Amazon Now State Plan and Sustainable Territories Platform (see [Box 6](#)).

COLLECTIVE ACTION THROUGH PRECOMPETITIVE COALITIONS

Companies are also taking landscape-scale action as part of commitments made in corporate-led precompetitive coalitions. This is observed in the CGF Forest Positive Coalition of Action (CGF FPCoA); beef is a material commodity for 12 of its members (see [Section 2.1](#)). Coalition members

have committed to drive transformational change in priority cattle regions (CGF FPCoA 2022a).

In 2021, the CGF FPCoA also developed a landscape strategy for the coalition across its focus commodities – palm oil, soy, beef, and pulp and paper. Following this, two members made their first investments in beef landscape initiatives in 2022 and 2023, complementing two others – Carrefour (SourceUp 2022) and Walmart (PCI Institute 2023) – that had already engaged in cattle production landscape initiatives in Mato Grosso. Active participation in the CGF FPCoA encouraged companies to engage in landscape initiatives in Mato Grosso, and also expanded corporate engagement to other states, namely Tocantins and Pará in Brazil.

BOX 3

TRANSAMAZONICA CONNECTIONS: COMPANY COLLABORATION FACILITATES NEW BEEF LANDSCAPE INITIATIVE

Responding to the challenge of limited traceability in cattle production (see [Section 1.2](#)), an initial step of two members of the CGF FPCoA in 2021 was to support the National Wildlife Federation to use its Visipec traceability tool and deforestation data to identify priority municipalities in Pará in which to engage. In Brazil, Pará was the state with the highest level of GHG emissions in 2021 (Observatório do Clima 2023).

The National Wildlife Federation identified priority municipalities based on the presence of indirect suppliers to Coalition members and deforestation risks. Proforest, as a technical and strategic partner of the CGF FPCoA, followed up this work by mapping out and engaging stakeholders in existing initiatives and organizations on the ground in several of these municipalities to gauge their interest in developing a jurisdictional initiative aligned with the Coalition’s principles.



Solidaridad, Imaflora and Proforest developed the Transamazonica Connections, a landscape initiative in the Novo Repartimento municipality, which has the third-largest livestock herd in Pará at more than 1.15 million heads of cattle (IBGE n.d.). The Transamazonica Connections landscape initiative started in early 2023 and will run for five years. It is currently supported by Neste, which is a member of the CGF FPCoA. The partners aim to integrate sustainability into cattle production – providing technical assistance for ranchers and support with crop diversification and environmental compliance – and municipality policies and to improve local governance through multi-stakeholder processes.

The partners intend to scale up the initiative in the coming years to other municipalities in the Transamazonica region.

Another initiative that is worth mentioning is one that covers soy and beef producing municipalities in Mato Grosso, but that is currently supported only by soy sourcing companies.

In 2023, Mato Grosso's PCI Institute, IPAM, Proforest and Produzindo Certo started the Western Mato Grosso initiative, funded by the LIF Coalition, CGF FPCoA members, and the Soft Commodities Forum – a group of soy traders. The landscape

initiative plans, among others, to develop governance systems aligned with the PCI Strategy in the Mato Grosso municipalities of Tangará da Serra, Campos de Julio, Sapezal, Diamantino, Alto Paraguai and Campo Novo do Parecis. Once these governance systems are in place, Mato Grosso will have nine municipal-level multi-stakeholder governance systems aligned with the PCI Strategy. The majority of these nine have specific goals for cattle production and deforestation reduction.

3.2 ACTIONS SUPPORTED BY COMPANIES

This section highlights the types of landscape-scale action most supported by companies, based on published corporate reports and interviews conducted for this study. The research team also reviewed responses from the two companies that reported engagement in qualifying landscape initiatives to CDP in 2022 (see [Section 2.2](#)).

SUPPORTING MULTI-STAKEHOLDER PROCESSES/PLATFORMS AND CO-DESIGNING LANDSCAPE GOALS

As many beef landscape initiatives are at an early stage – three of the seven initiatives identified were established in 2021 onwards – companies are supporting the steps in their first phase. These steps include engaging local stakeholders and developing multi-stakeholder processes through which shared goals can be designed. All six companies engaged in initiatives qualifying as landscape initiatives under CDP criteria are financially supporting the implementers to facilitate these processes. See [Box 3](#) on the Transamazonica Connections in Pará and [Box 5](#) for examples of company-supported initiatives in Tocantins.

SUPPORTING SUPPLIERS TO COMPLY WITH LEGISLATION

Meatpackers engaged in landscape initiatives have provided assistance to their direct suppliers to comply with Brazil's Forest Code. They provide technical assistance to farmers to register their farms in the CAR and to submit necessary land-use documents to the environmental regularization programme. In the case of the Juruena Valley PCI Compact, the investment of Carrefour and IDH to create the Sustainable Production of Calves started

BOX 4
MEATPACKERS SUPPORT SUPPLIERS AT LANDSCAPE SCALE

Pressure from NGOs and Brazil's Federal Public Prosecutor's Offices encouraged two of the largest meatpackers in the country to commit to no deforestation practices and to halting purchases from suppliers linked to illegal deforestation (see also [Section 1.3](#)). The companies aim to achieve full supply chain traceability and support all suppliers, including smallholders, to produce legally and without deforestation.

