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ANALYSIS**

DEFORESTATION IN BRAZIL

UBS finances agribusinesses Marfrig and
BrasilAgro exposed to environmental damage
in Amazon and Cerrado

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Context

This analysis was prepared by the Center for Climate Crime Analysis (CCCA) for the Society for Threatened Peoples (STP). It builds on research carried out by Olivier Christe (Section III) concerning the investment Bank UBS BB – a joint venture between the Swiss Bank UBS and the Brazilian Bank Banco do Brasil – which participated in providing financial services to two companies: Marfrig Global Foods S.A. on 6 August 2021 and BrasilAgro on 3 May 2021.

CCCA complemented this by examining the Environmental & Social Risk Policy Framework (ESR) that was in place when UBS provided the financial services; and the record of deforestation (from 2008-2020), and other violations connected with suppliers of two Marfrig units between 2018 and 2020 (Section V) and on five properties of BrasilAgro (Section VI).

The availability of data means that this analysis was limited to the period prior to the financing of Marfrig and BrasilAgro, and thus it is not claimed that these violations were caused by the provision of finance (though as they predate the financing, they *prima facie* could have been taken into account in deciding whether to provide the finance).

This analysis also identifies specific provisions of UBS's ESR Framework that appear to be implicated, and additional gaps that it reveals (Sections IV and VII). For additional discussion and recommendations regarding the policy implications of this, STP formulated a short report that is available on: www.gfbv.ch.

Summary

1. This analysis examines the adequacy of the 2021 "UBS Environmental and Social Risk Policy Framework" (hereafter "UBS 2021 ESR Framework")¹ in the context of financial services provided to Brazilian agribusiness, especially regarding the financing in two companies – Marfrig Global Foods S.A and BrasilAgro – that UBS organized through its joint venture with Banco do Brasil. It identifies multiple deficiencies which raise concerns that restricting the regulation or liability of financial institutions merely to self-regulation is not sufficient to achieve effective management of risks regarding deforestation, indigenous rights, and other related environmental and social impacts.
2. Through the joint venture with Banco do Brasil, an investment bank called UBS BB, UBS uses a particular financial instrument for most of its business with the Brazilian agribusiness industry, the Agribusiness Receivable Certificate (CRA). CRA are private credit securities (also called "asset-backed securities") organized by one or more investment banks (coordinators) with the help of a securitization company. UBS BB co-organized a CRA for Marfrig in July 2021, together with 5 other financial institutions. For BrasilAgro's CRA, in May 2021, UBS BB

¹ A copy of the UBS 2021 ESR Framework is included as Appendix 1 to this analysis. The document can also be downloaded from the UBS website. Available from: <<https://www.ubs.com/global/en/sustainability-impact/sustainability-reporting.html#tab-797028197>>.

was one out of three banks and had a more central role as lead coordinator. The UBS 2021 ESR Framework also covers UBS BB and was in place at the points in time that UBS BB provided financial services to the two companies.

3. CCCA's research compiles evidence on the negative environmental and human rights impacts associated with Marfrig and BrasilAgro. The Marfrig case study included two meat processing units – the Tangara da Serra Unit, located in Mato Grosso, and the Tucumã Unit, in Pará² – focusing primarily on the extensive deforestation committed by their suppliers in the Amazon and Cerrado biomes, the vast majority of which does not appear to have any legal authorization.
4. BrasilAgro's case study also shows substantive deforestation, including through the use of fires. Most of the deforestation detected took place after the acquisition by BrasilAgro and only a few years before the financing by UBS. In analyzing the deforestation authorizations in the National System for the Control of the Origin of Forest Products (SINAFLOR)³, it was possible to observe that no property had authorization.
5. The UBS 2021 ESR Framework sets standards according to which UBS should manage potential adverse impacts to the environment and human rights related to its business activities. The UBS 2021 ESR Framework lists "controversial activities", where UBS will not provide services (p. 5). This analysis connects Marfrig and BrasilAgro to four controversial activities listed in the UBS 2021 ESR Framework:
 - a. Deforestation of high conservative value forests (HCVF), as defined by the six categories of the Forest Stewardship Council (FSC). The determination of an HCVF is made on a case-by-case basis, and, to date, such analysis has not been completed. However, there are strong indications of Marfrig's direct and indirect suppliers being located in environmental protection areas;
 - b. Evidence of illegal fire for land clearance in BrasilAgro's properties after the acquisition of the farms by the company.
 - c. Marfrig's suppliers have been convicted of using labor analogue to slavery in Brazil, according to the official dirty list published by the government.
 - d. Indigenous land rights violations linked to invasions involving Marfrig suppliers. Using Rural Environmental Registry (hereafter "CAR") information, the research found that at least three properties were entirely located inside indigenous lands.
6. The UBS 2021 ESR Framework also lists "areas of concern"⁴, where UBS will only do business under stringent criteria. From this, we highlight as concerning:

² The activities in the Tucumã Unit were suspended in 2020, as available from: <<https://www.canalrural.com.br/radar/marfrig-suspende-atividades-em-tucuma-mas-nega-paralisacao-por-queda-de-consumo/>>

³ SINAFLOR website. Available from: <<http://www.ibama.gov.br/sinaflor>>.

⁴ UBS 2021 ESR Framework, p. 3 (see Appendix 1).



- a. The absence of livestock as a soft commodity: Even though the UBS 2021 ESR Framework identifies livestock as one of the main drivers of deforestation, it is not listed as an “area of concern”. The failure to provide clear guidance on avoiding deforestation linked to cattle undermines the overall effectiveness of the ESR framework.
- b. The criteria for soy were changed in the UBS 2021 ESR Framework, as compared with the 2020 version,⁵ only three days before the financial service provided to BrasilAgro. That makes it appear as if the requirements were weakened so a deal with BrasilAgro could go through. This is especially concerning since BrasilAgro had acknowledged in its 2019 annual report that legal action was being taken against it for environmental destruction or damage.⁶
- c. The absence of a policy against illegal clearance of land for reasons other than logging, soy or palm oil. There is no logical or principled reason for UBS to treat the illegal felling of trees for timber differently from the illegal felling of trees to clear land; especially when the illegal clearance of land is recognized as a “controversial activity” when conducted by other means.

⁵ A copy of the UBS 2020 ESR Framework is included as Appendix 2 to this analysis. This document can also be downloaded from the UBS website. Available from: <<https://www.ubs.com/global/en/sustainability-impact/sustainability-reporting.html#tab-780702540>>

⁶ BrasilAgro Annual Report (2019).

Available from: <https://www.sec.gov/Archives/edgar/data/0001499849/000121390020034148/f20f2020_brasilagro.htm>

I. Introduction

The Center for Climate Crime Analysis (CCCA) is a non-profit organization based in the Netherlands,⁷ and founded and led by prosecutors and law enforcement professionals. Its mandate is to support and scale up legal and other action against illegal activities that are relevant to climate change and human rights. To do so, it collates and conducts forensic and legal analysis of reliable information from a range of sources, including official data made public by government agencies. CCCA then compiles this information into actionable reports and casefiles, which it provides to partners and other institutions which have the authority or obligation to act. This can provide evidence and analysis to include law enforcement or regulatory authorities for enforcement action; to civil society for litigation and advocacy; and to corporations or other financial institutions to support compliance with their due diligence obligations or environmental, social and climate commitments.

Following two articles produced by journalist Olivier Christe (hereinafter “Christe”) and Fernanda Wenzel⁸ which exposed the concerning inflow of foreign capital into sectors linked to deforestation in Brazil, CCCA conducted research and analysis for the Society for Threatened Peoples Switzerland (STP) on the role of the Swiss Bank UBS and the possible relationship of its increasing investments in the agribusiness sector with environmental and human rights violations in Brazil.

To reduce reputational risks related to the projects and activities they finance, investment banks implement environmental, social, and governance policies and regulations. These rules and standards reflect and contribute to developing a set of widely acknowledged good governance principles that are increasingly understood as formal legal or quasi-legal obligations. These policies and standards claim to promote several 'good governance' values, such as transparency, broad public participation in decision-making and respect for the environment and human rights⁹.

The UBS 2021 ESR Framework claims that “Our industry is playing an active role in addressing global issues such as human rights and the protection of our environment” and that “Growing environmental and human rights concerns have resulted in a fast-changing regulatory and competi-

⁷ As an organization based in the Netherlands, CCCA is bound by the EU General Data Protection Regulation (GDPR). CCCA also complies with the Brazilian General Personal Data Protection Law 13709/2018 (LGPD) in its operations in Brazil. Its work focuses on the collection and analysis of companies and businesses operating in the Amazon, with the purpose of supporting law enforcement actions in Brazil and abroad.

⁸ The most important findings of Olivier Christe’s research found their way into the following two articles:

Brandherd mit Dividende. Available from: <https://www.republik.ch/2021/04/19/brandherd-mit-dividende>. Wenzel, F. and Christe, O. (2021).

Debt deal with deforester BrasilAgro puts UBS’s green commitment in question. Available from: < <https://news.mongabay.com/2021/08/debt-deal-with-deforester-brasilagro-puts-ubss-green-commitment-in-question/>>. Wenzel, F. and Christe, O. (2021).

⁹ McIntyre, O. (2015). Development Banking ESG Policies and the Normativisation of Good Governance Standards. In: Responsible *Investment Banking, CSR, Sustainability, Ethics & Governance*, DOI 10.1007/978-3-319-10311-2_8.

tive landscape, which is affecting our firm, our suppliers, and our clients. In response to these emerging risks and opportunities, we are shaping appropriate solutions and commitments”.¹⁰ It also reiterates a commitment (which was present from its initial 2011 Environmental and Social Risk policy framework¹¹) that “UBS will not knowingly provide financial or advisory services to clients whose primary business activity, or where the proposed transaction, is associated with severe environmental or social damage” in certain categories, such as illegal logging, illegal use of fire for land clearance, child and forced labour or infringements of indigenous peoples' rights.¹²

Despite this recognition and the commitments set out in the UBS 2021 ESR Framework, UBS, through a joint venture with the Brazilian bank Banco do Brasil (the UBS BB investment bank, hereafter “UBS BB”) has provided financing to multiple actors in the Brazilian agribusiness industry. This report analyses the indicators of non-compliance by UBS with its own 2021 ESR framework regarding its financing of two companies: Marfrig Global Foods S.A. and BrasilAgro. Two different approaches were used to identify environmental and human rights violations associated with these companies.

- Regarding Marfrig Global Foods S.A., CCCA analysis mapped the network of farms that supply cattle up to the 4th level.¹³ This enabled analysis of violations such as deforestation, embargoes and slave labour on each of the supplying farms.
- For BrasilAgro, CCCA performed a visual analysis of satellite images of the company’s properties from different years. This analysis aimed to identify features that indicate the occurrence of deforestation and/or fire. In addition, we verified whether any deforestation identified had been authorized, by checking the database of authorizations for vegetal suppression in the National System for the Control of the Origin of Forest Products (“SINAFLOR”)¹⁴.

Details of the respective methodologies are provided later in this report when each of the companies is addressed more specifically.

¹⁰ UBS 2021 ESR Framework, p. 3 (see Appendix 1).

¹¹ Arni, L et al (2015) UBS and the Integration of Human Rights Due Diligence Under the United Nations (UN) Protect, Respect and Remedy Framework for Business and Human Rights. In: *Responsible Investment Banking, CSR, Sustainability, Ethics & Governance*, DOI 10.1007/978-3-319-10311-2_8.

¹² UBS 2021 ESR Framework, p. 5 (see Appendix 1).

¹³ The methodology used to map the direct and indirect suppliers of the units analyzed will be better detailed ahead, but for clarification purposes, the level of the suppliers means how many connections between properties (where the cattle passed) before it was acquired by Marfrig. The higher the level, the more properties involved in the flow and the denser the connection. That is, the first level suppliers are those that sell directly to the Marfrig slaughterhouse, often large traders or fattening farms, which in some cases are actually subsidiaries owned by the slaughterhouse; the second level are the ranches that sell cattle to the first-level operators; the third level are the ranches that sell to second-level operators; and so on, with the fourth level being the ones that sell for the third level suppliers. The data utilized to tracking the cattle were obtained in consultation to CAR and GTA public systems. CAR is the acronym from the Portuguese Cadastro Ambiental Rural, or Rural Environmental Registry, which consists in a national electronic public registry, mandatory for all rural properties, with the purpose of integrating environmental information from rural properties and possessions and compose a database for control, monitoring, environmental and economic planning and combating. GTA is the acronym from the Portuguese Guia de Transporte Animal - Animal Transport Document – a document that records the origin, destination and characteristics of all live animals traded, as provided by the National Agricultural Policy

¹⁴ SINAFLOR website. Available from: <<http://www.ibama.gov.br/sinaflor>>.

II. The Financial Institutions, Agribusiness, and Deforestation in Brazil¹⁵

The financial sector plays a central role in allocating capital and pricing the risk involved in a specific economic activity. Hence, it cannot discount or ignore the inherent risk of the ongoing degradation of nature.

Forests and other natural ecosystems provide essential services for the planet and human well-being, from regulating our climate to maintaining biodiversity and supporting human health and livelihoods. However, deforestation and forest degradation represent the biggest threats to forests worldwide¹⁶, with agriculture production as its most significant driver¹⁷. Also, environmental crimes have always gone side by side with other crimes, particularly human rights violations, especially of indigenous peoples. This connection is even recognised in UBS's 2021 ESR Framework, which states that:

"Deforestation and forest degradation can cause biodiversity to decline. As approximately 80% of the world's documented species are found in tropical rainforests, deforestation will impact global biodiversity. Deforestation is, in fact, second only to the energy sector as a source of global greenhouse gas emissions and accounts for up to 20% of emissions, more than the entire global transport sector.

***It is further estimated that more than 50% of tropical deforestation is due to the production of soy, palm oil, timber and beef.** In human terms, millions of people rely directly on forests (small-scale agriculture, hunting and gathering, and harvesting forest products such as rubber). Yet, deforestation continues to cause severe societal problems, sometimes leading to violent conflict."¹⁸*

This is an especially sensitive and noted issue in Brazil, considering that deforestation rates have exponentially grown in the last few years. The Amazon was the leading biome in destruction in 2021, with more than half (59%) of the deforested area in the country. Cerrado is the second on the list, with 30% (500,537 hectares) of deforestation registered in the same year.¹⁹ These changes in land use, along with the agribusiness sector, are responsible for 73% of Brazilian GHG emissions.²⁰

¹⁵ This section draws on information and research from the investigator Olivier Christe regarding the activities of UBS Investment Bank in the Brazilian agro-industry published in the newspaper Republik on 19.4.2021 [Brandherd mit Dividende – Republik](https://www.republik.ch/2021/04/19/brandherd-mit-dividende-republik). Available from: <<https://www.republik.ch/2021/04/19/brandherd-mit-dividende-republik>>

¹⁶ Deforestation occurs when forests are converted to non-forest uses, for example, agriculture and roads, while forest degradation is the loss of forest ecosystems to provide essential goods to people and nature.

¹⁷ WRI (2020). Estimating the Role of Seven Commodities in Agriculture-Linked Deforestation: Oil Palm, Soy, Cattle, Wood Fiber, Cocoa, Coffee, and Rubber. Available from: <<https://www.wri.org/research/estimating-role-seven-commodities-agriculture-linked-deforestation-oil-palm-soy-cattle>>

¹⁸ UBS 2021 ESR Framework, p. 4 (Appendix 1), emphasis is bold.

¹⁹ Menegassi (2022). Desmatamento cresceu 20% no Brasil, com aumento em todos os biomas do país. Available from: <<https://oeco.org.br/noticias/desmatamento-cresceu-20-no-brasil-com-aumento-em-todos-os-biomas-do-pais/>>

²⁰ Analysis from SEEG, generated according to the Intergovernmental Panel on Climate Change (IPCC) based on the methodology of the Brazilian Inventories of Greenhouse Gas Emissions and Removals prepared by the Ministry of Science, Technology, and Innovation (MCTI), along with other data captured from unused registries, institutes, research centres, industry entities, and organizations. Available at: <https://seeg-br.s3.amazonaws.com/Documentos%20Analiticos/SEEG_9/OC_03_relatorio_2021_FINAL.pdf>.

Also, many reports denounce this deforestation as illegal – in 2019, at least 95% of Brazilian deforestation was done criminally – and intimately connected with the agribusiness sector²¹. Soy and Cattle are protagonists of this devastation.

