



**DEFORESTATION-
FREE INITIATIVES
IN THE BRAZILIAN
LEATHER SECTOR**
**CHALLENGES AND OPPORTUNITIES
FOR TRANSFORMING THE VALUE CHAIN**



The Tropical Forest Alliance (TFA) is a multi-stakeholder partnership catalyzing collective action to drive the transition to global deforestation- and conversion-free (DCF) agricultural commodities. Housed within the World Economic Forum, TFA uses public and philanthropic resources to transform the production and trade of agricultural commodities – with a focus on cattle, palm oil and soy.

Through its 190 participants and collaborators, the TFA network brings together experts from around the world to transform ideas into the development of new production models that balance climate, nature and food security objectives.

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Disclaimer: This report was originally written in 2024, and although every effort has been made to ensure that its content is up to date and accurate, errors and omissions may be present, as new facts and scenarios emerge. The report is provided on an “as is” basis and is not intended as a substitute for the reader's own due diligence and inquiry.

TABLE OF CONTENTS

1. Introduction	4
2. Situation Analysis: The Leather Sector	5
2.1. The Cattle Value Chain	5
2.2. Industrial Production of Leather in Brazil	6
2.3. Brazilian Leather in the International Market	8
2.4. History of Engagement in the Leather Sector	10
2.5. Key Takeaways from the Situation Analysis on Leather	12
3. Regulation and Policy Landscape in Deforestation-Free Supply Chains	13
3.1. Main Regulatory Initiatives	13
3.1.1. The European Union Deforestation Regulation (EUDR)	13
3.1.2. US Forest Act of 2021	14
3.1.3. UK Environment Act	14
3.2. Impacts on the Leather Supply Chain	15
3.3. Current and Potential Responses to the Regulations	16
3.4. Next Steps: Three Priority Actions on Regulation	16
4. Certification Schemes	17
4.1. The Leather Working Group's Audit Standards	17
4.2. The Brazilian Leather Certification of Sustainability (CSCB)	18
4.3. The Italian Institute of Quality Certification (ICEC)	18
4.4. Other Certification Initiatives	19
4.5. Next Steps: Three Priority Actions on Certification	19
5. Monitoring and Traceability Initiatives	20
5.1. National Traceability Initiatives in South America	20
5.2. Main Traceability Initiatives in Brazil	21
5.3. Traceability Challenges for the Brazilian Leather Sector	22
5.4. Pathways to Enhancing Traceability in the Brazilian Leather Sector	23
5.5. Next Steps: Three Priority Actions on Traceability	23
6. Value Chain Engagement: From Suppliers to Retail	24
6.1. Supply Side Engagement: Challenges and Pathways	24
6.1.1. Organizational Level	24
6.1.2. Sectoral Level	25
6.1.3. International Market Level	26
6.2. Demand Side Engagement: Challenges and Pathways	26
6.3. Next Steps: Three Priority Actions on Engagement	27
7. Conclusions	28
8. References	29
9. Annexes	31

1 INTRODUCTION

The cattle sector is one of the main contributors to deforestation and greenhouse gas (GHG) emissions in Brazil. Between 1997 and 2019, 75% of all deforestation in Brazilian public forests was attributed to this economic activity¹. There are two main products that derive from the cattle sector: beef and leather. The beef supply chain is primarily directed towards internal consumption, as it is approximated that only 25% of beef production in Brazil is exported².

On the other hand, leather production is predominantly directed towards the external market. It is estimated that 80% of the leather produced in Brazil is exported³, sold primarily to international luxury brands in the fashion and automotive industries. Across the world consumers are becoming increasingly concerned about deforestation in Brazil. Buying leather from Brazilian producers therefore presents a potential risk to these companies⁴. Consequently, due to the way in which they maintain a closer relationship to the final consumer and view their brand as their most important asset, luxury brands may have a greater incentive to promote action towards addressing deforestation.

THIS REPORT IS TARGETED AT POLICYMAKERS, COMPANIES, CIVIL SOCIETY, AND OTHER PARTNERS WHO ARE INTERESTED IN DEVELOPING COLLECTIVE ACTION TO ADDRESS THE MAIN SUSTAINABILITY CHALLENGES IN THE LEATHER SECTOR.

Given those general characteristics, it is possible to raise the assumption that the leather supply chain holds a potential to be at the forefront of change, being pivotal in working towards eliminating deforestation within the cattle sector in Brazil. This report aims to further investigate this premise, mapping the main challenges that the leather industry faces in achieving these goals and providing examples of initiatives that have already helped to create new pathways to bring about change. The analysis presented here is based on two

components; desk-based research using information from public databases, academic articles, sectorial reports, materials produced by environmental organizations and government documents; and semi-structured interviews with key stakeholders from the leather sector (including businesses, associations, and NGOs). The interviews were conducted between the months of March and June 2024, and the desk-based research was executed between June and July 2024.

The report is divided into six main sections. The first section presents an overview of the leather market in the form of a situation analysis of Brazil's leather sector. The second addresses the main regulatory documents that aim to mitigate deforestation in forest-risk supply chains, for example, EUDR. The third section of this report analyses the main certifications within the leather sector. The fourth section then focuses on existing traceability initiatives in Brazil and South America. Finally, the fifth section presents a more general analysis on the engagement of the entire leather value chain that is needed to achieve the objectives presented in the three previous sections.

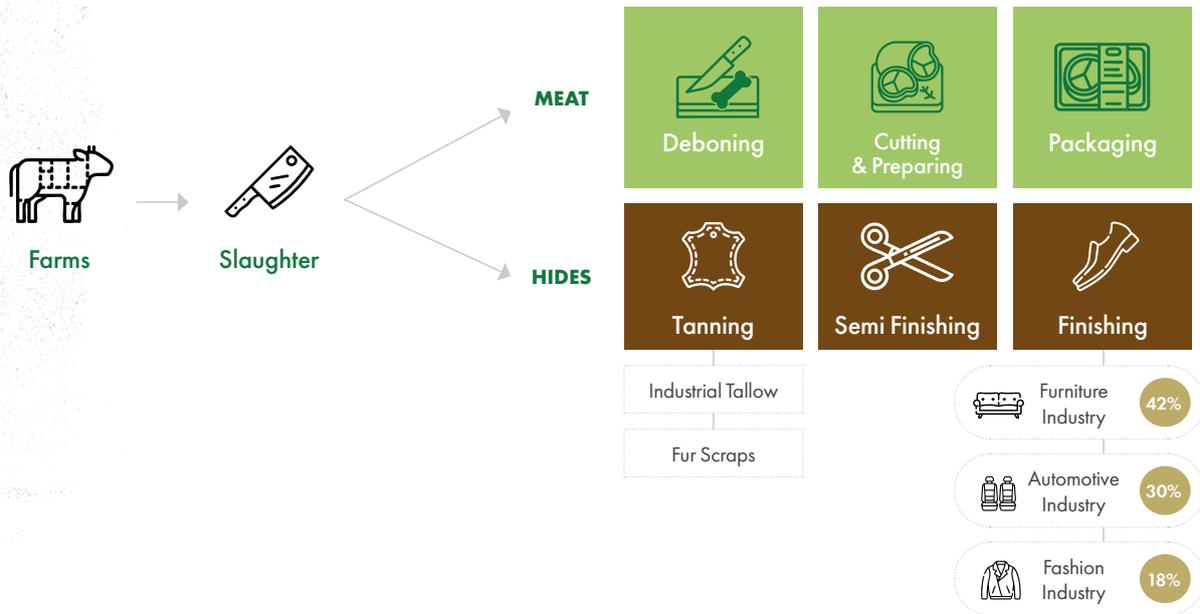
This report is targeted at policymakers, companies, civil society, and other partners who are interested in developing collective action to address the main sustainability challenges in the leather sector. The Tropical Forest Alliance is an important platform for public-private partnerships aimed at decoupling commodity trade from deforestation. This report also therefore serves as a springboard for TFA to explore how to mobilize and deliver partnerships that can support the leather sector to advance collectively on some of the most significant existential issues that it faces today. ■

- 1 Salomão, C. S. C. (2021).
- 2 Associação Brasileira das Indústrias Exportadoras de Carnes (ABIEC).
- 3 Amigos da Terra, Deutsche Umwelthilfe, Earthsight, National Wildlife Federation, Rainforest Foundation Norway, Repórter Brasil, University of Wisconsin-Madison, Centre for Sustainability, and the Global Environment (2022).
- 4 Deutsche Umwelthilfe, Canopée, Ecologistas en Acción, Environmental Investigation Agency, Fern, Mighty Earth, Rainforest Foundation Norway (2021).

2

SITUATION ANALYSIS: THE LEATHER SECTOR

Figure 1: Overview of the leather value chain



Source: Olab. From: Pereira, M. de A., et al (2005) and CICB (2022).

Note: percentages from each industry refer to leather production traded to the external market, in the year of 2021.

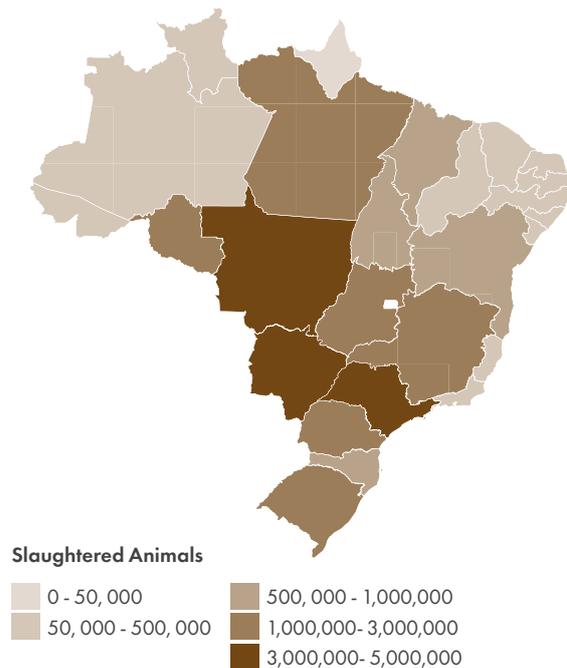
The aim of this section is to provide a broad context for the Brazilian leather sector by using the beef industry as a parameter to better understand the relevance of leather production within the cattle sector as a whole.

2.1. THE CATTLE VALUE CHAIN

The cattle value chain is the starting point of both the beef and the leather industry. The value chain begins in cattle raising farms. Once the bovine animals have been raised on these farms they are then sent on to slaughterhouses, where the hides are extracted and sold on to tanneries.

On average, between 2014 and 2023, approximately 31 million bovine animals were slaughtered per year in Brazil. Almost 60% of those slaughtered were in the top five cattle producing states: Mato Grosso, Mato Grosso do Sul, São Paulo, Goiás and Minas Gerais. It is also important to mention the particular relevance of states in the Northern region. Pará and Rondônia are the sixth and seventh largest cattle producers in Brazil, representing around 15% of all slaughtered animals in Brazil between 2020 and 2022.

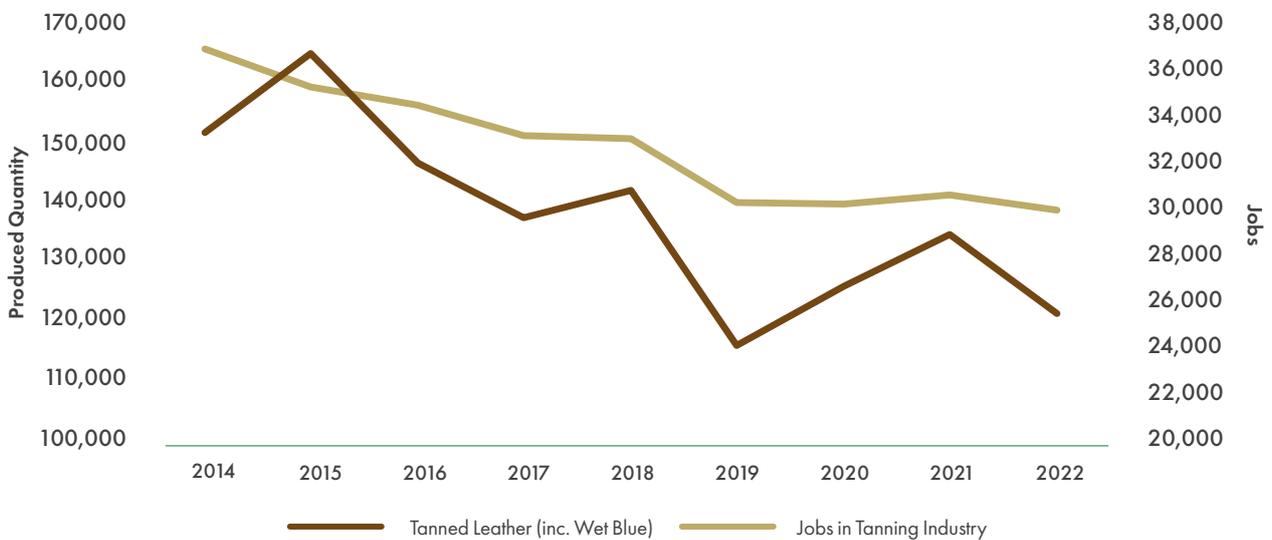
FIGURE 2:
Distribution of bovine animals slaughtering
in Brazil, per state (average between 2020 and 2022)



Source: Olab. From: Pesquisa Trimestral do Abate de Animais (ABATE-IBGE).