Marfrig has a deforestation-free sourcing policy and is one of the founders of the PCI Institute in Mato Grosso (PCI Institute n.d.). Through an agreement with Andgreen, Marfrig supports IDH in piloting its Sustainable Production of Calves Program in the state (IDH 2021a). Through this initiative it also provides technical assistance and support for land and environmental legalization for smallholders in the Juruena Valley, where the programme is being developed (Marfrig 2022b).

JBS has set up 19 Green Offices to provide support for farmers in five states in Brazil, including Mato Grosso and Pará. It is also collaborating with IDH to register by 2025 one million animals that are traceable from breeding onwards (SourceUp n.d.). The company supports landscape initiatives led by IDH in Juruena Valley and Barra do Garças.

in 2018 immediately after the goals of the PCI Compact were set by the local multi-stakeholder coalition. The programme was created with a focus on the inclusion of smallholder cattle ranchers in the socioeconomic system.



SUPPORTING SUPPLIERS TO IMPLEMENT SUSTAINABLE PRACTICES

Companies have supported their suppliers (either with in-kind assistance or financial support to implementation partners) to provide technical assistance to improve pasture and animal management. For example, Minerva’s Renove programme provides training and technical support for farmers to implement climate-smart practices that can contribute to increasing yield and profit. The plan is to connect the programme to the goals as stated in Mato Grosso’s PCI Strategy; the programme has recently supported farmers at the municipality level in Mato Grosso.

The implementation of the Sustainable Production of Calves Program (see [Section 3.1](#)) started in the Jurueña Valley PCI Compact as a prototype of possible solutions for improving the living income of the smallholder producers of calves in the region. It has been expanded to calf producers in Araguaia Valley and Pantanal, with the support of downstream companies, such as Carrefour through its corporate foundation.



COMPANIES HAVE SUPPORTED THEIR SUPPLIERS TO PROVIDE TECHNICAL ASSISTANCE TO IMPROVE PASTURE AND ANIMAL MANAGEMENT.

BOX 5

MULTI-STAKEHOLDER COLLABORATION FOR SUSTAINABLE PRODUCTION IN TOCANTINS

The Brazilian state of Tocantins saw almost 2.3 million ha converted to agricultural uses between 2005 and 2017, one of the highest rates in the country over that period (Ferreira and Marques 2020). Half of the total 15.2 million ha of agricultural land in Tocantins is already degraded (IBGE 2017), and farmers obtain low yields and practice unsustainable farming (Conservation International 2022). Consequently, the state’s agricultural research agency Embrapa developed a public policy, the ABC+ programme, to promote sustainable agricultural practices that can mitigate GHG emissions (Embrapa n. d.).

Conservation International is collaborating with Embrapa in a landscape initiative to promote low-carbon and regenerative production of beef and soy in six municipalities in the Tocantins part of the Cerrado biome. The initiative aims to avoid deforestation by supporting farmers to adopt practices aligned with the ABC+ programme, encourage agricultural production in degraded areas and improve land-use management. The initiative also raises awareness among farmers and ranchers of credit mechanisms and builds their capacity to access them.

The cross-commodity initiative has been supported since 2022 by one downstream company sourcing beef and two sourcing soy. The initiative has built the capacity of 53 rural producers and 40 rural extension experts on almost 60,000 ha for implementing low-carbon, regenerative soy and beef farming practices (CGF FPCoA 2023a).

3.3 MONITORING AND REPORTING ON LANDSCAPE PROGRESS



The implementers of the landscape initiatives report progress towards landscape goals mainly through two frameworks: the PCI Institute’s [dashboard](#) (which is planned to be updated in 2024 with a new monitoring platform on the PCI website) and [SourceUp](#).

The PCI Institute dashboard tracks Mato Grosso’s shared goals (see [Box 2](#)); five of the seven beef landscape initiatives identified in this study are located in the state. It has tracked 16 of the 21 metrics since 2015, with 2021 data the most recent. In 2023, the PCI Institute, supported by the REDD Early Movers Program, is expanding its monitoring to cover all the 141 municipalities of Mato Grosso. The goal is to monitor all 38 indicators from the PCI Strategy at municipality level and track and report progress of the PCI Strategy at a regional level – the municipalities are grouped into four regions.

The second monitoring framework is [SourceUp](#), a platform established and used by IDH to report on progress globally. In Mato Grosso, the platform monitors the municipalities of Jurvena Valley, Sorriso and Barra do Garças, as well as the region of Balsas in Maranhão state.

The CGF FPCoA has also developed a [landscape reporting framework](#), building on a model formulated by Proforest and ISEAL for Unilever, PepsiCo and Nestlé (CGF FPCoA 2023b).

This framework allows the Coalition to aggregate the progress made by landscape initiatives engaged by members using metrics related to natural ecosystem conservation, farmer production and livelihoods and multi-stakeholder partnerships. In 2022, one landscape initiative focusing on beef used this framework to report to the CGF FPCoA.

4. PATHWAYS FOR CORPORATE ENGAGEMENT IN BEEF LANDSCAPES



As with other commodities, downstream and midstream companies sourcing beef are using landscape approaches to help them meet their sustainability commitments. Three factors influence the uptake of these approaches by these companies. First is the complexity of the supply chain, which includes multiple actors operating over wide areas – often across subnational jurisdictions – as cattle move across multiple sites during their lifetime (see [Section 1.2](#)). This creates limited traceability across the supply chains. Such fragmented supply bases increases exponentially the need to focus on suppliers, particularly indirect ones, at landscape and jurisdictional scale to avoid leakage.