A study conducted by the Stockholm Environment Institute and Global Canopy, in partnership with Imaflora and Instituto Centro de Vida (ICV) from 2020, indicates that in the state of Mato Grosso about 27% of the deforestation occurred between 2012 and 2017 and took place on soybean farms.²²

On the other hand, the creation of pastures for cattle is still one of the main activities linked to deforestation in the Amazon – reports from Amazonia2030 show that 90% of land deforested in the biome becomes pastureland for cattle.²³ The largest Brazilian meat processing companies (JBS and Marfrig) even admitted in early 2021 – before the CRA was issued to Marfrig – that they are unable to monitor almost 40% of the herd processed. That is, there is a lack of guarantees that the cattle arriving at the slaughterhouse is not associated with producers involved in deforestation or human rights violations. In the Cerrado, the rate is even more alarming: 53% of the herd reportedly has no identification of its origin.²⁴

In addition, Marfrig has been the focus of several journalistic investigations inquiring about the link between the company and deforestation and human rights violations documented in the region. In 2020, Repórter Brasil revealed that a Marfrig meat packing plant slaughtered animals from farmers with properties located illegally within the Apyterewa Indigenous Land, the second most deforested in the Amazon in that year.²⁵ In 2019, further research showed that the company bought cattle from ranchers in the Triunfo do Xingu APA, the epicenter of the Amazon wildfires.²⁶ Even after the concerns raised by Reporter Brasil, the company continued buying from suppliers directly linked to significant human and labour rights violations in the region.²⁷

²¹ This connection is addressed in several different reports, such as:

Forest Trends (2021): <<https://www.forest-trends.org/wp-content/uploads/2021/05/Illicit-Harvest-Complicit-Goods.pdf>>

Escolhas (2020): <<https://www.escolhas.org/wp-content/uploads/How-does-brazilian-agribusiness-benefit-from-deforestation-.pdf>>

²² Aguilera, J. (2020). Estudo aponta soja como responsável por quase um terço do desmatamento em Mato Grosso. Available from: <<https://brasil.mongabay.com/2020/08/estudo-aponta-soja-como-responsavel-por-quase-um-terco-do-desmatamento-em-mato-grosso/>>

²³ Barreto, P. (2021). Políticas para desenvolver a pecuária na Amazônia sem desmatamento (p. 66). Amazônia 2030. Available from: <<https://amazonia.org.br/publicacoes/politicas-para-desenvolver-a-pecuaria-na-amazonia-sem-desmatamento/>>

²⁴ Harari, I. (2021). Financiamento para desmatar: organizações pedem veto a empréstimo milionário para Marfrig. Available from: <<https://reporterbrasil.org.br/2021/10/financiamento-para-desmatar-organizacoes-pedem-veto-a-emprestimo-milionario-para-marfrig/>>

²⁵ Campos, A. and Barros, C. J. (2020). O ‘boi pirata’ criado em terra indígena e a conexão com os frigoríficos Marfrig, Frigol e Mercúrio. Available from: <<https://reporterbrasil.org.br/2020/06/boi-pirata-criado-em-terra-indigena-e-a-conexao-com-frigorificos-marfrig-frigol-mercuro/>>

²⁶ Campos, A. (2019). JBS, Marfrig e Frigol compram gado de desmatadores em área campeã de focos de incêndio na Amazônia. Available from: <<https://reporterbrasil.org.br/2019/08/jbs-marfrig-e-frigol-compram-gado-de-desmatadores-em-area-campea-de-focos-de-incendio-na-amazonia/>>

²⁷ Campos, A. and Locatelli, P. (2020) Como a Morgan Stanley está ligada ao desmatamento na Amazônia. Available from: <<https://reporterbrasil.org.br/2020/09/como-a-morgan-stanley-esta-ligada-ao-desmatamento-na-amazonia/>>

Other research carried out by Global Witness pointed out that between 2017 and 2019, Marfrig bought cattle from 89 farms responsible for over 3,300 hectares of illegal deforestation.²⁸ Marfrig states that it “aims to track 100% of the company's cattle supply chain (including indirect suppliers) by 2025, in the Amazon, and by 2030, in the other biomes”; and notes that an audit of a sample of purchase by its units in the Amazon biome in 2021 found that it has complied with its commitments.²⁹

However, reports of sourcing from areas linked with deforestation and encroachment on indigenous lands such as those above led to a letter from around 200 civil society organizations in 2021 urging the Inter-American Development Bank (IDB) not to approve a loan to Marfrig worth USD 43 million (R\$ 237 million).³⁰ According to the signatory organizations, Marfrig’s accumulation of human rights and environmental violations in its production chain is “incompatible with receiving an investment from an institution committed to social and environmental responsibility and with the obligation to respect human rights in the allocation of public resources”. Such allegations were acknowledged by the Interamerican Development Bank, which in February 2022 rejected Marfrig’s loan application because of disagreements with the company’s environmental goals as well as the financial terms of the loan.³¹

In turn, BrasilAgro –which mainly produces soy– has been investigated by the legal authorities for suspected illegal land acquisitions since 2016.³² BrasilAgro’s farms mainly cover the Cerrado biome, especially the Matopiba region, which registered the highest deforestation rates in 2021.³³

Also, according to research by Agência Pública, between 2012 and 2017, BrasilAgro allegedly felled more than 21,000 hectares of native forests on its farms. In 2013, the Brazilian Institute of Environment and Renewable Natural Resources (IBAMA) fined the company R\$ 5.9 million for illegal deforestation of a permanent protection area in Goiás.³⁴

The responsibility of financiers must be addressed accordingly to their role in supporting the agribusiness activities in Brazil. The 2021/2022 harvest reportedly received around USD 176.82

²⁸ Mongabay (2020). Brazil beef giants linked to illegal Amazon deforestation. Available from: <https://news.mongabay.com/2020/12/brazil-beef-giants-linked-to-illegal-amazon-deforestation/>

²⁹ E-mail Communication between UBS and Marfrig on September 10, 2022; Audit report available from: <<https://marfrig.com.br/en/Lists/CentralConteudo/Attachments/5/Audition%20Report%202022%20-%20Marfrig%20and%20Greenpeace.pdf>>

³⁰ Letter to BID from organizations (2021). Available from: <<http://foe.org/wp-content/uploads/2021/10/IDB-Letter-Signatories-Formatted.pdf>>

³¹ ClimaInfo (2022), BID nega empréstimo à Marfrig por associação com desmatamento ilegal na Amazônia. Available from: <<https://clima.info.br/2022/02/24/bid-nega-emprestimo-a-marfrig-por-associacao-com-desmatamento-ilegal-na-amazonia/>>.

Bloomberg, Big Beef Loan Scrapped Amid Uproar Over Amazon Deforestation (2022) Available from <<https://www.bloomberg.com/news/articles/2022-02-23/big-beef-loan-shelved-amid-uproar-over-amazon-deforestation?sref=I9tSAnbU>>.

³² Paes, C. de F and Fonseca, B. (2021). BTG e XP estão a serviço de estrangeiros suspeitos de compra ilegal de terras. Available from: <<https://apublica.org/2021/05/btg-e-xp-estao-a-servico-de-estrangeiros-suspeitos-de-compra-ilegal-de-terras/>>

³³ TerraBrasil website. Available from: <<http://terrabrasil.dpi.inpe.br/app/dashboard/alerts/biomes/cerrado/daily/>>

³⁴ Monitoramento (2021). ISA: Bancos financiam empresas estrangeiras em esquema de grilagem de terras no cerrado. Available from: <<http://obind.eco.br/2021/05/28/isa-bancos-financiam-empresas-estrangeiras-em-esquema-de-grilagem-de-terras-no-cerrado/>>

billion (R\$ 900 billion reais), most of which (R\$ 650 billion) originate from private financial instruments, such as the CRAs.³⁵

Through the joint venture UBS BB, UBS gained access to the extensive client portfolio of Banco do Brasil – the world’s largest agribusiness lender, according to Forest and Finance³⁶. In an interview in May 2021, the creator and vice president of the joint venture, Sylvia Coutinho, stated that UBS BB’s main interest “is to support the financial transactions of large meat and soy companies and manage the assets of the owners of these corporations”.³⁷

To do so, UBS BB has affiliated itself with the Brazilian Agribusiness Association (ABAG), which includes companies such as meat processor JBS and grain trader Cargill, both of which – along with Marfrig – have also been accused in several international reports of collaborating in the deforestation of the Amazon.

However, the UBS 2021 ESR framework does not embody this concern, especially when it mentions cattle as a deforestation driver in its preamble but excludes this commodity as warranting enhanced due diligence.

When questioned on that matter, UBS outsources the responsibility of overseeing financial service clients, citing the absence of a control mechanism for the livestock sector:

“UBS’s forestry standards (illegal logging, HCVF etc.) cover all industries, including livestock. The rationale for our additional standards on palm oil, soy and timber is the availability of a robust certification process covering these commodities, and providing third-party assurance of a company’s performance. A similar certification process currently does not exist, to the best of our knowledge, for livestock. The sectors covered in UBS SCR policy framework / standards are aligned with market best practices and, on a regular basis, the SCR team monitors stakeholders, industry and peers’ developments for pertinent environmental, social and climate risk approaches in order to ensure that UBS keeps its standards at a high level, properly addressing such risks.”³⁸

As “a global company and the largest truly global wealth manager” UBS recognizes its “unique position to help address these challenges”, both with its clients and “**through its own efforts**”³⁹. Thus, the application of its compliance provisions, especially when dealing with financial services for clients with activities in high-risk sectors like, must be analyzed in a systemic and integrated manner, as it is pointed out:

³⁵ TerraMagna (2021). A chegada das fintechs de crédito no agronegócio. Available from: <https://terramagna.com.br/blog/a-chegada-das-fintechs-de-credito-no-agronegocio/>

³⁶ IHU (2021). Maior banco suíço volta ao Brasil e coloca em risco compromisso Ambiental. Available from: <https://www.ihu.unisinos.br/categorias/609349-maior-banco-suico-volta-ao-brasil-e-coloca-em-risco-compromisso-ambiental>.

³⁷ IHU (2021). Maior banco suíço volta ao Brasil e coloca em risco compromisso Ambiental. Available from: <https://www.ihu.unisinos.br/categorias/609349-maior-banco-suico-volta-ao-brasil-e-coloca-em-risco-compromisso-ambiental>.

³⁸ E-mail Communication between UBS and STP on August 16, 2022

³⁹ UBS 2021 ESR Framework, p. 2 (Appendix 1), emphasis is bold.

"Our principles and standards clearly apply to all relevant aspects of our business and the ways in which we engage with our stakeholders. Our Code of Conduct and Ethics guides our approach to corporate responsibility. Our work in key societal areas such as protecting the environment and respecting human rights are part of this. Living up to our societal responsibilities contributes to the wider goal of sustainable development. As a global firm, we take responsibility for leading the debate on important societal topics, contribute to the setting of standards and collaborate in and beyond our industry."⁴⁰

Therefore, considering the many reports involving Marfrig and BrasilAgro suggesting their involvement in illegal deforestation, it is questionable why UBS appears not to have considered such financial services as risky and possibly in conflict with its 2021 ESR framework, in view of the available information regarding these businesses.

III. UBS financial services for Marfrig and BrasilAgro

UBS Group AG, headquartered in Switzerland, is one of the world's leading financial services companies, offering international wealth and asset management and investment banking services. It is active in investment banking⁴¹ and asset management⁴² in Brazil. Most of UBS's Brazilian business is conducted through the joint venture between UBS Investment Bank and "Banco do Brasil" Investment Bank, which created the investment bank UBS BB. UBS controls UBS BB with 50.01%⁴³.

According to Christie's analysis, since the beginning the joint venture UBS BB used a very specific financial instrument for most of its business with the Brazilian agribusiness industry, the CRAs.⁴⁴ CRAs are structured, fixed-interest securities – more precisely they are so-called "asset-backed securities". As the name suggests, CRAs are "backed by a pool of assets that yield a fixed rate of interest over a specified period to maturity."⁴⁵ Specific to CRAs is that the assets backing the securities arise from "business between rural producers, or their cooperatives, and third parties, covering financing or loans related to the production, marketing, processing or industrialization of products, agricultural inputs or machinery and implements used in agricultural production".⁴⁶ The most important receivables covered by CRAs are the debentures, followed by the Rural Product Certificates

⁴⁰ UBS 2021 ESR Framework, p. 2 (Appendix 1).

⁴¹ UBS website. UBS BB IB. Available from: <<https://www.ubs.com/br/en/ubsbb-investment-bank.html>>.

⁴² UBS website. Create the life you want. Available from: <<https://www.ubs.com/br/en/wealth-management.html>>.

⁴³ Mandi, C. (2020). UBS, Banco do Brasil joint venture ready to start operations. Available from: <https://www.reuters.com/article/us-ubs-banco-do-brasil-investment-bankin-idUSKBN26M439>.

⁴⁴ B3 (2022). Certificado de Recebíveis do Agronegócio. Available from: https://www.b3.com.br/pt_br/produtos-e-servicos/negociacao/renda-fixa/certificado-de-recebiveis-do-agronegocio.htm.

⁴⁵ Yan, A.; Cheng, M. and Beer, K. (2022). Asset-Backed (ABS) vs. Mortgage-Backed Securities (MBS): What's the Difference? Available from: <<https://www.investopedia.com/articles/bonds/12/introduction-asset-backed-securities.asp>>.

⁴⁶ Definition by the large Brazil financial market infrastructure firm B3 (2022). Certificado de Recebíveis do Agronegócio. Available from: <https://www.b3.com.br/pt_br/produtos-e-servicos/negociacao/renda-fixa/certificado-de-recebiveis-do-agronegocio.htm>

(CPRs). Such titles as CPRs represent "a promise of future delivery of agricultural products and can be issued by rural producers or their associations, including cooperatives".⁴⁷

CRA is a Brazilian financial product that only companies operating in Brazil can issue. However, since Law 13.986 was approved in 2020 by the Brazilian congress⁴⁸, CRAs can be issued directly in offshore markets, allowing foreign investors to invest in them without opening a local investment account. Furthermore, land and other rural assets such as future harvests are now considered directly as collateral for foreign investors. This reduces the risk of investing in the Brazilian agri-industry. This is especially true for the issuance of CPRs, which is now more accessible for a broader group of entities. Just as before, proceeds from CRA investments do not have to be taxed. As a fixed-income product, investors also have a "predictability of the cash flow of the remunerations and amortizations of the security."⁴⁹ As a result, the market for this structured financial product is growing strongly and set a record in 2021, with 126 issues of securities worth 25.26 billion reais (CHF 5.02 billion)⁵⁰. Cattle production chains represented the largest issuer and beneficiary of such financing (in absolute terms)⁵¹.

Christe's analysis points out that the attractiveness of CRA/CPR, especially after the recent legislative amendments, spurred creativity among companies. The market for this structured financial product is growing strongly and set a record in 2021, with 126 issues of securities worth 25.26 billion reais (CHF 5.02 billion). Cattle production chains represented the largest issuer and beneficiary of such financing (in absolute terms). The main issuers of CRAs today are also mainly multinational companies that increasingly cover CRAs with debentures⁵².

So, although CRAs could be a good way to finance smaller, sustainable farmers, it is mainly multinational companies that use this product today. Meat giants JBS, Marfrig, Minerva, and BRF as well as input giant Syngenta have raised by far the most money through CRAs since October 2020⁵³.

Christe's analysis concludes that, in principle, CRA does not result in more disadvantages for people and the environment than other financing options such as classical loans or underwriting. However, CRAs, especially due to the recent change in the law, are bringing more foreign capital into the Brazilian agribusiness industry. If sustainability provisions do not apply in the process and more

⁴⁷B3 (2022). Rural Product Bill (CPR). Available from: <https://www-b3-com-br.translate.google.com/pt-br/produtos-e-servicos/registro/renda-fixa-e-valores-mobiliarios/cedula-de-produto-rural.htm?x_tr_sl=pt&x_tr_tl=en&x_tr_hl=en&x_tr_pto=nui,sc>.

⁴⁸ Brasil (2020). LEI Nº 13.986, DE 7 DE ABRIL DE 2020. Available from: <<https://www.in.gov.br/en/web/dou/-/lei-n-13.986-de-7-de-abril-de-2020-251562807>>

⁴⁹ MAPA (2020). Unlocking Brazil's Green Investment: Potential for Agriculture. Available from: https://www.climatebonds.net/files/reports/brazil_agri_roadmap_english.pdf

⁵⁰ Exchange rate as of 11.3.2021

⁵¹ The Brazilian structured finance thinktank UQBAR every year publishes a yearbook on CRA-emissions in Brazil, URL: <https://lp.uqbar.com.br/anuarios2022/cra.php>

⁵² Ibid.

⁵³ Research by Olivier Christe, based on the financial database Refinitiv and information to be published mandatorily in case of CRA issues; CRAs studied between October 2020 and December 2021.

capital is made available to the Brazilian agro industry, these financing options could promote existing grievances, such as deforestation, displacement, and other human rights violations. So, if more capital is made available to the Brazilian agro-industry, these financing options could promote existing grievances, such as deforestation, displacement, and other human rights violations.

