MARFRIG and IDH share the goal of accelerate sustainability within the beef value chain through the development of large scale and long-term impact solutions that consider multistakeholders coalitions of governments, trade unions, producers, financial institutions, companies, NGOs and universities that strive for impact on public good.

In September 13th, 2019 IDH and Marfrig signed a partnership to design a: “Landscape solution to support the establishment of a long term program for sustainable production of calves and cattle and forest protection in the Amazon Biome”

1. Structuring of Financial Mechanisms
   to attract resources (public and private, national and international) to be invested at the farm level with focus on Forest Code implementation, intensification of calves’ production systems through implementation of iLPF (pasture, crop, forest integrated systems) practices, payment for ecosystems services and maintenance of the zero deforestation commitments.

2. Structuring of Technical Assistance Network
   to support the implementation of the changes at farm level, including animal nutrition, herd management, breeding, environmental compliance, land register, others. TA will include implementation of the Low Carbon and Zero Carbon Beef protocols.

3. Design of an Indirect Suppliers Monitoring System
   that will attend investors, governments and society needs and ambitions and will address the landscapes elements where the program will be implemented.

Based on the PRODUCTION - PROTECTION - INCLUSION approach, Marfrig wants to create a closer connection with farmers among the supply chain that goes beyond the commercial relations, improving their livelihood and mitigating the deforestation risks.

<table>
<thead>
<tr>
<th>DIRECT SUPPLIERS</th>
<th>INDIRECT SUPPLIERS</th>
<th>SECTORIAL APPROACH</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Tier 1)</td>
<td>(Tier 2 and 3)</td>
<td></td>
</tr>
<tr>
<td>Expand the Purchase Policy and monitoring system to other biomes, promote the integration of the livestock chain for all sizes and stages of production</td>
<td>Develop origin control mechanisms for indirect suppliers under a inclusion approach supported by a TA network and financial mechanisms to promote better conditions to small and medium producers</td>
<td>Coordinated efforts among producers, industry, retailers, banks, investors and society in order to promote a market isonomy preventing the leakage risks</td>
</tr>
</tbody>
</table>
In order to implement this vision, Marfrig is establishing a set of **concrete actions** that are distributed over the next 10 years:

**5-Years Action Plan**
- **2022**: Short-term, having a clear vision of the risks and context.
- **2025**: Medium-term, Marfrig approach for sustainable origination based on implemented solutions.
- **2030**: Long-term, scaling-up the Marfrig sustainable origination approach within whole value chain.

**Structured Programs for 2030**
- Based on the 5-years Action Plan results.

**10-Years Program for Sustainable Origination**
- The livestock value chain is understood as the producers, feed industry, retailers, banks and investors.

---

**Glossary**

**Traceability**
Traceability or Origin control: It is one of the pillars of the Marfrig’s Sustainability Platform. This corresponds to the mechanisms adopted by the company to track the point of origin at farm level of the cattle from the breeding to the slaughterhouses. These mechanisms can include individual traceability (eartags, chip, etc.), block-chain technologies, landscape monitoring, among others, that are selected according to the risk level of each region and to the commercial conditions for clients. The main elements covered by the Origin Control includes biodiversity conservation, deforestation-free supply chain, working conditions, indigenous lands, among other criteria.

**Biome**
Biome is a set of plant and animal life, consisting of the grouping of vegetation types that are close together and can be identified at a regional level, with similar geology and climate conditions and that, historically, have undergone the same processes of landscape formation, resulting in a diversity of flora and fauna of their own.

https://cnae.ibge.gov.br/en/component/content/54-7a127a12 -vamos-conhecer-o-brasil/nosso-territorio/1465-acesssistemas 
.html?Itemid=111.

**Amazon Biome**
Amazon biome means any supply chain that is located in areas defined as Amazon Biome as defined by the IBGE definitions and biome maps.


**VSA**
VSA is an innovative market-based model and online platform that connects demand for sustainably produced agro-commodities with locally driven sustainability advancements, based on the landscape approach.

https://www.idhsustainabletrade.com/landscapes/verified-sourcing-areas/

**Direct Suppliers**
Direct suppliers correspond to Tier 1 of the livestock chain. Tier 1, are the suppliers that deliver the cattle to the slaughterhouses. (all of them has the fattening stage and can cover also the rearing and breeding stages in some cases), only one farm before the Marfrig’s slaughterhouses.