DEFORESTATION-FREE INITIATIVES IN THE BRAZILIAN LEATHER SECTOR: CHALLENGES AND OPPORTUNITIES FOR TRANSFORMING THE VALUE CHAIN

CHART 1:
Evolution of jobs and produced quantity (1.000 m2) in the leather tanning industry



Source: Olab. From: Pesquisa Industrial Anual (PIA-Produto, IBGE) and Relação Anual de Informações Sociais (RAIS-MTE). Note: (1) Codes for Industrial Production Lists (Prodlists) used to collect production data are presented in Annex 2. (2) Codes for National Classification of Economic Activities (CNAEs) used to collect employment data are presented in Annex 3. PIA-produto data for 2023 was not available when the study was prepared

2.2. INDUSTRIAL PRODUCTION OF LEATHER IN BRAZIL

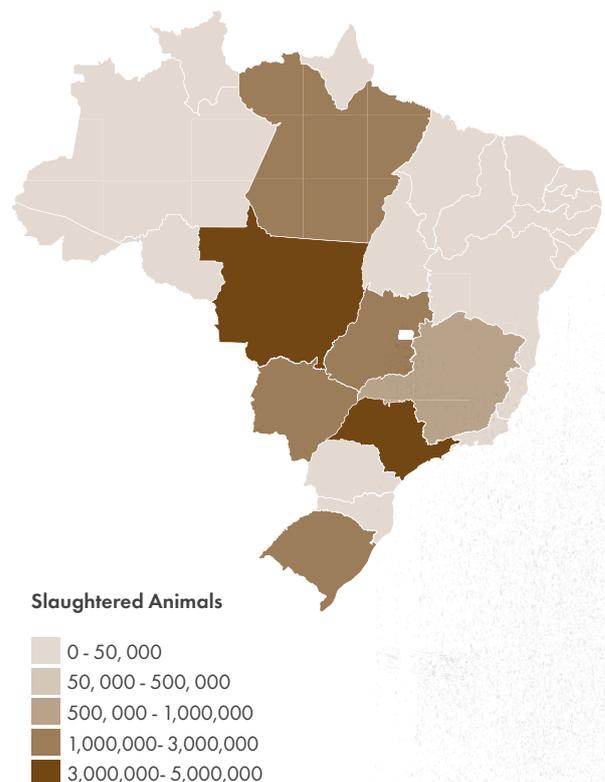
The tanning process is a key step in the leather value chain, since it produces inputs for finished and semi-finished leather. Additionally, tanned leather itself is a key product in terms of exports: in 2022, the exported value of tanned leather was larger than the sum of semi-finished and finished leather exports.

However, the leather tanning industry has experienced a significant decrease in its production level, which impacts the level of employment in this stage of the value chain. This trend is presented in Chart 1, which shows that, between 2014 and 2022, the number of jobs reduced by approximately 19%. This equates to a similar decrease registered in production quantity, which was 20%.

It is important to note that other factors may also impact the level of employment in the tanning industry, beyond the retraction on produced quantity. A key element here is the substitution of human labor for machinery, which can increase the productivity and reduce the waste of chemical substances in the process ⁵.

⁵ Silva, E. C. and Pedron, C. D. (2016).

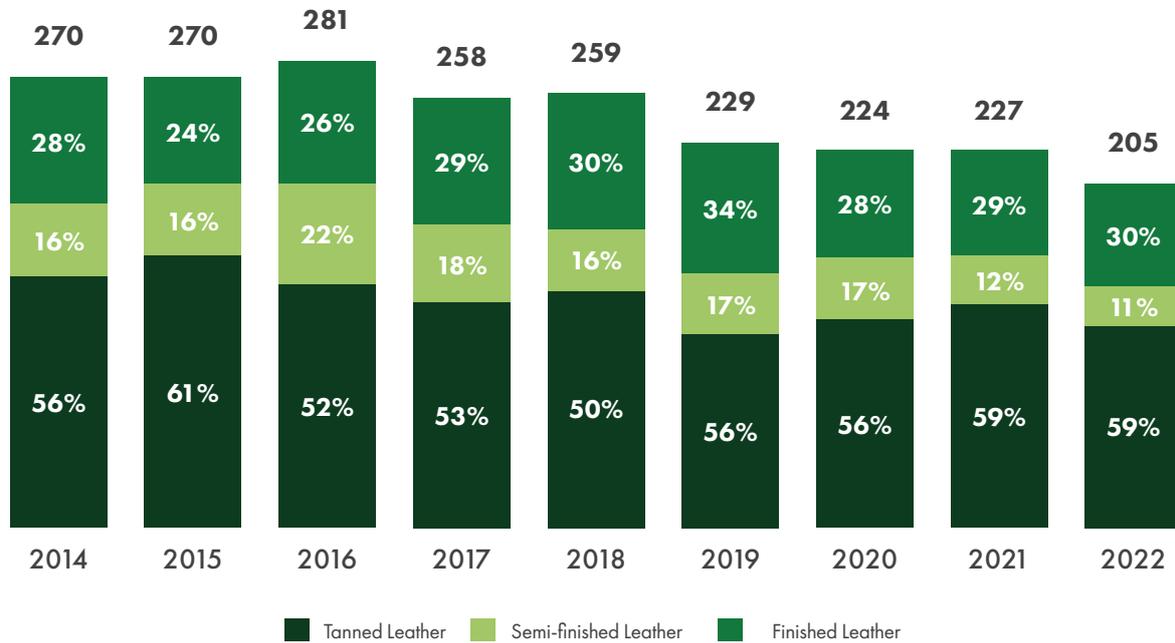
FIGURE 3:
Distribution of leather tanning units among Brazilian states (average between 2020 and 2022)



Source: Olab. From: Pesquisa Trimestral do Couro (PTC-IBGE).

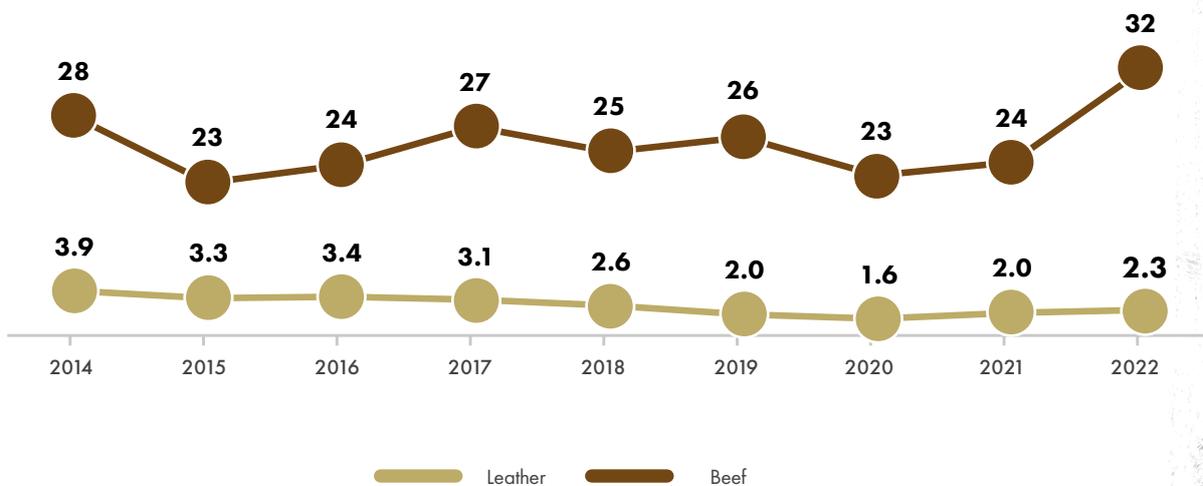
DEFORESTATION-FREE INITIATIVES IN THE BRAZILIAN LEATHER SECTOR:
CHALLENGES AND OPPORTUNITIES FOR TRANSFORMING THE VALUE CHAIN

CHART 2:
Brazilian production of processed bovine leather (million m²)



Source: Olab. From: Pesquisa Industrial Anual (PIA-Produto, IBGE). Note: (1) Codes for Industrial Production Lists (Prodlists) used to collect production data are presented in Annex 2. (2) The time range of 2014 to 2022 was established since there is a methodological break in PIA-Produto after 2013; PIA-produto data for 2023 was not available when the study was prepared

CHART 3:
Total value of Brazilian industrial production: beef and leather (Billion US\$)



Source: Olab. From: Pesquisa Industrial Anual (PIA-Produto, IBGE) and Ipeadata. Elaborated by: Olab. Note: (1) Codes for Industrial Production Lists (Prodlists) used to collect production data are presented in Annex 2. (2) The time range of 2014 to 2022 was established since there is a methodological break in PIA-Produto after 2013; also, PIA-produto data for 2023 was not available when the study was prepared

DEFORESTATION-FREE INITIATIVES IN THE BRAZILIAN LEATHER SECTOR: CHALLENGES AND OPPORTUNITIES FOR TRANSFORMING THE VALUE CHAIN

The leather tanning activity is concentrated in seven states. The biggest producer is Mato Grosso, which is also the main state in terms of slaughtered bovine animals. Mato Grosso is followed by São Paulo and Rio Grande do Sul. In the Northern region, the state of Pará is the biggest leather producer, with more than 2 million units of tanned leather. The regional distribution of leather tanning is presented in [Figure 3](#). Results from the interviews suggested that most of Brazilian leather and hides are exported directly by meatpackers themselves, rather than by tanneries. The leather industry can be divided into three main stages which generate the following product groups: tanned leather, semi-finished leather and finished leather. Most of the leather produced by the Brazilian industry is tanned leather⁶, which contributed to 59% of total production in 2022. In the same year, semi-finished leather was responsible for 11% of total production and finished leather accounted for 30%. Chart 2 presents the evolution of industrial leather production from 2014 to 2022.

In Chart 2 it is evident that after reaching a high of 281 million m² in 2016, the industrial production of leather has been steadily decreasing. The reduction

has happened in all three main product groups: tanned leather (-20%), semi-finished leather (-48%) and finished leather (-18%).

An important finding, therefore, is that supply from the cattle sector in Brazil is driven by the demand for beef. In 2022, the total produced value of the Brazilian beef industry was approximately 14 times larger than the produced value of leather, as presented in Chart 3.

Chart 3 shows that not only is there a considerable difference in size between the industrial production of beef and leather in Brazil, but that this difference has expanded during the analyzed period. That is mostly due to a decrease of 41% in the leather production, while the beef industry grew 14%.

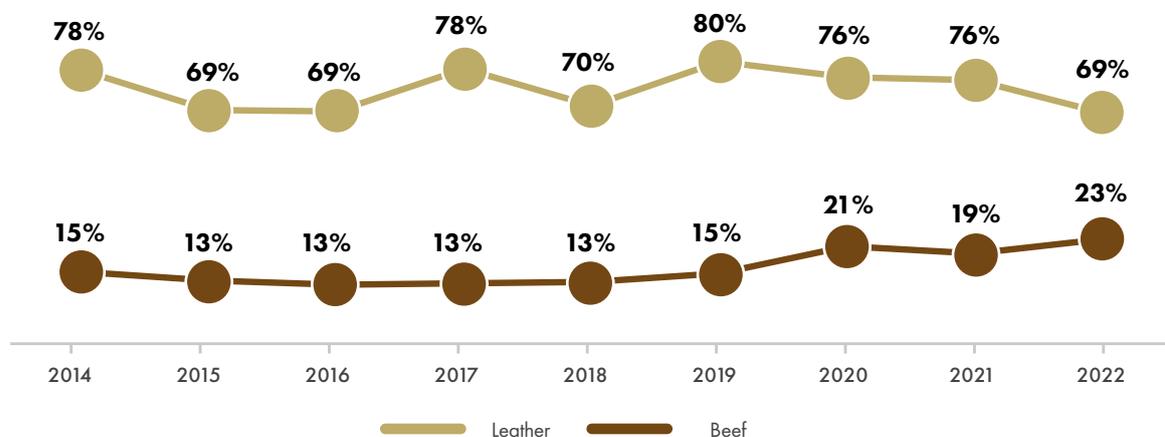
2.3. BRAZILIAN LEATHER IN THE INTERNATIONAL MARKET

The beef and leather industries in Brazil also diverge heavily when it comes to the destination of their products. Between 2014 and 2022, approximately 74% of the produced volume of leather in Brazil was exported, showing that the external market is the main destination for the sector's production.

On the other hand, in the same period, only 16% of the total beef produced in Brazil was exported. This is presented in Chart 4.

⁶ "Tanned leather" includes wet-blue leather (see Annex 2 for further detail on terminology). Aggregating these two categories (wet-blue and non-wet-blue) into tanned leather was done because of terminology differences between databases (ComexStat and PIA-produto data for 2023 was not available when the study was prepared).

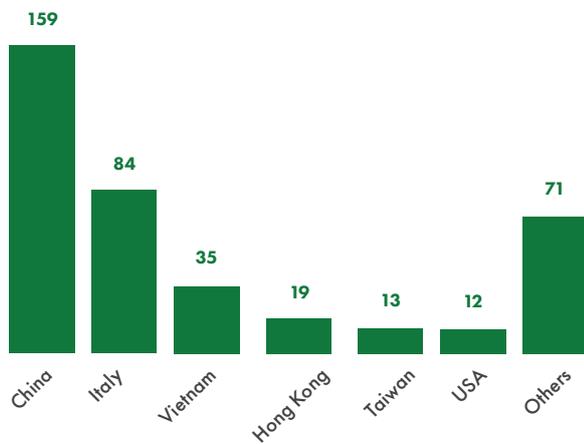
CHART 4:
Share of Brazilian production quantities destined for export: beef vs leather



Source: Olab. From: Pesquisa Industrial Anual (PIA-Produto, IBGE) and ComexStat. Note:

1. Codes for Industrial Production Lists (Prodlists) used to collect production data are presented in Annex 2.
2. Codes for Mercosur Common Nomenclature (NCM) used to collect international trade data are presented in Annex 2.
3. The time range of 2014 to 2022 was established since there is a methodological break in PIA-Produto after 2013; also, PIA-produto data for 2023 was not available when the study was prepared

CHART 5:
Brazilian leather exports ('000 Tons), per main destination (average 2021 and 2023)



Source: Olab. From: ComexStat. Note: Codes for Mercosur Common Nomenclature (NCM) used to collect international trade data are presented in Annex 2.