Against this background, in 2021, the two companies covered by this report (BrasilAgro and Marfrig) benefited from CRA financing coordinated by UBS BB.

III.1 UBS BB financial services for Marfrig

In 2021, UBS BB co-organised a CRA for the Brazilian company MARFRIG GLOBAL FOODS S.A., in the amount of 1 billion Brazilian reals (approx. 180 million USD).⁵⁴ BANCO SANTANDER (BRASIL) S.A. was the Lead Coordinator responsible for determining the terms and conditions in consultation with the other involved investment banks (coordinators) for this financing., with BRAD-ESCO BBI, BTG PACTUAL, ITAÚ BBA and SAFRA acting as coordinators alongside UBS BB.

While the CRA specifies the purpose as being for the purchase of cattle through one company (MFG Agropecuária Ltda), that company is closely related to Marfrig Global Foods: it was formerly a wholly-owned subsidiary of Marfrig Global Foods S.A.; is now owned by Marfrig's founder, Marcos Molina, and his wife; and operates feedlots apparently for the near-exclusive benefit of Marfrig (having sold more than 300,000 animals to Marfrig from 2018 to 2021 according to the CRA)⁵⁵.

While the exact figures on the fee received by UBS BB for this transaction are not publicly available, there are indications that the financial incentives are significant. A relevant publication⁵⁶ indicates that the total amount paid to all coordinators was R\$ 37,874,908,00 (thirty-seven million, eight hundred and seventy-four thousand, nine hundred and eight reais). In the case of six coordinators this results in a minimum amount of R\$ 6,312,484,00 that the Lead Coordinator (Banco Santander (Brasil) S.A.) received for this transaction. At the time of the publication of the corresponding CRA on 11/02/2022, this results in a sum of more than USD 1,201,599,00⁵⁷.

III.2 UBS BB financial service for BrasilAgro

On 3 May 2021, UBS BB participated as Lead Coordinator in the definitive prospectus of BrasilAgro's CRA, in the amount of 240 million Brazilian reals (approx. USD 43 million)⁵⁸. The financial

⁵⁴ Marfrig CRA (2021). Available from: <https://cms.santander.com.br/sites/WPS/documentos/arq-marfrig-prospectodef/21-08-07_163514_rb_sec_marfrig_def.pdf>

⁵⁵ Marfrig CRA (2021). Available from: <https://cms.santander.com.br/sites/WPS/documentos/arq-marfrig-prospectodef/21-08-07_163514_rb_sec_marfrig_def.pdf>

⁵⁶ Final prospectus for agribusiness credit rights for CRA [CRA021001VA and CRA021001PQ] in favor of Marfrig co-organized by UBS BB. Available from: <https://cms.santander.com.br/sites/WPS/documentos/arq-marfrig-prospectodef/21-08-07_163514_rb_sec_marfrig_def.pdf>.

⁵⁷ Conversion rate (1 USD = 0.1904 BRL) at the time of the CRA publication in favor of Marfrig (11.2.2022)

⁵⁸ BrasilAgro CRA (2021). Available from: <<https://vrgsitestorage.blob.core.windows.net/files-ri-vg/EMISSOES/ISEC/CRA/EMISSAO%2027/SERIE%201/Prospecto%20Definitivo%20%281%29.pdf>>

institutions Banco Bradesco and XP Investimentos participated as coordinators, too, but in a less central role.⁵⁹

Again, exact figures on the fee received by UBS BB for this transaction are not publicly available. However, the relevant publication⁶⁰ indicates that the total amount paid to all coordinators was R\$ 7,172,108,00. In the case of three coordinators (UBS BB, Bradesco BBI, XP Investimentos), this results in a minimum amount of R\$2,390,702,00 that the lead coordinator (UBS BB) received for this transaction. At the time of the publication of the corresponding CRA on 3.4.2021, this results in a sum of more than USD 418,613,00.⁶¹

IV. UBS's 2021 Environmental and Social Risk Policy Framework

UBS's Environmental and Social Risk policy framework (UBS ESR), disclosed in 2021⁶² and in force on the date of the CRA – recognizes the bank as a global company and “largest truly global wealth manager”, taking “responsibility for leading the debate on important societal topics, contribute to the setting of standards and collaborate in and beyond our industry”.⁶³

The framework recognizes that managing ESR is a critical component of UBS's corporate responsibility and is applied to all its activities. Upon request by STP, UBS confirmed that their policy also covers joint ventures like UBS BB.

The UBS 2021 ESR Framework sets standards in product development, investments, financing, and supply chain management decisions, that UBS committed to in order to manage potential adverse impacts to the environment and human rights. As part of this, the bank identified controversial activities they “will not engage in” or “will only engage in under stringent criteria”.⁶⁴

i) “Controversial activities” and the lack of coverage of deforestation to clear land.

The “Controversial activities” section in the UBS 2021 ESR Framework states⁶⁵:

“Where UBS will not do business

⁵⁹ BrasilAgro CRA (2021). Available from: <<https://vrgsitestorage.blob.core.windows.net/files-ri-vrg/EMISSOES/ISEC/CRA/EMISSAO%2027/SERIE%201/Prospecto%20Definitivo%20%281%29.pdf>>

⁶⁰ Final prospectus for agribusiness credit rights for CRA [CRA02100058] in favor of BrasilAgro organized by UBS BB. BrasilAgro CRA (2021). Available from: <<https://vrgsitestorage.blob.core.windows.net/files-ri-vrg/EMISSOES/ISEC/CRA/EMISSAO%2027/SERIE%201/Prospecto%20Definitivo%20%281%29.pdf>>

⁶¹ Conversion rate (1 USD = 0.1751 BRL) at the time of the CRA publication on behalf of BrasilAgro (3.4.2021).

⁶² A copy of the UBS 2021 ESR Framework is included as Appendix 1 to this analysis. A copy can also be downloaded from the UBS website, at <https://www.ubs.com/global/en/sustainability-impact/sustainability-reporting.html#tab-797028197>.

⁶³ UBS website (2022). Available from: <<https://www.ubs.com/global/en/ubs-society/our-documents.html>>.

⁶⁴ UBS 2021 ESR Framework, p. 5 (Appendix 1).

⁶⁵ UBS 2021 ESR Framework, p. 5 (Appendix 1).

UBS will not knowingly provide financial or advisory services to clients whose primary business activity, or where the proposed transaction, is associated with severe environmental or social damage to or through use of:

- *World heritage sites as classified by the United Nations Educational, Scientific and Cultural Organization (UNESCO);*
- *Wetlands on the Ramsar list;*
- *Endangered species of wild flora and fauna listed in Appendix 1 of the Convention on International Trade in Endangered Species;*
- *High conservation value forests as defined by the six categories of the Forest Stewardship Council (FSC);*
- *Illegal fire: uncontrolled and / or illegal use of fire for land clearance;*
- *Illegal logging including purchase of illegal harvested timber (logs or roundwood);*
- *Child labor according to ILO-conventions 138 (minimum age) and 182 (worst forms);*
- *Forced labor according to ILO-convention 29; and*
- *Indigenous peoples' rights in accordance with IFC Performance Standard 7."*

The analysis below of Marfrig (Section V) and BrasilAgro (Section VI) identifies multiple indicators of "controversial activities" listed in the UBS 2021 ESR Framework linked to their operations: adverse impact on forests, in particular deforestation, that meet the criteria for high conservation value forests as defined by FSC; the use of fire for illegal land clearance; and suppliers that use forced labour and violate indigenous people's rights.

However, of equal and systemic concern, is the fact that UBS includes illegal felling of forests for logging and the illegal clearance of forests by fire as controversial activities, while excluding the illegal felling or clearance of forests for clearing land (rather than logging) – a concern that is highlighted by the scale of illegal land clearance identified in the case studies.

In Section VII these adverse impacts will be analyzed through the lens of the UBS 2021 ESR Framework in more detail.

ii) "Areas of concern" and the exclusion of cattle

The "Areas of concern" section in the UBS 2021 ESR Framework states:⁶⁶

"Where UBS will only do business under stringent criteria.

Specific guidelines and assessment criteria apply to transactions with corporate clients engaged in the areas of concern listed below. The guidelines and assessment criteria apply to loans, trade finance, direct investments in real estate and infrastructure, securities and loan underwriting transactions, and investment banking advisory assignments. Transactions in the areas listed below trigger an enhanced due diligence and approval process. In addition to the assessment of regulatory compliance, adherence to UBS's controversial activities stand-

⁶⁶ UBS 2021 ESR Framework, p. 5 (Appendix 1).

ards, as well as consideration of past and present environmental and human rights performance and concerns of stakeholder groups, these transactions require an assessment of the following criteria”

The list that follows includes “Soft commodities”, “Power Generation” and “Extractives”. For the “Soft commodities”, the UBS 2021 ESR framework defines criteria for “palm oil”, “soy”, “timber” as well as “fish and seafood”.⁶⁷

Analyzing this list according to risks for deforestation and human rights, there is a significant omission from this list: the UBS 2021 ESR Framework fails to include beef or cattle as one of the soft commodities constituting an “area of concern”.⁶⁸ This is especially surprising as the 2021 UBS ESR framework itself specifically identifies beef as one of the main drivers of deforestation:⁶⁹

“Deforestation and forest degradation can cause biodiversity to decline. As approximately 80% of the world’s documented species are found in tropical rainforests, deforestation will impact global biodiversity. Deforestation is, in fact, second only to the energy sector as a source of global greenhouse gas emissions and accounts for up to 20% of emissions, more than the entire global transport sector.

It is further estimated that more than 50% of tropical deforestation is due to the production of soy, palm oil, timber and beef. In human terms, millions of people rely directly on forests (small-scale agriculture, hunting and gathering, and harvesting forest products such as rubber). Yet, deforestation continues to cause severe societal problems, sometimes leading to violent conflict.”

The UBS 2021 framework thus includes three of those drivers (soy, timber, and palm oil) as warranting enhanced due diligence but excludes the fourth (cattle). It does not provide an explanation for this exclusion, which is a particular concern for UBS’s expansion into the Brazilian agroindustry given the role that the cattle sector plays in driving deforestation (and frequently illegal deforestation).

When asked about the reason for omitting criteria for cattle in the 2021 ESR framework, UBS replied: “The rationale for our additional standards on palm oil, soy and timber is the availability of a robust certification process covering these commodities and providing third-party assurance of a company’s performance. A similar certification process currently does not exist, to the best of our knowledge, for livestock. The sectors covered in UBS SCR policy framework / standards are aligned with market best practices and, on a regular basis, the SCR team monitors stakeholders, industry and peers developments for pertinent environmental, social and climate risk approaches in order to ensure that UBS keeps its standards at a high level, properly addressing such risks”.⁷⁰ It thus appears that the failure by UBS to identify cattle as warranting enhanced due diligence was not based on any

⁶⁷ UBS 2021 ESR Framework, p. 5 (Appendix 1).

⁶⁸ Up to the date of publication of the current framework, now called “UBS Sustainability and Climate Risk Policy Framework” fails to include livestock as one of the soft commodities constituting an “area of concern”. Available from: <https://www.ubs.com/global/en/sustainability-impact/sustainability-reporting.html#tab-347205392>.

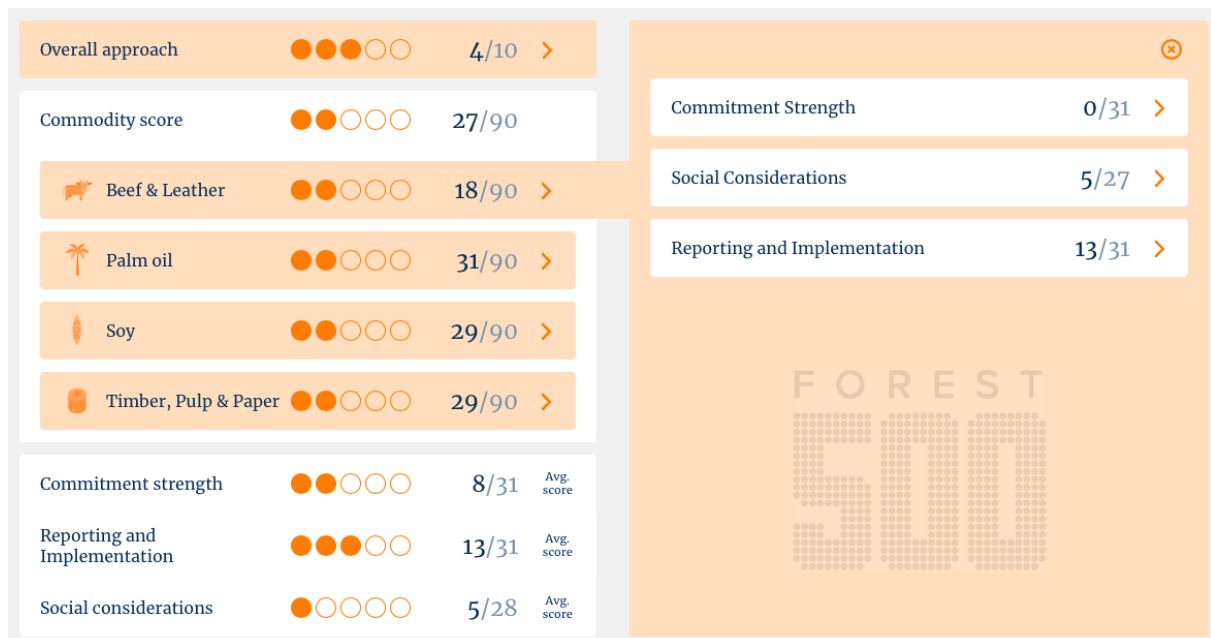
⁶⁹ UBS 2021 ESR Framework, p. 4 (Appendix 1).

⁷⁰ E-Mail conversation between UBS and STP, August 16, 2022.

assessment of the cattle sector, its impact, or the risks that it poses; but rather on the absence of a third-party certification scheme to which it could outsource some or all of the necessary assessment.

This refusal to recognize the need for enhanced due diligence for clients with activities in the cattle sector is reflected in the policy assessment of UBS in the Forest500 project by Global Canopy.⁷¹ According to the figure below, extracted from its website,⁷² the UBS policy has a low score of 27/90 across all commodities. However, within this assessment, the beef and leather sector stands out as having the weakest approach, scoring just 18/90 (compared with 31/90 for palm oil; and 29/90 for each of Soy and Timber, Pulp & Paper).⁷³

Figure 1 – UBS Score according to Forest500



Source: Forest500 (2021) <<https://forest500.org/rankings/financial-institutions/ubs>>

iii) "areas of concern" and the weakening of standards on soy

The 2021 UBS ESR exclusion criteria on soy states that:

"Soy: Companies producing soy in markets at high risk of tropical deforestation must be a member of the Roundtable on Responsible Soy (RTRS), or must apply a similar standard such as Proterra, International Sustainability & Carbon Certification (ISCC), Cefetra Certified Responsible Soya (CRS), and not be subject to any unresolved public criticism from these standards. When a company is not certified, it must credibly commit to RTRS or a similar

⁷¹ Forest500 (2021). USB Score. Available from: <<https://forest500.org/rankings/financial-institutions/ubs>>

⁷² Forest500 (2021). USB Score. Available from: <<https://forest500.org/rankings/financial-institutions/ubs>>

⁷³ Forest500 (2021). USB Score. Available from: <<https://forest500.org/rankings/financial-institutions/ubs>>

*standard, providing a robust time-bound plan or demonstrate a credible commitment toward an equivalent standard, to be independently verified.*⁷⁴

As noted in Christie's research, this wording is new for the UBS 2021 ESR, which was updated in April 2021,⁷⁵ replacing the former edition which significantly had more restrictive soy requirements. The corresponding section of the UBS 2020 ESR read as follows:

*"Companies producing soy in markets at high risk of tropical deforestation must be a member of the Roundtable on Responsible Soy (RTRS) and not subject to any unresolved public criticism from the RTRS. Companies must further be publicly committed to achieving full certification by 2020 (evidence must be available)."*⁷⁶

As seen, the 2021 exclusion on soy extended the criteria beyond the RTRS certification, a non-profit organization promoting the production, trade, and the use of responsible soy⁷⁷.

This change is particularly interesting regarding the organization of the CRA for BrasilAgro by UBS BB, given that soy is the main crop produced by BrasilAgro, according to its 2022 results release (figure 2, below, shows the production area for each crop that BrasilAgro produced in the years 2020/21 and 2021/22).⁷⁸

Figure 2 – Production area per crop (ha)

⁷⁴ UBS 2021 ESR Framework, p. 5 (Appendix 1).