“

DOWNSTREAM AND MIDSTREAM COMPANIES SOURCING BEEF ARE USING LANDSCAPE APPROACHES TO HELP THEM MEET THEIR SUSTAINABILITY COMMITMENTS.

Second, other sustainability solutions – those that companies traditionally rely on to ensure their purchases are sustainability produced – are limited in cattle; there is not yet a globally accepted certification system for beef.

Third, global buyers requiring products without deforestation consume a limited amount of beef from tropical countries (see [Section 1.2](#)) and as such have limited commercial influence.

Section 4.1 present lessons from corporate engagement in beef production landscapes and opportunities to further scale and leverage action. Challenges in mobilizing additional corporate action at landscape scale are presented in Section 4.2, followed by recommendations for companies and the wider community supporting landscape approaches in Section 4.3.

4.1 LESSONS AND OPPORTUNITIES

JURISDICTIONAL PLATFORMS MOBILIZE CORPORATE LANDSCAPE-SCALE ACTION

The presence of the PCI Institute, the jurisdictional platform in Mato Grosso, has succeeded in attracting companies to support action both at state and at municipality level. The PCI Institute has clear goals and is supported by a repository of initiatives to achieve them. It has a solid multi-stakeholder governance structure that allows efforts to be coordinated among stakeholders including companies, donors and CSOs. Its transparent monitoring system has built credibility related to the progress made towards shared goals at jurisdictional scale.

Other initiatives exist with which companies can engage, for example the Sustainable Territories Platform in Pará (see [Box 6](#)) and emerging jurisdictional initiatives in Gran Chaco, South America's second-largest forest area after the Amazon rainforests.

PRECOMPETITIVE COALITIONS UNLOCK COLLECTIVE ACTION

Precompetitive coalitions have successfully unlocked collective action and financing for landscape initiatives. The CGF FPCoA succeeded in bringing more company investment into landscape-scale action for beef in Brazil (see [Section 3.1](#)). It is expected that additional members will invest in beef landscape initiatives as the Coalition is set to scale up landscape-level action from 2024 (CGF FPCoA 2021).

Meatpackers who signed the Agriculture Sector Roadmap to 1.5°C (see [Section 1.3](#)) have also prioritized collaborative action, particularly to assist cattle ranchers in their decarbonization journey and to strengthen the enabling conditions for transformation to sustainable cattle production.

Collaboration between companies in the beef sector in initiatives such as Beef on Track, CNA Calves Protocol and the Cerrado Protocol could provide opportunities to expand private sector engagement in landscape initiatives. Engagement of downstream companies – and their coalitions – that source other cattle products such as leather and dairy (see Lesson 4) presents a similar opportunity.

BOX 6

SUSTAINABLE TERRITORIES PLATFORM IN PARÁ

The [Sustainable Territories Platform](#) was created in 2021 as a multi-stakeholder space to coordinate efforts to support Pará's transition to low-carbon development. It helps to operationalize and contribute to Pará's Amazon Now State Plan, launched at COP 25 in 2019 (TFA 2021).

The platform aims to promote environmental planning and land-use planning, strengthen sustainable commodity production and access to markets, and foster inclusive social development. It is managed by the state agencies for the environment and sustainability, land and agriculture, the state bank, The Nature Conservancy, Humanize and TFA (Sustainable Territories Platform n.d.).

Since its establishment, the Sustainable Territories Platform has set indicators and goals related to environmental and land regularization, market access and local capacity building, among others (TFA and MN Socioflorestal 2022). The indicators are monitored at state level and are reported on the platform, which also lists initiatives companies can invest in.

LANDSCAPE-SCALE ACTION CAN HELP ENGAGE INDIRECT SUPPLIERS

The inclusion of indirect cattle suppliers is one of the key drivers for companies to engage at landscape scale (see [Section 2.3](#)). Traceability across cattle supply chains is often challenging and limited, and consequently downstream companies take landscape-scale action to enable them to reach ranchers, including small-scale farmers who breed and rear cattle. Their expectation is that some of these farmers may be supplying them indirectly. This is observed, for example, in the Sustainable Production of Calves Program embedded in IDH's landscape initiatives (see [Section 3.1](#)).

Midstream companies can also take a similar approach. The number of farmers indirectly supplying JBS, Marfrig and Minerva, Brazil's largest meatpackers, in Mato Grosso and Pará is estimated to be between two to five times that of their direct

suppliers in those states (Chain Reaction Research 2022). And while nearly 80 percent of direct suppliers sell only to one of these three meatpackers, indirect suppliers tend to supply all three (Chain Reaction Research 2022).

As such, the expansion of meatpackers' sustainability programmes to include indirect suppliers, such as observed in Juruena Valley in Mato Grosso, can help all midstream and downstream companies sourcing from the region. Downstream companies can contribute to these efforts through financing landscape and jurisdictional initiatives.

COMPANIES SOURCING OTHER CATTLE PRODUCTS CAN BENEFIT FROM LANDSCAPE-SCALE ACTION

Companies sourcing cattle products other than beef, such as biofuel and leather, also have sustainability commitments. The Textile Exchange, a global platform with over 800 brands, manufacturers, farmers and retailers across the fashion, textile and apparel industry, has, in collaboration with the Leather Working Group, called on brands to take action in order to ensure leather is deforestation free by 2030 (Accesswire 2023).

