

HOW TO ACHIEVE ZERO DEFORESTATION IN THE CATTLE SECTOR

**Best practices in Brazil and the new EU
regulation on deforestation-free products**

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EXECUTIVE SUMMARY

Brazil is one of the largest beef exporters in the world, and the cattle sector accounts for most deforestation in the Amazon.

In 2009, two sectoral deforestation-free agreements were created in Brazil, with the Amazon biome as their geographical scope: the Term of Adjustment of Conduct (TAC) and the Public Livestock Commitment (CPP). The TAC stops producers sourcing from areas illegally deforested after 2008. The definition of illegality comes from the Forest Code (Brazilian environmental legislation) - it allows land use conversion up to a certain percentage of a property's area. The CPP stops producers sourcing from any deforested area after 2009.

To harmonise implementation, the Beef on Track programme was set up in 2020, as a full monitoring, reporting and verification (MRV) system for both of the existing agreements.

The new EU Regulation on deforestation-free products (EUDR) requires companies to carry out due diligence to prevent products linked to deforestation and human rights violations from entering the EU market. Although some gaps remain, the Beef on Track programme is highly aligned with the EUDR and can deliver most of its requirements. Despite existing efforts to curb deforestation in Brazil, ensuring full compliance with the EUDR will require investments especially to achieve full traceability of indirect suppliers, and to enact measures to mitigate human rights violations.

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INTRODUCTION

Brazil is one of the world's largest beef exporters, and its cattle sector accounts for most Amazon deforestation.¹ Even Brazil's environmental legislation the Forest Code allows land use conversion up to a certain percentage of a property's area, which varies according to the biome where the property is located. In the Amazon biome, where most of the country's forest resources are concentrated, the allowable percentage is up to 20 per cent.

Brazil set up two sectoral deforestation-free agreements with the aim of curbing deforestation and forest degradation, : 1) the Term of Adjustment of Conduct (TAC)² and 2) the Public Livestock Commitment (CPP for short in Portuguese, also known as the G4 Cattle Agreement). Figure 1 shows the scope of each agreement. The TAC requires that producers don't source from areas deforested illegally after 2008 (plus additional criteria on Indigenous Land, Protected Areas, Slave-like Labour). The CPP requires that suppliers don't source from any area deforested after 2009.

¹ According to Associação Brasileira das Indústrias Exportadoras de Carnes (ABIEC), Brazil exports around 25 per cent of the beef produced in the country and Europe is one of the most important markets for Brazilian beef. In 2020 alone, consignments of meat to the bloc accounted for 6.24 per cent of total exports by volume. Sources: <https://www.abiec.com.br/> and <https://www.abiec.com.br/en/abiec-and-apex-brasil-display-the-sustainability-of-brazilian-beef-at-anuga/#:~:text=Europe%20is%20one%20of%20the,of%20total%20exports%20by%20volume>.

According to the latest data from the MapBiomas, 86 per cent of the deforested areas in the Legal Amazon were occupied by pastures in 2021. The area used for livestock has tripled in 37 years, going from 19 million hectares in 1985 to 68 million hectares in 2021. Accordingly, pastures already occupied 13 per cent of the territory of the Legal Amazon, equivalent to almost three times the state of São Paulo. Source: <https://imazon.org.br/noticias/solucoes-para-amazonia-pecuaria/>

² The TAC requires an adjustment of conduct with respect to the Brazilian Forest Code deforestation-related requirements. However, the Brazilian Forest Code is more comprehensive. Thus, the TAC does not guarantee the broad implementation of the Forest Code, but only of the mentioned requirements.

Figure 1

Geographical Scope of TAC and CPP



In 2020 the Beef on Track programme was set up as a full monitoring, reporting and verification (MRV) system for both of the existing agreements. The aim was to harmonise implementation of TAC and CPP.

In June 2023, the new EU Regulation on deforestation-free products (EUDR) entered into force requiring companies to carry out due diligence to prevent products linked to deforestation and human rights violations from entering the EU market.³

This study is a response to the question of how the Beef on Track and complementary initiatives could align with the requirements of the EUDR.

³ Brazil accounted for 26.4 per cent of beef imports into the EU in 2021.
Source: [https://www.europarl.europa.eu/RegData/etudes/BRIE/2022/733676/EPRS_BRI\(2022\)733676_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2022/733676/EPRS_BRI(2022)733676_EN.pdf)



HISTORY OF THE BRAZILIAN TERM OF ADJUSTMENT OF CONDUCT AND THE PUBLIC LIVESTOCK COMMITMENT

In 2009, the first TAC in the cattle sector was established by the Federal Public Prosecutor's Office of Pará (which uses the Portuguese acronym MPF). It defined a minimum set of socioenvironmental criteria⁴ and monitoring rules for meatpackers to follow when purchasing cattle. In 2010 other Amazon states adopted what is popularly called the "Beef Legal TAC".

The CPP is a voluntary agreement initiated in 2009 by Greenpeace, and currently has the three largest meatpackers in Brazil on board (Marfrig, Minerva, and JBS). The CPP establishes that signatories must not purchase animals raised on properties that do not follow social and environmental laws and doesn't allow purchases from any area deforested after October 2009 – even with legal authorisation issued by the competent environmental agencies.

The signatories to these agreements implement procurement control systems in order to ensure cattle do not originate from properties with socioenvironmental irregularities. They also hire geo-monitoring services to carry out analyses of whether the TAC and/or CPP criteria are being met.

Both the TAC and the CPP require results to be verified by an independent audit process.