⁷⁵ UBS does not date its guidelines. However, the UBS 2021 ESR Framework appears to have been issued or updated in April 2021:

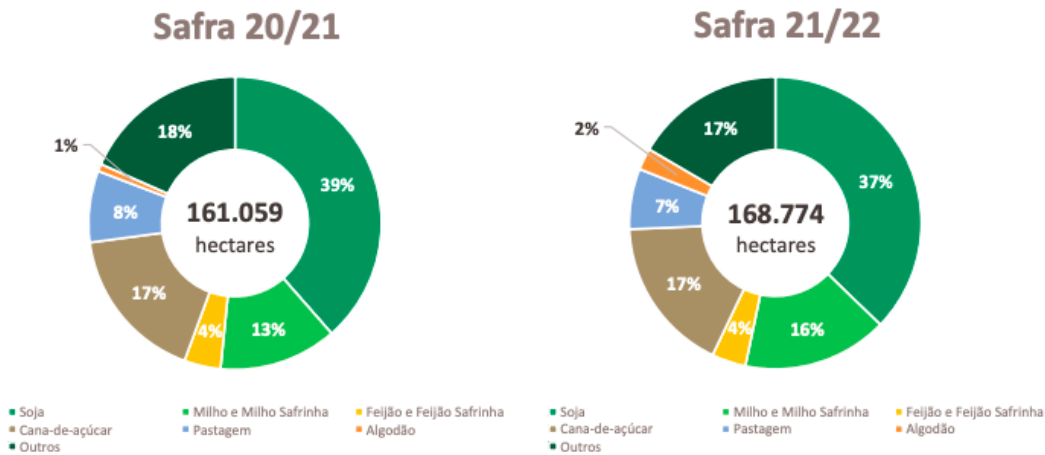
- The UBS 2021 ESR Framework states that it is "aligned with the *UBS in society organization*" (p. 1), which in April 2021 was replaced by the "*Group Sustainability and Impact organization*" (see [UBS Sustainability Report 2021](#), page 146);
- But the UBS 2021 ESR Framework also states that "This document has been updated following the release of the UBS Net Zero Commitment Statement in April 2021." (p. 1)

⁷⁶ UBS 2020 Environmental and social risk policy framework, p. 3 (Appendix 2), and available from: <https://www.ubs.com/global/en/sustainability-impact/sustainability-reporting.html#tab-780702540>

⁷⁷ Roundtable (2022). RTRS in numbers. Available from: <https://responsiblesoy.org/?lang=en>.

⁷⁸ BrasilAgro (2021). Release de resultados. Available from: <https://api.mziq.com/mzfilemanager/v2/d/2c1e0dd9-31eb-4dc0-ab4d-844683600488/f4e5c5c2-bb21-b1d7-15ec-0d0f2c5631a5?origin=1>. "Safrá" means "harvest".

Área em Produção por Cultura (ha)



Source: BrasilAgro (2021). Available from: <<https://api.mziq.com/mzfilemanager/v2/d/2c1eodd9-31eb-4dco-ab4d-844683600488/f4e5c5c2-bb21-b1d7-15ec-odof2c5631a5?origin=1>>

The dark green section represents the production area of soy (39% in 20/21; 37% in 21/22).

The CRA for BrasilAgro was concluded on 3 May 2021, only some days after updating the new exclusion criteria⁷⁹. It appears likely that this would not have been possible under the old regulations, based on their wording, because BrasilAgro was not a member of RTRS (Roundtable on Responsible Soy) which was a requirement in the old guidelines, but not in the April 2021 update.

This change in the UBS ESR framework is one of the concerns raised in this research. It makes it appear that the criteria were weakened so that deals with BrasilAgro or similar companies could go through. As Section VI will show BrasilAgro is a company with high-risk exposure in regard to deforestation.

The following two Sections will explore the main infractions identified by CCCA regarding Marfrig suppliers (Section V) and properties acquired by BrasilAgro (Section VI). In Section VII, the cases found will be analysed from the perspective of the limitations imposed by the UBS 2021 ESR framework, delimiting the possible infractions of the companies benefited by UBS through CRA financing with the bank's own compliance criteria.

⁷⁹ BrasilAgro CRA (2021). Available from: <https://vrgsitestorage.blob.core.windows.net/files-ri-vrg/EMISSOES/ISEC/CRA/EM-ISSAO%2027/SERIE%201/Prospecto%20Definitivo%20%281%29.pdf>. As noted above, the UBS 2021 ESR Framework appears to have been updated in April 2021.

V. Case Study: Marfrig Global Foods S.A.

In 2009, the three largest meat processing plants operating in the Amazon – JBS, Marfrig and Minerva – signed a Conduct Adjustment Agreement (TAC) with the Federal Public Ministry, known as the Meat TAC, and adhered to the "Minimum Criteria for operations with cattle and bovine products on an industrial scale in the Amazon biome".⁸⁰

In principle, they committed themselves⁸¹ to develop monitoring systems to exclude from their lists of suppliers those ranches that continued deforestation, that used labour analogous to slavery or that had invaded indigenous lands and other protected areas.

However, both the coverage and implementation of these agreements have been inadequate. For example, while Marfrig signed a TAC covering its operations in Mato Grosso,⁸² it reportedly did not sign an agreement covering its operations in Pará.⁸³ Moreover, even after signing this commitment, there has been significant evidence and repeated concerns that these companies have failed to avoid the involvement of their production chains with deforested lands.⁸⁴ For example, according to a report from Global Witness in 2020 focused explicitly on the responsibility of financiers, between 2017 and 2019, in Pará alone, JBS, Marfrig and Minerva bought cattle from 379 farms, which together were responsible for more than 20,000 football fields of illegal deforestation.⁸⁵

Based on that research, Global Witness concluded that the companies failed to monitor farms in Pará inserted in their production chains and that "these failures were rewarded by large EU and US banks, which financed the beef companies to the tune of almost R\$14 billion in the period analysed. Traditional names like Santander, Deutsche Bank, Barclays, Morgan Stanley, BNP Paribas, ING and HSBC apparently failed to do due diligence on their involvement with this destruction and continue to support the beef companies despite many warnings about their problems. Large Brazilian banks

⁸⁰ MPF (2009). CRITÉRIOS MÍNIMOS PARA OPERAÇÕES COM GADO E PRODUTOS BOVINOS EM ESCALA INDUSTRIAL NO BIOMA AMAZÔNIA. Available from: <https://storage.googleapis.com/planet4-brasil-stateless/2018/07/criterios-minimos-para-opera-2.pdf>

⁸¹ TAC Marfrig MT (2010). Available from: <[1597413430-tac_mt - marfrig.pdf](https://storage.googleapis.com/planet4-brasil-stateless/2018/07/criterios-minimos-para-opera-2.pdf) (beefontrack.org)>. TAC JBS MT (2010). Available from: <[1597413358-tac_mt - jbs.pdf](https://storage.googleapis.com/planet4-brasil-stateless/2018/07/criterios-minimos-para-opera-2.pdf) (beefontrack.org)>.

⁸² TAC Marfrig MT (2010). Available from: <[1597413430-tac_mt - marfrig.pdf](https://storage.googleapis.com/planet4-brasil-stateless/2018/07/criterios-minimos-para-opera-2.pdf) (beefontrack.org)>.

⁸³ Wenzel, F. (2019). TAC da Carne no Pará: MPF diz que ninguém está livre do desmatamento. Available from: <https://oeco.org.br/reportagens/tac-da-carne-no-para-mpf-diz-que-ninguem-esta-livre-do-desmatamento/>

⁸⁴ Another example: Report from the Brazilian Public Ministry concluding that there are still loopholes for deforestation cattle to reach the market. Wenzel, F. (2019). TAC da Carne no Pará: MPF diz que ninguém está livre do desmatamento.

Available from: <https://oeco.org.br/reportagens/tac-da-carne-no-para-mpf-diz-que-ninguem-esta-livre-do-desmatamento/>

JBS is investigated by the Public Ministry for allegedly buying cattle from illegally deforested areas: Prizibisczki, C. (2021). JBS é investigada por suposta compra de gado proveniente de área com desmatamento ilegal. Available from: <<https://oeco.org.br/reportagens/jbs-e-investigada-por-suposta-compra-de-gado-proveniente-de-area-desmatada-ilegalmente/>>.

⁸⁵ GlobalWitness (2020). Major global banks complicit in widespread destruction of the Amazon rainforest linked to Brazilian beef companies, and international audits flawed. Available from: <https://www.globalwitness.org/pt/major-global-banks-complicit-widespread-destruction-amazon-rainforest-linked-brazilian-beef-companies-and-international-audits-flawed-pt/>.

are also involved, with Bradesco and Banco do Brasil facilitating more than R\$6 billion for the companies in the period.⁸⁶

Usually, the cattle that is born on a farm frequently passes through various properties until the day it is slaughtered, leaving a trail of destruction in its wake that is not detected by the tracking systems of slaughterhouses and supermarkets. The lack of control of the origin of the animal from end to end of the chain of suppliers opens gaps to contaminate the entire supply of Brazilian meat produced for export and domestic consumption, making the final consumer a forced accomplice of a production contaminated with forest destruction and other irregularities.

The current analysis focused on the company Marfrig, in view of the financing granted to it via CRA, where UBS BB co-participated.

Marfrig is the world's largest hamburger producer and one of the global leaders in beef. In Brazil, it is the second largest meat processor, with a slaughtering capacity of 12,100 animals per day and a hamburger production capacity of 66,000 tons per year⁸⁷.

The company has at least five meat processing units located in the Amazon, two of which had their supply chain analyzed by the CCCA:⁸⁸ the Tangara da Serra Unit, located in the state of Mato Grosso; and the Tucumã Unit, in the state of Pará (although there are reports that the Tucumã Unit activities were suspended in 2020,⁸⁹ and Marfrig has subsequently confirmed that the Tucumã Unit suspended operations on 16 March 2020). The CRA specifies the purpose of the financing as being for the purchase of cattle through MFG Agropecuária Ltda, a closely related company that had previously been a wholly-owned subsidiary of Marfrig Global Foods S.A., is now owned by the same family that are the controlling shareholders of Marfrig Global Foods S.A., and which operates feedlots in Brazil for Marfrig). MFG identified itself as having half of its feedlots (four out of eight) located in the state of Mato Grosso, including one in the same municipality as the Marfrig slaughterhouse analyzed (Tangara da Serra) and two in neighbouring municipalities (Campo Novo do Parecis and Comodoro).⁹⁰ However, given that the financing was provided to Marfrig Global Goods S.A., and the very close relationship that MFG Agropecuária Ltda has with Marfrig, the analysis of the suppliers of Marfrig as a whole is relevant to compliance with the ESR Framework.

⁸⁶ GlobalWitness (2020). Major global banks complicit in widespread destruction of the Amazon rainforest linked to Brazilian beef companies, and international audits flawed. Available from: <<https://www.globalwitness.org/pt/major-global-banks-complicit-widespread-destruction-amazon-rainforest-linked-brazilian-beef-companies-and-international-audits-flawed-pt/>>.

⁸⁷ Marfrig (2020). Desmonstrações Financeiras. Available from: <[marfrig-global-foods-1-.pdf \(glbimg.com\)](https://www.marfrig.com.br/pt-br/relatorio-anual-2020)>.

⁸⁸ According to the official website of Minister of Agriculture, from the SIF document http://bi.agricultura.gov.br/reports/rwservlet?sigisif_cons&estabelecimentos.

⁸⁹ The announcement of the suspension presented it as temporary, due to the reduced global demand for meat during the pandemic and the suspension of meat purchases by China. The Unit CNPJ is still active but no longer appears on the company's website nor its SIF on the government website. Information available from: <https://www.canal-rural.com.br/radar/marfrig-suspende-atividades-em-tucuma-mas-nega-paralisacao-por-queda-de-consumo/> and http://bi.agricultura.gov.br/reports/rwservlet?sigisif_cons&estabelecimentos.

⁹⁰ "A MFG conta com oito unidades: Tangará da Serra/MT, Campo Novo do Parecis/MT, Comodoro/MT, Campo Verde/MT, Mineiros/GO, Pereira Barreto/SP, Terenos/MS e Eldorado do Sul/RS.": Information available from: <<https://mfgagropecuaria.com.br/>>.

V.1 Approach

During its research of the irregularities in the cattle supply chain of Marfrig, CCCA focused on identifying and analyzing the farms that supply a specific slaughterhouse or meat packing plant. Due to the patterns of deforestation and its drivers, the regulatory regime governing deforestation and the availability of data, we have focused our analysis primarily on the Amazon biome from 2009 to 2020.

Meatpacking plants for analysis are identified primarily by the Federal Inspection Service (SIF) numbers,⁹¹ though in the course of analysis the CNPJ⁹² of the plant may also be used. In this instance, the analysis focused on two plants: SIF 1751 (in Tangara da Serra) and SIF 1497 (in Tucumã), and aimed at identifying which farms supplying that slaughterhouse are in breach of the law (environmental and potentially labour aspects).

The regulation of livestock in Brazil requires that an Animal Transport Guide (GTA) must accompany any transit of live animals. The areas where these animals come from should also be registered in the Rural Environmental Registry (CAR). Where accurate and consistent information is provided in these two documents, one may cross-reference identify the geographical coordinates of the suppliers.

With this spatial information of the farms, it was possible to check this against

- official deforestation monitoring data⁹³ for the Amazon and Cerrado biomes for alerts indicating that the farms contained areas that were deforested after July 2008;⁹⁴

and to also use a geographic information system (GIS) to identify any overlap with:

- environmental protected areas (Conservation Units and Indigenous Lands);

⁹¹ SIF is the Portuguese acronym for Federal Inspection Service. The SIF is linked to the Department of Inspection of Products of Animal Origin – DIPOA and is responsible for ensuring the quality of edible and inedible products of animal origin intended for the domestic and foreign markets, as well as imported products. All products of animal origin under the responsibility of the Ministry of Agriculture are registered and approved by the S.I.F. Information available at <<https://www.gov.br/agricultura/pt-br/assuntos/inspecao/produtos-animal/sif>>.

⁹² The Brazil National Registry of Legal Entities number (CNPJ) is a company identification number that must be obtained from the Department of Federal Revenue (Secretaria da Receita Federal do Brasil) prior to the start of any business activities.

⁹³ The PRODES Cerrado project is developed and operated by the National Institute for Space Research (INPE), a unit of the Ministry of Science, Technology and Innovation - MCTI. For mapping, the project uses 118 images from the Landsat satellite or similar to identify, map and quantify the areas larger than 1 hectare where native vegetation has been suppressed, regardless of subsequent use of these regions.

⁹⁴ The timeframe (2008) is defined by Brazil's New Forest Code and granted amnesty for illegal deforestation that occurred in areas of private environmental protection (permanent preservation areas - APP and legal reserves) up to July 22, 2008. Small rural producers (up to four rural modules), as a rule, have full amnesty, not needing to recover anything that was deforested. Large and medium-sized producers, to qualify for the benefit, must adhere to the Environmental Regularization Program (PRA). Through the PRA, those interested undertake to follow more lenient parameters for recovering the deforested areas.

- areas under an IBAMA (Brazilian Federal Environmental agency) embargo⁹⁵; or
- areas covered by the civil lawsuits of Amazonia Protege.⁹⁶

To map the first-level indirect suppliers the steps were repeated, but with the substitution of the identification data of the processing plant by the identification data of each of the direct suppliers and repeating the analysis for each of these suppliers. Similarly, to identify the second-level indirect suppliers, the steps were repeated, but with the information identifying the first-level indirect suppliers as input data; and likewise for the third-level of indirect suppliers.

Knowing what the supplier properties of each unit are, it was possible to check whether the properties owners were associated with slave labour according to the “dirty lists” issued by the former Brazilian Ministry of Labor (now, under the Ministry of Economy).⁹⁷ The list includes the CPFs or CNPJs of every employer convicted for using slave labour. The detailed analysis can be found in the topic VII.4.

V.2 Marfrig Units analyzed by CCCA

Tangara da Serra Unit (SIF⁹⁸ 1751)

Applying the methodology in Section V.1 produced the following results for the Marfrig unit in Tangara de Serra (SIF 1751):

- Deforestation detected within supplier properties according to PRODES⁹⁹ in the Amazon: 12,829.78 ha (1,459.43 ha in direct suppliers).
- Deforestation authorized in Amazon: 463.85 ha (66.71ha in direct suppliers)
- Deforestation detected within supplier properties according to PRODES in Cerrado¹⁰⁰: 29,776.62 ha (2,762.72 ha in direct suppliers).