Leather is included in the EUDR's list of products that cannot be linked to deforestation occurring after 2020. The law is expected to be implemented from end 2024. Some NGOs have called on the EU to expand the scope of the EUDR from deforestation to also include conversion of other natural ecosystems, in order to include biomes such as the Cerrado (Mongabay 2022b).

Companies sourcing these non-beef cattle products can also benefit from multi-stakeholder collaboration at landscape and jurisdictional scale. It can help them improve traceability to reach indirect suppliers and ensure compliance. By engaging companies sourcing non-beef cattle products stakeholders in landscape initiatives can accelerate progress on the ground. One company interviewed for this study sources leather and stated they intended to take landscape-scale action in the next two years.

NEW POLITICAL LEADERSHIP AND ENVIRONMENTAL POLICIES CAN CREATE POSITIVE CHANGE

Political context greatly influences what can be achieved. Even before Brazil's new government was installed in January 2023, the then president-elect Luiz Inácio Lula da Silva pledged during COP 27 to achieve zero deforestation and degradation by 2030 (Mongabay 2022a). In June 2023, as president, he launched the new version of the Action Plan for the Prevention and Control of Deforestation in the Legal Amazon (PPCDAm); he intends to issue a similar action plan for the Cerrado later in 2023 (Brown 2023a). Within the first seven months of the new administration, deforestation in the Amazon dropped by 42% compared to the same period in 2022. However, in the same period, deforestation in the Cerrado biome increased by 19% to 5,071 km² (Brown 2023a).

At the Amazon Summit in Belém in August 2023, the eight countries of the Amazon Cooperation Treaty (ACTO), which guides regional cooperation across the Amazon, highlighted in their summit declaration the importance of protecting rainforests (ACTO 2023). The countries agreed to drive sustainable development across the region (ACTO 2023), but did not agree on zero-deforestation targets (Brown 2023b).

The buy-in and action of national and subnational governments around the sustainable development agenda are invaluable for mainstreaming sustainability practices on the ground and in domestic markets, which consume most of the beef produced in the countries in which landscape initiatives were identified. Government action is also likely to attract interest and support from companies and consumer countries.



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4.2 CHALLENGES

The number of downstream and midstream companies taking landscape-scale action in cattle is still small compared to other commodities – 5 companies in cattle compared to 62 in palm oil, 29 in cocoa and 26 in pulp, paper and packaging (TFA et al. 2023a, b, c). This section presents some of the challenges in engaging at landscape and jurisdictional scale for cattle sustainability.

LOW NUMBER OF COMPANIES WITH SUSTAINABILITY COMMITMENTS

Corporate commitments are a key driver for companies to engage at landscape scale (see [Section 2.3](#)). However, compared to other commodities, a relatively low number of companies have specific sustainability commitments related to cattle production. Only 30% of companies sourcing beef and 28% sourcing leather have deforestation commitments, compared to 72% in palm oil and 49% in pulp and paper, according to a 2022 analysis of 350 companies with the greatest exposure to deforestation risk (Forest 500 2022).

COLLABORATION AMONG COMPANIES IS LIMITED AND PROGRESSING SLOWLY AT LANDSCAPE LEVEL

Lack of traceability on cattle-derived products also presents a challenge for companies to scale up landscape-scale investments, as companies initially seek to link their investments with their supply chains. However, some downstream companies have engaged with landscape initiatives in regions where there are risks of deforestation and conversion that are not clearly connected to their own supply chains.

While several companies have invested in areas not confirmed to be linked to their supply chains, collaboration between meatpackers and their peers and downstream companies has only materialized in

two landscape initiatives, namely Juruena Valley and Barra do Garças. These collaborations involve the largest meatpackers and multinational retailers and manufacturers only; no medium-sized meatpackers or national companies have joined these initiatives yet.

LACK OF UNDERSTANDING OF LANDSCAPE APPROACHES

Based on CDP analysis (see [Annex 1](#) for methodology), less than 20% of the companies claiming to CDP that they engage in beef landscape initiatives actually invest in qualifying initiatives (see [Section 2.2](#)).

Most of the non-qualifying initiatives lack the engagement of other stakeholders in the landscape; multi-stakeholder engagement is key to ensuring there is local buy-in, that responsibility and goals are shared and outcomes sustained. Multi-stakeholder engagement is part of the definition of a landscape initiative employed by CDP and in this brief.

Some lack of understanding is to be expected considering landscape-scale action is a fairly recent phenomenon; two of the five companies engaged only in 2023. Peer-to-peer sharing with companies with longer experience and exchanges with the wider community of stakeholders in landscape and jurisdictional approaches can help to address this.

BEEF FARMERS HAVE LIMITED INCENTIVES TO ENGAGE MULTI-STAKEHOLDER PLATFORMS

Many beef farmers in Brazil are not used to participating in multi-stakeholder platforms and lack incentives to join these spaces.

One reason could be the topic being discussed: ranchers may be more interested in participating in forums sharing knowledge of farming practices, rather than in discussions around strategies to achieve no deforestation in the sector. As markets with no-conversion requirements only source a relatively small volume from Brazil, farmers lack clear commercial benefits to make the efforts necessary to ensure their cattle do not contribute to deforestation or conversion.



