

# Opportunities for deforestation-free supply chains through producer-consumer country partnerships

ISABELLA FREIRE

CECÍLIA KORBER GONÇALVES

PAULIEN DENIS

CAROLLE ALARCON



**APD**

DIÁLOGO AGROPOLÍTICO BRASIL · ALEMANHA  
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SCN Quadra 1 Bloco C salas 1102-1104

Ed. Brasília Trade Center Brasília - DF

+55 61 9 9964-3731

[contato@apd-brasil.de](mailto:contato@apd-brasil.de)

[www.apdbrasil.de](http://www.apdbrasil.de)

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ISABELLA FREIRE  
CECÍLIA KORBER GONÇALVES  
PAULIEN DENIS  
CAROLLE ALARCON



São Paulo, January 2024.

## ABOUT THIS STUDY

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## AUTHORS

**Isabella Freire** is the Co-Director for Latin America at Proforest. She has 20 years of experience in sustainability in the agribusiness sector, negotiation and establishment of cross-sector partnerships, strategic planning, responsible sourcing of agricultural commodities, policy development and analysis, project design and management, standard development and process facilitation. She established and developed Proforest regional office in Brazil. She holds an MPhil in Environmental Policy from the University of Cambridge and a BA in International Relations from the University of Brasilia.



**Cecília Korber Gonçalves** is Principal Project Manager at Proforest coordinating landscape and collaboration programs, and projects of responsible sourcing of agricultural commodities including cattle and soy. She has over 15 years of experience in large corporations and consultancy in the areas of agricultural supply chains, sustainability, social and environmental certifications, and climate change. She has an MBA in Agribusiness and in Sustainability Management, a Master's degree in Materials Engineering and holds a degree in Chemical Engineering.

**Paulien Denis** is Senior Project Manager at Proforest. She works on responsible sourcing and production of agricultural commodities including cattle, soy, and sugar. She furthermore leads the organization's work on climate, linking Proforest's DCF, regenerative agriculture and landscape work to corporate climate commitments. She has a background in environmental engineering and sustainable territorial development.

**Carolle Alarcon** is the Advocacy Coordinator for the Brazilian Coalition for Climate, Forest, and Agriculture. She holds a Master's degree in Tropical Forestry from the Technical University of Dresden, in Germany, and a Bachelor's degree in Environmental Management from the University of São Paulo. With multifaceted career, Carolle brings a rich cultural and linguistic background to her work at the intersection of environmental conservation and policy with diverse institutions in the Amazon region, as well as Germany and Nepal.

# Table of contents

1. Executive Summary	6
2. Context	8
Current status of soy and cattle supply chains in Brazil	8
Relationship between soy and cattle production and deforestation in Brazil	8
Existing sectoral solutions for deforestation	11
Challenges in traceability and transparency systems in soy and cattle supply chains	13
3. Recent developments in 2023	16
The Brazilian Coalition's traceability efforts	16
The Coalition's latest engagement with the Brazilian government	17
Other governmental developments in 2023	19
4. Scalable solutions for traceability, compliance monitoring, and transparency	21
5. Investment opportunities for Producer-Consumer country partnerships	24
Partnerships to foster investment for EUDR implementation	24
Key investment opportunities for consumer countries in Brazil	25
6. Final considerations	28
7. Acronyms glossary	30
8. References	32



# 1. Executive Summary

The 2022 Deforestation Regulation of the European Union marks a significant stride in combatting deforestation within commodity supply chains. Nevertheless, the compliance requirements for traceability and transparency have left many policy makers and corporations in producer and importer countries in confusion. In the context of Brazil, two key exported commodities affected by this legislation are soy and cattle products, of which a substantial part reaches the borders of the EU. Cattle and soy production in Brazil has been linked to deforestation and other natural ecosystem conversion, in particular in the Amazon and Cerrado biomes.

It is clear that the EUDR will only succeed if it is implemented in cooperation and dialogue with producer countries and stakeholders along the value chain. Through producer-consumer country partnership, synergies can be leveraged, resulting in deforestation-free commodities for the EU, and supporting sustainable deforestation-free landscapes in producer countries. Due to the alignment between Brazilian environmental policies and the EUDR, the regulation can be seen as an opportunity for sustainable agriculture in Brazil to gain scale and conquer a larger market share in Europe. In Brazil there are already several traceability efforts led by the public sector, the private sector, civil society organisations and academia, but these initiatives are fragmented and require the establishment of clear guidelines and governance by the government.

This paper aims to highlight opportunities for producer-consumer country partnerships to advance the implementation of compliant traceability and transparency systems in Brazil. The paper outlines the challenges faced by the cattle and soy sectors and emphasizes the role of private and public initiatives in bringing forward constructive solutions that promote the elimination of illegality and deforestation while avoiding smallholder exclusion and maintaining market stability. This work reflects the discussions held in the Brazilian Coalition's Traceability and Transparency taskforce, which works towards promoting the Brazilian Forest Code implementation, strengthening the national deforestation monitoring systems and building a national traceability and transparency policy that could address the complexity of the productive sectors' supply chains, encompassing both cattle and soy.

The Brazilian Coalition and Proforest present a set of key investment opportunities within the context of producer-consumer country partnerships, directed towards enhancing governance to create an enabling environment for the implementation of traceability, compliance monitoring and transparency systems in Brazil; building a National Traceability and Transparency Policy; establishing batch (short-term) and individual (long-term) traceability systems to cattle supply chains; increase transparency of socioenvironmental compliance for both commodities; advancing environmental registration, supporting supplier reintegration, especially smallholders, facilitating financial and in-kind investments from consumer countries.

## 2. Context

### **Current status of soy and cattle supply chains in Brazil**

In Brazil, which represents 40% of global soybean production (1), soy is produced mostly for export. In 2023, 73% of Brazil's exportation was directed to China, and 6% to Europe (2). Soybean market share is concentrated within the Brazilian Association of Vegetable Oil Industries (ABIOVE) and the National Association of Cereal Exporters (ANEC), which represents the majority of the market. Soy production in Brazil is concentrated in large-scale and mechanized rotational systems with corn. Despite the efforts of these associations in protecting natural ecosystems within the country, soy production is linked with a range of sustainability issues, including deforestation and conversion of natural ecosystems.