⁹⁵ Ibama (2022). Consulta de Autuações Ambientais e Embargos. Available from: <<https://servicos.ibama.gov.br/ctf/publico/areasembargadas/ConsultaPublicaAreasEmbargadas.php>>

⁹⁶ Amazônia Protege is a project idealized by the Federal Public Ministry that intends to fight illegal deforestation in the Brazilian Amazon Forest. Through the use of satellite images and cross-referencing public data, the MPF brings public civil actions against those responsible for illegal deforestation of more than 60 hectares registered by the Project for Monitoring Deforestation in the Legal Amazon (Prodes/Inpe). More information can be accessed here: <http://amazoniaprotege.mpf.mp.br/>

⁹⁷ The “dirty list” of employers found to have submitted workers to conditions analogous to slavery. Available from: https://www.gov.br/trabalho-e-previdencia/pt-br/composicao/orgaos-especificos/secretaria-de-trabalho/inspecao/areas-de-atuacao/cadastro_de_empregadores.pdf. See also: https://www.gov.br/trabalho-e-previdencia/pt-br/composicao/orgaos-especificos/secretaria-de-trabalho/inspecao/areas-de-atuacao/cadastro_de_empregadores.pdf.

⁹⁸ Federal Inspection Number

⁹⁹ Official Brazilian monitoring system. Available from: <http://www.obt.inpe.br/OBT/assuntos/programas/amazonia/prodes>.

¹⁰⁰ The PRODES Cerrado project is developed and operated by the National Institute for Space Research (INPE), a unit of the Ministry of Science, Technology and Innovation - MCTI. For mapping, the project uses 118 images from the Landsat satellite or similar to identify, map and quantify the areas larger than 1 hectare where native vegetation has been suppressed, regardless of subsequent use of these regions.

- d) Deforestation authorized in Cerrado: 171.84 ha
- e) Deforested area confirmed by validation in direct foragers: 0 ha
- f) IBAMA embargoes on supplier properties: 73 properties (7 in direct suppliers)
- g) Overlap with protected areas: 45 properties (3 in direct suppliers)
- h) Connections with the slave labour list: 0
- i) Amazônia Protege: 15 properties (3 in direct suppliers)

The large amount of deforestation – over 10,000 hectares in the Amazon biome and almost 30,000 hectares in the Cerrado biome – is the main point of attention for this research. Marfrig does not appear to have a better record in identifying and avoiding deforestation on direct supply properties than in its suppliers as a whole: approximately 10% of the properties are “direct” supply farms; and approximately 10% of the deforestation in each biome was on direct suppliers. Almost none of this deforestation were authorised by the competent authorities, and was thus illegal: less than 1% in the Cerrado, and approximately 4% in the Amazon biome. In addition, a significant number of suppliers were identified inside or encroaching on protected forest areas (with examples provided in topic VI), or had embargoes issued by IBAMA.

This slaughterhouse is, moreover, located in the same municipality (Tangara de Serra) as one of the feedlots operated by MFG Agropecuária Ltda, the closely related company (and former wholly-owned subsidiary) that operates feedlots for Marfrig in Brazil, and identified in the CRA; and in close proximity to two other MFG Agropecuária Ltda feedlots in neighbouring municipalities of Campo Novo do Pareciso and Comodoro.

As noted above, given that the financing was provided to Marfrig Global Goods S.A., and the closely related nature of MFG Agropecuária Ltda, the analysis of the suppliers of Marfrig as a whole is relevant to compliance with the UBS 2021 ESR framework. However, CCCA was also able to analyse the properties that supplied the MFG Agropecuária Ltda facility in one of these municipalities, Campo Novo do Parecis, using a similar methodology to that set out in Section V.1.¹⁰¹ This MFG facility appears to have supplied cattle almost exclusively to Minerva’s Tangara de Serra slaughterhouse. Analysis of its suppliers raised significant concerns:

- 159 suppliers were identified with PRODES alerts for deforestation in the Amazon, totaling 3,268 hectares of deforestation detected. This includes 18 direct suppliers accounting for 437 hectares.

¹⁰¹ This analysis only included two levels of suppliers – direct, and first-level indirect. And the analysis combines transfers to the CNPJ of MFG Agropecuária Ltda in the municipality of Campo Novo do Parecis, regardless of whether the destination was listed as the name of the facility (Fazenda Gera) or the name of the company (MFG Agropecuária Ltda).

- 34 suppliers were identified with PRODES alerts for deforestation in the Cerrado, totalling 1,296 hectares of deforestation detected. This includes 7 direct suppliers accounting for 228 hectares.
- 28 suppliers were identified with embargoes (including 4 direct suppliers).
- 8 suppliers were identified inside or overlapping protected areas (including 3 direct suppliers).
- 4 suppliers were identified as having proceedings against them under Amazonia Protege (including 1 direct supplier).

Tucumã Unit (SIF 1497)

Applying the methodology above (Section V.1) produced the following results for the Marfrig unit in Tucumã (SIF 1497):

- a) Deforestation detected within supplier properties according to PRODES in the Amazon: 80,137.02ha (2,436.87ha in direct suppliers).
- b) Deforestation authorized in Amazon: 0 ha.
- c) IBAMA embargoes on supplier properties: 307 properties (15 direct suppliers).
- d) Overlap with protected areas: 24 properties (1 direct supplier).
- e) Connections with the slave labour list:¹⁰²
 - 2018: 1 property (no direct supplier)
 - 2019: 2 properties (no direct supplier)
 - 2020: 2 properties (no direct supplier)
 - 2021: 0
- f) Amazônia protege: 47 properties (2 direct suppliers)

Marfrig's unit in Pará had a considerable number of suppliers and a large amount of deforestation in a vulnerable region under intense deforestation pressure: over 80,000 hectares of deforestation in the Amazon biome detected in the PRODES system; with no record indicating that any of this was authorized, which strongly indicates that it was illegal. The proximity of the unit and the spreading of its supply network in the vicinity of two indigenous lands (Kaiapó and Xicrin do Rio Catete) that have a high number of invasions and conflicts is concerning. The large number of suppliers embargoed, overlapping with protected areas and the three cases of farms where workers were

¹⁰² For further details, see Section VII.4, below.

found in degrading working conditions demonstrates serious flaws in the company's monitoring system (see Section VII.4, below).

There are reports that this Unit suspended its activities in March 2020: the company announced that "Marfrig informs that its activities in the Tucumã unit, in Pará, will be suspended on March 17 in continuity with the company's commitment to seek operational excellence by prioritizing plants with greater capacity, productivity and better costs".¹⁰³ The suspension was announced in the context of the COVID-19 pandemic, and its impact on operating conditions and demand for beef. At the time of conducting this analysis, it was unclear how long it lasted or will last: the Unit's CNPJ was still active, but it no longer appeared on the company's website nor its SIF on the government website.¹⁰⁴ Marfrig subsequently clarified in email correspondence with STP that the Tucumã plant "this facility has been out of operation since March 16, 2020".¹⁰⁵

VI. Case Study: BrasilAgro

According to its website, BrasilAgro describes itself as "one of Brazil's largest companies in terms of arable land". The core of its business consists of the "acquisition, development, operation and sale of rural properties suitable for agricultural activities":

"We acquire rural properties that we believe offer significant potential for cash flow generation and value appreciation by holding the asset and developing profitable agricultural activities. Once we acquire our rural properties, we begin to implement high-value-added crops and to transform these rural properties by investing in infrastructure and technology. In line with our strategy, when we understand a rural property has reached a value that delivers our expected return, we sell it to capture the capital gains."¹⁰⁶

However, this "development" arm of the business has been widely associated with deforestation of native forests, especially of the Cerrado biome. Reports from the Chain Reaction Research concluded that the company was responsible for the deforestation of almost 22,000 hectares (54,000 acres) of native vegetation from 2012-2017.¹⁰⁷ However, these reports do not differentiate between legal and illegal deforestation.

¹⁰³ Tooge, R. (2020). JBS e Marfrig suspendem atividades em 6 frigoríficos. Available from: <https://g1.globo.com/economia/agronegocios/noticia/2020/03/18/marfrig-suspende-atividades-em-frigorifico-localizado-no-para.ghtml>.

¹⁰⁴ MAPA (2022). Relação de Estabelecimentos. Available from: http://bi.agricultura.gov.br/reports/rwServlet?sig=sif_cons&estabelecimentos.

¹⁰⁵ E-mail Communication between UBS and Marfrig on September 10, 2022

¹⁰⁶ BrasilAgro (2022). History and Profile. Available from: <https://ri.brasil-agro.com/en/brasilagro/history-and-profile/>.

¹⁰⁷ Chain Reaction Research (2017). BrasilAgro: Cerrado Deforestation Could Reduce Farmland Value, Put Soy Revenue at Risk. Available from: <https://chainreactionresearch.files.wordpress.com/2017/11/brasilagro-company-profile-final2.pdf>

Chain Reaction Research (2018). BrasilAgro: 5,069 Hectares of Cerrado Forest at Imminent Risk. Available from: <https://chainreactionresearch.com/wp-content/uploads/2018/11/BrasilAgro-Company-Profile.pdf>

Most of BrasilAgro's properties are in the Matopiba region, an agricultural frontier that was opened for exploitation in the 1980s and spans the border region between the states of Maranhão, Tocantins, Piauí and Bahia in Brazil's north and northeast. All 10 of the municipalities with the highest deforestation rates in the Cerrado were in Matopiba in 2021, according to INPE,¹⁰⁸ the federal body that monitors deforestation in Brazil.

In its 2019 annual report, the company stated that legal action was being taken against it for environmental destruction or damage.¹⁰⁹ In 2013, the Brazilian Institute of the Environment and Natural Resources (IBAMA) fined BrasilAgro in R\$5.9 million for illegal deforestation of a permanent protection area in Goiás.¹¹⁰

The company is also suspected of illegal land acquisitions since 2016. The National Institute of Colonization and Agrarian Reform (INCRA), an official government body responsible for the land reform issues, reportedly suspected the company of acting "in non-compliance with the law", circumventing limits imposed on land sales to foreigners. Contrary to what the name of the company suggests, documents obtained by Pública indicate that it is Argentine and North American investors who run BrasilAgro¹¹¹.

Currently, there are a series of restrictions, such as limits on the areas that can be acquired and the requirement for prior government authorization for the sale of land to foreigners. With access to a set of official documents, the report from Pública identified purchases by this BrasilAgro in Bahia, Maranhão and Piauí "without authorization from National Institute for Colonization and Agrarian Reform (INCRA) or the National Congress", in violation of the law.¹¹²

In addition to all the above, the analysis conducted by CCCA and presented in Section VI.2 identified evidence of illegal deforestation committed in the properties owned by BrasilAgro.

VI.1. Methodology

To analyze possible illegalities linked to the BrasilAgro company, first, the geographical boundaries of the farms (in KML format) were obtained from the company's website. Then, in a GIS (Geographic Information System) environment, these coordinates were cross-referenced with the deforestation database of the governmental system (PRODES) of the Cerrado biome. Next, each of the

¹⁰⁸ Terrabrasilis Website (2022). Available from: <http://terrabrasilis.dpi.inpe.br/app/dashboard/alerts/biomes/cerrado/daily/>.

¹⁰⁹ BrasilAgro Annual Report (2019). Available from: https://www.sec.gov/Archives/edgar/data/0001499849/000121390020034148/f20f2020_brasilagro.htm.

¹¹⁰ BrasilAgro Annual Report (2019). Available from: https://www.sec.gov/Archives/edgar/data/0001499849/000121390020034148/f20f2020_brasilagro.htm.

¹¹¹ Paes, C. de F and Fonseca, B. (2021). BTG e XP estão a serviço de estrangeiros suspeitos de compra ilegal de terras. Available from: <https://apublica.org/2021/05/btg-e-xp-estao-a-servico-de-estrangeiros-suspeitos-de-compra-ilegal-de-terras/>.

¹¹² Paes, C. de F and Fonseca, B. (2021). BTG e XP estão a serviço de estrangeiros suspeitos de compra ilegal de terras. Available from: <https://apublica.org/2021/05/btg-e-xp-estao-a-servico-de-estrangeiros-suspeitos-de-compra-ilegal-de-terras/>.

deforestation alerts identified in that database was manually validated through a visual analysis of satellite images from different years referring to the areas of the company's properties. With this, it was possible to confirm the deforestation in the areas before and after the acquisition of the properties by the company.

In order to verify the possible illegality of this deforestation, a cross-check was conducted with the base of authorizations for vegetal suppression contained in the National System for the Control of the Origin of Forest Products (SINAFLOR)¹¹³.

Regarding fires, a visual analysis of satellite images from different years of the company's properties was conducted in order to identify features that indicate the occurrence of fire inside the farms.

At the end of the analysis, maps were elaborated showing the occurrence of deforestation and fire on the properties.

VI.2 BrasilAgro properties analyzed by the CCCA

Applying the methodology above (Section VI.1) produced the following results:

- a) BrasilAgro Properties: 16¹¹⁴
- b) Properties analyzed by CCCA¹¹⁵: 12
- c) Properties with confirmed deforestation: 5 (see annexes 1 to 5 with comparative maps of before and after)
- d) None of the deforestations analyzed presented deforestation authorization in the database of the national system (SINAFLOR – IBAMA).

Table 1: Farms owned by BrasilAgro with confirmed deforestation

Farm	Total defor- ested area (ha) 2010 to 2020 ¹¹⁶	Year of Deforestation	Year of acqui- sition ¹¹⁷
Araucaria	1.041,29	2016	2007
Chaparral	16.042,03	2010,2014,2015,2016,2017,2018,2019	2007

¹¹³For this study, it was not possible to obtain access to the state authorization bases, which may contain differences from the national base due to integration and updating problems. SINAFLOR website: <<http://www.ibama.gov.br/sinaflor>>.

¹¹⁴ BrasilAgro (2019). Relatório Anual. Available from: <<https://brasilagro2019.blendon.com.br/en/>>.

¹¹⁵ The other four farms need further research in order to identify their geographical coordinates or rural registries.

¹¹⁶ Source: PRODES Cerrado (footnote 93 and 99 above).

¹¹⁷ BrasilAgro (2022). Property Portfolio. Available from: <<https://ri.brasil-agro.com/en/brasilagro/property-portfolio/>>

Cremaq and Agua Branca	4.212,86	2010	2006
Avarandado – Parceria II	3.237,31	2010,2012,2014,2016,2017,2019	2013
Preferência	5.539,36	2012,2013,2014,2015,2020	2008

This indicates substantial deforestation committed on these properties, totaling over 30,000 hectares. The deforestation was often conducted over many years and in most of the cases, it was committed after the acquisition of the farm by BrasilAgro and only a few years before the financing by UBS (see Table 1 above). In analyzing the deforestation authorizations contained in SINAFLORE we observed that no property had authorization, this fact is a strong indication that the deforestations contained in this area are illegal.

16:03

VII. UBS 2021 ESR Framework and the financial services to Marfrig and BrasilAgro

As seen in topic III, UBS 2021 ESR framework determined that UBS (and hence UBS BB) will not *knowingly* provide financial or advisory services to clients whose primary business activity, or where the proposed transaction, is *associated with severe* environmental and social damage to or through the use of:

- World heritage sites as classified by the United Nations Educational, Scientific and Cultural Organization (UNESCO);
- Wetlands on the Ramsar list;
- Endangered species of wild flora and fauna listed in Appendix 1 of the Convention on International Trade in Endangered Species;
- High conservation value forests as defined by the six categories of the Forest Stewardship Council (FSC);
- Illegal fire: uncontrolled and / or illegal use of fire for land clearance;
- Illegal logging including purchase of illegal harvested timber (logs or roundwood);
- Child labor according to ILO-conventions 138 (minimum age) and 182 (worst forms);
- Forced labor according to ILO-convention 29; and
- Indigenous peoples' rights in accordance with IFC Performance Standard 7.

Considering the data presented in the previous chapter, the infractions found to be associated with the operations of Marfrig and BrasilAgro mean that the financing of these companies most likely violates the criteria of environmental damage to high conservative value forests; illegal fire; forced labour and indigenous people's rights, as detailed hereafter. There are also concerns that

UBS's ESR framework covers illegal *logging*, and clearance of land *by fire*, but not the illegal clearance of land by means *other than fire*.¹¹⁸

VII.1 High conservation value forests as defined by the six categories of the Forest Stewardship Council (FSC)

High conservation value forest (HCVF) is a Forest Stewardship Council (FSC) forest management designation used to describe those forests who meet criteria defined by the FSC Principles and Criteria of Forest Stewardship¹¹⁹.

Specifically, high conservation value forests are those that possess one or more of the following six High Conservative Values:

The six High Conservation Values

HCV 1 - Species diversity: Concentrations of biological diversity including endemic species, and rare, threatened or endangered species, that are significant at global, regional or national levels.

HCV 2 - Landscape-level ecosystems and mosaics: Large landscape-level ecosystems and ecosystem mosaics that are significant at global, regional or national levels, and that contain viable populations of the great majority of the naturally occurring species in natural patterns of distribution and abundance.

HCV 3 - Ecosystems and habitats: Rare, threatened, or endangered ecosystems, habitats or refugia.

HCV 4 - Critical ecosystem services: Basic ecosystem services in critical situations, including protection of water catchments and control of erosion of vulnerable soils and slopes.