**Indirect Suppliers**
Indirect suppliers corresponds to Tiers 2 and 3 of the livestock chain. Tier 2, usually the rearing stage (in some cases can also conduct the breeding stage), two farms before the slaughterhouses. Tier 3 usually conducts only the breeding stage, three or more farms before the slaughterhouses.

**ILP/ILPF**
Integration-crop-livestock-forest (ILPF) is a production strategy that integrates different productive, agricultural, livestock and forestry systems within the same area.


**Deforestation**
Deforestation means conversion by suppression of areas of primary forest physiognomy by anthropogenic actions (INPE) of 6,26 ha contiguous ha or more.

http://www.obt.inpe.br/OBT/assuntos/programas/amazoniaprodutos/pdfs/Metodologia_Prodes_Deter_revisada.pdf
**5-YEAR ACTION PLAN FOR SUSTAINABLE ORIGINATION**

<table>
<thead>
<tr>
<th>Engagement level</th>
<th>Vision</th>
<th>Goals</th>
<th>SDGs</th>
<th>Actions</th>
<th>Deliverables</th>
<th>Deadline</th>
<th>Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>D1.1</td>
<td>Partnership with financial institution established and no integration model (commercial and financial approaches) ready for pilot</td>
<td>2020</td>
<td>IDH</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>D1.2</td>
<td>Integration model developed with Embrapa for integration model ready for pilot and implementation</td>
<td>2021</td>
<td>IDH</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>D2.1</td>
<td>Methodology for to monitor direct suppliers in Cerrodo biome</td>
<td>2021</td>
<td>Geoflorestas</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>D2.2</td>
<td>100% of the direct suppliers in Cerrodo biome monitored by Marfin's monitoring system</td>
<td>2022</td>
<td>Geoflorestas</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>D2.3</td>
<td>Marfin's purchase policy revised and adapted to cover the suppliers in the Cerrodo biome</td>
<td>2023</td>
<td>AgroSone</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>D3.1</td>
<td>Partnership agreement between Marfin and Embrapa covering the MCR and LCR protocols</td>
<td>2020</td>
<td>Embrapa</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>D3.2</td>
<td>Pilot use of a blockchain solution in MCR</td>
<td>2022</td>
<td>Sanatec / TNO / PMF</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>D3.3</td>
<td>Partnership or service agreement with Sanatec covering the TA for restoration in direct suppliers</td>
<td>2022</td>
<td>Geoflorestas</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>D3.4</td>
<td>Partnership with Finantia institution established and financial products being offered to Marfin Club members</td>
<td>2022</td>
<td>IDH</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>D4.1</td>
<td>New Marfin Club Protocol</td>
<td>2020</td>
<td>I2O Company</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>D4.2</td>
<td>Update questionnaire, Assessment of standards, Implementation of new report in line with auditor recommendation</td>
<td>2021</td>
<td>IDH</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>D4.3</td>
<td>Continue using the Marfin Club protocol and application to indirect suppliers (Tiers 2 and 3)</td>
<td>2022</td>
<td>IDH</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>D4.4</td>
<td>At least 1 new element of market recognition being developed to Marfin Club members</td>
<td>2023</td>
<td>IDH</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>D5.1</td>
<td>Incorporation of technical and legal framework with MFPI/Embrapa to re-introduce direct suppliers to formal supply chain (short-term)</td>
<td>2022</td>
<td>MFPI / Embrapa</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>D5.2</td>
<td>Incorporation of procedures for re-insertion readjustment</td>
<td>2025</td>
<td>MFPI / Embrapa</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>D5.3</td>
<td>Communication plan to publicize the possibility of re-insertion</td>
<td>2025</td>
<td>MFPI / Embrapa</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>D6.1</td>
<td>Mapping the market dynamics in Cerrodo biome, using the indirect risk map</td>
<td>2022</td>
<td>AgroSone</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>D6.2</td>
<td>Commercial and financial package for integration adapted to Cerrodo biome</td>
<td>2023</td>
<td>IDH</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>D6.3</td>
<td>1 pilot project under implementation in Cerrodo biome</td>
<td>2025</td>
<td>IDH</td>
</tr>
</tbody>
</table>