Brazil has the second largest cattle herd in the world (3) and plans to increase its production by 16.2% between 2020 and 2030 to meet growing demand (4). Even though only 28% of beef production is exported (5), Brazil is still the largest beef exporter in the world (3). Around 12% of industrialized beef and 7% of offal and others, that are exported from Brazil are directed to the EU market (5). ABIEC, the Brazilian Association of Meat Exporting Industry, gathers companies that represent 98% of exported beef (6). Smallholders play an important role in cattle production, with the latest census in Brazil showing that 80% of the more than 2.5 million farms with cattle were smallholders (7). Similar to soybean production, sustainability issues in cattle farming include deforestation and habitat conversion.

### **Relationship between soy and cattle production and deforestation in Brazil**

Brazil's top position as a producer of agricultural commodities can be attributed to its vast land area and exceptional natural resources. Two biomes that often make headlines are the Amazon, and the slightly lesser known Cerrado. Agricultural expansion, mainly for cattle and soy production, is the main driver of deforestation in the Cerrado (8). According to the National Institute of Spatial Research (INPE) the average deforestation index between 2012 – 2021 was over 8,900 km<sup>2</sup> per year (9).



Yet, the Amazon is still the biome with the highest deforestation rates in Brazil in terms of area. The increasing trend of deforestation that began in 2013 intensified in 2019, and a total of 4.53 million hectares have been deforested just in the period 2019-2022 (10). The two main deforestation drivers in the Amazon are cattle ranching and construction of transport infrastructure. Other minor drivers are worth mentioning, such as large-scale agriculture and logging, mining, hydroelectric power plants, smallholder farming, and bushfires (8). Nevertheless, deforestation hotspots might arise and are dependent on the implementation of the Forest Code and biome-specific legislation.

Importantly, large parts of the Cerrado biome cannot be classified as forest. The current absence of ‘other wooded land’ in the EUDR is likely to create a spillover effect that can accelerate conversion of the Cerrado, intensifying production in these unprotected areas to bypass the EU regulation. Trase reported that regions in the Cerrado where the EU sources soy and beef from, 80% of recent conversion for agricultural expansion was of vegetation not covered by the EUDR (11). The research showed that by limiting the EUDR to forests leaves three quarters of the Cerrado (79 million hectares) unprotected. The research showed that the majority of the EU soy and beef imports are sourced from the Cerrado (12). Almost two thirds of the EU’s soy-related deforestation exposure and more than one third of beef-related deforestation exposure is concentrated there.

The Cerrado’s land dynamics is marked by having a low percentage of protected areas and public land, with private properties predominating, with almost 80% of the area (13). This situation brings important challenges, whether for the conservation of biodiversity or for the recognition of the rights of indigenous peoples and traditional peoples and communities. Between August 2022 and July 2023, 63.47% of all deforestation in the Cerrado occurred within private areas (14), reinforcing the importance of moving forward with the implementation of the Forest Code and establishing sustainable landscapes to drive transformational change in land-use management, deforestation, smallholder livelihoods, respect for Indigenous Peoples and local communities, and labour issues.



## The Brazilian Forest Code

The central piece of Brazilian legislation regulating land use and management on private properties is the Forest Code. Its core goal is to promote environmental conservation, agricultural production and socioeconomic development. The Code requires landowners to conserve native vegetation on their rural properties, setting aside a legal reserve (RL), a mandatory portion of the rural property that must be maintained with native vegetation depending on the region and the type of biome, as well as APPs (Areas of Permanent Preservation), mainly on hills and around water bodies. Since 2010 it is mandatory for all rural properties to be mapped and registered through a government system known as CAR (Rural Environmental Registry). The Forest Code is a fundamental instrument to limit further agricultural expansion, without compromising production, by creating incentives for rural producers to invest in productivity. However, the implementation of the law is still an important challenge. The environmental regularization of rural properties involves several stages and the intervention of different actors.

The registration, analysis and validation of the CAR are the initial stages. Property owners fill out their own CAR, which has resulted in a high volume and low quality of registrations. Validation is therefore very important, for example by assessing overlap with conservation or indigenous areas. In November 2023 there were 7.24 million registries reported, of which 14.1% has been analyzed by the respective state agencies (15). States also need to regulate and implement the Environmental Regularization Program (PRA), which defines a plan for restoration of the deficit in the native vegetation in rural properties. Not all areas covered by native vegetation are legally protected as the Forest Code allows a certain amount of conversion in private properties, varying according to the biome region: 20% in the Amazon biome, 65% in Cerrado areas within the Legal Amazon<sup>a</sup> and 80% in the rest of the country. There is therefore still a considerable area in Brazil that can be legally deforested.

To implement this legislation in the two main biomes in the country, Brazil has an Action Plan for the Prevention and Control of Deforestation in the Legal Amazon, [PPPCDAm](#), and the Action Plan for the Prevention and Control of Deforestation and Fires in the Cerrado, the [PPCerrado](#). Zero deforestation under these action plans refers to the elimination of illegal deforestation and offsetting

the legal removal of native vegetation and the GHG emissions resulting from it. This is aligned with the Forest Code, which allows deforestation for agriculture on land outside APPs and RL, provided this has been previously authorized by the competent authority and compensated through reforestation. In addition, PPCDAm and PPCerrado provide incentives for the conservation of areas vulnerable to deforestation through economic instruments (16).

However, it is estimated that 99% of deforestation in Brazil shows signs of illegality (17), in this case the high rate of illegality implies that in practice the scope of national legislation, in forested areas, is in practice aligned with the scope of the EUDR. It is important to point out that this level of illegality does not only refer to deforestation on lands that are protected through the Forest Code, but also includes illegal deforestation where a license could have been obtained but was not adequately solicited with local government.