ONLY 30% OF COMPANIES SOURCING BEEF AND 28% SOURCING LEATHER HAVE DEFORESTATION COMMITMENTS, COMPARED TO 72% IN PALM OIL AND 49% IN PULP AND PAPER

4.3 RECOMMENDATIONS

Section 4.3 provides one set of recommendations for downstream and midstream companies and another for all stakeholders interested in progressing towards a nature- and people-positive future in cattle production landscapes. These recommendations focus on actions that will have impact in the short term – within the next three years – to mobilize more landscape-scale action from downstream and midstream companies.

4.3.1 RECOMMENDATIONS FOR COMPANIES

CONTINUE AND INCREASE LANDSCAPE-SCALE ACTION

Companies sourcing cattle products, including beef, should continue to increase their landscape-scale action to enable them to meet their sustainability commitments in the short and long term. Landscape and jurisdictional initiatives can provide the platforms for advanced piloting or roll-out of traceability and forest monitoring systems at scale, reducing costs and increasing impact, particularly as regulations such as the EUDR come into force. Successful pilots will support the business case for integrating landscape-scale action into companies' sustainability strategies.



LANDSCAPE AND JURISDICTIONAL INITIATIVES CAN PROVIDE THE PLATFORMS FOR ADVANCED PILOTING OR ROLL-OUT OF TRACEABILITY AND FOREST MONITORING SYSTEMS AT SCALE, REDUCING COSTS AND INCREASING IMPACT, PARTICULARLY AS REGULATIONS SUCH AS THE EUDR COME INTO FORCE.

Other opportunities to build the business case for landscape-scale action lie in the climate space, as companies commit to reducing their GHG emissions under frameworks such as the Science Based Target initiative's (SBTi) Net Zero targets. The beef sector is a major source of GHG emissions from deforestation (see [Section 1.2](#)), but studies show there is potential to reduce this, for example by 75% per kilogram of a calf in a study conducted with smallholders in Pará (Solidaridad 2019).

The guidance to determine what actions will count for corporate emissions reduction is still being developed and how it will apply to cattle is unclear, due to the commodity's long supply chain and expansive production areas. This is a space to watch.

ENHANCE COLLABORATION WITH PEERS, SUPPLIERS AND BUYERS AT LANDSCAPE SCALE

Collaboration between peers and with suppliers and buyers at landscape scale is limited in beef, even though companies face similar challenges, including compliance with consumer regulations such as the EUDR. There is, however, solid scope for collaboration. For example, meatpackers and their direct suppliers and downstream companies could map areas where there is likely to be overlap in indirect supply chains and take action at landscape level to address traceability and monitor deforestation.

Downstream companies taking landscape-scale action could be proactive in encouraging their suppliers and other downstream companies to collaborate by showcasing the benefits of doing so.

This can be achieved through peer-to-peer dialogue in coalitions such as the CGF FPCoA or the Cerrado Manifesto, and through commercial relationships with medium- and smaller-sized meatpackers, starting with those that are already engaged in sectoral initiatives.

LINK COMPANIES' SUSTAINABILITY PROGRAMMES WITH LANDSCAPE AND JURISDICTIONAL INITIATIVES

Companies, particularly those, such as meatpackers, with operations in production landscapes and typically already engaging with other stakeholders, can strengthen and accelerate progress towards sustainability at scale by aligning their own corporate programmes and ongoing stakeholder engagement with landscape and jurisdictional initiatives.

Existing initiatives could benefit as meatpackers have much to offer in terms of experience, technical expertise and potentially data and all companies have much to gain from collaboration, which can unlock additional funding.



Such collaboration has started, for example in landscape initiatives in Jurueña Valley and Barra do Garças (see [Box 4](#)). Companies could expand their investments to regions where there is already interest and favourable conditions including local government commitment, such as Pará in Brazil (see [Box 6](#)), Jalisco in Mexico and the Argentinian part of Gran Chaco (see [Annex 4](#) for a list of landscape and jurisdictional platforms and initiatives that are not yet supported by downstream and midstream companies).

COLLABORATE WITH BUYERS OF OTHER CATTLE PRODUCTS, SOY AND OTHER COMMODITIES

Companies sourcing soy, either directly or embedded in other products, share similar sustainability goals as those buying beef, and area-based frameworks like the Amazon and Cerrado protocols cover deforestation across both commodities.

The overlap between the two commodities is clear: four of the seven landscape initiatives supported by companies sourcing beef are also supported by soy buyers (see [Section 2.2](#)). These include Conservation International’s landscape initiative in Tocantins, and the PCI Institute as the platform coordinating efforts in Mato Grosso, which has large areas of soy, including in the municipalities of

Sorriso, Tangará da Serra and Barra do Garças. Companies should identify areas where there is a high risk that beef and soy production will cause deforestation and where there are already initiatives and active stakeholders. They could scale up existing landscape initiatives or develop new ones.

Collaboration with buyers of cattle products such as leather (see [Section 4.1](#)) and other commodities is another opportunity to be explored.

SUPPORT MULTI-STAKEHOLDER PROCESSES AND PLATFORMS

Companies should focus their efforts to support committed and progressing subnational jurisdictions and regions in order to drive down costs and extend the impact. For example, downstream companies and meatpackers can support efforts to replicate PCI Mato Grosso processes to develop shared goals at municipality level. Such efforts have been observed in initiatives supported by beef and soy buyers such as in Jurueña Valley, Barra do Garças and Western Mato Grosso, and can be expanded to other municipalities. Companies can also support existing multi-stakeholder processes and/or platforms in other states, such as Pará in Brazil, which currently is yet to be supported by a downstream or midstream company, as well as emerging initiatives, such as in Jalisco in Mexico.