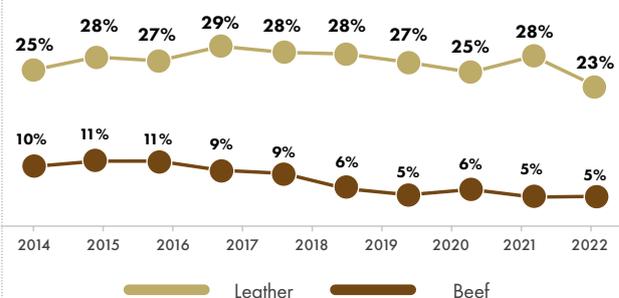
In terms of quantity, the exports of Brazilian leather are mainly focused on three markets: China (40%), Italy (21%) and Vietnam (9%), which together accounted for 70% of Brazilian leather exports between 2021 and 2023. These countries import Brazilian leather at a similar price, between 1.5 and 2.5 US Dollars per kilogram. In terms of value, the United States also play an important role in Brazilian leather exports, being the second most relevant importer, with an average price of around 15 US Dollars per kilogram.

The Chinese market is also the main destination for Brazilian beef products, and beef exports from Brazil to China represent a larger export value than leather products. Between 2021 and 2023, China has imported around 45% of Brazilian beef, which is around 4.5 times higher than the second main destination, the United States (10%). It is also important to note that no EU member is among the top 10 importers of Brazilian beef. The most relevant EU importer of Brazilian beef is Italy (14th), representing approximately 1% of total beef exports from Brazil.

In contrast, the European Union is considerably more important for Brazilian leather exports. In 2023, the EU was the final destination for approximately 23% of leather products from Brazil, and only 5% of its beef products. Given the growth of the Chinese market, the EU has also gradually lost some of its share of Brazilian beef exports, as indicated in Chart 6.

Another important point to be noted here is that China has radically increased its imports of Brazilian beef over the last 10 years. In 2014, the country imported around 100 tons of beef, and in 2023, this number had grown to 1.2 million tons, as demonstrated in Chart 7. That is due to an extremely significant economic growth by China, which generated a steep increase in demand for food. Also, however, in 2018 the country experienced a crisis of African Swine Fever, which killed 40% of the Chinese swine herd, also generating a need of substituting meat sources. In terms of beef, China's domestic market has quite a high dependency, once 30% of total consumption is fulfilled by imports, making China the biggest importer of beef in the world⁷.

CHART 6:
Share of value for beef and leather exported to the European Union (2014-2023)

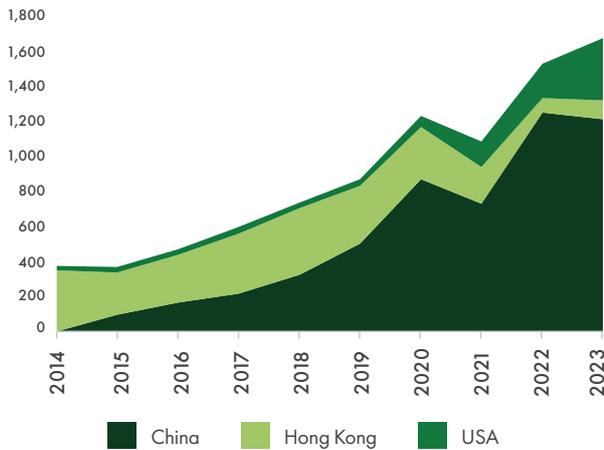


Source: Olab. From: ComexStat. Note: Codes for Mercosur Common Nomenclature (NCM) used to collect international trade data are presented in Annex 2.

⁷ Jank et al, 2023.

DEFORESTATION-FREE INITIATIVES IN THE BRAZILIAN LEATHER SECTOR: CHALLENGES AND OPPORTUNITIES FOR TRANSFORMING THE VALUE CHAIN

CHART 7:
Top 3 destinations for Brazilian beef exports
('000 Tons), 2014 to 2023



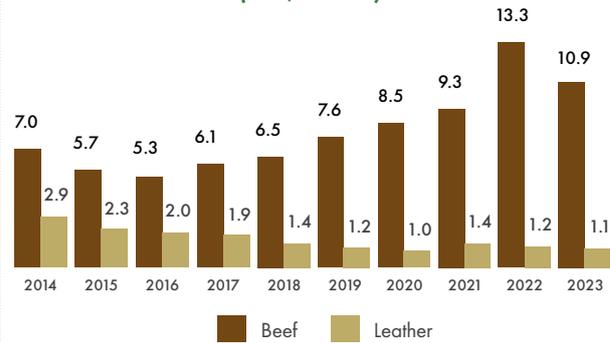
Source: Olab. From: ComexStat. Note: Codes for Mercosur Common Nomenclature (NCM) used to collect international trade data are presented in Annex 2.

The growth of China’s demand is the main factor that has led to an increase in Brazil’s beef exports, which grew from 7.0 billion US\$ in 2014, to 10.9 billion US\$ in 2023. On the other hand, leather exports have decreased from 2.9 billion US\$ in 2014, to 1.1 billion US\$ in 2023. This trend is presented in Chart 8.

The commercialization of leather on the external market can also be seen through a sectoral perspective. In 2021, the total leather sales for the external market were directed towards three main industries: furniture (upholstery), automotive and fashion (shoes). Together these three industries accounted for approximately 91% of all leather commerce. This is presented in Chart 9.

As seen in Chart 9, the furniture industry is the most prominent sector in terms of Brazilian leather sales to the external market, representing a 42.4% share of Brazil’s total leather exports. The automotive industry represents a 30% share, and the fashion industry represents 18%. In terms of deforestation-free ambitions, the leading share of the furniture sector is concerning as brand value is not as important for generating revenue in this sector as it is for the automotive and fashion industries. Therefore, sustainability requirements do not have a central role in the business models of furniture companies, which could potentially reduce incentives for deforestation-free practices from Brazilian leather suppliers.

CHART 8:
Brazilian Exported Quantity: Beef vs Leather
(US\$ Billion)



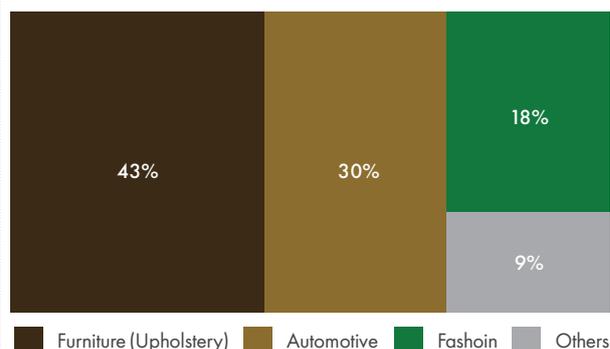
Source: Olab. From: ComexStat. Note: Codes for Mercosur Common Nomenclature (NCM) used to collect international trade data are presented in Annex 2.

2.4. HISTORY OF ENGAGEMENT IN THE LEATHER SECTOR

The aim of this section is to better understand the place that the leather sector occupies in terms of overall engagement within the cattle supply chain, by comparing information on the sector with contributions from stakeholder interviews. This comparative analysis has revealed that the leather sector holds a unique position within the cattle supply chain and in its interactions between stakeholders.

From 2024 to 2025, this became an argument used by the sector’s lobby to justify the removal of leather from the EUDR (as we heard from Ricardo Andrade). However, our point here is the opposite: leather should not be excluded from discussions on deforestation/sustainability, but rather be **even more proactive in it** to be included and be relevant, as it

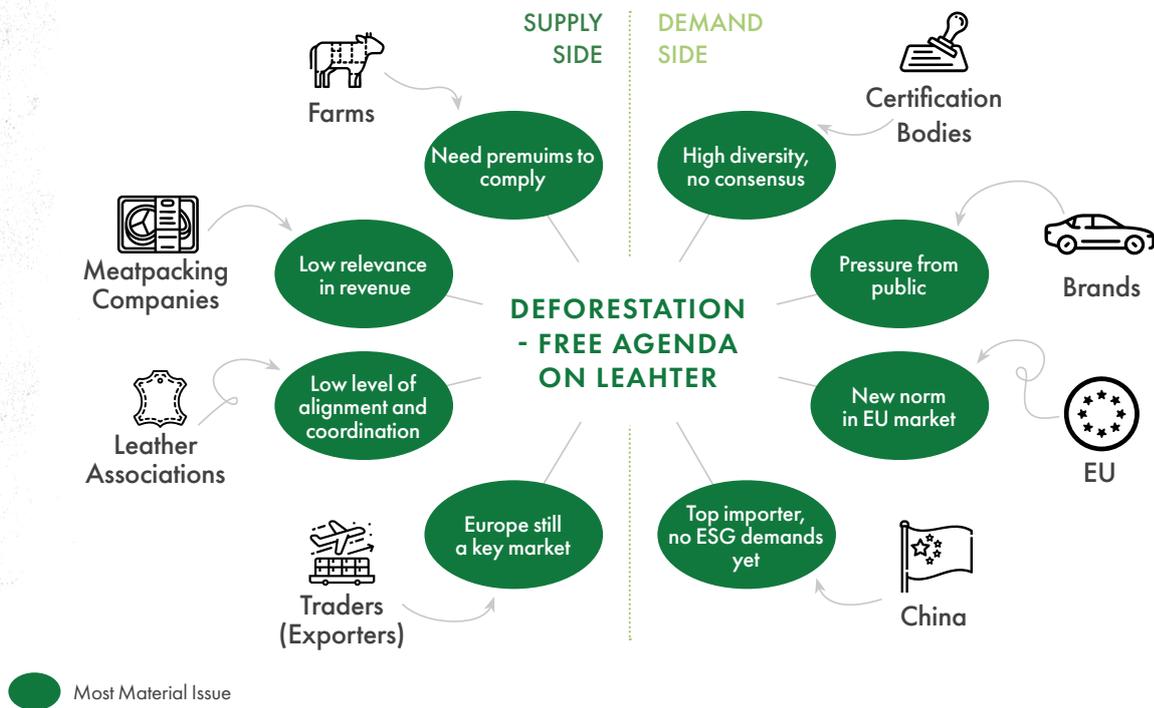
CHART 9:
Percentage of leather sales for
the external market, per sector (2021)



Source: Olab. From: CICB (2022).

DEFORESTATION-FREE INITIATIVES IN THE BRAZILIAN LEATHER SECTOR: CHALLENGES AND OPPORTUNITIES FOR TRANSFORMING THE VALUE CHAIN

FIGURE 4: Dynamics of leather sector engagement on the deforestation-free agenda



Source: Olab analysis. From: interviews executed for this report.

cannot be financially/operationally. Most of the leather exported to foreign countries is produced by large meatpacking companies, which have a verticalized structure that allows competitive advantages in terms of leather production costs. The low impact that it has on the revenue of these companies makes leather a very low priority in terms of adopting general policies and good practices. This presents a significant barrier to the leather sector's ability to mobilize the overall cattle supply chain in terms of deforestation-free approaches.

The diminished presence of leather producers in discussion spaces for the cattle supply chain is also a consequence of a historically low levels of cooperation among leather stakeholders. Results from interviews pointed to a trend of leather departments inside meatpacking companies were left apart on discussions about cattle.

Additionally, in general, these actors in the supply chain have a low level of knowledge in subjects like traceability and in the importance of adopting deforestation-free practices. The consequence is an overall resistance to deforestation-free regulations. Despite the internal lack of coordination among

leather sector stakeholders, the external market has a different approach to the deforestation-free agenda. As previously outlined, Europe (especially Italy) is a much more significant destination for Brazilian leather exports than for beef.

This demand segment for Brazilian leather is in part composed by luxury companies in the fashion and automotive sectors, who hold brand value as their biggest asset. These companies sell their products to a highly demanding consumer segment (in terms of ESG criteria) that is increasingly pushing for a deforestation-free agenda.

The conflict between the priorities of stakeholders on the supply and the demand side of the leather sector in Brazil is a pattern that is expressed in diverse ways throughout this report.

RESULTS FROM INTERVIEWS POINTED TO A TREND OF LEATHER DEPARTMENTS INSIDE MEATPACKING COMPANIES WERE LEFT APART ON DISCUSSIONS ABOUT CATTLE.

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The following sections of the report will present a more complex view of the engagement scenario dynamics within the leather supply chain, summarized below in [Figure 4](#).

2.5. KEY TAKEAWAYS FROM THE SITUATION ANALYSIS ON LEATHER:

THE ANALYSIS OF THE LEATHER SECTOR LEADS TO THE FOLLOWING CONCLUSIONS:

- I. Leather is a byproduct of the beef industry; therefore, the terms and scope of leather supply are dictated by demand from the beef sector. However, it's important to distinguish between the representation of leather in the supply chain and the exposure of the sector. While leather is considered a byproduct, its production and associated market have very different dynamics (from the quality and sustainability point of view) than beef.
- II. All product groups (tanned, semi-finished and finished leather) from the Brazilian leather industry have seen their production reduced in recent years, in contrast to the expansion of the Brazilian beef sector. Employment in the Brazilian leather tanning industry is in decline.
- III. In terms of product destination, there are considerable differences between beef and leather: around three quarters of Brazilian leather production is exported, while only one fifth of beef production reaches external markets.
- IV. China is the largest single buyer of Brazilian beef and leather. The EU (mainly Italy) is a significant importer of Brazilian leather, but it occupies a minor segment of total Brazilian beef exports overall. ■

WHILE LEATHER IS CONSIDERED A BYPRODUCT, ITS PRODUCTION AND ASSOCIATED MARKET HAVE VERY DIFFERENT DYNAMICS (FROM THE QUALITY AND SUSTAINABILITY POINT OF VIEW) THAN BEEF, WHICH REQUIRES AN EVEN MORE PROACTIVE POSTURE FROM THE SECTOR TO SOLVE ISSUES IN THOSE MATTERS.