The geospatial data from CAR can be used in the due diligence process by European operators who need to provide the geolocation of all land plots where commodities were produced. CAR data can be cross-referenced with satellite images to prove that products are free from deforestation after December 31, 2020 (15).

## Existing sectoral solutions for deforestation

Despite Brazil's large contribution to tropical deforestation globally, its Forest Code and Rural Environmental Registry are considered a reference in legal frameworks and implementation systems to address deforestation in rural properties. As the main drivers of deforestation, the cattle and soy sectors have seen the development of sectoral deforestation-free agreements focused on the Amazon and multiple efforts to streamline private traceability systems. However, the sectors still face challenges to scale-up Amazon agreements and to implement similar approach for the Cerrado.

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<sup>a</sup> The Legal Amazon comprises the states of Acre, Amapá, Amazonas, Mato Grosso, Pará, Rondônia, Roraima, Tocantins and part of Maranhão (IBGE, 2022).

In the cattle sector, in response to environmental concerns, Terms of Conduct Adjustment<sup>b</sup> (TAC) between the government and the private sector emerged, especially related to illegal deforestation. Part of the cattle sector established in 2009 criteria for compliance with these TACs and through the Public Livestock Commitment, later consolidated in the [Beef on Track](#) Program (18). To promote transformation in the cattle sector, in 2023, ABIEC committed to implement deforestation-free agreements in the Amazon following the Beef on Track program by the end of 2024, and then for other biomes, initially the Cerrado biome. Of 39 member companies, 16 have already adhered to the protocol, representing 63% of total slaughters in Brazil and including the 3 largest meatpackers in the country (19). The [Cerrado Protocol \(version 1.1 for testing\)](#), a voluntary monitoring protocol for cattle suppliers, seeks alignment of the best socioenvironmental monitoring practices for cattle purchases in this biome. The Working Group on Indirect Suppliers, [GTFI](#), promotes viable solutions that enable the monitoring of indirect suppliers, such as private (such as [Conecta and Visipec](#)) and public tools (such as [Selo Verde](#)).

For soybean, all members of ABIOVE and ANEC are signatories to the Soy Moratorium, which is an agreement by grain traders not to purchase soy grown on land deforested after 22 July 2008 in the Amazon. The Soy Moratorium uses the national data base of PRODES, the Program for the Calculation of Deforestation in the Amazon by Satellite. The Moratorium is considered to have contributed significantly to the reduction of deforestation driven by soy in the Amazon (20).

In the Cerrado, ABIOVE and ANEC are committed to verifying soybean maps with the polygons in the PRODES Cerrado and the CAR. This is part of their Socioenvironmental Criteria for Management, Promotion of Production and Purchase of Soy, launched in March 2023, reinforcing their commitment to comply with Brazilian national regulations (21). The pledge entails not sourcing or financing soy grown in areas of the Cerrado illegally deforested or converted after 1 August 2020.

Also, best-in-class voluntary sustainability standards, such as Proterra and RTRS (Roundtable on Responsible Soy), can play an important role as market-based solutions for compliance with national regulations and EUDR criteria, considering segregated chain of custody,

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<sup>b</sup> TAC is a legal instrument in Brazil that allows public authorities, such as environmental agencies, to settle administrative proceedings related to violations or non-compliance with legal and regulatory requirements. TACs are essentially agreements between the authorities and individuals or companies that are under investigation for certain offenses. These agreements outline specific actions or measures that the parties agree to take in order to address the issues at hand. TACs often involve commitments to rectify the environmental, social, or legal impacts of the alleged violations.

clear no-deforestation requirements and cut-off date. However, the availability of such volumes is limited and does not meet the demand. A point of concern is the vast investment that would have to be made for the soybean sector to create specific infrastructure to segregate all the soybeans to be sold to Europe, certified or non-certified soy, to ensure these are not mixed with unverified grains.

According to grain traders, extensive traceability would represent a disproportionate logistical burden. Earthworm foundation estimated this would present an estimated additional cost of € 30 per tonne, or 6% of total value of soybean meal, which is much less than the amount requested in the case of certifications (22). This type of large-scale infrastructure would entail vast investments, that could otherwise have been directed towards actions to combat deforestation in the country. Segregation can furthermore promote the exclusion of certain suppliers and regions, cleaning up the EU supply chain without providing a clear incentive for these excluded suppliers to stop deforesting or start restoring (23).

## **Challenges in traceability and transparency systems in soy and cattle supply chains**

In Brazil, deforestation is concentrated in a small number of municipalities (only 50 accounted for 52% of the total deforested area in Brazil in 2022, with 17 of these municipalities in the state of Pará and 8 in Amazonas (16)). This implies that in order to guarantee a supply without deforestation, to comply with the EUDR while also keeping costs down, the level of traceability must be improved. Traceability provides information on the place of production, from production to storage, processing to trade for soy, and from birth to slaughter for cattle. Compliance with socioenvironmental requirements is determined by analysing the area determined by the geographical coordinates that delimit the polygon of the production area.

Between origin and destination, soy and cattle products are accompanied by documents that can ensure traceability: the [Tax Invoice](#), the proof of transaction that links the tax information of the entities involved; In addition, for cattle, national law requires the emission of an animal transport guide, [GTA](#), which is an official and mandatory document for the intra-district and interstate transit of animals for any purpose. It contains essential information on origin, destination, purpose, species, vaccinations, among others. The GTA aims to ensure that animal transportation is carried out in compliance with

health and safety standards, preventing the spread of diseases and promoting humane treatment of animals during transit. Important to note that GTA is emitted for the batch of animals, not for individual cattle.

It is not mandatory for these documents to have information on the location of the product's origin or to share the information of the previous GTAs. For soy, the commodity may have been produced or stored on another farm, and for cattle, these documents do not include other farms that the cattle might have passed through before. A GTA for a certain animal transfer will not include information about previous GTAs. Therefore, actors further down the supply chain such as meatpackers are dependent on the producers' willingness to inform and transfer data through the whole supply chain.