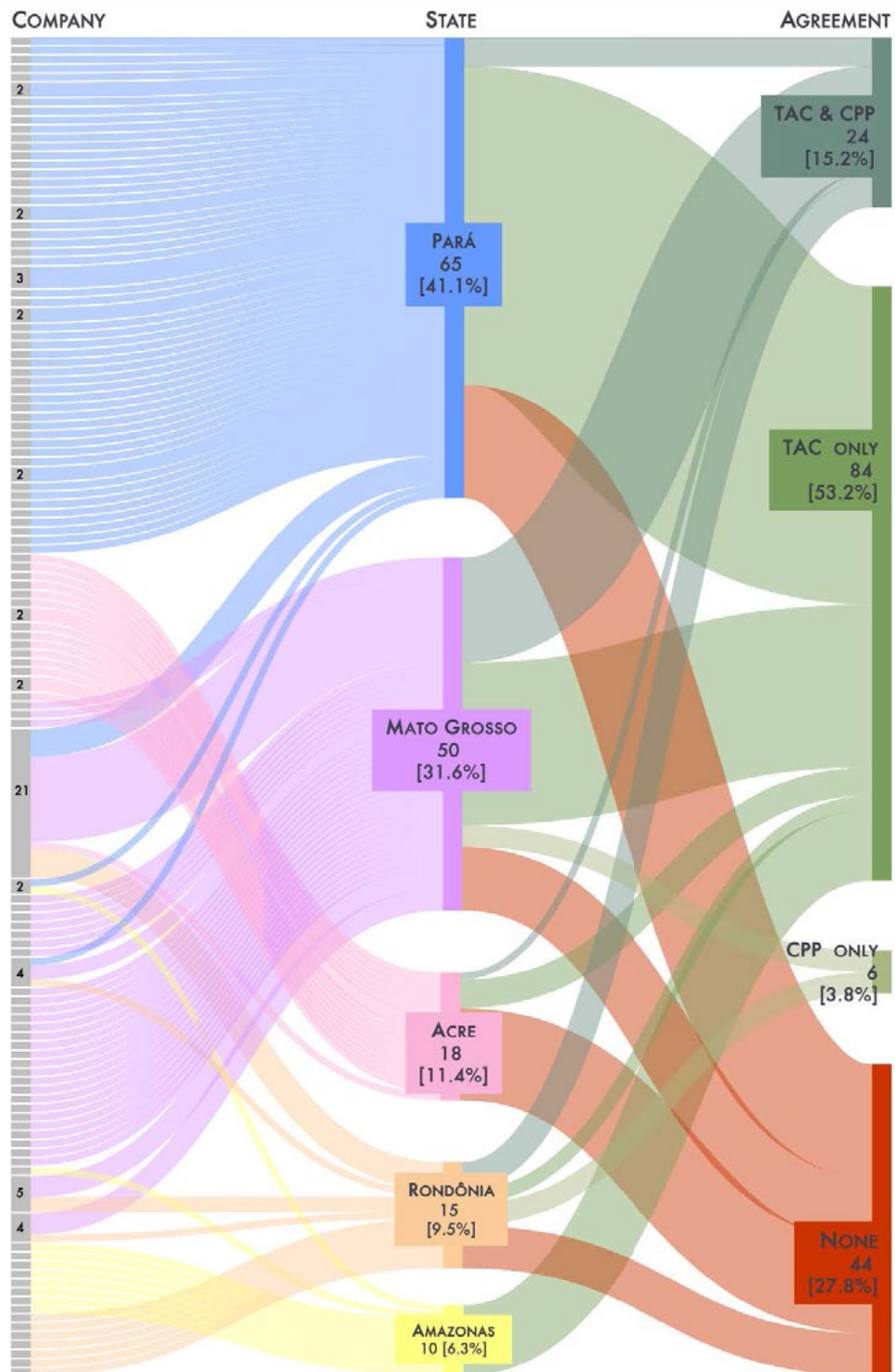
Currently several meatpackers are signatories of either or both agreements. Out of 158 meatpackers in operation in the Amazon, 84 are signatories of the TAC, and six of the CPP alone.⁵ Twenty-four are signatories of the TAC and CPP, and 44 have not yet agreed to any commitment (Figure 2 shows the numbers per state).

⁴ *Illegal deforestation, overlapping with Indigenous Land, overlapping with Protected Areas, environmental embargoes, and changes in the boundaries of the Rural Environmental Registry.*

⁵ *Since they were exempted from the TAC requirement by the fact they represent less than 0.3 per cent of the total cattle sourced in the state.*

Figure 2

TAC and CPP: Who signed what?



* the numbers in the left grey column represent aggregated meatpackers who work as part of the same private group

Source: This figure was developed using Beef on Track data, obtained on the 27/07/2023 from <https://www.beefontrack.org/transparency/>

BRAZILIAN LEGAL FRAMEWORK ON ENVIRONMENT, TRACEABILITY AND HUMAN RIGHTS

ENVIRONMENTAL LEGAL FRAMEWORK

The Forest Code is the Brazilian law that sets out the proportion of natural vegetation that must be protected in each rural property. It includes the protection of the so-called Areas of Permanent Protection (*Áreas de Preservação Permanente* – APP, basically riparian zones and tops of hills) and the Legal Reserve, referring to the proportion of natural areas that must be protected in addition to the APPs.

The percentage of Legal Reserve varies by biome, according to the following: in the Amazon, 80 per cent of the land must be preserved as Legal Reserve, in the Cerrado within the Legal Amazon 35 per cent, and 20 per cent in Cerrado outside the Legal Amazon, other biomes 20 per cent.

For the implementation of the Forest Code, the Brazilian federal government has created the Rural Environment Registry (Portuguese acronym -CAR), a national electronic public registry mandatory for all rural properties with the purpose of integrating the environmental information of properties and possessions into a database for control, monitoring, and economic planning, as well as to combat deforestation.

The DECRETO Nº 7.830, DE 17 DE OUTUBRO DE 2012 is the one that establishes the Rural Environmental Registry System, the Rural Environmental Registry, and the general rules for Environmental Regularization Programs, which is a key element of efforts to deal with infractions.

TRACEABILITY LEGAL FRAMEWORK

Regarding livestock production systems in Brazil, there are three possible systems on each farm (full cycle, breeding, and fattening), and the animals may be transported from one property to another depending on their life-stage. For the livestock sector there are two traceability tools and both were devised primarily for animal health control purposes to enable the tracing of outbreaks of foot-and-mouth and other diseases. The identification by lots using the Animal Transit Guide (GTA) is the main traceability tool adopted in the country. Since the information is linked to batches of animals, and not individually, the control over the supply chain is only possible via a mass balance approach because each batch is mixed with other batches from different farms in the supply chain.

The GTA includes information about the farm of origin of the cattle lot, the destination of the animals, sanitation conditions, and the purpose of transport. This system, however, allows the meatpackers to only view information on the last farm where batches were grouped. The state animal health agency is the unique holder of the full set of GTAs. Currently, only Pará state provides a relatively high level of the full set of GTA visibility. This information is not available in other states yet.