4.3.2 RECOMMENDATIONS FOR ALL STAKEHOLDERS

ENGAGE SECTORAL COALITIONS TO PROMOTE MULTI-STAKEHOLDER COLLABORATION AT LANDSCAPE SCALE

Several sectoral initiatives, such as Beef on Track and the Brazilian Beef Exporters Association (see [Section 1.3](#)), already promote sustainable beef production and focus their efforts on improving traceability and supporting smallholders. There is scope for them to introduce and promote landscape and jurisdictional approaches as a strategy to address systemic issues at scale in cattle production areas.

As stakeholders in these sectoral coalitions are already engaging and collaborating with others, there is a great opportunity to build on, transfer and link this multi-stakeholder collaboration to specific landscapes or jurisdictions.



FINDING AND DEVELOPING SHARED GOALS AND PRESENTING A CLEAR NARRATIVE THAT EXCITES AND RESONATES WITH DIFFERENT STAKEHOLDER GROUPS IS CRUCIAL.

DIRECT SOURCES OF FUNDING TO COMMITTED AND PROGRESSING JURISDICTIONS

Stakeholders interested in addressing deforestation and achieving sustainable land use in cattle production landscapes should also align their efforts. Consumer countries or blocs could align their support and direct it to subnational jurisdictions where existing multi-stakeholder processes and initiatives have made progress; this support can help jurisdictions comply with upcoming regulations such as the EUDR.

Another opportunity is to align efforts to attain sustainable commodity production with efforts related to climate mitigation. This could include the efforts of downstream and midstream companies sourcing beef (see [Recommendation 1](#) for companies) as well as others, for example those that have committed to buy forest carbon credits at jurisdictional scale, known as JREDD+ credits.

Mato Grosso and Pará have both expressed interest to supply carbon credits to the Lowering



Emissions by Accelerating Forest Finance (LEAF) Coalition, which includes companies such as Amazon and Salesforce. The LEAF Coalition has committed to purchasing \$1.5 billion of JREDD+ credits (Emergent 2022). Other companies have also taken action, for example Mercuria Trading, which signed an agreement with Brazil's Tocantins state, where Conservation International is implementing a landscape initiative, to help them prepare to supply JREDD+ credits (Governo do Tocantins 2023; Mercuria 2023).

FIND SHARED GOALS AND NARRATIVES THAT RESONATE WITH LOCAL STAKEHOLDERS

Finding and developing shared goals and presenting a clear narrative that excites and resonates with different stakeholder groups is crucial. It will help stakeholders to work together and will accelerate progress. For example, in Brazil, beef sourcing companies, environmental NGOs and the government are aligned in the need to tackle deforestation, albeit for different reasons. Compliance to the Forest Code, a legal requirement for all producers, could be a shared goal and narrative around which to develop collaboration at scale. Shaping a narrative and support around this shared goal could be a major step towards other goals, for example zero deforestation, and builds trust and buy-in among stakeholders on the ground.