In addition to databases lacking transparency, standardisation, and integration, and the invisibility of indirect suppliers, deliberate triangulation is often an issue, where the farm that issued the Tax Invoice, or GTA in case of cattle, might not be the origin farm of that soy or cattle being traded. This is common practice to circumvent legal and market restrictions upon rural properties.

### **Monitoring cattle suppliers using GTA and CAR**

In the Beef on Track program and most of the compliance monitoring systems, to monitor the direct supply chain for deforestation, the CAR and the GTA data of animal batches are cross-referenced. Producers that bought the cattle from a fattening or birthing farm, do not have any obligation to share the information of the previous GTAs. Furthermore, these documents are self-declaratory and not necessarily verifiable by the government with the necessary agility. In some States they are issued on paper, and are not even part of a digital database. Indirect cattle suppliers are generally located in regions of greater environmental risk, have smaller herds and limited means to invest in infrastructure and connectivity (17).

A report produced for the Brazilian Coalition (24) states that of 10 million cattle heads, only 3% were identified with GTA-related irregularities, which shows an excellent implementation. It indicates that traceability via GTA can be implemented in the short term, and that is not a barrier to small producers entering the supply chain. In the same report, it is also mentioned that there are gaps in GTA issuance. For example, there are reports of cases of producers selling two or three animals for which they do not issue the GTA. Exceptions could increase with the use of GTAs as a tool for monitoring deforestation, thus endangering sanitary control. There is further resistance to sharing GTA content since it contains personal information protected by privacy law.

Over the past decades, Brazil has demonstrated remarkable progress in implementing individual traceability systems. The Brazilian Service for the Traceability of the Bovine and Bubaline Production Chain (SISBOV) is a concrete example of government efforts to establish reliable tracking standards. In 2002, Brazil created this traceability system to meet international requirements. Membership of the system is not compulsory for all producers, only for those exporting to the EU (17). The traceability system is used for sanitary control, not for addressing socioenvironmental compliance. The animals in this system are individually identified through ear tags containing a bar code. However, SISBOV was not well received by producers, terming it complex, bureaucratic, and expensive. Besides the poor adherence of producers, the application of traceability ear tags is only required ninety days before slaughter or shipment abroad (25).

A study by IPAM, the Amazon Environmental Research Institute, concluded that although considered to be a very distant horizon, individual identification, not necessarily using SISBOV, still appeared as the ideal traceability system. Others point towards the GTA as the best current option for scaling up monitoring of indirect suppliers, especially as a short-term solution (26). The maturity of these systems is not sufficient to provide the necessary traceability data as required by the EUDR as they stand now, because they do not encompass the full supply chain, often omitting indirect suppliers, or not available for all biomes or supply chains. Another hurdle is the limited participation of certain actors in debates on traceability and environmental regularization, as well as in the use of available traceability tools. These actors include indirect suppliers overall, but in also smaller slaughterhouses, as well as tanneries and small-scale producers. The latter are disadvantaged by a lack of technical assistance and internet connection (22).

## 3. Recent developments in 2023

### **The Brazilian Coalition's traceability efforts**

The Brazilian Coalition on Climate, Forests and Agriculture is a coalition composed of 370 representatives from the private sector, financial sector, academia, and civil society. They work to promote synergy between agendas for protection, conservation, sustainable use of natural and planted forests, agriculture, and climate change adaptation. The dialogue among the members of the Brazilian Coalition takes in annual plenary sessions, and in meetings of other governance bodies, such as the Task Forces.

Their Traceability and Transparency Task Force (T&T Task Force) works towards building a national traceability and transparency policy that could address the complexity of the productive sector's supply chains. This topic has gained prominence in the Coalition due to new demands from the international market. Beyond setting guidelines and consensus that can lead to a legal framework regulation on traceability and transparency, the Task Force discusses partnerships to structure a new deforestation-free supply chain, through dialogue and funding. A roadmap has been set to explore strategies and alternatives for decoupling the beef and soy supply chains from deforestation. The T&T Task Force understand that there are already several traceability efforts led by the public sector, the private sector, civil society organisations and academia, but these still present many challenges, as presented in the previous section. In this context, the Coalition advocates for the adoption of a national, public and official policy that addresses the traceability and transparency of agricultural chains.

In 2023, the Task Force was led by Proforest, ABIEC, and TFA, the Tropical Forest Alliance. Sectoral meetings, virtual technical workshops and meetings with different secretariats of the Ministry of Agriculture and Supply were held with the aim of defining elements for a public policy on monitoring, traceability and transparency in cattle and soy supply chains in Brazil. Members of the Task Force include the Brazilian Roundtable on Sustainable Livestock (MBPS), ABIEC, ABIOVE, Imaflora through their Beef on Track initiative, as well as other enterprises of the soy and beef sectors, NGOs, academia and financial institutions.



In October 2023, the Coalition, in partnership with the aforementioned organisations and GTFI, and moderated by Proforest, organised the workshop “Contributions to Advancing a National Traceability and Transparency Policy”. Discussions at the workshop centred on key elements for a traceability and transparency policy, existing traceability solutions and the challenges and feasibility of implementation. The workshop revealed the complexity of implementing traceability in cattle and soy production, with challenges related to resistance from various actors, the need for incentives and penalties, adapting systems and integrating information. During this process, it became clear that multi-sector articulation - including the private sector, the government, civil society and research institutions - is fundamental to the successful implementation of a national traceability policy, confirming the relevance of the Coalition’s role as a space for building consensus on the agenda.

## **The Coalition’s latest engagement with the Brazilian government**

Sectoral alignment, clear mandate and next steps for the Coalition and the Task Force resulted from the workshop, and for soy as well as cattle further engagement with the federal government was set up.

For soy, Task Force leaders, executive coordinators and ABIOVE representatives met with the Brazilian Federal Revenue Service at the Ministry of Finance in an exploratory meeting to better understand the process of linking the CAR to the Tax Invoice, followed by a formal recommendation to put this into practice.