The individual identification using the Brazilian Cattle and Buffalo Identification and Certification System (SISBOV) is also used and it can track animals individually from birth. This mechanism, however, has a few flaws:

- It is not mandatory for the local market and only focuses on exports to Europe. Therefore, this tool has a low adoption rate. Currently, only 1,400 farms (out of two million cattle farms in Brazil) are using the SISBOV system.
- It is focused only on the health aspects of cattle production and is not used for the control of deforestation and human rights violations.
- Since the focus is only on health control, it allows farms registered in the SISBOV system to acquire animals without individual identification from other farms, requiring the identification of animals in the SISBOV system to be made within a maximum period of 30 days after the animal's entrance (Article 60 of SISBOV Normative Instruction). This explains why only a small number of farms are in the SISBOV system, and usually they are located at the end of the cattle production cycle, the direct suppliers to the meatpackers. This would be a flaw in the system if it were used for deforestation and human rights violation controls.

Neither the GTA nor the SISBOV hold information on the environmental status of the farm of origin, but both are increasingly being used to complement the environmental monitoring of the origin of cattle.

HUMAN RIGHTS LEGAL FRAMEWORK

Brazil has a robust legal framework regarding the protection of labour and human rights. The Brazilian Labour Code (*Consolidação da Lei Trabalhista* - CLT) establishes standards for working conditions, minimum wage, working hours, social security, and a ban on child labour and forced labour.

Regulatory Instruction 24 (NR24) sets forth rules for clean and comfortable conditions in the workplace.

Regulatory Instruction 31 (NR31) regulates health and safety for rural work, including agriculture and livestock activities, and it is a benchmark in these areas. The NR31 establishes the Risk Management Program in Rural Work and requires mitigation measures to address the risks identified. As part of efforts by the Ministry of Labour and Social Security to combat slave labour, the ministry keeps an updated Register of Employers who have subjected workers to conditions similar to slavery (called the Black List of Slave Labour) that is publicly available.

There are also regulations regarding community rights, such as the Indigenous land law (LEI Nº 6.001, DE 19 DE DEZEMBRO DE 1973), the Quilombola land decree (DECRETO Nº 4.887, DE 20 DE NOVEMBRO DE 2003), the traditional communities' decree (DECRETO Nº 6.040, DE 7 DE FEVEREIRO DE 2007) and settlements established by the Land Reform law (LEI Nº 8.629, DE 25 DE FEVEREIRO DE 1993), that sets out the rights and duties related to such land stewardship.

All the decrees mentioned above deal with land rights and for Indigenous and Quilombola land and settlements there are official maps available to verify illegalities (Settlements and Quilombola land maps are available at Instituto Nacional de Colonização e Reforma Agrária (INCRA)'s website and Indigenous land maps at Fundação Nacional dos Povos Indígenas (FUNAI)'s website). However, there is neither a robust legal framework on the Free, Prior, and Informed Consent (FPIC) mechanism, nor on the grievance mechanism.

BEEF ON TRACK AS A MONITORING, REPORTING AND VERIFICATION SYSTEM

To meet the TAC and the CPP requirements, meatpackers have improved their practices and established individual protocols to monitor suppliers. However, over time, individual company protocols had differences regarding methodologies for monitoring, verification and auditing, and the means of reporting (for each company and each state), so they could not be compared with each other.

In 2020,⁶ the Beef on Track programme (that includes a harmonised Protocol for Monitoring Cattle Suppliers in the Amazon and all other commitments) was developed as a full monitoring, reporting and verification (MRV) system that serves all existing commitments. The aim was to harmonise implementation of the commitments by the signatories, through a joint effort between the MPF, NGOs and the largest meatpackers and retailers in Brazil. It was led by Imaflora.

The Beef on Track programme consists of the following key components⁷:

- A monitoring protocol with criteria, parameters, definition of databases to be used, and rules.
- An audit protocol for signatory companies to be audited, demonstrating progress towards commitments.
- An audit report of verified results. This can be sent to interested parties, to ensuring the transparency of their activities.

The Beef on Track programme enables beef producers and supply chain companies to measure, report, and verify socioenvironmental performance in a standardised way. Governance is provided by MPF, Imaflora, and the so-called Fourth Chamber of the MPF.⁸

The protocol contains the assessment criteria and indicators included in the TAC and the CPP.⁹ Auditors are selected by the meatpacker and trained to play this role before being approved by MPF. Meatpackers must hire one of the auditing companies approved by the MPF to access their systems and their purchases.

A publicly accessible online platform lists the companies that have signed the agreements and will include the summary audit reports. The platform allows users to search for beef processors that have signed a TAC or CPP, that have been audited and that have been exempted from the audit. Information is updated by Imaflora using information provided by each state's MPF offices. It is expected that the first summary reports will be available on the platform by December 2023. Buyers in Europe can also request reports directly from companies in Brazil.

The monitoring protocol has eleven criteria to meet the TAC, described below. Aiming to comply with the CPP, zero deforestation was added as an additional and voluntary geo-monitoring criterion.

⁶ Continuing the technical collaboration started in 2017 between MPF, meatpackers and their service providers, in which relevant technical inputs with comparative analysis and statistics was provided by the geotechnology company Agrootools, who was supporting at the time three out of the six major companies under the TAC agreement.

⁷ It is important to highlight that the Beef on Track is not a traceability system. Beef on Track is a MRV system that applies to all existing agreements in Brazil.

⁸ An official chamber of the MPF that deals specifically with topics related to flora, fauna, preservation areas, environmental management, legal reserves, coastal zone, mining, transgenics, water resources and preservation of cultural heritage, among others. Source: <https://www.mpf.mp.br/atuacao-tematica/ccr4>

⁹ The protocol does include the zero-deforestation criteria, but it is voluntary and the MPF does not verify it.