HCV 5 - Community needs: Sites and resources fundamental for satisfying the basic necessities of local communities or indigenous peoples (for livelihoods, health, nutrition, water, etc.), identified through engagement with these communities or indigenous peoples.

HCV 6 - Cultural values: Sites, resources, habitats and landscapes of global or national cultural, archaeological or historical significance, and/or of critical cultural, ecological, economic or religious/sacred importance for the traditional cultures of local communities or indigenous

The determination of an area as HCVF is made on a case-by-case basis and, to date, such an analysis has not been completed. However, there are strong indications of Marfrig's direct and indirect suppliers located in environmental protection areas, especially in Mato Grosso, as specified in cases below.

¹¹⁸ See section VI.3, below

¹¹⁹ HCV (2013). Guia geral para ALTOS VALORES DE CONSERVAÇÃO. Available from: <<https://ic.fsc.org/download.guia-geral-para-identificacao-de-altos-valores-de-conservacao-portugues.a-3705.pdf>>

- **Marcon Farm – Mato Grosso**

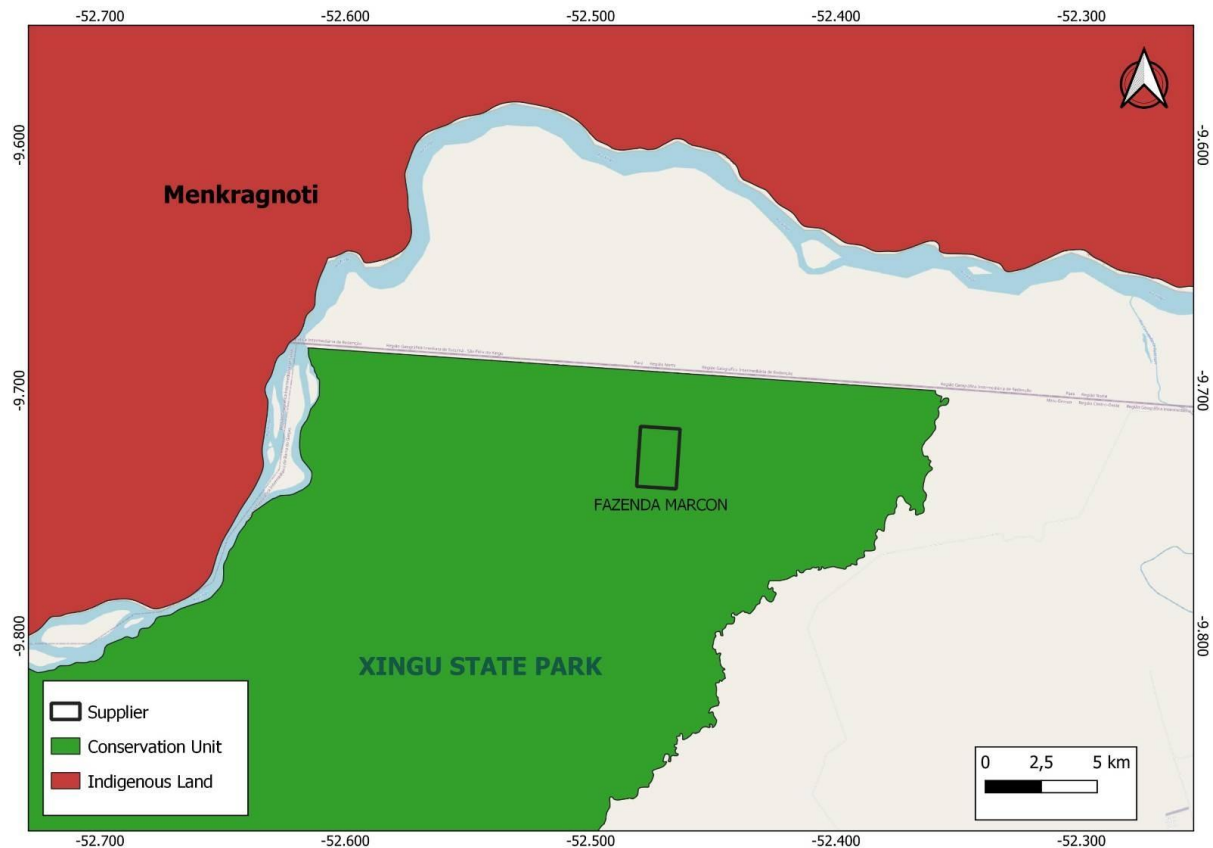
Marcon Farm is a direct supplier (level 1) to the Tangara da Serra Unit (SIF 1751) and, according to its CAR information, is located inside the Xingu State Park, a restricted-use Conservation Unit created in 2001. The park still doesn't have a management plan, being the restrictions for use of the area foreseen in the Law 9.995/2000, which establishes that the National or State Parks "have as their basic objective the preservation of natural ecosystems of great ecological relevance and scenic beauty, allowing for scientific research and the development of environmental education and interpretation activities, recreation in contact with nature and ecological tourism". As a rule, cattle breeding farms are not allowed in these areas.¹²⁰

The Xingu State Park is an extremely important park which presents a unique environment of transition from Cerrado vegetation to Amazon Rainforest, with several lakes, which serve as breeding areas for fauna, especially fish that populate the main channel of the Xingu River. In addition, the park borders the Menkragnet indigenous land and the conservation of the area perpetuates the way of life of the indigenous people of the region.¹²¹

Figure 5 – Marcon Farm location

¹²⁰ In Brazil, National and State Parks are the most popular and oldest category of Conservation Unit. The National System of Nature Conservation Units (SNUC), established by Federal Law No. 9.985, 2000, includes the National and State Parks in the group of Full Protection Conservation Units, i.e., the most restrictive category of protection. According to the SNUC legislation, the Parks must only "preserve ecosystems of great ecological relevance and scenic beauty, enabling scientific research, educational activities and environmental interpretation, recreation and ecological tourism, through contact with nature". Occasionally, cattle breeding was authorised inside some national parks, which generated several criticisms and debates as to the legality of these decisions. Available from: <<https://oeco.org.br/noticias/justica-libera-criacao-degado-no-parque-nacional-da-serra-da-canastra/>>

¹²¹ Wikiparques (2022). Parque do Xingu. Available from: <https://www.wikiparques.org/wiki/Parque_Estadual_do_Xingu>



Source: Elaborated by CCCA LAB through CAR information.

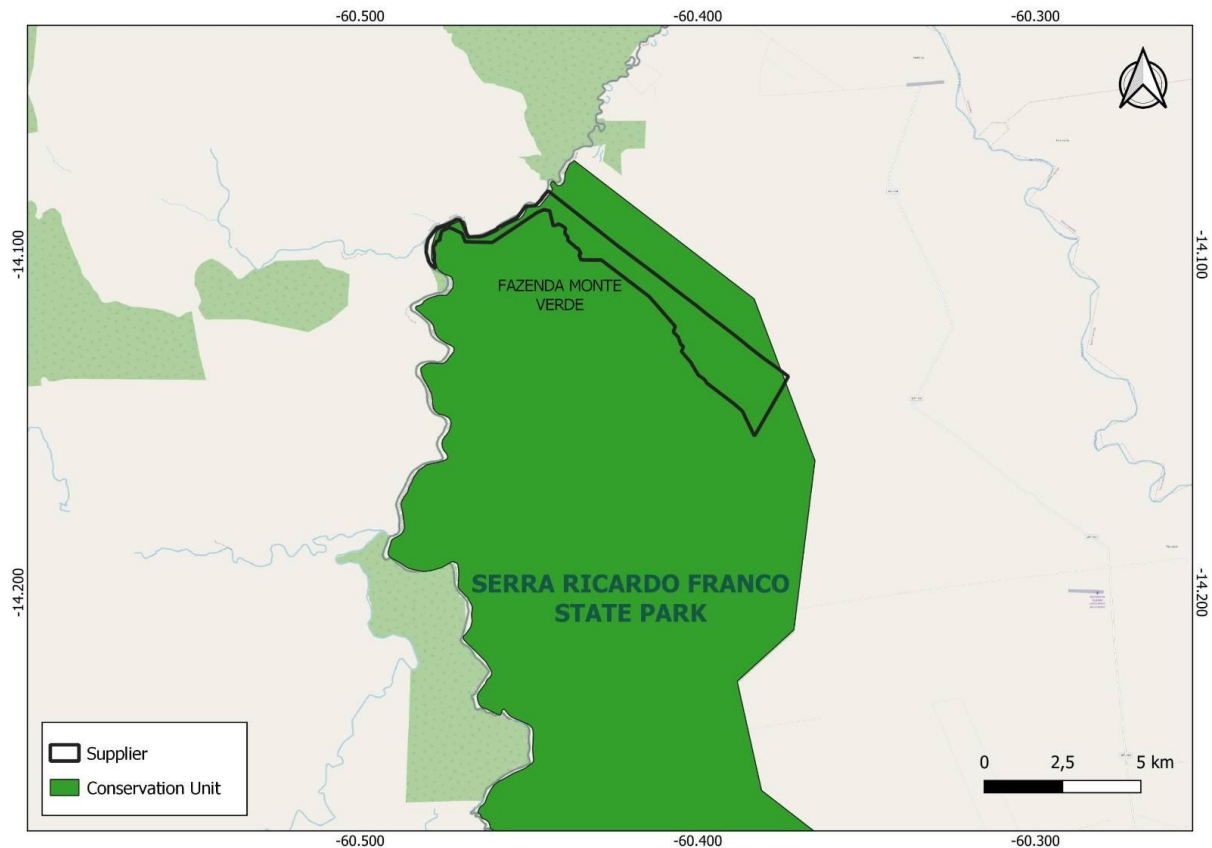
- **Monte Verde Farm– Mato Grosso**

Monte Verde Farm is an indirect supplier (level 2), also to the Tangara da Serra Unit (SIF 1751). According to its CAR information, the farm is located inside the State Park Serra Ricardo Franco, created in 1997 in the state of Mato Grosso.

The park was the object of a case study prepared by Greenpeace,¹²² which highlighted the relevance of its biodiversity and identified that 71% of the park's entire extension overlap with the Rural Environmental Registry (CAR) and many of these farms produce cattle, which contaminate the meatpacking chain.

Figure 6 – Monte Verde Farm location

¹²² Greenpeace (2021). ESTUDO DE CASO: PARQUE SERRA RICARDO FRANCO. Available from: <https://www.greenpeace.org.br/hubfs/biodiversidade/Estudo_Parque_Ricardo_Franco.pdf>.



Source: Elaborated by CCA Lab through CAR information.

- **Santa Fé Farm - Pará**

Monte Verde Farm was a direct supplier (level 1) to the Tucuma Unit. According to its CAR information, the farm is located inside the Iri State Forest, created in 2006. The Forest is a conservation unit of sustainable use, and its basic objective is to make nature conservation compatible with the sustainable use of a portion of its natural resources. According to the Legislation on Conservative Units (Law 9.995/2000): "The National or State Forest is an area with forest cover with predominantly native species and has as its basic objective the sustainable multiple use of forest resources and scientific research, with emphasis on methods for sustainable exploitation of native forests" (article 17).

The Iri State Forest functions as an important ecological corridor for the region and for the planet, but deforestation has advanced, with land grabbers illegally invading on both sides.

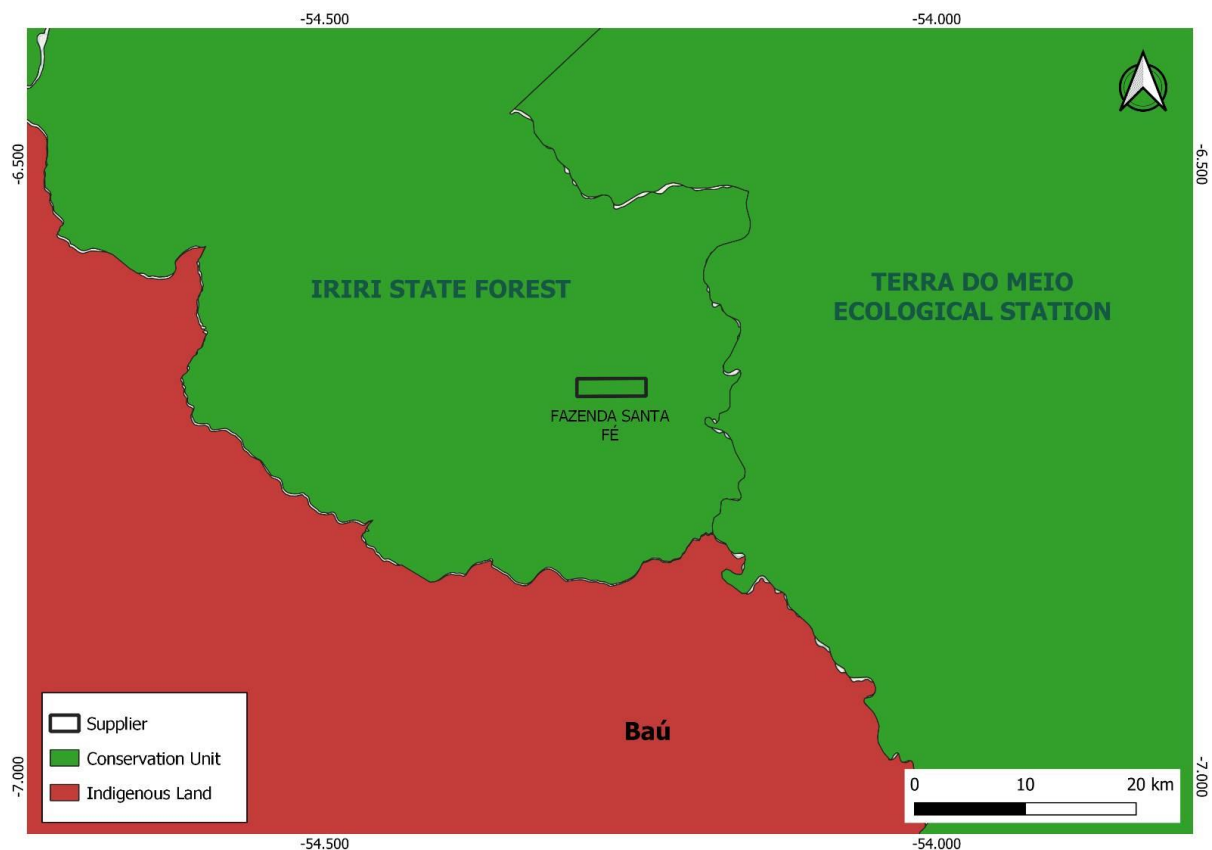
A 2021 report by the Xingu+ Network,¹²³ based on its Sirad deforestation monitoring system, revealed that there are 201 properties illegally claimed and registered in the CAR in the Iri State

¹²³ Xingu+ website (2022). Available from: <<https://www.xingumais.org.br/>>

Forest, covering 3,970 km² of land, more than three times the area of the municipality of Rio de Janeiro.¹²⁴

According to the report, the magnitude of the deforestation recorded within the conservation unit, with areas of up to 14 km² being cleared in a single undertaking, illustrates how the drivers behind massive land clearance are economically powerful.

Figure 7 – Santa Fé Farm location



VII.2 Illegal fire: uncontrolled and / or illegal use of fire for land clearance

The identification of the presence of fire can be done through visual interpretation of images from different years, locating signs typically associated with the occurrence of fires. In most cases, these incidents are associated with vegetation degradation rather than deforestation.

CCCA is still working to analyse evidence or correlation between the large volume of Marfrig's suppliers, the deforestation conducted on their properties, and evidence of fire. However, it has con-

¹²⁴ Cowie, S. (2021). Desmatamento na bacia do Rio Xingu dispara sob governo Bolsonaro. Available from: <https://brasil.mongabay.com/2021/06/desmatamento-na-bacia-do-rio-xingu-dispara-sob-governo-bolsonaro/>

ducted visual analysis of the five BrasilAgro properties where deforestation was identified and located signs typical of fire on two of those properties: Chaparal and Avarandado. The potential fire is indicated in orange on the maps below.

- **Chaparal Farm**

The Chaparal farm, located in Correntina, Bahia, was acquired by BrasilAgro in 2007, according to the company's own website¹²⁵. The farm has 37,182 hectares and has as its main project the planting of grains and cotton.

According to the map below, there were outbreaks of fires in 2008, when the farm was already owned by BrasilAgro. In addition to the fact that most of it had been deforested by 2020.

¹²⁵ BrasilAgro (2022). Portfólio de Propriedades. Available from: <<https://ri.brasil-agro.com/brasilagro/portfolio-de-propriedades/>>.