For cattle, based on the Brazilian government’s intention to establish a mandatory National Individual Traceability System for cattle, in December 2023 the Brazilian Coalition and MBPS shared a proposal of a National Policy, detailing their recommendations for an individual monitoring system (27). Individual traceability has emerged as the centrepiece of the sector’s sanitary and socioenvironmental control, consolidating itself as an essential tool for boosting transparency and responsibility in livestock production. Important to highlight, that the Brazilian Coalition considers an ideal solution but a medium-to-long-term approach. A combination of strategies is needed, considering both urgent and short-term actions, grounded in the batch traceability combination, while individual traceability, a medium and takes shape.



## **Proposal for a Mandatory National Individual Traceability Policy for Cattle**

The main objective of the proposal is to ensure that all animals destined for slaughter are 100 per cent traced and monitored throughout their lives. It outlines a national public policy, clearly defining the responsibilities of both the government and the private sector, which includes livestock farmers, industry, retail and financial organisations. These agents are tasked with the provision, control, implementation, and use of individual bovine traceability information in a system applicable throughout the national territory. Considering that individual traceability takes time to be implemented throughout the entire production chain, a staggered approach was suggested with implementation in three stages and a transition period aimed at adaptation that does not jeopardize exports.

The suggested model should be aligned with the rules to be determined by the Ministry of Agriculture and Livestock (MAPA) for the presentation of socioenvironmental information from the production area, considering the entire supply chain, including indirect suppliers. For that, it is suggested the criteria already in use by the TACs. The government is responsible for establishing these guidelines and regulations governing the traceability system. This includes defining standards, norms and creating a legal framework to guide implementation.

Guarantees of production in accordance with health and socioenvironmental specifications should be provided by the government. This status reflects the legal compliance of cattle production with the Forest Code, labour and land laws and is based on data from inspection agencies, including infraction notices, embargoes, fines and other elements that support sustainable production in line with Brazilian law. This way, based on the status of each property over time, it will be possible to cross-reference the information of the animals that have remained in these establishments. This allows for determining the level of socioenvironmental compliance of the animal's rearing throughout its life and its length of stay on each property.

The data corresponding to each production unit, as well as its socioenvironmental status and the traceability of the animals, must be available for consultation by all interested parties. Based on this structure, the responsibility for proving that the animal traced by the official programme was produced within the required and validated parameters, according to the purpose of control for compliance protocols and/or specific markets, can be delegated to the supply chain involving producers, certifiers, meatpackers, retailers and importers.

## Other governmental developments in 2023

The actions of the Coalition are aligned and collaborate with existing initiatives of the government. For example, the **Agro+Sustainable Brazil Platform** is an initiative led by the Ministry of Agriculture and Livestock with the primary purpose of to integrate public databases, qualify information on Brazilian agricultural production and be used to show socioenvironmental compliance to global consumer markets. The platform can be an auditable way of verifying compliance with the requirements imposed by this and other legislation (28). In addition, the platform seeks to demonstrate that Brazil has robust data, information, technology, institutions and legislation, thus reducing country risk and reaffirming its position as a nation committed to the best agricultural and environmental practices (29). It involves the creation of a Data Lake for the Brazilian agricultural sector, integrating identification, compliance, sustainability, and traceability data. There is still no official announcement of the Programme on official government portals.

Furthermore, the Ministry of Agriculture and Livestock installed the **Carbon and Sustainability Chamber** in November 2023. The Chamber aims to bring together the public and private sectors and leverage the debate to reinforce public policies that promote the sustainability of the agribusiness (30). The Coalition and Proforest are members of the Chamber, and the **Traceability-focused Working Group**. The latter will focus on priority products, mapping of existing initiatives, and supporting further development.

Lastly, the Ministry of Development, Industry, Commerce and Services (MDIC) has proposed the launch of labels to demonstrate the sustainability of certain products (31). The initiative aims to increase the competitiveness of Brazilian products, with the [Selo Amazônia](#)



(Amazon Label) and the [Selo Verde](#) (Green Label). More specifically, the Green Label program entails a national strategy for the certification and conformity assessment of Brazilian products and services that have been proven to have a socially and environmentally responsible life cycle. The Amazon Label Program aims to establish voluntary standards for products and services produced specifically in the Amazon, with inputs from the region and in respect for environmental and social sustainability criteria.

## 4. Scalable solutions for traceability, compliance monitoring, and transparency

The Brazilian government, private sector and civil society are making clear efforts to structure traceability, compliance monitoring, and transparency systems to improve sustainable production of commodities and to meet market demands, such as the EUDR and upcoming UK, US and China legislations. In the T&T Task Force’s activities in 2023, the following solutions were identified as key to advance with a National Traceability and Transparency system for soy and cattle supply chains. These solutions will be studied in more detail simultaneously, and the implementation of one does not exclude the other.

Solution	Description	Leads	Opportunities	Implementation gaps
Individual cattle traceability (BEEF)	Public long-term solution, based on the National Policy (described in BOX section 4), and a new system for individual cattle traceability (SISBOV 2.0). The animals in this system are individually identified through ear tags containing a bar code.	ABIEC; MBPS; Brazilian Coalition; Brazilian Government (MAPA)	This strategy will enable the possibility to individually track cattle through the entire supply chain, extending the socioenvironmental control carried out by the industry to the entire production chain, based on Beef on Track socioenvironmental criteria.	<ul style="list-style-type: none"> <li>• Producer resistance: need to create an environment of security and a stepwise approach, with penalties for non-compliances and recognition of properly registered producers.</li> <li>• Analysis of the ear tag request and delivery process and the necessary infrastructure to enable traceability, considering the operational costs and the phased implementation plan.</li> </ul>
Cattle traceability by batches (BEEF)	Private short-term transition solution, based on the TACs and Beef on Track, to identify the path taken by animals in the territory, using GTA, while the environmental assessment is carried out through the CAR.	ABIEC; GTFI; Brazilian Coalition	This risk-management strategy will be able to track batches of cattle in the entire chain, extending the socioenvironmental control carried out by the industry to the entire production chain by including the CAR information in the GTA. An option considered by the industry is to include the historical information of previous GTAs, that supplied the animals from previous farms (indirect suppliers), in the GTA.	<ul style="list-style-type: none"> <li>• Need to integrate state databases to guarantee the compatibility and validity of documents, such as the GTAs, at a national level.</li> <li>• Improvement of Sanitation Regulatory Agencies to include the CAR information in the GTAs. There is already a non-mandatory CAR/coordinate field in the system.</li> </ul>