REGULATION AND POLICY LANDSCAPE IN DEFORESTATION-FREE SUPPLY CHAINS

This section presents three policies that aim to address deforestation through regulating the supply of a set of commodities and is followed by a discussion on the impact within the leather industry and responses from the private sector.

In recent years, there has been a growing tendency among governments to implement regulations that can subsidize deforestation-free commodity supply chains. Those governance schemes are all either local or regional, which means that they do not reach a global scale, and therefore have a limited impact potential⁸. The main regulatory initiatives are the European Union Deforestation Regulation (EUDR), the United States Forest Act of 2021, and the United Kingdom Forest Act.

THE EUDR FOCUSES ON SIX COMMODITIES, WHICH TOGETHER CONTRIBUTE TOWARDS MORE THAN 98% OF EU DRIVEN DEFORESTATION

3.1. MAIN REGULATORY INITIATIVES

3.1.1. THE EUROPEAN UNION DEFORESTATION REGULATION (EUDR)

The EUDR came into force in June 2023 and will be put into practice from January 2026. It follows a set of other environmental regulations implemented by the EU, such as the European Green Deal and the 2030 EU Biodiversity Strategy⁹.

The scope of the regulation includes products and commodities produced in the Union as well as those imported to the Union. More specifically, the EUDR focuses on six commodities, which together contribute towards more than 98% of Union-driven deforestation. Those seven commodities are palm oil, soy, wood, cocoa, coffee, cattle and rubber, as well as derived products (e. g.: beef, furniture, chocolate) are included in the scope of the Regulation.

The aim of the regulation is to prohibit the circulation of these commodities within the EU market if they violate the following criteria¹⁰:

- I. To be deforestation-free (defined as commodities not being produced on land that has not been subject to deforestation after December 31, 2020).
- II. To have been produced in accordance
- III. with the relevant legislation of the producing country.
- IV. To be covered by a due diligence statement.

The EUDR enforcement will be implemented according to the level of risk of each country and company. When the country of origin is classified with high risk of deforestation, the competent authorities will analyze 9% of the due diligence statements and documents connected to the imported products. Those percentages fall to 3% in terms of standard risk countries, and to 1% for low-risk countries¹¹.

⁸ Oliveira, S. E. M. C. et al (2024).

⁹ Leather Working Group (2023)

¹⁰ Official Journal of the European Union (2023).

¹¹ Leather Working Group (2023).

3.1.2. US FOREST ACT OF 2021

Despite still being in discussion in the United States' Senate, the US Forest Act is another important regulation that shows a significant change in the approach of developed countries to commodities that have a deforestation risk. The main objective of the bill is to combat illegal deforestation by prohibiting imports of products that are made by commodities produced on land undergoing illegal deforestation¹².

In contrast to the EUDR, the US Forest Act focuses only on illegal deforestation, and not on deforestation as a whole. The list of commodities is almost the same as the EUDR: palm oil, soybeans, cocoa, cattle, rubber and wood pulp. The only commodity listed in the EUDR but not in the US Forest Act is coffee. The Forest act details the commodity list, highlighting that when referring to cattle, hides and skins of bovine animals are included, as well as further processed leather.

The US regulation not only seeks to prohibit imports of deforestation-risk commodities but also incentivizes the import of deforestation-free products. This is enabled through establishing the following norm on contracts involving the acquisition of those products: in comparing proposals for the purpose of awarding a contract made of a covered commodity, the head of an executive agency shall reduce the bid price by 10% if the contractor demonstrates that the commodity has low risk of deforestation, and that the contractor has policies to ensure the protection of land and biodiversity¹³.

3.1.3. UK ENVIRONMENT ACT

The UK's approach to the prohibition of imports of forest-risk commodities is enacted in the country's Environment Act of 2021, more specifically on the Section 116, schedule 17¹⁴. The legislation – which is still in discussion – also aims to prohibit the use of illegally produced forest-risk commodities and the products that derive from them¹⁵. To guarantee compliance, the UK's Environment Act also requires due diligence exercises by the suppliers, which must be reported annually.

Since the UK represents a fraction of the demand for some commodities that are linked to deforestation, the legislation also establishes some other objectives, which contribute to a broader evaluation of the proposed measures. The first complementary objective is the increment on demand for sustainably produced commodities. The second one is the establishment of effective partnerships with producer countries. The final complementary objective is an improvement on transparency in forest risk commodity supply chains. Similar to the EU and US regulations, the UK environment act points to seven commodities which have the highest deforestation risk: cattle (beef and leather), cocoa, coffee, maize, palm oil, rubber, and soya¹⁶.

12 117th United States Congress (2021).

13 117th United States Congress (2021).

14 Parliament of the United Kingdom (2021).

15 Oliveira, S. E. M. C et al (2024).

16 DEFRA (2021).



3.2. IMPACTS ON THE LEATHER SUPPLY CHAIN

In this section, the goal is to present the **main effects of the three deforestation regulations** on the leather supply chain, and to discuss possible unintended consequences of the legislation that may affect the leather sector.

The first impact of the regulations on the leather industry is related to **timing**. The EUDR is set to enter into force in 2026. However, the schedules for cattle slaughter during that period are already being altered in anticipation¹⁷. Therefore, the nature of the leather supply chain demands early and anticipated measures to guarantee compliance, if not in time to comply with the EUDR, to at least be ready for when the UK and US regulations come into force.

Another important effect is on **traceability**. The regulations will demand a considerable amount of additional work on registering, tracking, and selecting compatible value chains. It will also be necessary to make the traceability data available to the leather industry, through transferring the cattle data to the hide at the point of slaughter. This may require changes in local legislation.

It is also important to mention that slaughterhouses will need to assure the implementation of monitoring systems, which will need to be adopted to capture data and to evaluate direct and indirect suppliers. The technology for this is already available. The main challenge is the **coordination among the soy and cattle sectors** to facilitate the visualization of the origins of the feed¹⁸.

In addition to the direct impacts of these regulations on the leather industry, there are also **unintended consequences** of the regulation, which must be considered. If not addressed, they may lead to a deviation from the initial purposes of the regulations, shaping the market in such way that will not have a strong impact on avoiding deforestation.

The first unintended consequence is the **risk of deregulation**. In this case, rather than strengthening environmental protection in the face of regulation, **producer countries could weaken their laws** to help local industries meet the legal compliance required by the international regulations. This could potentially

be prevented, however, through international cooperation and diplomatic alliances aimed at helping to guarantee, and to promote approaches towards, compliance at a national level.

Another important unintended consequence is one that is commonly referred to as **leakage**. This may occur if the reduced demand for non-compliant commodities was offset by the **uptake of these commodities in other markets** in which there are no deforestation-free regulations. To prevent that, it would be necessary to implement demand-side measures, such as reduction of transition costs to switch to sustainable production and output subsidies favoring sustainable production¹⁹.

The need for reinforcing and expanding traceability and monitoring systems also implies **additional costs to farmers and slaughterhouses**, which in turn generates two possibilities. The first one is the establishment of a market premium for deforestation-free leather, as an incentive for farmers to raise cattle in compliance with the new demands. To enable the payment of the premium, the exporting companies would also set a higher price for the leather exported to operators in those countries. If operators pay for the premium, then leather commercialization might be maintained at a similar level than before (although at a higher price). However, if operators resist on paying for the increase in price (which might also happen, as compliance is not set to be a differential on the market, but a mandatory condition), then the second possibility arises. In this case, there is a **risk that companies reduce their investment in leather**, which may jeopardize the EUDR's ambitions, limiting the leather sector's capacity of promoting positive change²⁰.

Another key risk generated by the EUDR is regarding the creation of tanning and leather processing plants outside of the EU, importing leather inputs from Brazil and exporting final leather products to the EU. That outsourcing process would be aimed at using deforestation-related leather to export products to the EU but hiding it in the supply chain. However, as reported in interviews, that is set to last for only a short time, as the EU is projected to look into the origin of commodities that end up in final manufactured goods.

17 Leather Working Group (2023).

18 Leather Working Group (2023).

19 DEFRA (2021).

20 Leather Working Group (2023).

To analyze the probability of a sector, a country, or a group of companies being disincentivized by the costs of compliance, there are some important factors that should be mentioned here. These include the link with native vegetation conversion to expand production, the level of the institutional organization of producers, and the extent of their adherence to voluntary sustainability standards ²¹.

3.3. CURRENT AND POTENTIAL RESPONSES TO THE REGULATIONS

The leather sector's responses to the regulations presented in this report are still in an initial stage. Nevertheless, there are initiatives who are already addressing this. For example, the "Deforestation-Free Call to Action for Leather" was presented in 2023 by the Leather Working Group and Textile Exchange. The call to action asks brands to commit to sourcing bovine leather from deforestation-free supply chains by 2030 or earlier. The document prioritizes South America, and has the following targets ²²:

- I. Leverage size and power of consumer-facing leather brands and align their action to promote change in leather value chains.
- II. Ensure that the responsibility to invest in forest protection is shared more equitably across both ends of the supply chain.
- III. Provide better visibility in long and complex supply chains, therefore improving communication between brands and suppliers, rewarding deforestation-free practices.
- IV. Increase the availability of verified deforestation-free cattle farms.
- V. Improve transparency through reporting on the collective progress being made by participating brands.

The target date established in the call to action (2030) is later than EUDR's target (2026). The reasons for that are: (1) leather supply chains are long and complex when compared to the beef industry, which brings tough challenges to promote compliance; (2) the distance from the source to the consumer is longer and will require brands more time to cascade down requirements within their supply chains; (3) the leather industry is at an early stage of addressing deforestation and conversion, therefore leather brands will require more time to tackle these challenges ²³.



3.4. NEXT STEPS: THREE PRIORITY ACTIONS ON REGULATION

To summarize the analysis on the regulatory section, and when looking forward to the future of the leather sector, this report proposes three priority actions:

- I. Promote **communication and engagement between representatives of the leather sector and the European Commission**, to improve harmonization between the sector's 2030 target and the EUDR's 2026 target, addressing the possibility that the Brazilian leather sector is unable to meet the EU's earlier deadline.
- II. Prepare **a study and engage the sector on the cost premium consequences of deforestation free leather**, including its impact on **competitiveness** of Brazilian leather, the opportunity for 'rebranding' the sector in Brazil, and a pathway to **equitable cost sharing**.
- III. Support upstream stakeholders in the Brazilian leather sector to **share compliance procedures and good practices** on sustainable leather, with a view to improving the **harmonization of initiatives aimed at addressing deforestation**. ■

21 Oliveira, S. E. M. C. et al (2024).

22 Textile Exchange and Leather Working Group (2023).

23 Textile Exchange and Leather Working Group (2023)

24 Chen, X. et al (2022).

25 Cranfield, S (2023).

4 CERTIFICATION SCHEMES

This section will focus on the main certification schemes that aim to promote deforestation-free compliance in the leather sector. These schemes have a wide range of targets, such as; product quality (e.g.: ISO standards); contract forms (e.g.: International Leather Contracts and Definition); use of harmful chemical substances (e.g.: ZDHC); material selection (e.g.: SAC Higg Material Sustainability Index); product safety (e.g.: OEKO-TEX); circular economy (e.g. C2C); and, finally, environmental impacts, which are the key object of this analysis ²⁴.

4.1. THE LEATHER WORKING GROUP'S AUDIT STANDARDS

The Leather Working Group (LWG) is the world's largest leather industry-specific stakeholder organization, which in 2023 had more than 2,000 stakeholders (brands, retailers and suppliers) in over 60 countries (98 in Brazil). LWG's goal is to promote a world in which leather is sourced, produced, and used sustainably. To do so, the organization works on incentivizing the use of responsibly made leather as a sustainable material, through collaboration with producers, convening and standard setting ²⁵.

THE LEATHER WORKING GROUP HAS 2,000+ STAKEHOLDERS (BRANDS, RETAILERS AND SUPPLIERS) IN OVER 60 COUNTRIES (98 IN BRAZIL).

LWG's certification scheme is highly regarded among the leather industry, which means that important international brands require its certification from potential suppliers ²⁶. The certification process is based on a set of criteria (LWG Audit Standards) that cover the production from raw skins or hides to finished leather. The certification is not restricted to tanneries, as traders and subcontractors can also be certified, expanding LGG's range of impact ²⁷.

Before submitting themselves for audit, leather suppliers are offered another LWG tool called Tannery of the Future. It is a self-assessment mechanism to support manufacturers to achieve environmental compliance and, therefore, the LWG certification. The tool allows

suppliers to evaluate their current environmental and social performance, to identify areas with room for improvement and to understand their readiness to undergo an LWG audit. The result of the Environmental Audit Protocol is based on scores given to 16 critical sections²⁸.

If the manufacturer fails to achieve compliance in any of those sections, they will fail the audit overall. The result is based on the lowest scoring critical section. There are three ratings based on the overall score: gold, silver, and bronze²⁹.

Deforestation is addressed by LWG's Audit Standards in the "Incoming Material Traceability" section, which requires evidence that hides originating from Brazil or Paraguay (identified as critical countries) are sourced from deforestation and conversion-free suppliers to the slaughterhouse. However, the referred section is classified as "non-critical", which means that it does not contribute to the final medal rating, but all tanners must be evaluated against them in preparation for the time that they become critical³⁰.

Therefore, deforestation is not a factor that impacts LWG's final assessment. Additionally, the protocol does not mention how it addresses indirect supplier traceability. This leads to a risk that the certification would not tackle deforestation and ecosystem conversion in its broader sense³¹. It is important to consider, however, that LWG has a global reach.

26 Chen, X. et al (2022).

27 Flores, A., Junges, M. G., de Souza, L. I. (2020).

28 (1) general facility details; (2) subcontracted operations; (3) social audit; (4) operating permits; (5) production data; (6) incoming and outgoing material traceability; (7) environment management systems; (8) restricted substances; (9) energy consumption; (10) water usage; (11) air and noise emissions; (12) waste management; (13) effluent treatment; (14) health, safety and emergency preparedness; (15) chemical management; (16) operations management.