**Direct Suppliers (Tier 1)**

- Expand the Purchase Policy and monitoring system to other biomes, promote the integration of the indirect chain for all sizes and stages of production
- Re-insert blocked suppliers in the Amazon biome
- Expand the integration model for Cerrodo biome

**Technical Assistance and Financial Mechanisms**

- Monitoring
<table>
<thead>
<tr>
<th>Engagement Level</th>
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<th>Deadline</th>
<th>Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>D7.1</td>
<td>Final report from CFA with recommendations for Maranhão's purchase policy and monitoring system</td>
<td>2021</td>
<td>CFA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>D7.2</td>
<td></td>
<td>2021</td>
<td>IOH</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>D7.3</td>
<td>New purchase policy/criteria for high-risk areas</td>
<td>2021</td>
<td>IOH</td>
</tr>
<tr>
<td></td>
<td>11.1</td>
<td></td>
<td></td>
<td>Hiring a consultancy to conduct the study for all Maranhão's supply chain in Brazil, including Amazon and Cerrado biome</td>
<td>2020</td>
<td>Agroecology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11.2</td>
<td></td>
<td></td>
<td>Identify the risk areas for supply</td>
<td>2020</td>
<td>Agroecology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12.1</td>
<td></td>
<td></td>
<td>Partnering with EJH in the Sustainable Production of Caviças Program</td>
<td>2020</td>
<td>IDH</td>
<td></td>
</tr>
<tr>
<td></td>
<td>13.1</td>
<td></td>
<td></td>
<td>Partnering with Aliança das Favelas to develop and pilot VOS/HSIC solutions under Maranhão's operations to avoid cattle deforestation</td>
<td>2022</td>
<td>Aliança das Favelas</td>
<td></td>
</tr>
<tr>
<td></td>
<td>13.2</td>
<td></td>
<td></td>
<td>Explore independent studies on the risks and impacts from cattle ranchers activities under Maranhão's supply chain over indigenous peoples, traditional communities and conservation units</td>
<td>2023</td>
<td>IDH</td>
<td></td>
</tr>
<tr>
<td></td>
<td>13.3</td>
<td></td>
<td></td>
<td>Engaging in the landscape level initiatives to establish pilot regions for deforestation-free supply (VSA approach)</td>
<td>2025</td>
<td>IDH</td>
<td></td>
</tr>
<tr>
<td></td>
<td>14.1</td>
<td></td>
<td></td>
<td>Establishing new partnerships to test solutions available in the market for monitoring indirect suppliers</td>
<td>2025</td>
<td>IDH</td>
<td></td>
</tr>
<tr>
<td></td>
<td>14.2</td>
<td></td>
<td></td>
<td>Engaging in the landscape level initiatives to assist in pilot regions for deforestation-free supply (VSA approach)</td>
<td>2025</td>
<td>IDH</td>
<td></td>
</tr>
<tr>
<td></td>
<td>14.3</td>
<td></td>
<td></td>
<td>Establishing technical and legal framework with MPA/Iman to re-introduce indirect suppliers to the formal supply chain (medium-term)</td>
<td>2025</td>
<td>MPA/Iman</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15.1</td>
<td></td>
<td></td>
<td>Partnering with IDH in the Sustainable Production of Caviças Program</td>
<td>2020</td>
<td>IDH</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15.2</td>
<td></td>
<td></td>
<td>Establishing new partnerships for developing financial mechanisms for smallholders</td>
<td>2021</td>
<td>IDH</td>
<td></td>
</tr>
<tr>
<td></td>
<td>16.1</td>
<td></td>
<td></td>
<td>Expand the TA network established under the Sustainable Production of Caviças Program to other biomes and states</td>
<td>2025</td>
<td>IDH</td>
<td></td>
</tr>
</tbody>
</table>
5-YEAR ACTION PLAN FOR SUSTAINABLE ORIGINATION