Solution	Description	Leads	Opportunities	Implementation gaps
Include CAR on the Tax Invoice (SOY)	Solution to improve the current federal and state systems, by including the CAR number of the farm in a field in the Tax Invoice.	ABIOVE; Brazilian Coalition; Brazilian Government (CONFAZ, the National Finance Policy Council)	Through this strategy, it will be possible to track the soy producer and origin farm in the Tax Invoice, using the same information analysed in the official socioenvironmental compliance monitoring, based on the CAR data.	<ul style="list-style-type: none"> <li>• Need to ensure transparency and data integrity by the government.</li> <li>• Validation of information throughout the production chain (CAR validation).</li> </ul>
Define a State Registration number (IE) per farm (SOY)	Solution based on assigning a State Registration number per farm to guarantee the identification of the origin of production.	ABIOVE; Brazilian Coalition; Brazilian Government (RFB – Federal Revenue of Brazil)	Enables the possibility to identify in the Tax Invoice the specific farm that is origin of the soy, even when the producer has many properties that usually are registered under the same number.	<ul style="list-style-type: none"> <li>• Operational difficulties for rural producers in managing the issuance of Tax Invoices from several properties.</li> </ul>
Define a unique land registration number (BEEF/SOY)	Solution to unify registries of governmental official land information to guarantee the identification of the origin of production.	Brazilian Coalition; Brazilian Government (RFB);	The unique land registration number is not intended for traceability. The use of the Brazilian real estate code, named CIB, would solve the issue of different registries in governmental agencies (RFB, CAR and INCRA - National Institute for Colonization and Agrarian Reform) having different concepts of rural properties, which makes it difficult to aggregate and share information. Initiative by the RFB within the scope of SINTER – the National Land Information Management System.	<ul style="list-style-type: none"> <li>• Compatibility between systems from different federal government entities.</li> </ul>
Compliance monitoring system (BEEF/SOY)	Solution based on a Public system that provides transparency on the legal compliance of rural properties, such as the Brazilian Government's initiative, Agro+Sustainable Brazil Platform, presented in Section 4.	ABIEC; Brazilian Government (MAPA); Brazilian Coalition	<p>There is an understanding that it would be a public responsibility to guarantee and communicate, at a minimum, the legality of the production, based on the crossover of public databases. An integrated platform would allow this attribute to be given to all Brazilian agricultural production at low cost.</p> <p>The definition of an official public protocol for legal compliance would permit to differentiate from private protocols (with market requirements), such as those required by the EU. This platform would include an Application Programming Interface for private systems with additional criteria for compliance.</p>	<ul style="list-style-type: none"> <li>• Sharing personal information (LGPD – data protection law).</li> <li>• Concerns that the commercialization of products that are not in full socioenvironmental compliance will be penalized by the government itself, by blocking the issuance of documents such as the Tax Invoice and GTA with no appropriate support for regularization.</li> </ul>

In 2024, for the solutions focused on soy, the T&T Task Force plans to focus on investigating the feasibility and challenges of the different options, in partnership with the leads. For beef, the batch traceability solution is expected to be tested in priority subnational states. The individual traceability solution and compliance monitoring system is planned to be designed and implemented by the federal government, with support of the Brazilian Coalition and leads.

There are other solutions being developed, including local solutions, that can be replicated by other states, such as the initiative for calves by FAEPA, the Foundation for the Support of Teaching, Research and Assistance, and IDH, the Sustainable Trade Initiative ([link](#)); the initiative of the State of Pará to achieve 100% traceability of all cattle in the state by 2026 ([link](#)); and the initiative of the State of Maranhão to implement a traceability system for soy ([link](#)). This is not an exhaustive list and shall be constantly updated and complemented.

The implementation of other transversal actions is indispensable for the success of the solutions presented above. For example, there is a need to invest in information security mechanisms and the protection of rural producers' personal and commercial data, to diminish resistance to implementation. Furthermore, progressing with the CAR validation is crucial, as this document has essential information that is the foundation of socioenvironmental compliance monitoring. It is important to emphasize that environmental agencies no longer have sufficient capacity to carry out environmental regularization. When traceability and monitoring of socioenvironmental compliance advances, there will be a greater number of producers with irregularities identified, further increasing the urgency and volume of regularizations required by the state. This requires investment to support producers and in data analysis and validation by the government.

## 5. Investment opportunities for Producer-Consumer country partnerships

The primary focus of the traceability system implementation should not be solely on verifying adherence to legal or market standards. Additionally, it is essential to consider evaluating other aspects of the production phase, such as the preservation of forestry assets and the adoption of climate-smart agriculture practices. To ensure that socioenvironmental traceability is not perceived as a form of surveillance or a punitive measure for producers, a more constructive approach would involve positioning it as a tool for gaining financial or tax incentives, improved credit terms, and access to more favorable markets, including the EU. By introducing such incentives, the costs associated with implementing traceability, monitoring compliance, and ensuring transparency can be distributed more equitably across the supply chain, thereby alleviating the burden on upstream stakeholders.

### **Partnerships to foster investment for EUDR implementation**

This type of financial and in-kind support is expected to be part of the cooperation, dialogue, and partnerships between producer and consumer countries to implement the EUDR requirements. Producer and consumer countries share the responsibility to find the most effective ways to build on existing efforts towards EUDR compliance, as laid out in Article 30 on the Cooperation with Third Countries (32). Furthermore, without sufficient support, the ambitious deadlines and requirements of the regulation can result in a supply side deficit that would disturb European markets.