29 Cranfield, S (2023).

30 Leather Working Group (2021).

31 Flores, A., Junges, M. G., de Souza, L. I. (2020).

4.2. THE BRAZILIAN LEATHER CERTIFICATION OF SUSTAINABILITY (CSCB)

Created in 2012 by the Center for the Brazilian Tanning Industry (CICB), the Brazilian Leather Certification of Sustainability (CSCB) is the first program that establishes the Brazilian leather sector's commitment to sustainability within the value chain³². Its normative basis constitutes the foundations for the sustainable production of leather, which is divided into the following dimensions: economic, environmental, and social, adding also an extra dimension of sustainability management³³. The dimensions unfold into principles and are verified through a set of criteria.

Similar to the LWG, the CSCB also establishes categories of fulfillment for the criteria, then providing different levels of certification for the tanneries that are evaluated. The levels are based on the percentage of applicable indicators met in all dimensions: bronze (50%); silver (75%); gold (90%); and diamond (100%)³⁴. The conformity certificates issued for the leather producers are valid for three years, and the maintenance audit must follow, occurring within a period of twelve months.

THE CSCB IS THE FIRST PROGRAM THAT ESTABLISHES THE BRAZILIAN LEATHER SECTOR'S COMMITMENT TO SUSTAINABILITY WITHIN THE VALUE CHAIN

In addition to the certification, CSCB also supports companies to implement the actions needed to address the established requirements, which is done through training and consulting. The process of preparing companies starts with identifying practices that meet the norm and issues that must be adjusted by the tanneries. The CICB is also active in promoting the certification, presenting it to national and international buyers and establishing cooperation with the footwear industry, stimulating guarantees that its suppliers are compliant with the obligatory criteria of the standard.

Another important mark for CSCB was the formation of an agreement of mutual acknowledgement between the CSCB and the Italian certification, ICEC (Italian Institute of Quality Certification for the Leather Sector). This has opened new pathways for cooperation in

terms of research, the strengthening of sustainability indicators, the valorization of leather for the final consumer, and an acknowledgement of companies who integrate the certificates³⁵.

In relation to deforestation, the scope of the CSCB does not include the aspect of traceability to indirect farms, as happens with LWG. Therefore, it does not cover all criteria linked to deforestation and contains no obligation to meet the traceability criteria. These are aspects which must be addressed if the Brazilian leather industry is to have a sustainability certification that is wholly compliant with deforestation-free practices. However, as CSCB's procedures are based on an ABNT standard and an INMETRO Ordinance, it is considerably harder to implement such changes³⁶.

4.3. THE ITALIAN INSTITUTE OF QUALITY CERTIFICATION (ICEC)

The Italian Institute of Quality Certification for the Leather Sector (ICEC) was founded in 1994, aiming to benefit the European leather industry. The certification issues a diverse range of standards, divided into four main topics; environmental sustainability; ethic and social sustainability; product and economic sustainability; and company sustainability³⁷.

The standards promoted by ICEC are mainly used by Italian companies³⁸. The certifications issued by ICEC can be applied to tanneries, leather manufacturing companies, and subcontractors. ICEC does not execute auditing activities³⁹.

In terms of traceability, ICEC has the Leather Traceability Certification, applicable to tanneries and sub-contractors. The certification has two variants, one for a set of products in tanneries, and the other for single products in tanneries. The first one maps the hides' journey upstream from the tannery, or the raw hides' seller, but does not check traceability of the production phase of the hides in the tannery. The second one verifies the

32 CICB

33 Flores, A. (2019).

34 CICB

35 Flores, A. (2019)

36 Flores, A., Junges, M. G., de Souza, L. I. (2020).

37 ICEC

38 Chen, X. (2022).

39 Flores, A., Junges, M. G., de Souza, L. I. (2020).

traceability of the production and storage phases of the skins in the tannery and the seller of the raw hides. The traceability certificate issued by ICEC specifies a rating and a summary judgement that expresses the level of control that the tannery has on its purchases, which is calculated based on a mapping process of all raw material purchase orders over twelve months⁴⁰.

In May 2019, CICB, UNIC (National Union of Italian Tanneries) and their certification arms – ICEC and CSCB – signed an agreement with the National Wildlife Federation (NWF) to develop a pilot project with a group of tanneries that source leather from the Amazon, using the traceability tool VISIPEC⁴¹. However, in contrast to CSCB and LWG, the ICEC's influence on deforestation is limited, since it does not explicitly consider criteria linked to ecosystem deforestation and conversion⁴².

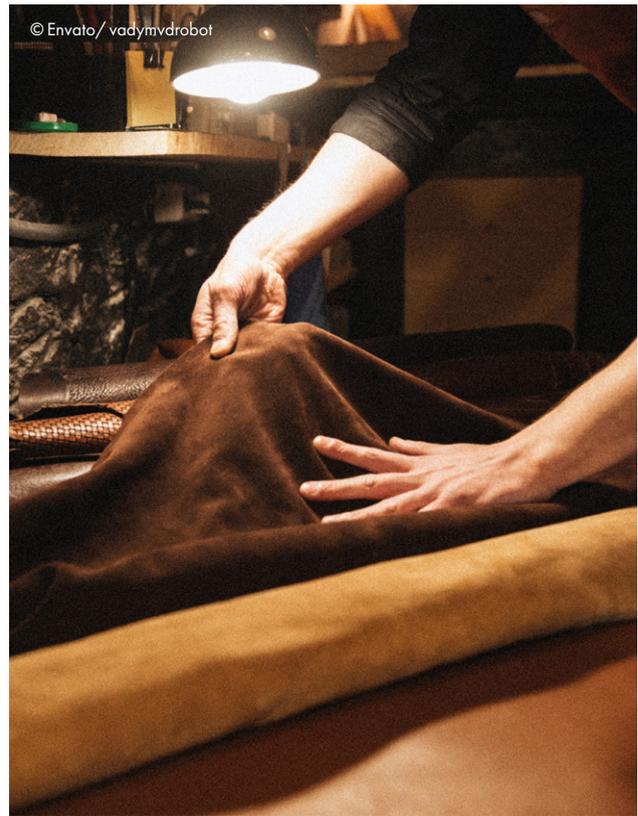
THE TRACEABILITY CERTIFICATE ISSUED SPECIFIES A RATING AND A SUMMARY JUDGEMENT THAT EXPRESSES THE LEVEL OF CONTROL THAT THE TANNERY HAS

4.4. OTHER CERTIFICATION INITIATIVES

Although LWG, CSCB and ICEC are some of the most widespread leather certifications worldwide, there are other important certifications and standards that track different aspects of sustainability in the leather industry.

THESE INCLUDE⁴³:

- I. Energy Controlled Leather (ECO2L) - Focused on energy efficiency and CO2 emissions. Operates through the calculation of an auditing model for the leather industry, developed by the German Leather Research Foundation.
- II. OEKO-TEX Leather Standard. This is an organization that consists of seventeen independent research and test institutes in Europe and Japan. Focuses on human and ecological product safety.
- III. ICradle to Cradle (C2C). With focus on circular and responsibly made products, by analyzing the value chains through five categories: material health, product circularity, clean air and climate protection, water and soil stewardship, and social fairness.



4.5. NEXT STEPS: THREE PRIORITY ACTIONS ON CERTIFICATION

To summarize the analysis on certification schemes, looking forward to the future of the leather sector, this report proposes three priority actions:

- I. Ensure that deforestation-free requirements are explicitly inserted into the three main certification schemes (LWG, CSCB, ICEC). This could happen through the creation of a new certification category or through the incorporation of this category within the pre-existing structure. A combined effort between the three initiatives may be possible here.
- II. Deepen engagement and alignment between existing schemes, building on agreements between CSCB and ICEC. For example, to expand the range of national certification and to strengthen the sharing of good practices among certification bodies.
- III. Increase technical assistance to farmers and ranchers, slaughterhouses, and tanneries, in order to expand the uptake of certification. ■

40 ICEC

41 Mekon Ecology (2020).

42 Flores, A., Junges, M. G., de Souza, L. I (2020).

43 Mekon Ecology (2020).

MONITORING AND TRACEABILITY INITIATIVES

One of the main gaps in leather certification is on tracing the deforestation connected to indirect suppliers. This is also a concern for regulations such as the EUDR. Therefore, the pathway to addressing those challenges is through the development of monitoring and traceability initiatives. Monitoring and traceability are two different concepts. The first is about the analysis of the social and environmental conditions of farms and facilities through the supply chain. The latter is concerned with following the products throughout the transformation process⁴⁴.

In this chapter, the goal is to present cattle traceability initiatives in South America (Argentina and Paraguay), followed by a more specific analysis of Brazil's initiatives. The report will then outline the overall challenges and pathways to improving traceability in the Brazilian leather sector.

5.1. NATIONAL TRACEABILITY INITIATIVES IN SOUTH AMERICA

In Argentina, the national traceability system was implemented in 2007, and is essentially focused on providing sanitary solutions, with emphasis on preventing diseases such as the Bovine Spongiform Encephalopathy (BSE) and the Foot and Mouth Disease⁴⁵. It is based on the National Health Registry of Farming and Livestock Producers (RENSPA). It combines a farmer's information, through the National Identity Card Number (DNI), and information on their animals through the Unitary Livestock Identification Code (CUIG). Together, these two registry databases form the System of Sanitary Management (SGS). In order to track animal movement around farms, it is also necessary to provide the Document for Animal Transit (DTe)⁴⁶.

The biggest issue with traceability in Argentina is the absence of a proper register for land tenure, given the lack of coordination between the federal government and lower levels of the state. This generates a potential split between legally and illegally established farms, which represents a risk to cattle ranching and to the leather supply chain, given that the animals move from farm to farm⁴⁷.

Given its relatively low share of exports to premium foreign markets, the pressure for sustainability actions in the Paraguayan cattle sector is not as high as it is in either Argentina or Brazil. In Argentina there are serious issues regarding land ownership. However, in Paraguay this problem contains a further challenge. The information system for land ownership data in Paraguay is called National Cadaster and Registry Information System (SICAR) only provides low quality data and does not provide complete information. As a consequence, in 2017 Paraguay had the highest number of complaints in the Inter-American Court for transgressions of indigenous land rights⁴⁸.

ONE OF THE MAIN GAPS IN LEATHER CERTIFICATION IS ON TRACING THE DEFORESTATION CONNECTED TO INDIRECT SUPPLIERS.

Paraguay has two cattle traceability systems in place. The first is the Livestock Information System of Regional Offices (SIGOR), in which registration is mandatory for all farms and livestock.

It does not have individual level information for animals, and only refers to herds of cattle. It does provide information on farms, animal ownership and their movement, with basic sanitary requirements. SIGOR is required for local consumption or for export to non-premium markets. The second system – Traceability System of Paraguay (SITRAP) – is directed to producers that export to highly demanding markets. Therefore, registering in it is voluntary.

In addition to the data registered in SIGOR, SITRAP provides information on individual traceability of the animals as well as sanitary and nutritional measures⁴⁹.

44 Froehlich, G., Stabile, M., de Souza, M.L. (2022).

45 Textile Exchange (2021).

46 Mekon Ecology (2020).

47 Mekon Ecology (2020).

48 Mekon Ecology (2020).

49 Textile Exchange (2021).



5.2. MAIN TRACEABILITY INITIATIVES IN BRAZIL

Brazil, like Argentina and Paraguay, also has a national public traceability system, aimed at addressing sanitary requests for exports and the local market. There are also other traceability initiatives for Brazilian cattle, which do not operate in the national level, but have a sustainability goal, and can provide examples for traceability in the leather supply chain.

Brazil's national traceability system is the Tracking Service of Bovines and Bubalus (SISBOV), introduced in 2002, and is mandatory for farmers who wish to export to countries that require traceability (EU). As in Paraguay and Argentina, SISBOV is only focused on sanitary issues and has no registration of sustainability data. Despite being implemented for over twenty years, the system has experienced a low level of farmer registration. Up until 2020, only 0.5% of all farms were registered, which can be explained by the high complexity of the system and, therefore, the elevated costs it is associated with⁵⁰.

In addition to SISBOV, there are two other important sources of traceability information: the Animal Transit Guide (GTA) and the Environmental Rural Registration (CAR). GTA is an official and obligatory document for animal transportation in Brazil and contains sanitary information of bovine animals. CAR, regulated since 2014, provides the environmental characteristics of rural properties in Brazil, such as the areas designated for agricultural production and cattle ranching, and the parts that contain forests and legal reserves. It is a self-declared document and needs validation through competent authorities⁵¹. Ideally, CAR and GTA can provide an important environmental picture of

Brazilian rural properties through which cattle is moved in the supply chain, since they allow the articulation of bovine data from farms. That would be an interesting way to add information for those provided by SISBOV.

However, in practice, there are several issues associated with the systems that monitor the cattle supply chain in Brazil. First, the data is very hard to be unified. For example, the records of GTA are not linked together and cannot be easily tracked, hampering its association with SISBOV to enhance the quality of data⁵². Second, despite CAR being an important tool for traceability mechanisms, it has been used for the illegal process of legitimizing public land, even though it is an environmental regulation instrument. In 2021, a study demonstrated that 28% of all public land was registered in CAR as private properties. That is a sign of this illegal registration, which can then lead to unchecked deforestation⁵³.

Despite the inherent risks regarding the traceability systems in Brazil, there are local initiatives that use data from CAR and GTA to promote traceability and the monitoring of deforestation. In this report the focus will be on two of them, which are currently being implemented by state governments in Pará and Maranhão. In 2021, the state of Pará launched the Selo Verde platform, which aims to provide data on the environmental situation of farms.