ANNEX 1

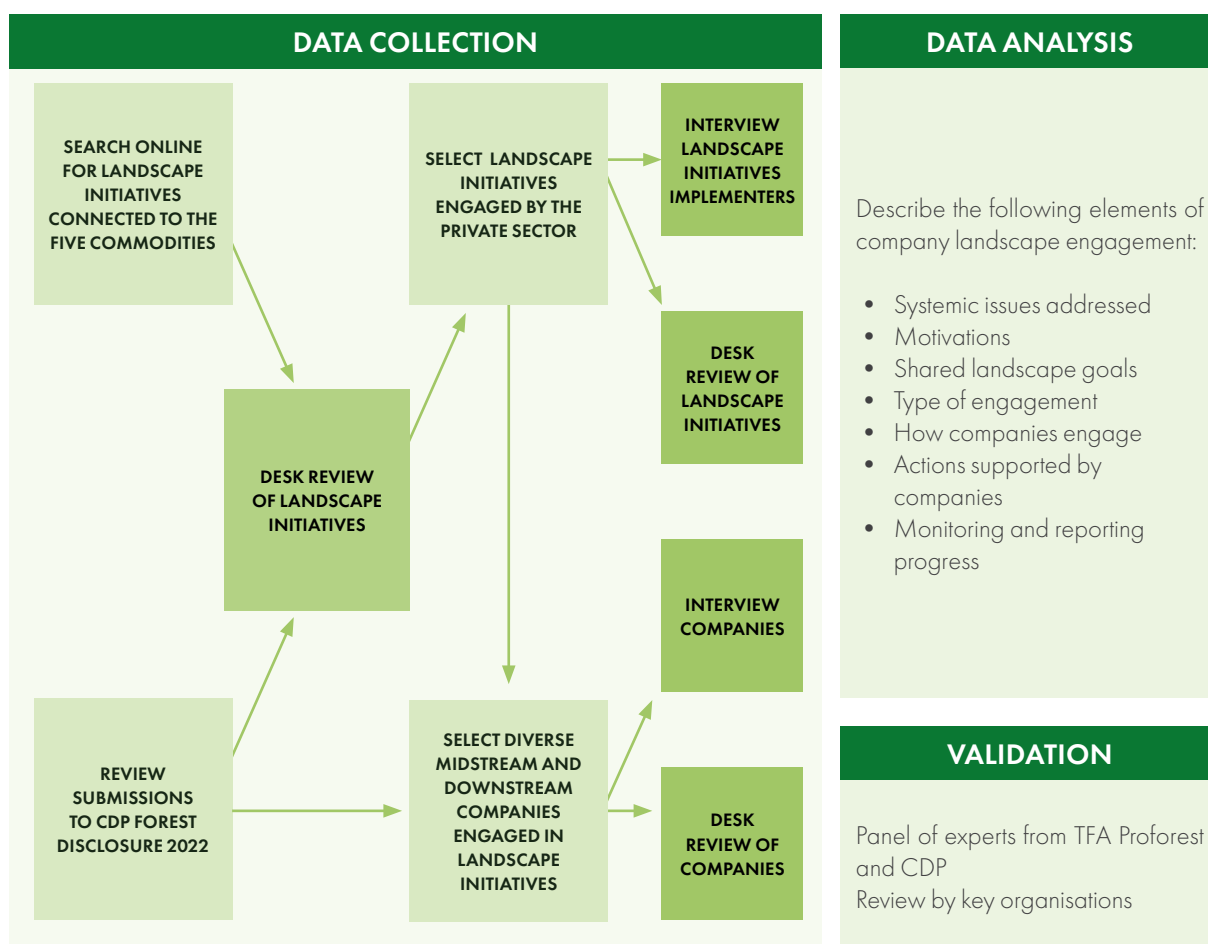
METHODOLOGY

This paper is part of a global study on private sector engagement at landscape scale that aims to advance understanding of the use of landscape and jurisdictional approaches as a key corporate strategy towards nature-positive businesses.

The study also aims to map the way forward to mobilize more landscape-scale action by downstream

and midstream companies and multi-stakeholder collaboration at scale. Through interviews, desk-top research and analysis of company submissions to CDP's forest questionnaire in 2022, the study explores why and how manufacturers, retailers and traders have used landscape and jurisdictional approaches to address deforestation driven by palm oil, cocoa, soy, beef, and pulp and paper.

ANNEX FIGURE 1.1 METHODOLOGY FOR COMMODITY-SPECIFIC BRIEFS



Recognizing that landscape engagement is relatively new for many companies, CDP reviewed all submissions to assess whether the programmes met the basic CDP criteria for landscape and

jurisdictional initiatives. Qualifying landscape initiatives are those that provide evidence of multi-stakeholder processes and collective goals for a defined territory.

ANNEX FIGURE 1.2 CDP CRITERIA FOR LANDSCAPE INITIATIVES



1. The scale of the approach is an environmental, productive, or geopolitical landscape/jurisdiction.

Heterogeneous land area composed of multiple and interacting ecosystems, people, functions, authorities, and land uses that are repeated in a similar form throughout.

BUILD BASED ON A SHARED LONG-TERM VISION OF SUSTAINABILITY AND INTEGRATED IN A MANAGEMENT STRATEGY OR ACTION PLAN WITH:



2. Multiple local stakeholder groups participate

in processes/platforms of discussion and decision making.



3. Collective goals and actions

on sustainable production (e.g. commodities), human well-being, and conservation.



4. Transparent reporting or information systems

on actions and progress are established and collectively acknowledged.

Source: CDP

The information provided by companies and the facilitators of landscape initiatives was codified, anonymized and analysed to identify lessons learnt, challenges and recommendations. A group of experts from CDP, TFA and Proforest provided inputs to preliminary findings and recommendations. The

report also benefits from input into an advanced draft from representatives from the private sector, implementers of landscape initiatives, and other experts.

ANNEX 2

COMPANIES TAKING LANDSCAPE-SCALE ACTION IN BEEF

The study identified meatpackers, manufacturers and retailers that have invested in landscape and jurisdictional initiatives focused on achieving sustainable land use and beef production at scale. The list

of companies investing in qualifying initiatives in Annex Table 2.1 is derived from desktop research, interviews and company submissions to CDP's forest questionnaire of 2022; it is not exhaustive.

	COMPANY*	BUSINESS TYPE	COUNTRY OF ENGAGEMENT
1	Carrefour	Retailer	Brazil
2	JBS	Meat packer	Brazil
3	Marfrig	Meat packer	Brazil
4	Neste	Manufacturer	Brazil
5	Walmart	Retailer	Brazil

* Not all companies listed here reported to CDP's forest questionnaire of 2022.
Source: Published corporate reports and interviews.

ANNEX 3

BEEF LANDSCAPE INITIATIVES SUPPORTED BY SECTOR COMPANIES

Annex Table 3.1 is a non-exhaustive list of landscape initiatives supported by downstream, midstream and integrated companies sourcing beef (see [Annex 2](#) for the list of companies). These landscape initiatives

are aligned with the definition used in this study ([Box 1](#)) and focus on achieving shared sustainable goals for land use and cattle production at scale and beyond individual corporate supply chains.