A well-established governance including the Brazilian government, private sector and civil society, in combination with a proactive dialogue with producer countries and stakeholders along the value chain, can help consolidate common rules to encourage responsible production. It is important to support local governments in high priority areas to establish a risk-based and phased traceability approach, promoting the elimination of illegality and deforestation while avoiding smallholder exclusion and maintaining market stability.



Producer-consumer country partnerships should be built on existing policies and regulations and initiatives led by national and subnational governments. It is essential that such a partnership identifies key stakeholders, concrete activities and gaps in financial support to ensure the transition of all production, beyond individual supply chains or commodities, towards sustainability.







In a partnership, the following are considered key elements: effective governance; monitoring and verification; capacity building; alignment and linkage with existing initiatives; and incentives mechanisms. Incentive mechanisms and rewards for partners, especially small producers, can foster ownership and success. The incentive structure should be performance-based and designed to match stakeholder needs and aspirations.



## **Key investment opportunities for consumer countries in Brazil**

Incentives for implementing traceability, compliance monitoring and transparency solutions include the transfer of resources by public, private and public-private mechanisms, through technical and bilateral cooperation. Innovative “blended finance” initiatives can also be considered, in which public and private funders pool capital to reduce risk for private investors, while enabling deployment of large projects or provision of credit to large numbers of smallholders (33). In addition to financial resources, other forms of incentives can be adopted, such as service and technical support and market advantage, among others. It is important to ensure that incentives in the supply chain reach the producer and are distributed fairly through all links in the value chain, including the cattle rearing farms.







In a study in 2023, the need was observed to create a fund to obtain resources for the implementation of national traceability systems in the cattle chain. Such an instrument would rely on the contribution of private agents, since the formation of a public fund presents legal obstructions in Brazil. An agency, potentially linked to the government, could manage the resources to implement the necessary mechanism to support the system. It was emphasized that the governance and incentives must consider the risk of opportunistic behavior in the supply chain (cattle triangulation or laundering), which could compromise the entire system. The definition of clear rules for these cases is important for the proper functioning and credibility of the system and national livestock farming (34).

Beyond incentives to a compliant supply chain, consumer countries have the opportunity to actively contribute to the establishment of an enabling environment for the implementation of these systems in both the short and long term. This can be consolidated through the initiatives outlined in the roadmap (35) of the T&T Task Force, as well as financially supporting other initiatives, to contribute to the development of the current proposal for a National Policy. By doing so, investors and other actors can engage in ongoing testing and implementation of solutions that support governance and infrastructure improvements, delivering the Forest Code and EUDR implementation in Brazil. The table below outlines key structuring actions for potential investment.

Investments opportunities	Description	Beneficiaries	Impact
Enabling traceability systems	Individual traceability including indirect cattle suppliers. Support improving and delivering the SISBOV 2.0 system. Support adhesion of rural producers through capacity building, financial incentives, credit lines.	Federal government / Secretariat of Agricultural Defence (SDA)	
	Traceability by batches including indirect cattle suppliers. Support improving and integrating electronic GTA systems on the Platform for Agricultural Management (PGA). Support the adhesion of rural producers through capacity building.	State animal health agencies	
CAR +PRA implementation-compliance monitoring	Support implementing a compliance system, potentially the Agro+Sustainable Brazil Platform unofficially announced by MAPA. Ensure technical support, improvement and integration of databases and systems.	Federal government / Secretariat for Innovation, Sustainable Development, Irrigation and Cooperatives (SDI)	
	Improve infrastructure and processes of state environmental agencies to advance with CAR and PRA implementation.	State environmental agencies	
	Support for producers to implement actions towards environmental regularization, through technical assistance and implementation of restoration activities.	Producers	
Support producer reintegration	Support private systems to reintegrate producers in states that are transitioning to implement the environmental regularization systems (such as PREM and Sirflor, from Mato Grosso and Pará states, respectively). These systems are relevant to ensure that non-compliant producers that were excluded from the supply chain have a clear path to regularization and be part of the supply chain again.	Producers	

Investments opportunities	Description	Beneficiaries	Impact
Protected areas	Support programs that aim to establish new and protect existing Conservation Units, Indigenous Lands and Traditional Communities Territories to tackle deforestation and forest degradation, increase biodiversity conservation, and recognize the rights of indigenous peoples and traditional peoples and communities (as foreseen in Axis 4 of PPCDAM and PPCerrado - Normative and Economic Instruments).	Indigenous Peoples and Traditional Communities	
Forest conservation	<p>Support programs to increase the production of information, improve the integration of databases, use of intelligence mechanisms to support prevention, monitoring, inspection and control of degradation and deforestation. (as foreseen in Axis 2 of PPCDAM and PPCerrado - Environmental oversight and control).</p> <p>Support measures to effective accountability for crimes and violations against the environment, such as improving capacity of federal and Environmental Agencies.</p>	Federal and state government – Environmental agencies, public prosecutor offices and surveillance forces	

Legend:

-  Tackle deforestation;
-  Conservation;
-  Restoration;
-  Systems/infrastructure;
-  Climate;
-  Smallholders.

## 6. Final considerations

The convergence of the European Union's 2023 Deforestation Regulation and the proactive traceability solutions led by various local actors in Brazil presents a promising opportunity for the evolution of low-carbon agricultural practices in the soy and cattle supply chains. While acknowledging the challenges posed by the ambitious technicalities and timelines of the EUDR, it is crucial to recognize its role as a stimulator for deforestation-tackling systems in producer countries.

The fragmented but constructive traceability solutions in Brazil, underscore the need for clear guidelines and governance from the government. The ongoing discussions within the T&T Task Force emphasize the potential for alignment and synergies between the public sector, the private sector, civil society organisations and academia. Leveraging Brazil's stringent environmental legislations, albeit with implementation challenges, provides a foundation for comprehensive traceability and transparency systems.