1. **Deforestation:** monitorable through geospatial analysis. To check conformity, georeferenced maps of the farms (CAR) should be overlaid with maps from the official cartographic baseline showing deforestation and land use conversion. This monitoring only considers overlaps with deforestation polygons ≥ 6.25 ha. from the Prodes Amazônia/Inpe system and later than 1 August 2008. To be compliant, the georeferenced map of the property should not overlap onto deforestation polygons on the date cattle were purchased.
2. **Overlapping with Indigenous Land:** monitorable through geospatial analysis. To check conformity, georeferenced maps of the farms (CAR) should be overlaid with maps from the official cartographic baseline of the National Indigenous Peoples Foundation. To be compliant, the georeferenced map of the property should not overlap onto Indigenous Land on the date of the cattle purchase.
3. **Overlapping with Protected Areas:** monitorable through geospatial analysis. To check conformity, georeferenced maps of the farms (CAR) should be overlaid with maps from the official cartographic baseline of the Chico Mendes Institute for Biodiversity Conservation, as well as other relevant public agencies. To be compliant, the georeferenced map of the property should not overlap onto Conservation Units on the date of the cattle purchase.
4. **Changes in the boundaries of the Rural Environmental Registry (CAR):** monitorable through geospatial analysis. To check conformity, it is required that the supplier's database be updated in accordance with the CAR database within 30 days after the release of the Prodes deforestation rate. To be compliant, the georeferenced map of the property should not show any boundary changes in the updated CAR database.
5. **Environmental embargo (vector):** monitorable through geospatial analysis. This monitoring only considers polygons of environmental embargoes due to deforestation issued by the Brazilian Institute of the Environment. To be compliant, the georeferenced map of the property should not overlap onto environmental embargo polygons on the date of the cattle purchase.
6. **Environmental embargo (list):** monitorable also through analysis of official public lists. To be compliant, the corporate or individual taxpayer's registry number should not be on the Brazilian Institute of Environment Lists or Environmental Agencies List.
7. **Slave labour:** monitorable through analysis of official public lists. To be compliant, the corporate or individual taxpayer's registry number of producers, suppliers and properties should not be on the Register of employers who have subjected workers to slave-like conditions.
8. **Rural Environmental Registry (CAR):** monitorable through supplier, producer and/or property documentation. To be compliant, the supplier should present the updated CAR on the date of the cattle purchase.
9. **Rural Environmental Licensing (LAR):** monitorable through supplier, producer and/or property documentation. To check conformity, direct supply producers of properties $\geq 3,000$ ha. located in Pará state should present the LAR or the Application Protocol. To be compliant, the current LAR or Protocol should be available on the date of the cattle purchase.

10. Animal Transit Guide (GTA): monitorable through public document analysis of the producers and the properties. To be compliant, all animals should have a GTA from the last property of origin.

11. Productivity: monitorable through analysis of property productivity. To check conformity, the maximum productivity rate of three head/ha/year per supplier property sold in the tax year should be considered.

Currently, the MPF only requires meatpackers to monitor their direct suppliers.



Photo: Nathalia Segato/Unsplash.

THE NEW EU REGULATION DUE DILIGENCE REQUIREMENTS

The new EU Regulation on deforestation-free products (EUDR) entered into force in June 2023 and applies to beef, soy, palm oil, timber, rubber, cocoa, coffee, leather, pulp and paper (summary provided in Figure 3). The Regulation is intended to minimise the EU's contribution to deforestation, requiring companies to carry out due diligence to prevent products linked to deforestation and human rights violations from entering the EU market, among other obligations. The main areas covered by the Regulation that will be discussed in this case study are:

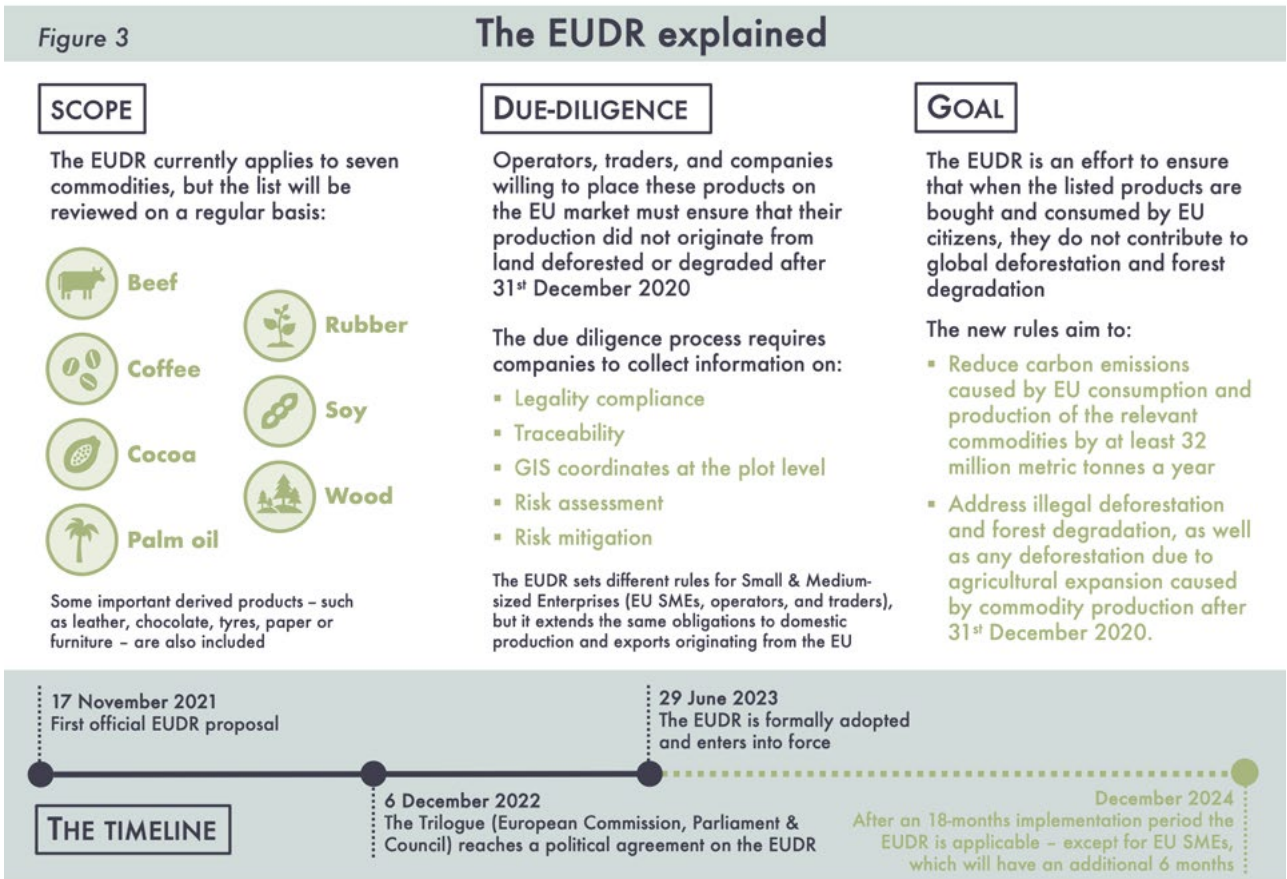
- **Mandatory due diligence:** Article 4 requires companies to exercise due diligence prior to placing relevant products on the market or exporting them to prove that they comply with Article 3. Article 8 states that the due diligence process must include the collection of information, data and documents needed to meet the Regulation requirements, as well as risk assessment measures, and risk mitigation measures.¹⁰
 - » **Legality compliance and deforestation-free criteria:** Article 3 prohibits the placing of goods linked to deforestation or forest degradation on the EU market, unless all of the following conditions are met: (a) they must be deforestation-free and degradation-free after 2020, (b) they must have been produced in accordance with the relevant laws¹¹ of the country of production and (c) they must be covered by a due diligence declaration.
 - » **Traceability:** Companies must ensure that the products they place on the EU market are traceable throughout the supply chain, from the point of production to the point of import. Article 9 sets out the information requirements that companies must meet, including: i) data collection with evidence, ii) the geolocation of all plots of land where the relevant commodities were produced¹² and the date or time range of production, iii) adequately conclusive and verifiable information that the products are deforestation-free, iv) adequately conclusive and verifiable information that the products have been produced in accordance with the relevant laws of the country of production.
 - » **Risk assessment:** Companies must identify the specific risks of deforestation and human rights violations associated with their supply chains and take measures to mitigate such risks. Article 10 requires companies to carry out a risk assessment covering the entire supply chain, from the production of raw materials to the manufacture of the end products. Products should not enter the EU market except for when the risk assessment reveals no or only a negligible risk that the products are non-compliant. The risk assessment must consider: i) the presence of forests and Indigenous Peoples in the country of production; ii) the source, reliability, validity, and links to other available documentation; iii) the risk of mixing with relevant products of unknown origin; iv) the risk of being linked to human rights violations, as well as other requirements. Violations of human rights associated with deforestation or forest degradation, including rights of Indigenous Peoples, local communities, and customary tenured landholders, must also be considered. The risk assessment must be carried out at least on an annual basis, and upon request.