#	LANDSCAPE INITIATIVE	COUNTRY	JURISDICTION	IMPLEMENTER	COALITION/ PLATFORM	COMMODITY	STARTING YEAR
1	PCI Institute	Brazil	Mato Grosso	PCI Institute	n.a.	Beef, soy, planted forests, timber, cotton, cocoa	2015
2	Liga do Araguaia	Brazil	Mato Grosso	Instituto Agroambienta, Imaflora	PCI Institute	Beef	2017
3	PCI Compact Juruena Valley	Brazil	Mato Grosso	IDH and PCI Institute	CGF FPCoA	Beef, cocoa	2018
4	PCI Compact Barra do Garças	Brazil	Mato Grosso	IDH, The Nature Conservancy and PCI Institute	PCI Institute	Beef, soy, other grains	2019
5	PCI Tangará da Serra	Brazil	Mato Grosso	PCI Institute and IPAM	PCI Institute	Beef, soy, cotton	2021
6	Low-carbon Regenerative Commodity Production in the Cerrado Biome	Brazil	Tocantins	Conservation International	CGF FPCoA	Beef, soy	2022
7	Transamazonica Connections	Brazil	Pará	Solidaridad, Imaflora, Proforest	CGF FPCoA	Beef	2023

Source: Published corporate reports and interviews.

ANNEX 4

BEEF LANDSCAPE INITIATIVES YET TO BE SUPPORTED BY COMPANIES

Annex Table 3.1 is a non-exhaustive list of landscape initiatives supported by downstream, midstream and integrated companies sourcing beef (see [Annex 2](#) for the list of companies). These landscape initiatives

are aligned with the definition used in this study ([Box 1](#)) and focus on achieving shared sustainable goals for land use and cattle production at scale and beyond individual corporate supply chains.

#	INITIATIVES	COUNTRY	JURISDICTION	IMPLEMENTER	COMMODITY
1	PCI Compact Balsa	Brazil	12 municipalities in Balsas, Maranhão	IDH and NatCap	Beef, soy, cotton and smallholder produce such as cassava
2	PCI Compact Sorriso	Brazil	Sorriso municipality, Mato Grosso	IDH and NatCap	Beef, soy, cotton, biofuel
3	Western Mato Grosso	Brazil	Six municipalities in Mato Grosso	IPAM, Produzindo Certo, Proforest	(soy buyers engaged, corn ethanol engaged)
4	TerrAmaz	Brazil	Paragominas, Pará	CIRAD, Imaflora	Beef, soy, timber
5	São Félix do Xingu Jurisdictional approach	Brazil	São Félix do Xingu, Pará	The Nature Conservancy	Beef, cocoa
6	GCF Jalisco	Mexico	Jalisco	Fondo Noreste A.C.	Beef
7	Sustainable Territories Platform	Brazil	Pará	Pará state government	Beef
8	Nascentes do Pantanal	Brazil	Rochedo, Corguinho e Rio Negro	WWF, Boviplan	Beef
9	FIP Paisagens Rurais	Brazil		Serviço Nacional de Aprendizagem Rural, GIZ	Beef
10	Créditos REDD+ jurisdiccionales de alta integridad a la Coalición LEAF	Colombia	Departamento de Chocó	LEAF Coalition, NICFI	Beef, forestry
11	Amazonia Connect	Colombia	Departamento de Caquetá	Solidaridad, USAID, University of Michigan, Earth Innovation Institute	Cattle, coffee
12	Rare	Colombia	Departamento de Meta	Rare	Beef, cocoa
13	Kering Regenerative Fund for Nature	Argentina	Salta	Solidaridad	Beef, leather
14	Alliance for Regenerative Cattle in Peruvian Amazon	Peru	Iñapari, Madre de Dios	WWF	Beef

Source: Published reports and interviews.

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ABOUT TROPICAL FOREST ALLIANCE

The Tropical Forest Alliance is a multi-stakeholder partnership platform initiated to support the implementation of private sector commitments to remove deforestation from palm oil, beef, soy, cocoa and pulp and paper supply chains. Hosted by the World Economic Forum, our 170+ alliance partners include companies, government entities, civil society, Indigenous Peoples, local communities and international organizations. With our partners, TFA works to mobilize collective action to advance the world's transition to deforestation-free commodity production. TFA hosts and manages the Jurisdictional Action Network of 2,200+ proponents of landscape and jurisdictional approaches to achieve sustainability at scale and the [JA Resource Hub](#). Visit www.tropicalforestalliance.org.



ABOUT PROFOREST

Proforest is a global mission-driven organization, focused on the production base and supply chains of agricultural and forestry commodities including soy, sugar, rubber, palm oil, cocoa, coconut, beef and timber. We support companies with direct action to tackle environmental and social risks throughout a supply chain. We also work with governments, companies, and collaborative organisations, in order to address systemic issues beyond the supply chain, within a landscape or a sector, to deliver positive outcomes at scale for people, nature and climate. For more information: www.proforest.net or follow us @proforest.



ABOUT CDP

CDP is a global non-profit that runs the biggest world's environmental disclosure system for companies, cities, states and regions. Founded in 2000 and working with more than 680 financial institutions with over \$130 trillion in assets, CDP pioneered using capital markets and corporate procurement to motivate companies to disclose their environmental impacts, and to reduce GHG emissions, safeguard water resources and protect forests. Fully TFCF aligned, CDP scores are widely used to drive investment and procurement decisions towards a zero carbon, sustainable and resilient economy. CDP is a founding member of the Science Based Targets initiative, We Mean Business Coalition, The Investor Agenda and the Net Zero Asset Managers initiative. Visit cdp.net or follow @CDP to find out more.