50 Textile Exchange (2021).

51 Froehlich, G., Stabile, M., de Souza, M.L. (2022).

52 Mekon Ecology (2020).

53 Froehlich, G., Stabile, M., de Souza, M.L. (2022).

The platform was built from a partnership with the Center for Territorial Intelligence (CIT) of the Federal University of Minas Gerais (UFMG)⁵⁴. Using a system developed by CIT, the platform connects data from several databases (PRODES, FUNAI, Ibama, ICMBio etc.) and provides a free and open environmental diagnosis of the properties registered in the platform. The key to accessing the data is through the property's CAR code. As it uses information from CAR, the system does not show personal data from the farm's owner, the slaughterhouses who buy from it or other sensitive information. However, the only gap that the platform has is that the data visualization is not for individual animals (only herds)⁵⁵.

THE PLATFORM PROVIDES A FREE AND OPEN ENVIRONMENTAL DIAGNOSIS OF THE PROPERTIES REGISTERED IN THE PLATFORM.

Also in 2021, the state of Maranhão launched the System of Surveillance and Monitoring of Agribusiness (SIFMA), developed through a partnership with the Interamerican Development Bank (IDB). Initially, the system was focused on tax compliance, tracking agricultural production at its origin and connecting data from invoices with databases of productivity and production (IBGE and CONAB) to check if the properties were omitting values to pay less tax⁵⁶.

The system has the capacity to manage geographic databases, satellite images and other features that are capable of validating plantation areas, defining productive areas, estimating productivity and monitoring native vegetation⁵⁷. Later in 2023, SIFMA evolved, incorporating features to analyze environmental and social criteria from all rural properties of the state using CAR codes. This emerged through a partnership with Selo Verde and the German Cooperative Agency (GIZ)⁵⁸, which allowed SIFMA to incorporate traceability using criteria such as deforestation, work similar to slavery, and violations of indigenous lands⁵⁹.

5.3. TRACEABILITY CHALLENGES FOR THE BRAZILIAN LEATHER SECTOR

Although, as seen in the previous section, there are traceability initiatives that can be used by the leather sector to monitor and address deforestation, it is also evident that significant challenges remain.

In this section, five of those challenges will be presented, looking primarily at the cattle sector in general, since deforestation in the leather value chain emerges from cattle raising.

- I. Land and environmental regulation of rural properties. As seen, there is a lack of mechanisms to check the legality of rural areas. Even though CAR is an important document for registering rural properties, the fact that it is self-declared can generate several risks of illegal land ownership.
- II. Lack of engagement from the production sector. There is a low level of participation of producers and indirect cattle suppliers in spaces to discuss and develop solutions to promote traceability in the cattle sector.
- III. Difficulties in accessing public information and databases. Despite being extremely valuable in theory, public data such as CAR and GTA still present a lack of transparency, standardization, and integration.
- IV. Reduced participation of small and medium farmers in traceability systems. This is due to the high costs inherent in traceability systems, which do not compensate for the potential benefits (higher prices) generated by commercialization of deforestation-free cattle. Additionally, there is an important gap in the technical assistance available to smallholders, which also stands as a barrier to joining traceability initiatives.
- V. Low level of integration between tanneries and slaughterhouses. These two stakeholders often use different traceability systems or, in a worst case scenario, when only one of them uses a system the traceability of the whole value chain is compromised. Additionally, there is an alarming gap in the integration between the input of the tanneries (hides, which come from slaughterhouses) and the internal traceability of its product (leather), which is caused by the industrialization of tanneries⁶⁰.

54 Brabo, B. (2021).

55 Froehlich, G., Stabile, M., de Souza, M.L. (2022).

56 SEDEPE-MA (2023)

57 Agência de Notícias do Maranhão (2022).

58 SEFAZ-MA (2024).

59 SEFAZ-MA (2023).

60 Froehlich, G., Stabile, M., de Souza, M.L. (2022).

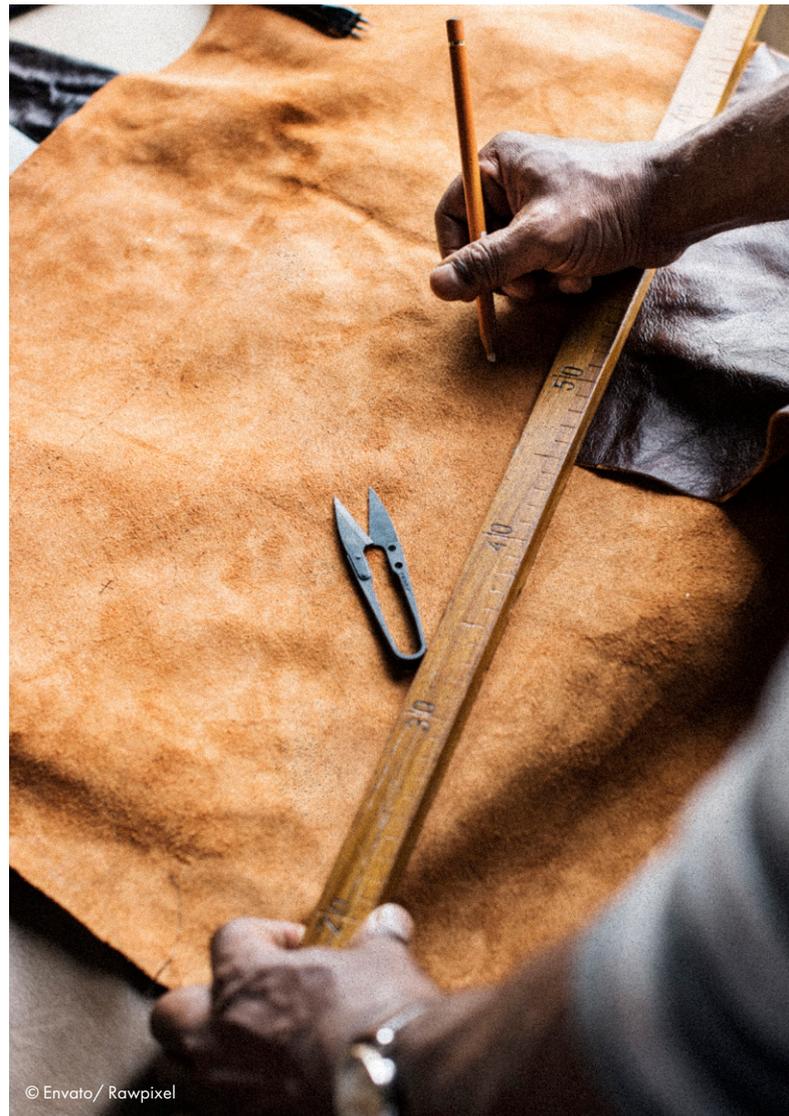
5.4. PATHWAYS TO ENHANCING TRACEABILITY IN THE BRAZILIAN LEATHER SECTOR

Although the challenges are considerable, it is also important to discuss pathways that can be followed to improve the existing traceability mechanisms in Brazil, and specifically within the leather sector. Here, some of these pathways will be presented.

- I. Develop incentives for the regulation of land ownership. To promote land regulation through CAR, an important step would be to stimulate producers to register. This could be done, for example, through special conditions in credit lines or even price differentiation mechanisms. An essential condition for this would also involve consolidating CAR validation.

IT IS ALSO IMPORTANT TO DISCUSS PATHWAYS THAT CAN BE FOLLOWED TO IMPROVE THE EXISTING TRACEABILITY MECHANISMS IN BRAZIL

- II. Promote the participation of farmers in discussions about traceability. It would be important not only in terms of integrating key stakeholders into these spaces, but also to illustrate the benefits that can be generated through the adherence to traceability initiatives (access to new markets, higher prices etc.). Additionally, it is essential to give special attention to small farmers and to local and regional slaughterhouses.
- III. Promote transparency and facilitate access to public traceability databases. This would significantly enhance traceability, as information would become more accessible. The case of Selo Verde is a clear example of the benefits generated through this process.
- IV. Promote arrangements between tanneries and slaughterhouses to integrate their traceability systems. It is key to develop specific programs to connect traceability of the inputs (hides) to the final product (leather).
- V. Expand technical assistance services to smallholder farmers. This is crucial, as smallholders are responsible for a considerable quantity of indirect cattle supply. Priority should be given to creating special programs that promote improvements in productivity and traceability⁶¹.



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5.5. NEXT STEPS: THREE PRIORITY ACTIONS ON TRACEABILITY

This report proposes three priority actions on traceability relating to Brazilian leather:

- I. **Incentivize dialogue** among stakeholders in the leather sector, aimed at **harmonizing traceability systems** across different stages of the supply chain.
- II. Encourage the **connection of farmers and slaughterhouses to existing platforms such as Selo Verde and SIFMA** in the states that have such mechanisms and **promote the development of similar systems in key states for the leather industry**
- III. Incentivize the **regulation of land ownership**, which can be accelerated through the provision of specific credit conditions or through price mechanisms. ■

61 Froehlich, G., Stabile, M., de Souza, M.L. (2022).

6 VALUE CHAIN ENGAGEMENT: FROM SUPPLIERS TO RETAIL

So far, this report has presented three key topics regarding the implementation of a deforestation-free agenda for the leather sector: regulation, certification, and traceability. However, there is still one topic to be discussed which combines all three of the previous points: the engagement of the supply chain. If the stakeholders in the leather industry do not support a deforestation-free agenda for leather, the deforestation-free agenda for leather has no driver for implementation.

This section will therefore focus on the supply chain itself and outline the main challenges and pathways implicated in reducing deforestation, with an emphasis on Brazilian leather. The analysis will be focused on three parts: an analysis of the history of engagement

in the leather sector, drawing on the semi-structured interviews, the supply side (farms, slaughterhouses and tanneries) and the demand side (brands). It is important to note here that the majority of this section's findings were gathered through interviews with key stakeholders in the leather sector, such as companies, non-profit organizations and sector associations.

6.1. SUPPLY SIDE ENGAGEMENT: CHALLENGES AND PATHWAYS

The challenges and pathways for engaging the supply side (farms, slaughterhouses, tanneries) of the leather value chain can be divided into three dimensions: organizational level, sector level and international market level. The analysis will follow the proposed categorization.

6.1.1. ORGANIZATIONAL LEVEL

At the organizational level – which involves individual decisions by players in the leather value chain – there are two key challenges in terms of engaging suppliers upstream. The first is related to the protection of farmers' personal information where a traceability system is in place. This has already been noted in the section on traceability and continued to emerge in the interviews that were undertaken as research for this report.

The second challenge is the increase in costs that a deforestation-free policy may have for farmers, given the need to follow the requests of a traceability system and to provide more detailed documentation on the transport of bovine animals between farms.

The possible pathway to address these challenges would be through implementing economic incentives that would compensate the additional costs and transparency risks inherent in a higher engagement from farmers. Therefore, it would be necessary to pay a premium for deforestation-free compliant farmers. As will be discussed in following sections, that pathway depends on a broader engagement from the entire value chain and generates other potential challenges in the sector and international market levels that may hamper the viability of its implementation.



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6.1.2. SECTORAL LEVEL

At the sector level – which involves the set of decisions made within the Brazilian leather supply chain – the challenges become slightly more complex. The first challenge is related to a structural characteristic of the leather sector. Leather is a byproduct of beef and is therefore a part of a broader cattle supply chain. In this larger chain, leather has an extremely low level of relevance, being responsible for around 1% of the total cattle sector revenue. Therefore, given its low share, leather may not have the capacity to mobilize the entire supply chain towards a deforestation-free approach.

A second challenge for the engagement of the supply chain on a sector level is related to the dynamics explained above. The payment of deforestation-free premiums – a precondition for addressing organizational level challenges – may start through the leather value chain, but without incorporating beef, it has minimal impact possibilities on the entire cattle sector.

The third challenge at the sector level is caused by a historically low level of cooperation among stakeholders in the leather supply chain, aggravated by low capacity and knowledge over subjects like traceability. As mentioned in the section on traceability, an issue that contributes to this phenomenon is that there is an incompatibility between traceability and sustainability strategies among slaughterhouses and tanneries. This, along with the reduced participation of leather stakeholders in discussion spaces for the cattle sector, generates a low level of communication on the deforestation-free agenda within the supply chain.



Complementary to the third challenge, there is a fourth one: as seen in the certification chapter, the leather sector has a diverse range of sustainability initiatives, but none of them has been capable of assembling all the necessary attributes to generate change. The decentralization of initiatives is even more harmful in a sector that is relatively small and has limited resources. A fifth challenge regarding the engagement of suppliers is related to an intrinsic characteristic of the cattle sector. Bovine animals are different from all other commodities, since they move over different lands and are transferred between farms. Therefore, there needs to be an effort to engage multiple suppliers, since it cannot be focused on a specific and restricted number of farms.

Finally, the last challenge on the sector level resides in the incompatibility of timing between government efforts and external (market and regulatory) pressures for deforestation-free initiatives. During the interviews with Brazilian leather traders, a key finding was the perception that traceability efforts provided by the national government were not manifesting as quickly as the companies needed.

Some companies were implementing traceability strategies, but that position may represent a risk of economic losses, since taking individual measures is more expensive, takes more time and, more importantly, does not generate a high level of confidence by the clients. This is because if these companies stop executing the traceability strategy, it discontinues an important source of deforestation-free leather, and the investments made by the clients on that specific supplier become sunk costs.

In 2016, the Smart Sourcing Leather Workshop ⁶² in Paris involved key stakeholders from the global Leather industry, such as experts (from academia, NGOs, consultancies and funds) and Brands. The workshop proposed that there are three main ways in which progress in the leather industry could be achieved.

Given the complexity of the challenges presented at the sector level, those guidelines present interesting starting points to promote a deforestation-free supply chain:

- I. Collaboration among actors (e.g. leather supply chain actors, the meat and dairy industry, the public sector etc.).
- II. Alignment of tools to move toward a common language (e.g. traceability systems, current emerging standards etc.).
- III. Mapping and sharing information on farming practices and sustainable initiatives to find smart sources and to disseminate best practices.