¹⁰ For low-risk countries or regions, only collection of information is required.

¹¹ Relevant laws of the country of production means the laws applicable in the country of production concerning the legal status of the area of production in terms of: (a) land use rights; (b) environmental protection; (c) forest-related rules, including forest management and biodiversity conservation, where directly related to logging; (d) third party rights; (e) labour rights; (f) human rights protected under international law; (g) the principle of free, prior and informed consent (FPIC), including as set out in the UN Declaration on the Rights of Indigenous Peoples; (h) tax, anti-corruption, trade and customs regulations.

¹² For relevant products that contain or have been made using cattle, the geolocation shall refer to all the establishments where the cattle were kept, encompassing the birthplace, farms where they were fed, grazing lands, and slaughterhouses.

- » **Risk mitigation:** Companies must adopt risk mitigation procedures and measures that include no or only a negligible risk. Article 11 sets out measures that may include requiring additional information, data or documents, carrying out independent surveys or audits, and supporting suppliers, in particular smallholders, through capacity building and investments. The decisions on risk mitigation procedures and measures must be documented, reviewed at least on an annual basis, and made available upon request. According to the Regulation, companies must also be able to demonstrate how decisions on risk mitigation procedures and measures were taken.
- **Reporting and transparency:** Companies must disclose public information about their due diligence systems, including the measures taken to prevent and address deforestation risks in their supply chains. Article 12 states that companies must, on an annual basis, publish disclosure reports regarding their due diligence systems, including the steps taken to meet their obligations. The report must include the conclusions of the risk assessment, and, when applicable, a description of the consultation process with Indigenous Peoples, local communities, and other customary tenured landholders or of the civil society organisations that operate in the area of production.



HOW DOES THE BEEF ON TRACK PROGRAMME DELIVER WHAT THE NEW EU REGULATION REQUIRES?

We describe below how Beef on Track relates to the EUDR (see a summary in Tables 1 and 2), considering the following three levels of alignment:

- ✓ High-level of alignment: covers most EUDR requirements
 - ✓ Medium-level of alignment: partially covers EUDR requirements
 - ✓ Low-level of alignment: shows major gaps related to the EUDR requirements
- **Mandatory due diligence:** the due diligence process includes data collection, legality compliance, traceability, risk assessment and risk mitigation. Beef on Track helps companies to build sustainable beef supply chains and support them in all these aspects:
 - » **Legality compliance and deforestation-free criteria:** The EUDR requires companies to ensure that their products have been produced in accordance with the local relevant laws and to ensure they are deforestation/degradation-free after 2020. Beef on Track allows companies to access data to check if Brazilian suppliers have converted any natural forest areas and includes verification of the official conversion allowance issued by the environmental agencies for the type of conversion identified. Beef on Track does not check the percentages of deforestation and conversion allowed by the Brazilian Forest Code, nor compliance with the criteria related to the specific Permanent Areas of Protection. However, the protocol includes a voluntary no-deforestation commitment, with 2009 as the cut-off date, which CPP signatories abide by.

In summary, Beef on Track only delivers a partial check on Forest Code compliance¹³ but for the companies committed to the CPP (currently, 30 of the 154 meatpackers operating in Amazon abide by this criteria), Beef on Track is highly aligned with the EUDR, since it delivers the EUDR deforestation-free criteria, considering the cutoff date of 2009.¹⁴
 - » **Traceability:** The EUDR requires companies to ensure that the products they place on the EU market are traceable across the supply chain. The Beef on Track programme is not a traceability system, but it requires companies, via the harmonised monitoring protocol, to access information regarding the two main tools used in Brazil:
 - Animal movements: The harmonised monitoring protocol requires the GTA from the direct suppliers.
 - Property geolocation: The harmonised monitoring protocol requires information from CAR, including farm boundary geolocation, which is stricter than the geolocation requirements of all plots of land mentioned in the EUDR, including the assessment of the whole property and not just the plots linked to certain products, such as cattle or soy. Therefore, the person or company carrying out the deforestation is blocked and not just the plot linked to a certain type of production.