Figure 8 – Fire in the Rural Property Chaparral



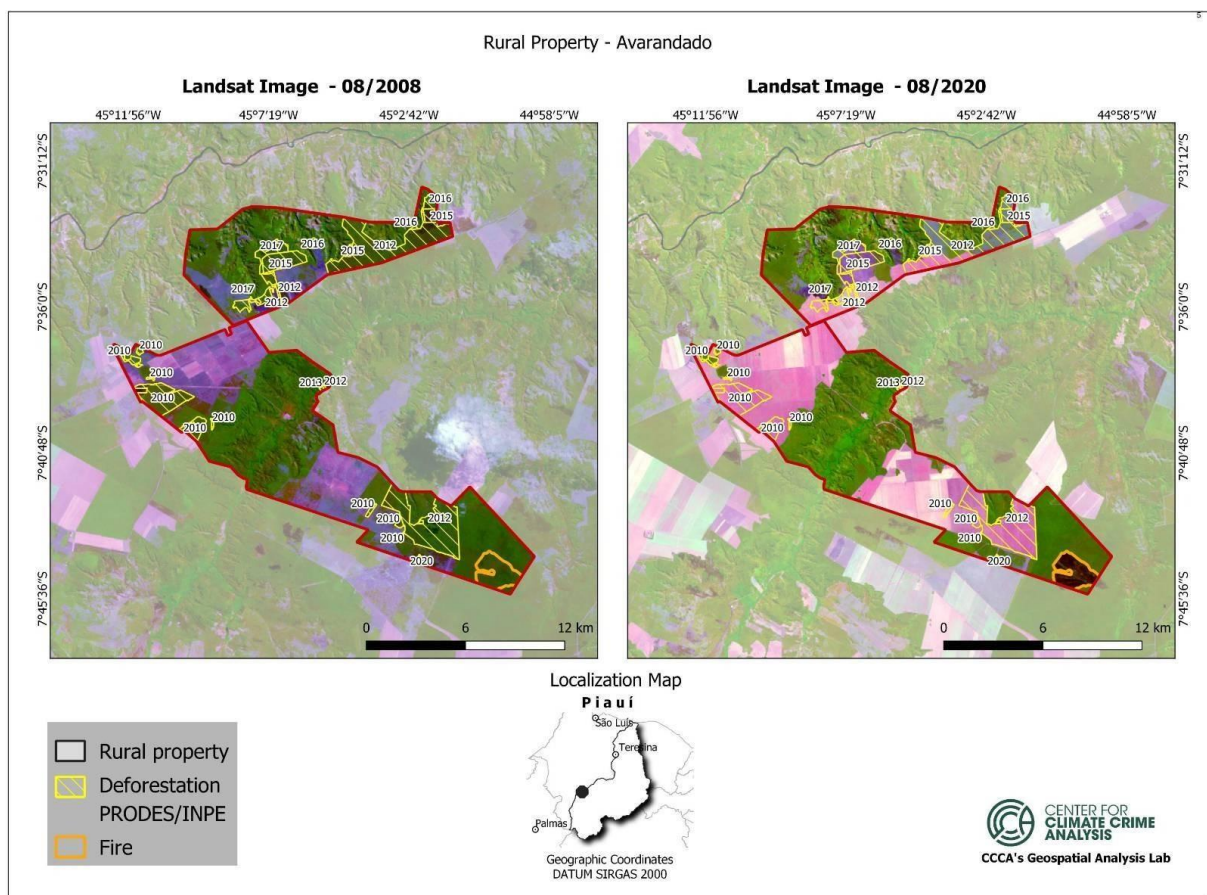
Source: Elaborated by CCCA Lab

- **Avarandado Farm (Parceria II)**

The Avarandado farm (also called Parceria II), located in Ribeiro Gonçalves, Piauí, was acquired by BrasilAgro in 2013¹²⁶. The main project of the 7,500 hectares of land is the planting of grains.

According to the map below, there were outbreaks of fires in 2020, when the farm was already owned by BrasilAgro. In addition to several deforestations that occurred after the purchase (2015, 2016, 2017 and 2020).

Figure 9 – Fire in the Rural Property Avarandado



Source: Elaborated by CCCA Lab

¹²⁶ BrasilAgro (2022). Portfólio de Propriedades. Available from: <https://ri.brasil-agro.com/brasilagro/portfolio-de-propriedades/>.

VII.3 Illegal deforestation by means other than fire and for purposes other than logging

UBS's ESR Framework appears to contain a core weakness in the way that it defines its controversial activities and areas of concern. While those areas rightly exclude the provision of financial or advisory services to clients/companies where the primary business activity is associated with illegal felling of trees for the purpose of logging (including the purchase of illegally harvested timber), or the illegal clearance of land by the use of fire, it does not address the illegal clearance of land (for reasons other than logging). There is no logical or principled reason for UBS to treat the illegal felling of trees for timber differently from the illegal felling of trees to clear land; especially when the illegal clearance of land is recognised in the same Framework as a "controversial activity" when conducted by other means.¹²⁷

This failure to address or identify as an "area of concern" illegal clearance of land (by means other than fire) undermines the practical effect of UBS's other principled commitments regarding forests and biodiversity – where the UBS 2021 ESR Framework recognizes that deforestation and forest degradation can "cause biodiversity to decline", are a major "source of global greenhouse gas emissions", and a cause of "severe societal problems, sometimes leading to violent conflict".¹²⁸

The scale of the illegal deforestation linked to Marfrig illustrates that this risk should be treated in the same way as illegal logging or clearance by fire, especially when the cattle industry (acknowledged in the UBS 2021 ESR Framework as one of the major drivers of deforestation) is not included as an area of concern (as noted in Section IV).

Alternatively, if the reference to "Illegal logging" in the English version of the ESR Framework is intended to cover all cutting of trees, regardless of the purpose or end-use,¹²⁹ then it would be helpful for UBS to clarify this language. When contacted on this issue by STP, UBS replied: "Our policy is in line the EU legislation and policies around forestry. Illegal logging is defined as the harvesting of timber in contravention of the laws and regulations of the country of harvest (e.g., EU FLEGT Regulation). In environmental terms illegal logging is associated with deforestation, climate change and a loss of biodiversity." This reinforces the assumption that not all illegal deforestation is accounted for.

¹²⁷ UBS 2021 ESR Framework, p. 5 (see Appendix 1)

¹²⁸ UBS 2021 ESR Framework, p. 4 (see Appendix 1).

¹²⁹ While the English language version of the ESR explicitly refers to "Illegal logging", and contextualizes this by referring to "including purchase of illegal harvested timber (logs or roundwood)", subsequent statements from a UBS representative suggested that the illegal logging standard covers all industries.

VII.4 Forced labour according to ILO-convention 29

According to the ILO Forced Labour Convention, 1930 (No. 29), forced or compulsory labour is "all work or service which is exacted from any person under the threat of a penalty and for which the person has not offered himself or herself voluntarily."¹³⁰

According to Brazilian criminal law, labour analogous to slavery is defined as submitting human beings to forced labour, including by forcing them to work days so intense as to cause physical harm, degrading conditions, and restriction of locomotion due to a debt contracted with an employer or agent. The penalty is aggravated when the crime is committed against a child or adolescent or for reasons of race, colour, ethnicity, religion, or origin prejudice. When employers are caught submitting their employees to these conditions, their names can be included in the Employers' Register, known as the "Dirty List".¹³¹

Created in 2003 (and currently regulated by the Interministerial Ordinance MTPS/MMIRDH No. 4 OF 11/05/2016¹³²), the Brazilian dirty list of slave labour contains the names of all the companies that were fined for using labour analogous to slavery after inspection by the former Ministry of Labour, now under the Ministry of Economy.

Before entering the registry, employers have the right to defend themselves in two administrative instances – in addition to due process before the criminal court.¹³³ After a sentence, the companies involved in this crime can remain for up to two years on the dirty list. Those who enter into an agreement with the government are on a "watch list" and can be removed from the list after one year if the commitments are fulfilled.

This watch list is one of the main instruments of public policy to combat slave labour, guaranteeing publicity, transparency and expanding the social control that helps combat this practice.

In 2009, Marfrig and other multinational giants signed the Meat TAC, an agreement with the Public Ministry in which they committed not to buy cattle directly from suppliers fined for illegal deforestation or fined for slave labour.¹³⁴

¹³⁰ International Labour Organization (2017). Available from: <https://www.ilo.org/dyn/normlex/en/f?p=1000:12100:0::NO::P12100_ILO_CODE:C029>.

¹³¹ Conectas (2019). Como a lei brasileira define o trabalho análogo ao escravo. Available from: <https://www.conectas.org/noticias/como-a-lei-brasileira-define-o-trabalho-analogo-ao-escravo/>

¹³² Portaria Interministerial MTPS/MMIRDH Nº 4 DE 11/05/2016. Dispõe sobre as regras relativas ao Cadastro de Empregadores que tenham submetido trabalhadores a condições análogas à de escravo. Available from: <<https://www.legisweb.com.br/legislacao/?id=320458>>

¹³³ Portaria Interministerial MTPS/MMIRDH Nº 4 DE 11/05/2016. Dispõe sobre as regras relativas ao Cadastro de Empregadores que tenham submetido trabalhadores a condições análogas à de escravo. Available from: <<https://www.legisweb.com.br/legislacao/?id=320458>>

¹³⁴ MPF (2009). CRITÉRIOS MÍNIMOS PARA OPERAÇÕES COM GADO E PRODUTOS BOVINOS EM ESCALA INDUSTRIAL NO BIOMA AMAZÔNIA. Available from: <https://storage.googleapis.com/planet4-brasil-stateless/2018/07/criterios-minimos-para-opera-2.pdf>

However, three properties that were on the dirty list in 2018, 2019 and 2020 were identified as part of the analysis set out in section V.2, above, as suppliers to Marfrig's Tucumã Plant, located in the state of Pará (although, as noted above, the Tucumã Unit indeed ceased operations in March 2020).

Property	City	Level Supplier	Year on the Dirty List
FAZENDA JK (54864046115)	Altamira	2 and 3	2018 and 2019
FAZENDA ABA- RAM (06617441249)	Itupiranga	3	2019 and 2020
FAZENDA SAO JOAO (68098197204)	Novo Reparti- mento	3	2020

In addition to these properties, research conducted by Repórter Brasil in April 2021 (i.e. before the financing via CRA coordinated by UBS BB, which occurred in May 2021), revealed that Marfrig was one of the buyers of cattle rancher Maurício Pompéia Fraga, even after labour inspections found workers in a situation analogous to slavery in June 2018.¹³⁵ Marfrig claims that it continued to buy from Maurício because he was only included in the dirty list on 5 April 2021, noting a gap of almost three years between the inspection and the punishment. Marfrig cited its reliance on the list published by the Secretariat of Labour as the only publicly available mechanism to verify occurrences analogous to slave labor;¹³⁶ while another meatpacking company actively defended continuing to buy cattle from Maurício in the period between the inspection finding conditions analogous to slavery and formal inclusion.¹³⁷

¹³⁵ Camargos, D. (2021). Pecuarista que vende gado para grandes frigoríficos entra na 'lista suja' do trabalho escravo. Available from: <<https://reporterbrasil.org.br/2021/04/pecuarista-que-vende-gado-para-grandes-frigorificos-entra-na-lista-suja-do-trabalho-escravo/>>.

¹³⁶ Repórter Brasil (2021). Íntegra das respostas da JBS e Marfrig. Available from: <<https://reporterbrasil.org.br/2021/04/integra-das-respostas-da-jbs-e-marfrig/>>

¹³⁷ Camargo, D. (2021). Pecuarista que vende gado para grandes frigoríficos entra na 'lista suja' do trabalho escravo. Available from: <<https://reporterbrasil.org.br/2021/04/pecuarista-que-vende-gado-para-grandes-frigorificos-entra-na-lista-suja-do-trabalho-escravo/>>

VII.5 Indigenous peoples' rights in accordance with IFC Performance Standard 7.

The last controversial activity listed in the UBS 2021 ESR framework is the criteria that UBS will not provide financial or advisory services to clients whose primary business activity is associated with indigenous peoples right in accordance with IFC Performance Standard 7.¹³⁸

1. *“Performance Standard 7 recognizes that Indigenous Peoples, as social groups with identities that are distinct from mainstream groups in national societies, are often among the most marginalized and vulnerable segments of the population. In many cases, their economic, social, and legal status limits their capacity to defend their rights to, and interests in, lands and natural and cultural resources, and may restrict their ability to participate in and benefit from development. Indigenous Peoples are particularly vulnerable if their lands and resources are transformed, encroached upon, or significantly degraded. Their languages, cultures, religions, spiritual beliefs, and institutions may also come under threat. As a consequence, Indigenous Peoples may be more vulnerable to the adverse impacts associated with project development than non-indigenous communities. This vulnerability may include loss of identity, culture, and natural resource-based livelihoods, as well as exposure to impoverishment and diseases.”*

Despite this commitment, cases relating to Marfrig’s suppliers overlapping indigenous lands have also been previously reported by other sources. In 2020, research conducted by Repórter Brasil¹³⁹ identified that between 2018 and 2019, the Tucumã meatpacking plant received animals from a farm encroached on the Apyterewa Indigenous Territory. In that case, Marfrig said that the coordinates of the farm that appear in the CAR place the rural property within the margin of error: “The equipment for demarcating areas that used to exist did not have such precision, nor did the technology available today”¹⁴⁰. The company claimed that to mitigate possible cartographic flaws, the methodology used in the analysis of overlaps [of land] considers a tolerance of 10%, while the case identified by Repórter Brasil had only 8% of its registered property inside the indigenous territory. Marfrig denies having sourced from direct suppliers located inside indigenous territories, clarifying that it considers indigenous territories that have been declared, approved or regularized (but not those that have only been delimited or are under study) for this assessment.¹⁴¹

¹³⁸ IFC (2012). Guidance Note 7 Indigenous Peoples. Available from: <https://www.ifc.org/wps/wcm/connect/9baef8f6-9bd9-4d95-a595-7373059081d4/GN7_English_2012.pdf?MOD=AJPERES&CVID=mRQk089>

¹³⁹ Campos, A. and Barros, C. J. (2020). O ‘boi pirata’ criado em terra indígena e a conexão com os frigoríficos Marfrig, Frigol e Mercúrio. Available from: <<https://reporterbrasil.org.br/2020/06/boi-pirata-criado-em-terra-indigena-e-a-conexao-com-frigorificos-marfrig-frigol-mercuro/>>.

¹⁴⁰ Repórter Brasil (2020). Íntegra das respostas para a reportagem sobre gado criado em terra indígena. Available from: <https://reporterbrasil.org.br/2020/06/integra-das-respostas-para-a-reportagem-sobre-gado-criado-em-terra-indigena/>

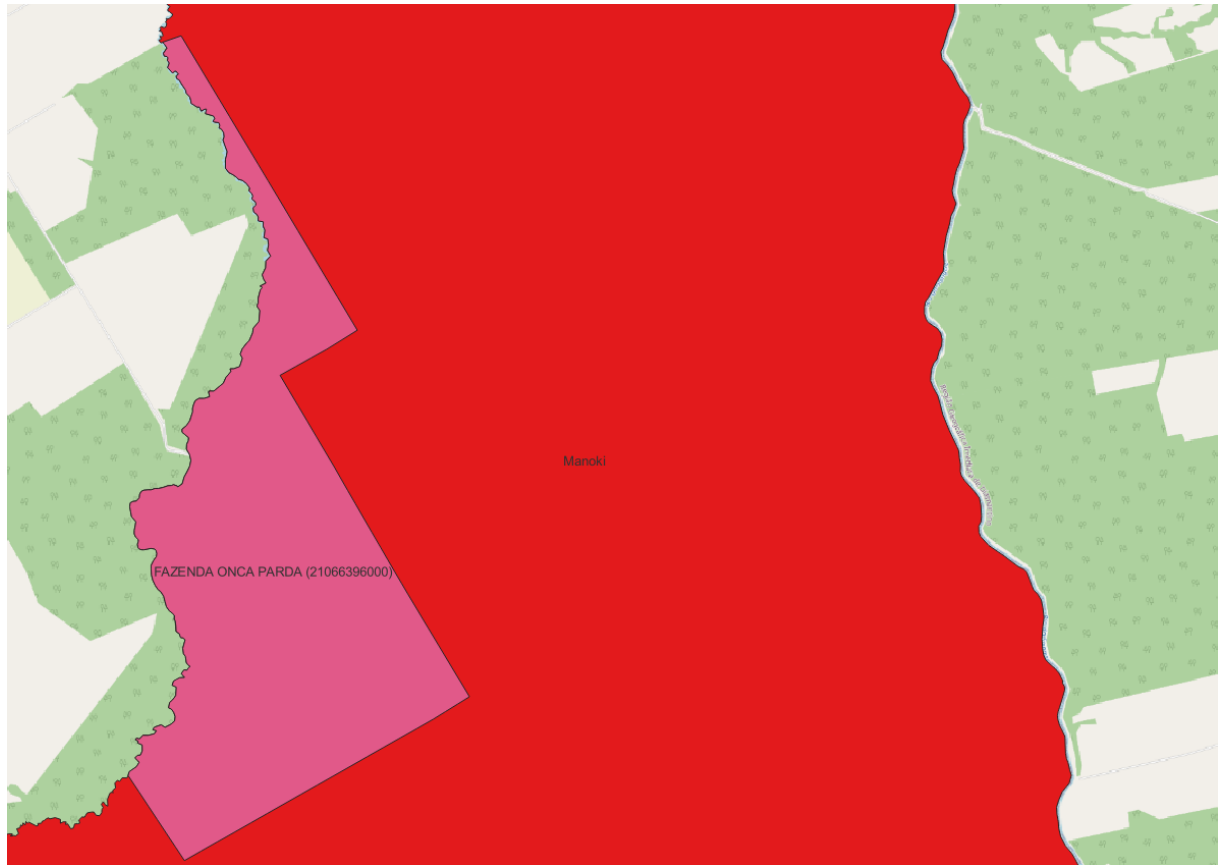
¹⁴¹ E-mail Communication between UBS and Marfrig on September 10, 2022; For an overview of the phases or demarcating indigenous lands and the context of cattle supply chains, see https://www.beefontrack.org/public/media/arquivos/1653923455-protocolo_monitoramento_gado_a4_40p_ingles_1.1_-_060-8767_v2.pdf, p. 19.