GIVEN THE COMPLEXITY OF THE CHALLENGES AT THE SECTOR LEVEL, THESE GUIDELINES PRESENT INTERESTING STARTING POINTS TO PROMOTE A DEFORESTATION-FREE SUPPLY CHAIN

6.1.3. INTERNATIONAL MARKET LEVEL

At the international market level – which involves the interactions and decisions made between Brazilian suppliers and other international suppliers – there are two main challenges associated with the engagement of the supply chain.

The first challenge derives from the potential payment of premiums for deforestation-free compliant farmers in Brazil. This has competitive limitations, since one of Brazil's advantages in the international leather market is precisely the competitive price. In a scenario where a premium is paid, the Brazilian exports would be threatened by US leather, which has a higher quality level and, therefore, a higher price.

The second challenge is generated by the fact that, in recent years, Brazil's leather supply has been affected by the country's negative image in terms of deforestation.

IF ALL THE SUSTAINABILITY AND TRACEABILITY PRACTICES ARE IN PLACE, BRAZILIAN LEATHER MUST BE LINKED TO A DIFFERENT IMAGE, ASSOCIATED TO THE PRESERVATION OF FORESTS AND THE FIGHT AGAINST DEFORESTATION.

Despite being relatively advanced in terms of basic sustainability premises (LWG adoption, Forest Code etc.) in the leather sector, the overall image of Brazil's recent approach to forests contributes to the devaluation of the leather sector.

In this sense, the pathways to guarantee supplier engagement and overcome these challenges on the international market level are related to a shift in communication on Brazilian leather. If all the sustainability and traceability practices are in place, Brazilian leather must be linked to a different image, associated to the preservation of forests and the fight against deforestation.

6.2. DEMAND SIDE ENGAGEMENT: CHALLENGES AND PATHWAYS

The supply side engagement of the leather value chain is key and can be achieved despite the aforementioned challenges associated with it. However, it is extremely important that the demand side (international brands in the fashion, automotive and furniture sectors) is also committed to incentivizing Brazilian leather to become deforestation-free. The specific challenges associated with demand side engagement are outlined below.

The first challenge is the most direct one: the risk that brands stop buying Brazilian leather. This may happen in a post-EUDR scenario and is susceptible to pressures from consumers. It is important to point out that leather products are directed to highly demanding markets from the ESG point of view, and leather demands comes from clients for whom the brand is the main asset. Therefore, those companies are very sensitive to sustainability issues.

62 Smart Sourcing Leather Workshop (2016).

DEFORESTATION-FREE INITIATIVES IN THE BRAZILIAN LEATHER SECTOR: CHALLENGES AND OPPORTUNITIES FOR TRANSFORMING THE VALUE CHAIN

The commercial challenge presented above becomes, therefore, an environmental challenge. In the scenario that brands reduce demand from Brazilian leather, there is a risk of two phenomena happening: price reduction, and a change in product destinations. Price reduction means that the economic incentives paid to cover the costs of deforestation-free compliance stop cannot exist anymore, potentially reversing the trend of sustainable practices. Changing the product destinations means that Brazilian leather traded to highly demanding markets will start to be sent to less demanding markets from the ESG point of view, which also is an incentive for reducing practices of mitigating deforestation.

The third challenge resides in the fact that not all leather demanding sectors are committed to deforestation-free strategies. More specifically, there is the furniture sector, which does not have the same level of requirements as the automotive and fashion sectors, as the brand is not as significant of a factor and the final consumers are not as demanding. Therefore, even in highly demanding markets like Europe, the furniture industry represents a risk of disincentivizing deforestation-free practices from leather suppliers.

Finally, there is the challenge associated with the possibility of brands substituting leather for other inputs in their supply chains, since leather is not an essential input and adoption of synthetic tissues may even be seen as a positive strategy. In combination with the three other challenges mentioned above, this could lead to an overall value loss in the leather market, given that it is still connected to a negative perception related to malpractices and deforestation.

Given the challenges outlined here, there are three pathways that the demand side could follow to support the transition to a deforestation-free leather supply chain in Brazil.

- I. Incentivizing a sustainable leather supply chain through the payment of premiums for deforestation-free leather.
- II. Engaging the furniture sector to follow sustainability requirements.
- III. Contributing to a shift in consumer perception of Brazilian leather, through reinforcing its commitment to deforestation-free strategies and highlighting initiatives for sustainable leather production in Brazil.

6.3. NEXT STEPS: THREE PRIORITY ACTIONS ON ENGAGEMENT

This report proposes three priority actions on engagement in the Brazilian and global leather sectors:

- I. Strengthen **communication strategies to promote deforestation-free leather in the international market**, supporting **Brazil to position itself as the key global source for 'green commodities'** including leather.
- I. Promote **connections between international brands and deforestation-free compliant suppliers in Brazil**, engaging both sides to trade. Incentivize the furniture sector to join such initiatives.
- I. Promote the **sharing of sustainability practices among leather suppliers.** ■T



7 CONCLUSIONS

THE CURRENT SITUATION:

- Brazil's **leading market for leather is China (40%). Additionally, the main sector that Brazil supplies leather to globally is furniture (42%).** Neither of these destinations are as sensitive to ESG pressures as the other destination markets and sectors.
- The **leather sector is largely disjointed and unaligned**, and, compared with other commodity value chains, is still close to **the start of its sustainability journey.**
- There was a prevailing view that the sector's exposure to luxury brands could make it a potentially early-mover on DCF. However, the industry has demonstrated that **the sector's relative size compared with the beef sector means it has very little leverage.**
- Nonetheless, campaigning NGOs continue to challenge the sector on the deforestation that exists within its supply chain; this **may lead to divestment from Brazil, or a focus on less exposed downstream industries, such as furniture** (viz-à-viz fashion and cars).
- At the same time, the **leather sector's influence on the cattle sector is limited**, given the difference in economic size of the two; and the Brazilian leather **sector is largely retracting** when it comes to production and employment levels. These factors may pose **a potential limit for implementing deforestation-free initiatives for cattle through leather.**
- The arrival of the EU's new deforestation regulation (**EUDR**) **represents a significant challenge and an opportunity for the sector.** Around 30% of Brazilian exports of leather by value are destined for the European Union (cf. 5% of beef). As such, the cattle industry has been **slow to respond to the traceability** and other demands set out by EUDR. **Doubts have been cast over the future of the Brazilian leather sector** if it proves unable to meet the due diligence requirements set out by EUDR.
- The **certification schemes** that do exist in the leather sector have proven **unable to – by themselves – address deforestation** linked to the commodity. The **range and diversity of certification bodies** further compounds this challenge.

CONCLUSIONS

- The leather sector is **an important industry in Brazil**, with a total value of R\$12bn (US\$2.2bn) per annum of which more than **two thirds is exported.**
- Given the relative and absolute sizes of the beef sector (US\$ 32bn, 23% exports), the comparison of the two can sometimes be misleading. However, **the two value chains start out as one, and the supply of leather is driven by the demand for beef.**
- Where they differ is that a significant proportion of the demand for leather comes from **high-end luxury consumer goods**, which tend to have **stricter ESG criteria** and are more **sensitive to reputational risks.**
- Nearly **two-thirds of all global commodity-driven deforestation can be attributed to the cattle sector**, and while a number of **important voluntary initiatives** exist – including certification and traceability – they are **largely piecemeal and unaligned**, meaning their potential impact is reduced.
- While national traceability programmes in Brazil have developed positively, including new public systems such as Selo Verde and the soon-to-be-launched 'Agro Brasil Mais Sustentável', two important outstanding issues remain:
 1. **Traceability of indirect supply;**
 2. **Individual animal traceability.**
- Considering the precarious economic state of the Brazilian leather sector, there are **concerns about its capacity to address deforestation** and other material risks in the value chain. This can be attributed to three main causes:
 1. historically, the sector has demonstrated **low levels of cooperation and collaboration** among stakeholders;
 2. leather as a material issue is **not prioritized in discussion spaces regarding the cattle supply chain;** and
 3. there is still a relatively a **low level of knowledge** in the sector regarding issues such as **traceability and deforestation-free practices.** ■

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ANNEXES

ANNEX 1: CODES FOR INDUSTRIAL PRODUCTION (PRODLISTS) AND MERCOSUR COMMON NOMENCLATURES (NCMS) AND RESPECTIVE CORRESPONDENCES BETWEEN THEM

PRODUCT	PRODUCT GROUP	NCM CODE	NCM DESCRIPTION	PRODLIST CODE	PRODLIST DESCRIPTION
Leather	Finished Leather	4107.92.10	Couros e peles, incluindo as tiras, de bovinos (incluindo os búfalos), preparados, divididos, com o lado flor	1510.2060	Couros e peles de bovinos (incluindo os búfalos) e equídeos apergaminhados ou preparados após curtimento ou secagem (couros acabados)
Leather	Finished Leather	4107.91.10	Couros e peles, incluindo as tiras, de bovinos (incluindo os búfalos), preparados, plena flor, não divididos	1510.2060	Couros e peles de bovinos (incluindo os búfalos) e equídeos apergaminhados ou preparados após curtimento ou secagem (couros acabados)
Leather	Finished Leather	4107.11.20	Outros couros e peles inteiros, de bovinos (incluindo os búfalos), plena flor, não divididos	1510.2060	Couros e peles de bovinos (incluindo os búfalos) e equídeos apergaminhados ou preparados após curtimento ou secagem (couros acabados)
Leather	Finished Leather	4107.12.20	Outros couros e peles inteiros, de bovinos (incluindo os búfalos), divididos, com o lado flor	1510.2060	Couros e peles de bovinos (incluindo os búfalos) e equídeos apergaminhados ou preparados após curtimento ou secagem (couros acabados)
Leather	Finished Leather	4107.99.10	Outros couros e peles, de bovinos, preparados	1510.2060	Couros e peles de bovinos (incluindo os búfalos) e equídeos apergaminhados ou preparados após curtimento ou secagem (couros acabados)
Leather	Finished Leather	4107.11.10	Couros e peles inteiros, de bovinos (incluindo os búfalos), plena flor, não divididos, de superfície unitária não superior a 2,6 m ²	1510.2060	Couros e peles de bovinos (incluindo os búfalos) e equídeos apergaminhados ou preparados após curtimento ou secagem (couros acabados)
Leather	Finished Leather	4107.12.10	Couros e peles inteiros, de bovinos (incluindo os búfalos), divididos, com o lado flor, de superfície unitária não superior a 2,6 m ²	1510.2060	Couros e peles de bovinos (incluindo os búfalos) e equídeos apergaminhados ou preparados após curtimento ou secagem (couros acabados)
Leather	Finished Leather	4107.19.20	Outros couros e peles inteiros de bovinos (incluindo os búfalos), preparados	1510.2060	Couros e peles de bovinos (incluindo os búfalos) e equídeos apergaminhados ou preparados após curtimento ou secagem (couros acabados)
Leather	Finished Leather	4107.19.10	Couros e peles de bovinos (incluindo os búfalos), preparados, de superfície unitária não superior a 2,6 m ²	1510.2060	Couros e peles de bovinos (incluindo os búfalos) e equídeos apergaminhados ou preparados após curtimento ou secagem (couros acabados)
Leather	Finished Leather	4107.12.90	Couros e peles, inteiros, de equídeos, preparados	1510.2060	Couros e peles de bovinos (incluindo os búfalos) e equídeos apergaminhados ou preparados após curtimento ou secagem (couros acabados)
Leather	Finished Leather	4107.19.90	Couros e peles inteiros de equídeos, preparados após curtimento	1510.2060	Couros e peles de bovinos (incluindo os búfalos) e equídeos apergaminhados ou preparados após curtimento ou secagem (couros acabados)
Leather	Finished Leather	4107.99.90	Outros couros e peles de equídeos, preparados	1510.2060	Couros e peles de bovinos (incluindo os búfalos) e equídeos apergaminhados ou preparados após curtimento ou secagem (couros acabados)
Leather	Finished Leather	4107.11.90	Couros e peles inteiros, de equídeos, plena flor, não divididos	1510.2060	Couros e peles de bovinos (incluindo os búfalos) e equídeos apergaminhados ou preparados após curtimento ou secagem (couros acabados)