¹³ Further versions of Beef on Track could potentially include other law compliance verification, such as the APPs and Legal Reserve, however, it would require increased data availability.

¹⁴ In order to fully deliver the EUDR on deforestation criteria, the meatpacker should adopt the voluntary criteria of no deforestation.

The MPF requires that the monitoring protocol be applied to direct suppliers only. A chapter for indirect suppliers is under development and will comply with the same criteria. Some initiatives have been developed to move forwards on tracing indirect suppliers or to provide further information in this regard, and they can be used to expand the existing controls over the supply chain.

- » **Risk assessment:** The EUDR states that companies must identify the specific risks of deforestation/forest degradation and human rights violations associated with their supply chains, among the other relevant laws mentioned, and take measures to mitigate such risks. By following the Beef on Track monitoring protocol, companies can access reliable data, perform risk assessments, and identify negligible risks on:
 - Deforestation rates and land use changes: Monitoring the rate of deforestation in key regions where cattle are raised, as well as monitoring land use conversion. Data source: Prodes.
 - Land ownership and human rights violations: Monitoring violations of land use rights and other human rights. In order to analyse the Indigenous Land criteria¹⁵, georeferenced maps of the farms (official CAR database) should be overlaid onto the maps of the cartographic baseline of the National Indigenous Foundation, which is regularly updated. The same procedure is done to analyse the Protected Area criteria, using the cartographic baseline of public federal entities and public state agencies. Data sources available: Rural Environment Register, Sicar/PA, Simcar/MT, National Rural Registry System, Environment Ministry, Chico Mendes Institute for Biodiversity Conservation, National Indigenous Foundation, Register of employers who have subjected workers to slave-like conditions.
 - Compliance with regulations: Monitoring compliance with regulations related to environmental protection and labour rights. Labour rights violations analysis is carried out by cross-checking the personal data of the farm owner with the List of slave-like labour from the Labour Inspection Department and the Ministry of Labour and Social Security. Due to the regular updates in the list, it is recommended that the check be carried out on a daily basis. Data sources available: Embargoed areas, Register of employers who have subjected workers to slave-like conditions.

In summary, companies currently check the Register of employers who have subjected workers to slave-like conditions, and look for overlaps with Indigenous Land and Protected Areas. These approaches, however, have limitations since 1) the List of slave-like labour is based just on confirmed cases found by complaints and inspections, 2) there are other traditional communities in Brazil in addition to Indigenous Peoples, riverside communities and grassland communities, whole lands are not mapped in the official government databases, and 3) this is not necessarily a due diligence process as it may not include all steps such as checking labour conditions and social conflicts on the ground. To fill the existing gap in official data, additional social analyses would be necessary. Important public and non-public data (such as that detected by Fern's case study A Deforestation and Rights Observatory - A Case Study from Brazil) may be useful in informing social risk to pinpoint where stricter due diligence should be carried out.

Overall, the Beef on Track programme demonstrates a high level of alignment with the environmental EUDR requirements for risk assessment and a medium level of alignment with the social EUDR requirements,¹⁶ with opportunities for improvements in data accessibility.

¹⁵ For the monitoring protocol, only Indigenous Land that is in the "declared" or more advanced demarcation phase is recognised because in Brazil there are six phases in the demarcation process (1. Under study, 2. Delimited, 3. Declared, 4. Homologated, 5. Regularized, 6. Prohibited).

¹⁶ However, it not clear yet what EUDR will consider in relation to social due diligence.

- » **Risk mitigation:** The EUDR requires companies to adopt risk mitigation procedures and measures to ensure no or only a negligible risk in their supply chains. Currently, the Beef on Track implementation process is used to inform and make decisions on purchases, including the suppliers' blocking and unblocking process. The process of unblocking suppliers with irregularities leads to further action, such as supporting suppliers to overcome their gaps.

Overall, the Beef on Track programme demonstrates a high alignment with the environmental EUDR requirements for risk mitigation. However, it has a low alignment level with the social EUDR requirements as improvements are required on data accessibility to perform risk assessments, and consequently, to carry out mitigation actions along the supply chain.

- **Reporting and transparency:** The EUDR states that companies must, on an annual basis, report on their due diligence system, including on the steps taken by them to meet their obligations. The Beef on Track platform already provides the summary of the Pará state audit report, and the disclosure of other states' reports is under discussion. The summary report brings information on the number of non-conformities by criteria and the full report (that will not be disclosed publicly) include the description of the audit procedures, the description of the processes used by the companies to monitor cattle purchases, the registering of noncompliances and the respective evidence and the audit conclusion. More specifically, it contains details on every cattle purchase that was made by the meatpacker, including which suppliers presented non-conformities and the measures to get them into compliance again or if they were blocked. The full report could be requested from the meatpacker directly by importers, if necessary, but since it contains commercially strategic data, the companies may refuse to comply. As the Beef on Track programme embedded all due diligence steps, these reports could possibly meet EUDR requirements in terms of reporting and transparency regarding performance.

Overall, the Beef on Track programme has a high alignment level with the social and environmental EUDR requirements in terms of reporting and transparency.