**Engagement level**

**Vision**

S1. Mitigate the implications from blocking direct suppliers – cattle transaction, through the Homogenized Protocol for Cattle Purchase

**Goals**

S1.1 Homogenize Protocol for Cattle Purchase within the beef industry

**SDGs**

**Actions**

S1.1.1 Homogenized Protocol for Cattle Purchase in-use by Marfrig

**Deliverables**

Participation in other sectoral initiatives

**Deadline**

2022

**Partners**

MPF / Imaltera

**Technical Assistance & Financial Mechanisms**

**Monitoring**

S2. Develop sectoral mechanisms for Market recognition of environmental services (ex. carbon)

**SDGs**

**Actions**

S2.1 Partnership with Embraapa for piloting and scaling-up the NCB and LCB protocols

**Deliverables**

First projects under NCB and LCB protocols

**Deadline**

2022

**Partners**

Embraapa

**Technical Assistance & Financial Mechanisms**

**Monitoring**

S2.2 Identify farms that fall under the protocol and develop TA partnerships for implementation by farmers

**SDGs**

**Actions**

S2.3 Developing branding strategies and distribution channels for certified NCB and LCB beef products

**Deliverables**

Branding strategy defined

**Deadline**

2022

**Partners**

Embraapa

**Technical Assistance & Financial Mechanisms**

**Monitoring**

S3. Integrate animal origin control with environmental data

**SDGs**

**Actions**

S3.1 Advocacy with public sector bodies for the integration of animal control and environmental data

**Deliverables**

Summary of the tests and pilots implemented by Marfrig

**Deadline**

2025

**Partners**

IDH

**Technical Assistance & Financial Mechanisms**

**Monitoring**

S4. Stimulate the development of long-term pre-competitive TA models to support farmers

**SDGs**

**Actions**

S4.1 Foster the capacity building for TA within sectoral organizations, capacity building entities and public TA companies

**Deliverables**

At least 1 assessment established focused on capacity build and/or pre-competitive TA models

**Deadline**

2025

**Partners**

IDH

**Technical Assistance & Financial Mechanisms**

**Monitoring**

S5. Stimulate the development of new business models involving all the actors in the value chain

**SDGs**

**Actions**

S5.1 Promote sectoral discussions and market analyses about the role of each actor in the beef value chain (producers, industry, retailers, banks and investors) in promoting sustainable production pathways (Production-Preservation-Inclusion approach)

**Deliverables**

Summary results about the each actor among the beef value chain

**Deadline**

2022

**Partners**

IDH

**Technical Assistance & Financial Mechanisms**

**Monitoring**

S5.2 Establishing new approaches for the beef value chain based on the results of the market analysis

**SDGs**

**Actions**

S5.3 Establishing new approaches for the beef value chain based on the results of the market analysis

**Deliverables**

At least 1 initiative supported by Marfrig covering new business models for the beef value chain

**Deadline**

2025

**Partners**

IDH

**Technical Assistance & Financial Mechanisms**

**Monitoring**

MAP OF CURRENT PARTNERSHIPS

**Homogenized Protocol for Cattle Purchase**
within the beef industry

**Re-insertion of blocked suppliers** (direct in the short-term and indirect in the medium-term - monitoring solutions to farmers)

**Assessment and improvement** of Marfrig’s supply chain monitoring approach based on the assessment of documentation and process, it is a initiative from CFA that Marfrig will participate

**Service provider hired to develop the indirect suppliers risk-map** in the Amazon Biome

Marfrig is one of the 8 founding organizations of the PCI Institute, a public-private association recognized as the official implementor of the Mato Grosso State PCI Strategy
**Development and piloting of a block-chain application**
to report on zootechnical and environmental information to the beef-industry - self informed by the producer - Marfrig would contribute with the geo-monitoring system indicating the environmental situation and regularization needs

**Partner with Amigos da Terra - Amazonia Brasileira** to apply the Visipec solution to avoid cattle triangulation and pilot the solution in Marfrig’s operations

**Consultancy hired to conduct the review** of the Marfrig Club Protocol

**Geo-monitoring service provider** - can be a future partner for restoration TA

**Partnership for piloting and scaling-up** the CCN and CBC protocols