PRODUCT	PRODUCT GROUP	NCM CODE	NCM DESCRIPTION	PRODLIST CODE	PRODLIST DESCRIPTION
Leather	Finished Leather	4107.91.90	Couros e peles de equídeos, incluindo as tiras, preparados, plena flor, não divididos	1510.2060	Couros e peles de bovinos (incluindo os búfalos) e equídeos apergaminhados ou preparados após curtimento ou secagem (couros acabados)
Leather	Finished Leather	4107.92.90	Couros e peles de equídeos, incluindo as tiras, preparados, divididos, com o lado flor	1510.2060	Couros e peles de bovinos (incluindo os búfalos) e equídeos apergaminhados ou preparados após curtimento ou secagem (couros acabados)
Leather	Tanned Leather	4104.11.14	Outros couros e peles de bovinos (incluindo os búfalos), plena flor, não divididos, no estado úmido	1510.2045	Couros e peles de bovinos (incluindo os búfalos) e equídeos simplesmente curtidos (p. ex. pré-curtimento vegetal), exceto ao cromo (wet-blue) e recurtidos
Leather	Tanned Leather	4104.11.24	Outros couros e peles de bovinos (incluindo os búfalos), divididos, com o lado flor, no estado úmido	1510.2045	Couros e peles de bovinos (incluindo os búfalos) e equídeos simplesmente curtidos (p. ex. pré-curtimento vegetal), exceto ao cromo (wet-blue) e recurtidos
Leather	Semi-Finished Leather	4104.41.30	Outros couros e peles de bovinos (incluindo os búfalos), no estado seco (crust)	1510.2063	Couros e peles inteiros de bovinos (incluindo os búfalos), no estado seco ("crust") ou recurtidos
Leather	Tanned Leather	4104.11.23	Outros couros e peles de bovinos (incluindo os búfalos), com pré-curtimenta vegetal, divididos, com o lado flor, no estado úmido	1510.2045	Couros e peles de bovinos (incluindo os búfalos) e equídeos simplesmente curtidos (p. ex. pré-curtimento vegetal), exceto ao cromo (wet-blue) e recurtidos
Leather	Tanned Leather	4104.19.40	Outros couros e peles de bovinos (incluindo os búfalos), no estado úmido	1510.2045	Couros e peles de bovinos (incluindo os búfalos) e equídeos simplesmente curtidos (p. ex. pré-curtimento vegetal), exceto ao cromo (wet-blue) e recurtidos
Leather	Semi-Finished Leather	4104.41.10	Couros e peles inteiros, de bovinos (incluindo os búfalos), de superfície unitária não superior a 2,6 m ² , no estado seco (crust)	1510.2063	Couros e peles inteiros de bovinos (incluindo os búfalos), no estado seco ("crust") ou recurtidos
Leather	Semi-Finished Leather	4104.49.20	Outros couros e peles de bovinos (incluindo os búfalos), no estado seco (crust)	1510.2063	Couros e peles inteiros de bovinos (incluindo os búfalos), no estado seco ("crust") ou recurtidos
Leather	Tanned Leather	4104.19.20	Outros couros e peles inteiros, de bovinos (incluindo os búfalos), de superfície unitária não superior a 2,6 m ² , no estado úmido	1510.2045	Couros e peles de bovinos (incluindo os búfalos) e equídeos simplesmente curtidos (p. ex. pré-curtimento vegetal), exceto ao cromo (wet-blue) e recurtidos
Leather	Tanned Leather	4104.11.29	Couros de equídeos, divididos, com o lado flor, no estado úmido	1510.2045	Couros e peles de bovinos (incluindo os búfalos) e equídeos simplesmente curtidos (p. ex. pré-curtimento vegetal), exceto ao cromo (wet-blue) e recurtidos
Leather	Tanned Leather	4104.19.90	Couros/peles, equídeos, úmidos	1510.2045	Couros e peles de bovinos (incluindo os búfalos) e equídeos simplesmente curtidos (p. ex. pré-curtimento vegetal), exceto ao cromo (wet-blue) e recurtidos
Leather	Tanned Leather	4104.11.22	Outros couros e peles inteiros, de bovinos (incluindo os búfalos), de superfície unitária não superior a 2,6 m ² , divididos, com o lado flor, no estado úmido	1510.2045	Couros e peles de bovinos (incluindo os búfalos) e equídeos simplesmente curtidos (p. ex. pré-curtimento vegetal), exceto ao cromo (wet-blue) e recurtidos
Leather	Tanned Leather	4104.19.10	Couros e peles inteiros, de bovinos (incluindo os búfalos), de superfície unitária não superior a 2,6 m ² , simplesmente curtidos ao cromo (wet-blue), no estado úmido	1510.2067	Couros e peles inteiros, de bovinos (incluindo os búfalos), simplesmente curtidos ao cromo (wet-blue)

PRODUCT	PRODUCT GROUP	NCM CODE	NCM DESCRIPTION	PRODLIST CODE	PRODLIST DESCRIPTION
Leather	Tanned Leather	4104.11.13	Outros couros e peles de bovinos (incluindo os búfalos), com pré-curtimenta vegetal, plena flor, não divididos	1510.2045	Couros e peles de bovinos (incluindo os búfalos) e equídeos simplesmente curtidos (p. ex. pré-curtimento vegetal), exceto ao cromo (wet-blue) e recurtidos
Leather	Semi-Finished Leather	4104.41.20	Outros couros e peles de bovinos (incluindo os búfalos), curtidos ao vegetal, para solas, no estado seco (crust)	1510.2063	Couros e peles inteiros de bovinos (incluindo os búfalos), no estado seco ("crust") ou recurtidos
Leather	Tanned Leather	4104.11.21	Couros e peles inteiros, de bovinos (incluindo os búfalos), de superfície unitária não superior a 2,6 m2, simplesmente curtidos ao cromo (wet-blue), divididos, com o lado flor, no estado úmido	1510.2067	Couros e peles inteiros, de bovinos (incluindo os búfalos), simplesmente curtidos ao cromo (wet-blue)
Leather	Tanned Leather	4104.11.11	Couros e peles inteiros, de bovinos (incluindo os búfalos), de superfície unitária não superior a 2,6 m2, simplesmente curtidos ao cromo (wet-blue), plena flor, não divididos, no estado úmido	1510.2067	Couros e peles inteiros, de bovinos (incluindo os búfalos), simplesmente curtidos ao cromo (wet-blue)
Leather	Tanned Leather	4104.11.12	Outros couros e peles inteiros, de bovinos (incluindo os búfalos), de superfície unitária não superior a 2,6 m2, plena flor, não divididos, no estado úmido	1510.2045	Couros e peles de bovinos (incluindo os búfalos) e equídeos simplesmente curtidos (p. ex. pré-curtimento vegetal), exceto ao cromo (wet-blue) e recurtidos
Leather	Semi-Finished Leather	4104.49.90	Couros/peles equídeos, no estado seco (crust)	1510.2063	Couros e peles inteiros de bovinos (incluindo os búfalos), no estado seco ("crust") ou recurtidos
Leather	Tanned Leather	4104.11.19	Couros de equídeos, não dividido, no estado úmido, plena flor, não divididos, no estado úmido	1510.2045	Couros e peles de bovinos (incluindo os búfalos) e equídeos simplesmente curtidos (p. ex. pré-curtimento vegetal), exceto ao cromo (wet-blue) e recurtidos
Leather	Semi-Finished Leather	4104.49.10	Couros e peles inteiros, de bovinos (incluindo os búfalos), de superfície unitária não superior a 2,6 m2, no estado seco (crust)	1510.2063	Couros e peles inteiros de bovinos (incluindo os búfalos), no estado seco ("crust") ou recurtidos
Leather	Semi-Finished Leather	4104.41.90	Couros e peles de equídeos, secos, pena flor	1510.2063	Couros e peles inteiros de bovinos (incluindo os búfalos), no estado seco ("crust") ou recurtidos
Leather	Tanned Leather	4104.19.30	Outros couros e peles de bovinos (incluindo os búfalos), com pré-curtimenta vegetal, no estado úmido	1510.2045	Couros e peles de bovinos (incluindo os búfalos) e equídeos simplesmente curtidos (p. ex. pré-curtimento vegetal), exceto ao cromo (wet-blue) e recurtidos
Leather	Finished Leather	4114.20.10	Couros/peles envernizados ou revestidos	1510.2070	Couros e peles com acabamento metalizado, envernizado ou revestido
Leather	Finished Leather	4114.10.00	Couros e peles acamurçados (incluindo a camurça combinada)	1510.2040	Couros e peles com acabamento acamurçado (incluindo a camurça combinada)
Leather	Finished Leather	4114.20.20	Couros/peles metalizados	1510.2070	Couros e peles com acabamento metalizado, envernizado ou revestido

PRODUCT	PRODUCT GROUP	NCM CODE	NCM DESCRIPTION	PRODLIST CODE	PRODLIST DESCRIPTION
Beef	Frozen or Fresh Beef	2023.30.00	Carnes desossadas de bovino, frescas ou refrigeradas	1011.2030	Carnes de bovinos frescas ou refrigeradas
Beef	Frozen or Fresh Beef	2023.30.00	Carnes desossadas de bovino, congeladas	1011.2020	Carnes de bovinos congeladas
Beef	Byproducts of Beef	1502.10.12	Sebo bovino fundido (incluindo o premier jus)	1011.2065	Gorduras de bovinos, ovinos ou caprinos refinadas (fundidas); p. ex. sebos
Beef	Processed Beef	1601.00.00	Enchidos e produtos semelhantes, de carne, de miudezas ou de sangue; preparações alimentícias à base de tais produtos	1011.2120	Produtos embutidos ou de salami e outras preparações de carnes de bovinos, tais como: carnes secas, salgadas, defumadas e temperadas; quando integrados ao abate; exceto pratos prontos congelados
Beef	Frozen or Fresh Beef	2022.20.90	Outras peças não desossadas de bovino, congeladas	1011.2020	Carnes de bovinos congeladas
Beef	Byproducts of Beef	2062.22.00	Fígados de bovino, congelados	1011.2080	Miudezas comestíveis de bovinos (línguas, fígados, rabos, etc.) frescas, refrigeradas ou congeladas
Beef	Byproducts of Beef	1502.10.11	Sebo bovino, em bruto	1011.2055	Gorduras de bovinos, ovinos ou caprinos em bruto (não fundidas)
Beef	Byproducts of Beef	2062.29.90	Outras miudezas comestíveis de bovino, congeladas	1011.2080	Miudezas comestíveis de bovinos (línguas, fígados, rabos, etc.) frescas, refrigeradas ou congeladas
Beef	Byproducts of Beef	2062.29.10	Rabos de bovino, congelados	1011.2080	Miudezas comestíveis de bovinos (línguas, fígados, rabos, etc.) frescas, refrigeradas ou congeladas
Beef	Processed Beef	2102.20.00	Carnes de bovinos, salgadas/em salmoura/secas/defumadas	1011.2120	Produtos embutidos ou de salami e outras preparações de carnes de bovinos, tais como: carnes secas, salgadas, defumadas e temperadas; quando integrados ao abate; exceto pratos prontos congelados
Beef	Frozen or Fresh Beef	2012.20.90	Outras peças não desossadas de bovino, frescas ou refrigeradas	1011.2030	Carnes de bovinos frescas ou refrigeradas
Beef	Processed Beef	1602.20.00	Preparações alimentícias e conservas, de fígados de quaisquer animais	1011.2120	Produtos embutidos ou de salami e outras preparações de carnes de bovinos, tais como: carnes secas, salgadas, defumadas e temperadas; quando integrados ao abate; exceto pratos prontos congelados
Beef	Byproducts of Beef	1502.10.19	Outros sebos bovinos	1011.2065	Gorduras de bovinos, ovinos ou caprinos refinadas (fundidas); p. ex. sebos
Beef	Processed Beef	1602.50.00	Preparações alimentícias e conservas, da espécie bovina	1011.2120	Produtos embutidos ou de salami e outras preparações de carnes de bovinos, tais como: carnes secas, salgadas, defumadas e temperadas; quando integrados ao abate; exceto pratos prontos congelados
Beef	Byproducts of Beef	1502.90.00	Gorduras ovinas ou caprinas	1011.2055	Gorduras de bovinos, ovinos ou caprinos em bruto (não fundidas)

PRODUCT	PRODUCT GROUP	NCM CODE	NCM DESCRIPTION	PRODLIST CODE	PRODLIST DESCRIPTION
Beef	Byproducts of Beef	1502.10.90	Outras gorduras bovinas	1011.2065	Gorduras de bovinos, ovinos ou caprinos refinadas (fundidas); p. ex. sebos
Beef	Frozen or Fresh Beef	2022.20.10	Quartos dianteiros não desossados de bovino, congelados	1011.2020	Carnes de bovinos congeladas
Beef	Frozen or Fresh Beef	2022.20.20	Quartos traseiros não desossados de bovino, congelados	1011.2020	Carnes de bovinos congeladas
Beef	Frozen or Fresh Beef	2012.20.20	Quartos traseiros não desossados de bovino, frescos/refrigerados	1011.2030	Carnes de bovinos frescas ou refrigeradas
Beef	Frozen or Fresh Beef	2012.20.10	Quartos dianteiros não desossados de bovino, frescos/refrigerados	1011.2030	Carnes de bovinos frescas ou refrigeradas
Beef	Byproducts of Beef	2062.21.00	Línguas de bovino, congeladas	1011.2080	Miudezas comestíveis de bovinos (línguas, fígados, rabos, etc.) frescas, refrigeradas ou congeladas
Beef	Processed Beef	1602.90.00	Outras preparações alimentícias e conservas, de carnes, miudezas, incluindo as preparações de sangue de quaisquer animais	1011.2120	Produtos embutidos ou de salami e outras preparações de carnes de bovinos, tais como: carnes secas, salgadas, defumadas e temperadas; quando integrados ao abate; exceto pratos prontos congelados
Beef	Frozen or Fresh Beef	2011.10.00	Carcaças e meias carcaças de bovino, frescas ou refrigeradas	1011.2030	Carnes de bovinos frescas ou refrigeradas
Beef	Byproducts of Beef	2061.10.00	Miudezas comestíveis de bovino, frescas ou refrigeradas	1011.2080	Miudezas comestíveis de bovinos (línguas, fígados, rabos, etc.) frescas, refrigeradas ou congeladas
Beef	Frozen or Fresh Beef	2021.10.00	Carcaças e meias-carcaças de bovino, congeladas	1011.2020	Carnes de bovinos congeladas
Beef	Processed Beef	2109.99.40	Outras miudezas comestíveis	1011.2120	Produtos embutidos ou de salami e outras preparações de carnes de bovinos, tais como: carnes secas, salgadas, defumadas e temperadas; quando integrados ao abate; exceto pratos prontos congelados

ANNEX 3: CODES FOR NATIONAL CLASSIFICATION OF ECONOMIC ACTIVITIES (CNAES)

CNAE Code	Considered as Tanning?	CNAE Description
15.1	Yes	Curtimento e outras preparações de couro
15.2	No	Fabricação de artefatos de couro não especificados anteriormente
15.3	No	Fabricação de calçados de couro
15.4	No	Fabricação de máquinas e equipamentos para as indústrias do vestuário, do couro e de calçados



TROPICAL FOREST ALLIANCE