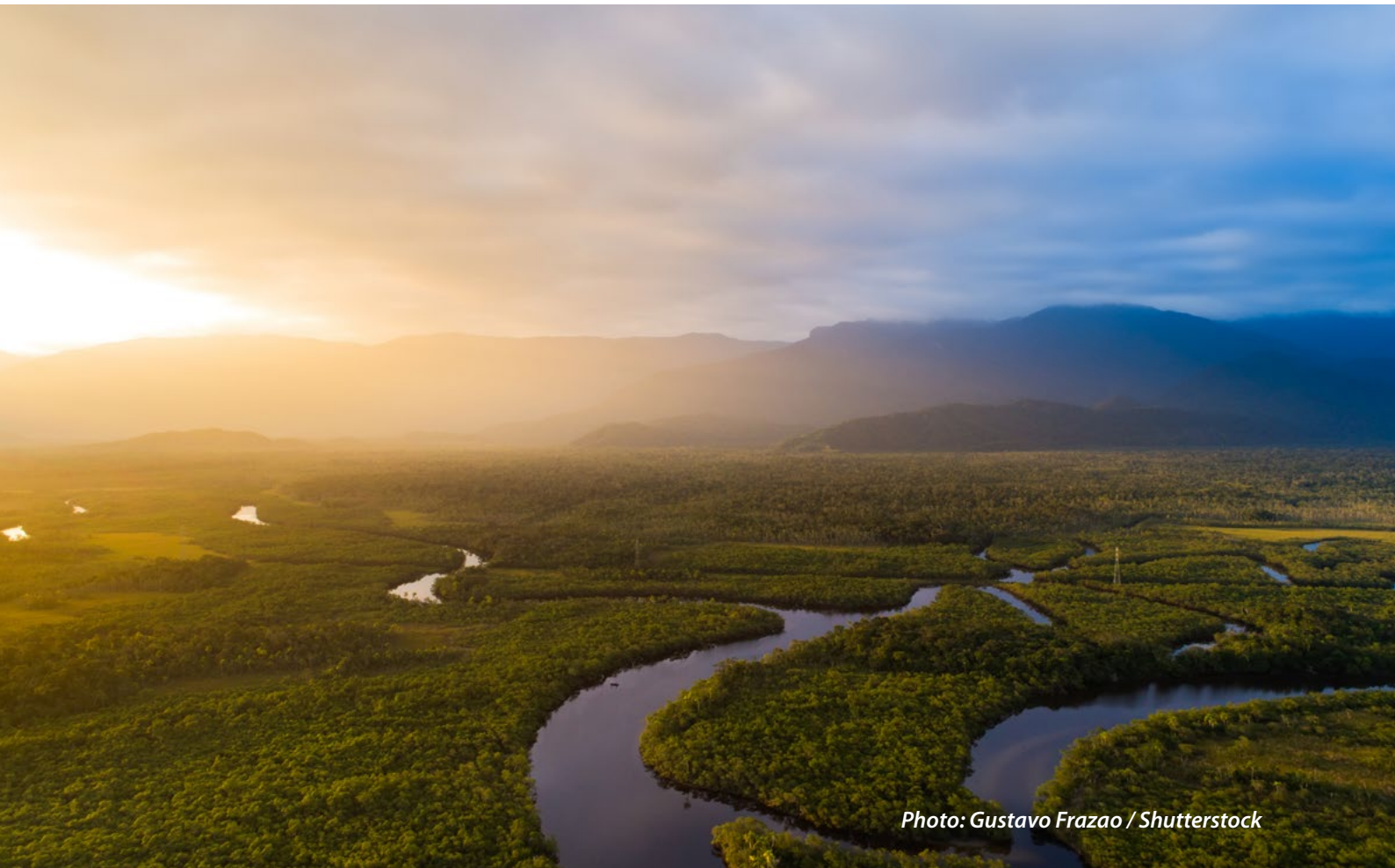





Photo: Gustavo Frazao / Shutterstock

Table 1 What do existing cattle agreements deliver on environmental aspects of the EUDR?

EUDR Requirement	Beef on Track	
	TAC	CPP
Mandatory due diligence		
Deforestation Free		
Legality compliance		
Risk assessment		
Risk mitigation		
Reporting & Transparency		

LEVEL OF ALIGNMENT  HIGH  MEDIUM  LOW

Table 2 What do existing cattle agreements deliver on social aspects of the EUDR?

EUDR Requirement	Beef on Track	
	TAC	CPP
Mandatory due diligence		
Legality compliance		
Risk assessment		
Risk mitigation		
Reporting & Transparency		

LEVEL OF ALIGNMENT  HIGH  MEDIUM  LOW

HOW THE BEEF ON TRACK PROGRAMME IS IMPLEMENTED ON THE GROUND

INITIATIVES FOCUSED ON BEEF ON TRACK IMPLEMENTATION FOR DIRECT SUPPLIERS

After Greenpeace's report titled *Slaughtering the Amazon* was published in 2009, large Brazilian meatpackers (JBS, Marfrig and Minerva) made a commitment to monitor their cattle purchases in the Amazon biome based on the principles of the Beef Public Commitment. In practice, these companies agreed not to purchase products of bovine origin from farms involved in: deforestation after October 2009, invasion of Indigenous Land and Environmental Conservation Units; embargoed by the Brazilian Government's Environmental Protection Agency (IBAMA) or that use slave labor. They also agreed to reject land-grabbing and violence in the fields by implementing a tracking system capable of monitoring, verifying and reporting occurrences.

To do so, meatpackers rely on private geotechnology companies ([Agrotools](#), [NicePlanet](#), [Brain](#), [Geoflorestas](#), and others) to monitor direct suppliers in regard to meeting the requirements of the Beef on Track programme and other legal commitments. Their platforms basically cross public information on the Beef on Track criteria with information from the direct suppliers and their farms, collected by the meatpackers. Currently this service only focusses on direct supplier assessment, since the MPF does not require meatpackers to identify their indirect suppliers as they have no access to the GTA nor their identification numbers linked to CAR numbers.

INITIATIVES FOCUSED ON SOLVING INDIRECT SUPPLIER TRACEABILITY AND MONITORING

In recent years, a protocol and a few tools have been created in Brazil focused on getting traceability to include indirect suppliers by applying the set of criteria recently harmonised under the Beef on Track programme, across the whole supply chain. They attempt to get the information on cattle movement by accessing the GTA.

They operate in the following ways:

Guidelines

In order to make implementation of the criteria feasible for indirect suppliers, the indirect suppliers working group (Grupo de Trabalho de Fornecedores Indiretos – GTFI) has created a guideline named [GTFI Good Practices](#), that defines specific parameters to monitor indirect supplier against the agreed criteria among the sector, including the focus on the first level of indirect suppliers.¹⁷

Tools

[SMGeo Prospec](#) is a private platform application developed by [NicePlanet Geotecnologia](#) to be used by cattle ranchers (the direct supplier to meatpackers) to monitor animals coming into their production system (through breeding and fattening) using a cell phone app that helps suppliers to verify the socioenvironmental compliance of their own supply chain. In this way, SMGeo allows the registration, analysis and socioenvironmental monitoring of indirect suppliers of the livestock production chain. It relies on producers' information.