Crucially, the success of the EUDR hinges on cooperative efforts and dialogue with producer countries, necessitating extensive involvement in the implementation process. Producer-consumer country partnerships, as advocated by the Brazilian Coalition and Proforest, offer a pathway to deforestation-free commodities for the EU while simultaneously supporting sustainable landscapes in producer countries.

To address concerns about illegality, deforestation, and smallholder exclusion, the Brazilian Coalition and Proforest have identified key investment opportunities. These include enhancing governance, establishing both batch and individual traceability systems for cattle supply chain, increase transparency of socioenvironmental compliance for both commodities, advancing environmental registration, supporting supplier reintegration, especially smallholders, facilitating financial and in-kind investments from consumer countries. These ongoing efforts will play a pivotal role in assisting the soy and beef sectors, particularly smallholders, in meeting the new regulatory requirements and adopting innovative tools for compliance.

The Brazilian Coalition, their partner institutions and initiatives are well-positioned to support facilitating these partnerships. The Coalition will continue its efforts through the T&T Task Force, following the action plan set out in the roadmap for a deeper analysis of the solutions, to identify key stakeholders and technical challenges in their implementation. As the global community moves forward, a collaborative approach, integrating environmental responsibility and economic viability, can pave the way for a transformative and harmonious future.

## 7. Acronyms glossary

<b>ABIOVE</b>	<i>Associação Brasileira das Indústrias de Óleos Vegetais</i> - Brazilian Association of Vegetable Oil Industries
<b>ABIEC</b>	<i>Associação Brasileira das Indústrias Exportadoras de Carnes</i> - Brazilian Beef Exporters Association
<b>ANEC</b>	<i>Associação Nacional dos Exportadores de Cereais</i> - National Association of Cereal Exporters
<b>API</b>	Application Programming Interface
<b>APP</b>	<i>Área de Preservação Permanente</i> - Area of Permanent Preservation
<b>CAR</b>	<i>Cadastro Ambiental Rural</i> - Rural Environmental Registry
<b>CIB</b>	<i>Cadastro Imobiliário Brasileiro</i> - Brazilian Real Estate Code
<b>CONFAZ</b>	<i>Conselho Nacional de Política Fazendária</i> - National Finance Policy
<b>EUDR</b>	European Union Deforestation Regulation
<b>FAEPA</b>	<i>Fundação de Apoio ao Ensino, Pesquisa e Assistência</i> - Foundation for the Support of Teaching, Research and Assistance
<b>GTA</b>	<i>Guia de Trânsito Animal</i> - Animal Transport Guide
<b>GTFI</b>	<i>Grupo de Trabalho de Fornecedores Indiretos</i> - Working Group on Indirect Suppliers
<b>IDH</b>	Sustainable Trade Initiative
<b>Imaflora</b>	<i>Instituto de Manejo e Certificação Florestal e Agrícola</i> - Institute of Forest and Agricultural Management and Certification
<b>INCRA</b>	<i>Instituto Nacional de Colonização e Reforma Agrária</i> - National Institute for Colonization and Agrarian Reform
<b>INPE</b>	<i>Instituto Nacional de Pesquisas Espaciais</i> - National Institute of Spatial Research
<b>IPAM</b>	<i>Instituto de Pesquisa Ambiental da Amazônia</i> - Amazon Environmental Research Institute
<b>LGPD</b>	<i>Lei Geral de Proteção de Dados</i> - General Data Protection Law
<b>MAPA</b>	<i>Ministério da Agricultura, Pecuária e Abastecimento</i> - Ministry of Agriculture and Livestock

<b>MBPS</b>	<i>Mesa Brasileira da Pecuária Sustentável</i> - Brazilian Roundtable on Sustainable Livestock
<b>MDIC</b>	<i>Ministério do Desenvolvimento, Indústria, Comércio e Serviços</i> - Ministry of Development, Industry, Commerce and Services
<b>NF</b>	<i>Nota Fiscal</i> - Tax Invoice
<b>PGA</b>	<i>Plataforma de Gestão Agropecuária</i> - Platform for Agricultural Management
<b>PRA</b>	<i>Plano de Regularização Ambiental</i> - Environmental Regularization Program
<b>PREM</b>	<i>Programa de Reinserção e Monitoramento</i> - Reinsertion and Monitoring Program
<b>PRODES</b>	<i>Projeto de Monitoramento do Desmatamento na Amazônia Legal por Satélite</i> - Program for the Calculation of Deforestation in the Amazon by Satellite
<b>RFB</b>	<i>Receita Federal do Brasil</i> - Federal Revenue of Brazil
<b>RL</b>	<i>Reserva Legal</i> - Legal Reserve
<b>RTRS</b>	Roundtable on Responsible Soy
<b>SDA</b>	<i>Secretaria de Defesa Agropecuária</i> - Secretariat of Agricultural Defense
<b>SDI</b>	<i>Secretaria de Inovação, Desenvolvimento Sustentável, Irrigação e Cooperativismo</i> - Secretariat for Innovation, Sustainable Development, Irrigation and Cooperatives
<b>SINTER</b>	<i>Sistema Nacional de Informações Territoriais</i> - National Land Information Management System
<b>SIRFLOR</b>	<i>Sistema de restauração florestal</i> - Forest restoration system
<b>SISBOV</b>	Service for the Traceability of the Bovine and Bubaline Production Chain - <i>Sistema Brasileiro de Identificação e Certificação de Bovinos e Bubalinos</i>
<b>T&amp;T Task Force</b>	Traceability and Transparency Task Force
<b>TAC</b>	<i>Termo de Ajuste de Conduta</i> - Terms of Conduct Adjustment
<b>TFA</b>	Tropical Forest Alliance



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## Editorial Board & Staff

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Isabella Freire, Cecília Korber Gonçalves,  
Paulien Denis, Carolle Alarcon

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Scriptorium design,  
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