[Conecta](#) is also a private platform from Safe Trace that delivers a traceability system to monitor direct and indirect cattle suppliers and it integrates monitoring and traceability tools (CAR and GTAs). However, Conecta relies on public or voluntary data from ranchers.

¹⁷ According to University of Wisconsin-Madison, monitoring the first tier of indirect suppliers with more than 100 hectares, could elevate meatpackers' capacity to monitor deforestation in cattle supply chain up to ~80 per cent and cover ~94 per cent of the remaining forest.

Visipeç is a traceability tool that provides the meatpacking industry in Brazil with visibility into their supply chains, including links between direct and indirect supplying ranches, and was developed through the joint effort of several institutions – led by the National Wildlife Federation, researchers from the Land Use and Environment Laboratory at the University of Wisconsin-Madison, and support of Amigos da Terra-Amazônia Brasileira. The tool has an “add-on” concept, as it was built in an Application Programming Interface (API) format, which can be integrated with the current monitoring systems used by meatpackers so as to work in a complementary way. In addition, it uses a database built from GTA and CAR public data sets to link direct and indirect supplying ranches and assess the socioenvironmental compliance of indirect ones at scale using GTFI Good Practices. However, it does not currently cover all indirect supplying tiers as GTA is a batch level document, which limits the scope of analyses, since there is a need for high precision analyses as the info will serve for commercial decision-making by slaughterhouses. In addition, Visipeç currently tracks cattle with up-to-date information in Para State (Amazon biome) and Tocantins (Cerrado biome), historical data in Mato Grosso State (Amazon and Cerrado biomes), and partial data in Goiás State (Cerrado biome). The tool operates within the states that provide the necessary level of transparency to GTA, but it is ready to cover the entire national territory, according to State level data availability.

Selo Verde is a public mechanism developed through Technical Cooperation developed by the Federal University of Minas Gerais (UFMG) and the Centre for Territorial Intelligence (CIT), in partnership with Brazilian state governments (Pará-PA and Minas Gerais-MG). Implemented in 2021, it is the only public and free platform that allows users to search the environmental compliance of rural properties in relation to all the Beef on Track criteria in relation to the Forest Code (areas of Legal Reserve and Permanent Conservation Areas – mainly riparian zones). Since it is a governmental system, it accesses personal and sensitive data not necessarily fully available to the private systems currently adopted by industry.

Selo Verde is capable of tracking commercial relationships and cattle movements between properties, using the full set of GTA of Pará State, which makes it possible to identify the percentage of direct purchases “contaminated” by cattle purchased by non-compliant indirect suppliers. Due to its ability to access databases from state environmental and animal sanitary agencies, it estimates the level of contamination from non-compliance – considering the volume of cattle transacted – from direct and indirect suppliers (it assigns contamination of direct suppliers that have more than 20 per cent of cattle coming from non-compliant indirect suppliers).¹⁸ So far, the way the data are made available to the supply chain enables a risk analysis to be undertaken. It is possible to access a full view of the traceability and monitoring results by asking the state Environmental Agency.











Private systems and initiatives have also been developed. All of them are built on existing solutions and data mentioned before, such as from suppliers or the government. This demonstrates that the responsibility to trace the origin of cattle is indeed a collective effort.

¹⁸ The 20 per cent parameter is not a fixed value; rather, it consists of an initial parameter defined by Pará State authorities in order to provide feasibility in its implementation. It can be changed anytime according to national and international trade requirements.

Table 3 shows a summary of whether each initiative requires full traceability of the cattle origin in terms of supply chain scope and geographic scope in relation to the EUDR.

Table 3

What do existing Brazilian traceability initiatives deliver for the EUDR?

Scope	Selo Verde	Visipec	Conecta	SMGeo	Private Geotechnology (Agrotools, Brain, NicePlanet, Geoflorestas...)
Supply chain scope					
Geographic scope					

LEVEL OF ALIGNMENT



HIGH



MEDIUM



LOW

FINAL COMMENTS

Overall, the Beef on Track programme has a good level of alignment with the EUDR environmental requirements, and a medium level of alignment with the social requirements. The main barrier to its ability to fully meet the requirements is lack of access to data and mitigation measures along the supply chain. To fully support compliance with the EUDR it will be necessary to add social due diligence and risk mitigation measures, based on MRV of system data, or a new version of the harmonised Protocol for Monitoring Cattle Suppliers which includes missing requirements such as the monitoring of indirect suppliers.

It is important to note that overcoming the major gap of monitoring indirect suppliers is reliant on public data accessibility. Therefore, it is not a gap in the Beef on Track system, but rather in public sector collaboration. Even with these missing parts, the Beef on Track programme, as a widely recognised system grounded in a complex multi-stakeholder process, is a good starting point for companies to reach full compliance with the EUDR. It can act as the driver for even greater harmonisation and integration of different tools, policies and initiatives. Ideally it would become part of public policy with state responsibility for the tracking and monitoring of the entire cattle sector.

Due to the lack of data, the major meatpackers have different strategies for achieving the traceability requirements of the TAC, particularly in relation to indirect suppliers. Many have developed their own initiatives to 'green' their supply chains, but no existing initiative currently achieves the scope and level of transparency required by the EUDR.

It should be conceptually possible for the Brazilian Ministry of Agriculture and Livestock to coordinate monitoring of ranchers linked to deforestation and human rights violations by cross-referencing their CAR with their corresponding GTAs or other traceability system that captures cattle movements.

Selo Verde in Pará State applies the Beef on Track Protocol to the full supply chain, this can be improved by providing transparency to traceability data and defining public policies to unblock direct suppliers and by providing support to indirect suppliers to deal with non-compliance.

It is clear that a national system of traceability and monitoring of socio-environmental indicators is key to avoiding leakage of negative impacts from one biome to another, and from one link of the supply chain to another. A system of this nature is therefore essential to contribute to halting deforestation, conversion and human rights violations in the livestock supply chain. Partial solutions focussing solely on delivering legal volumes to the EU will not achieve the full positive impact.

The EU has suggested to offer support to producer countries in implementing the actions necessary to deliver compliant products. Considering the existing solutions and gaps, this support should focus on incentivising the establishment, implementation and recognition of a national system of traceability and monitoring of socio-environmental criteria, building upon the mechanisms in place, such as Beef on Track.



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