It is questionable whether such a self-declared policy of ignoring apparent encroachment into indigenous or other protected areas of up to 10% of a supplier's property, without further examination, could be appropriate. However, regardless of this, CCCA's research based on the methodology set out above (see section V.1), and presented below, located suppliers of both Tangara de Serra and Tucumã Units that significantly exceed Mafrig's self-declared margin for error, having most (if not all) of their area within indigenous land.

- **Tangara de Serra Unit – Mato Grosso**

Onça Parda Farm is an indirect supplier (level 2) to the Tangara Unit, in the State of Mato Grosso and is located inside the Manoki Territory.

Figure 10 – Onça Parda Farm



Subtitles: Indigenous Land (red) and Onça Parda Farm (pink).

The Manoki Indigenous Land has not yet been ratified, but it has been recognised since 2008, when Administrative Rule 1.429 was published declaring an area of approximately 252,000 hectares to be "of permanent possession of the Manoki people".¹⁴²

In 2010 the process of ratification of the area was initiated, but almost a decade later it has still not been homologated by the President. Among the reasons for this delay are the lawsuits that arose during the demarcation process contesting the regularization of the Indigenous Lands, where

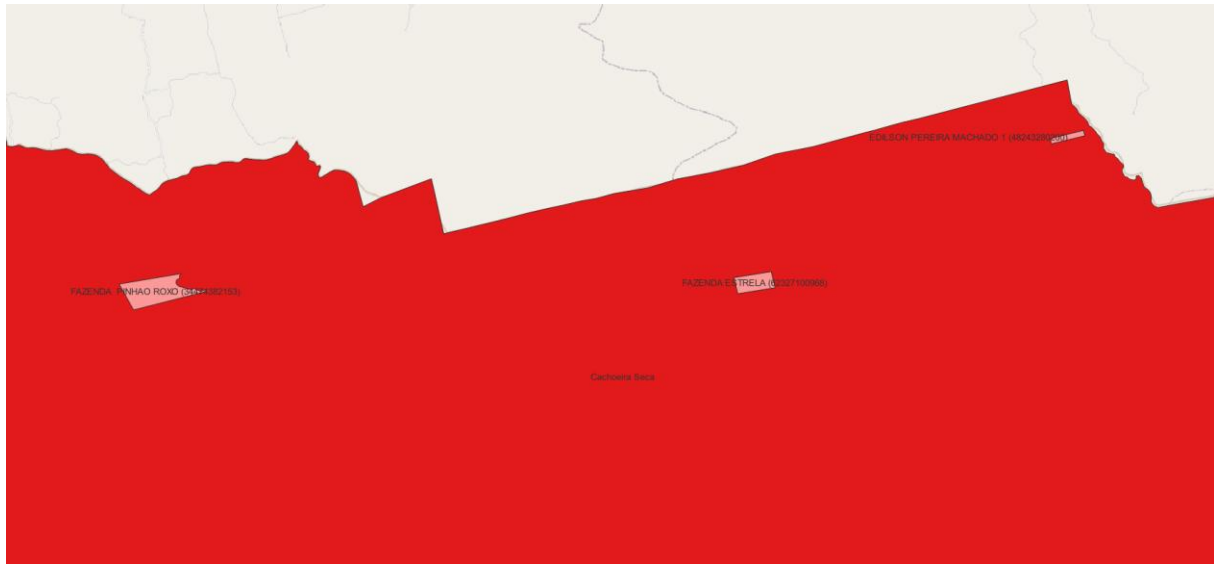
¹⁴² ISA (2022). Terra Indígena Manoki. Available from: <<https://terrasindigenas.org.br/pt-br/terras-indigenas/4157>>

the plaintiffs claim ownership of land in the area and ask for the suspension or annulment of the demarcation process.¹⁴³ Marfrig acknowledges that Onca Parda could be classified as an indirect supplier, including through MFG Agropecuária, but states that it ceased to be part of Marfrig's supply chain in March 2019.¹⁴⁴

- **Tucumã Unit - Pará**

Pinhão Roxo Farm and Estrela Farm were both indirect suppliers to the Tucumã Unit in Pará and are located inside the Cachoeira Seca Indigenous Land.

Figure 11 – Pinhão Roco and Estrela Farms



Subtitles: Indigenous Land (red) and Pinhão Roco and Estrela Farms (pink)

The Cachoeira Seca Indigenous Land was ratified in 2016, as one of the environmental conditions imposed in the licensing of the Belo Monte hydroelectric dam. The indigenous struggle for recognition of the land had been going on since 1970. However, the ratification was not enough to remove the invaders from the area.

¹⁴³ Anjos, A. B. Índios Manoki lutam por território invadido por fazendas. Available from: <<https://apublica.org/2018/03/indios-manoki-lutam-por-territorio-invadido-por-fazendas/#Link1>>.

¹⁴⁴ E-mail Communication between UBS and Marfrig on September 10, 2022

Currently, the Cachoeira Seca Indigenous Land is in land title regularization phase¹⁴⁵, but it is still the most deforested in the country according to INPE¹⁴⁶. In just four months, between September and December 2020, more than 1,700 hectares were deforested in the territory. This rate, almost four times greater than the total deforested in the first eight months of the year, coincides with the closure of an IBAMA base in the region which has previously been used to conduct inspections.¹⁴⁷

¹⁴⁵ Justiça Federal da Primeira Região (2020). Processo N. 0003017-82.2015.4.01.3903. Available from: <https://www.socioambiental.org/sites/blog.socioambiental.org/files/nsa/arquivos/decisao_tutela_urgencia_etnocidio.pdf>

¹⁴⁶ Apib (2021). Povo Arara, da T.I. Cachoeira Seca, lança campanha em defesa de direitos territoriais. Available from: <<https://apiboficial.org/2021/03/16/povo-arara-da-t-i-cachoeira-seca-lanca-campanha-em-defesa-de-direitos-territoriais/>>

¹⁴⁷ Instituto Socioambiental (2021). Desmatamento na Terra Indígena Cachoeira Seca (PA) explode após retirada de base de fiscalização. Available from: <<https://www.socioambiental.org/pt-br/noticias-socioambientais/desmatamento-na-terra-indigena-cachoeira-seca-pa-explode-apos-retirada-de-base-de-fiscalizacao>>.

Annex 1 - Map before and after deforestation Cremaq e Água Branca Farm (BrasilAgro)

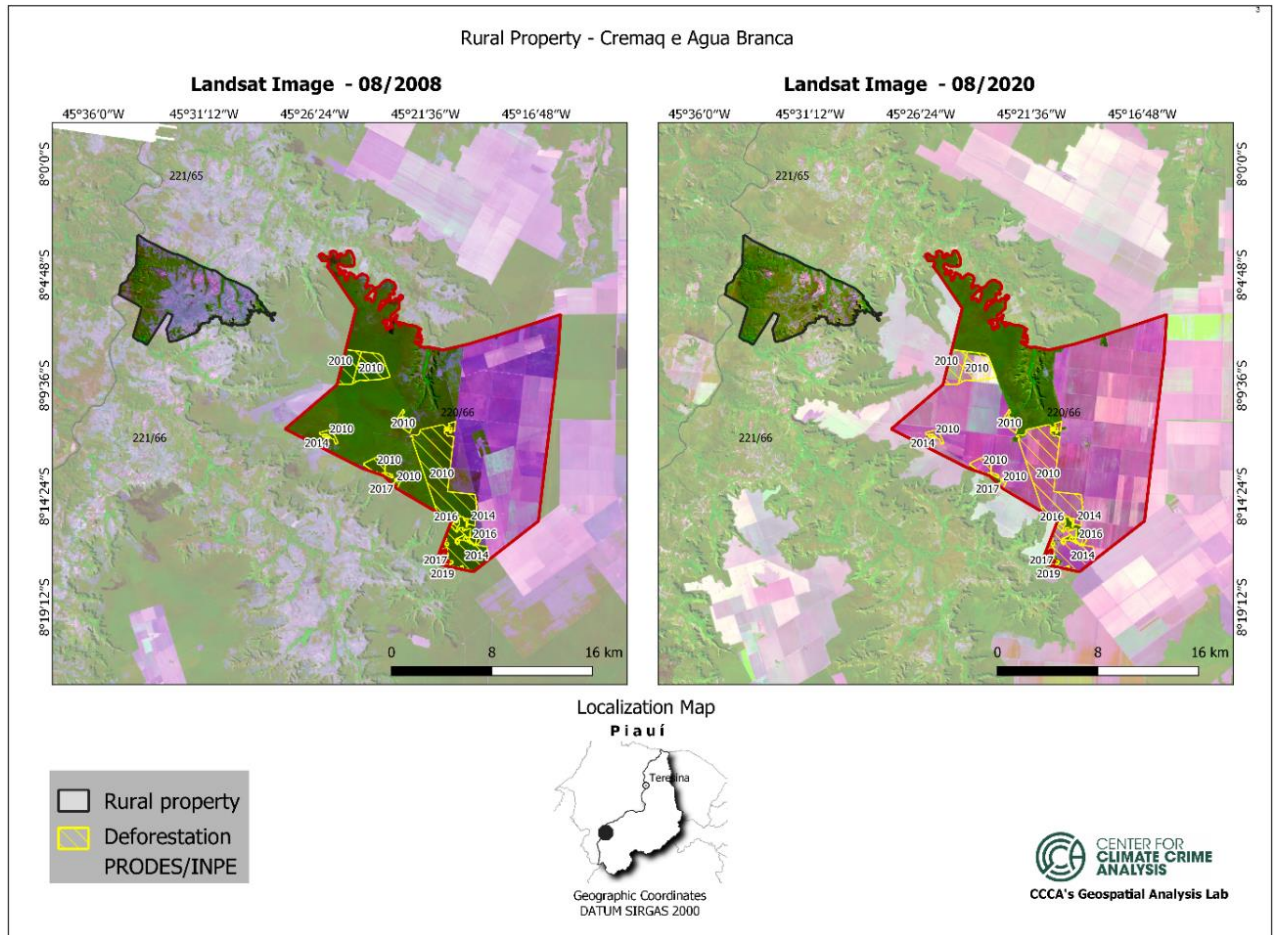


Figura 1- Comparative map before and after deforestation

NOTE: Areas in shades of pink or purple indicate loss of vegetation (deforestation), while areas in lime-green indicate new forest growth (reforestation). The yellow-bordered polygons indicate the deforestation alerts from the PRODES system (together with the year in which the alert was issued), showing the polygon on both the 2008 image to indicate where the deforestation will occur; and the later image to show where it had occurred.

However, the PRODES system captures only deforestation of primary vegetation (i.e., never cleared), and does not issue alerts for deforestation of secondary vegetation (i.e., areas that were deforested in the past and regenerated, even if that new / secondary forest is later cleared).

Therefore, in many images there are also areas that are identified as having suffered deforestation (indicated by shades of pink to represent the loss of this vegetation) but which that was not detected by PRODES. This may be due to the deforestation being secondary (rather than primary) forest, or it could be a failure in detection. To be certain, a historical study of the region would be necessary.

Annex 2 – Map before and after deforestation Preferência Farm (BrasilAgro)

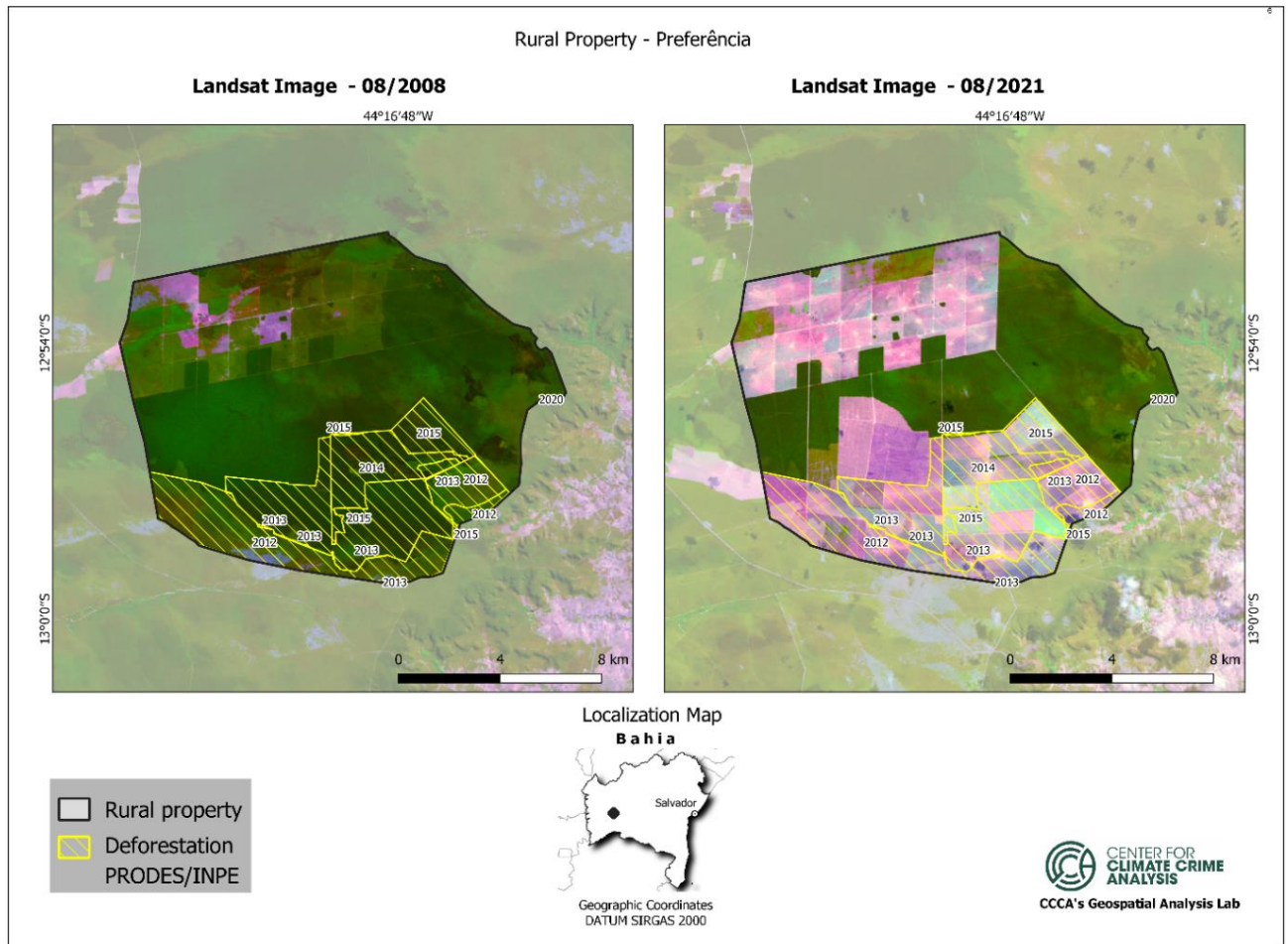


Figura 2 - Comparative map before and after deforestation.

NOTE: For explanation of the color coding on the images, see Annex 1.

Annex 3 – Map before and after deforestation Araucária Farm (BrasilAgro)



Figura 3 - Comparative map before and after deforestation.

NOTE: For explanation of the color coding on the images, see Annex 1.

Annex 4 – Map before and after deforestation Chaparral Farm (BrasilAgro)



Figura 4 – Comparative map before and after deforestation.

NOTE: For explanation of the color coding on the images, see Annex 1.

Annex 5 – Map before and after deforestation Avarandado Farm (BrasilAgro)

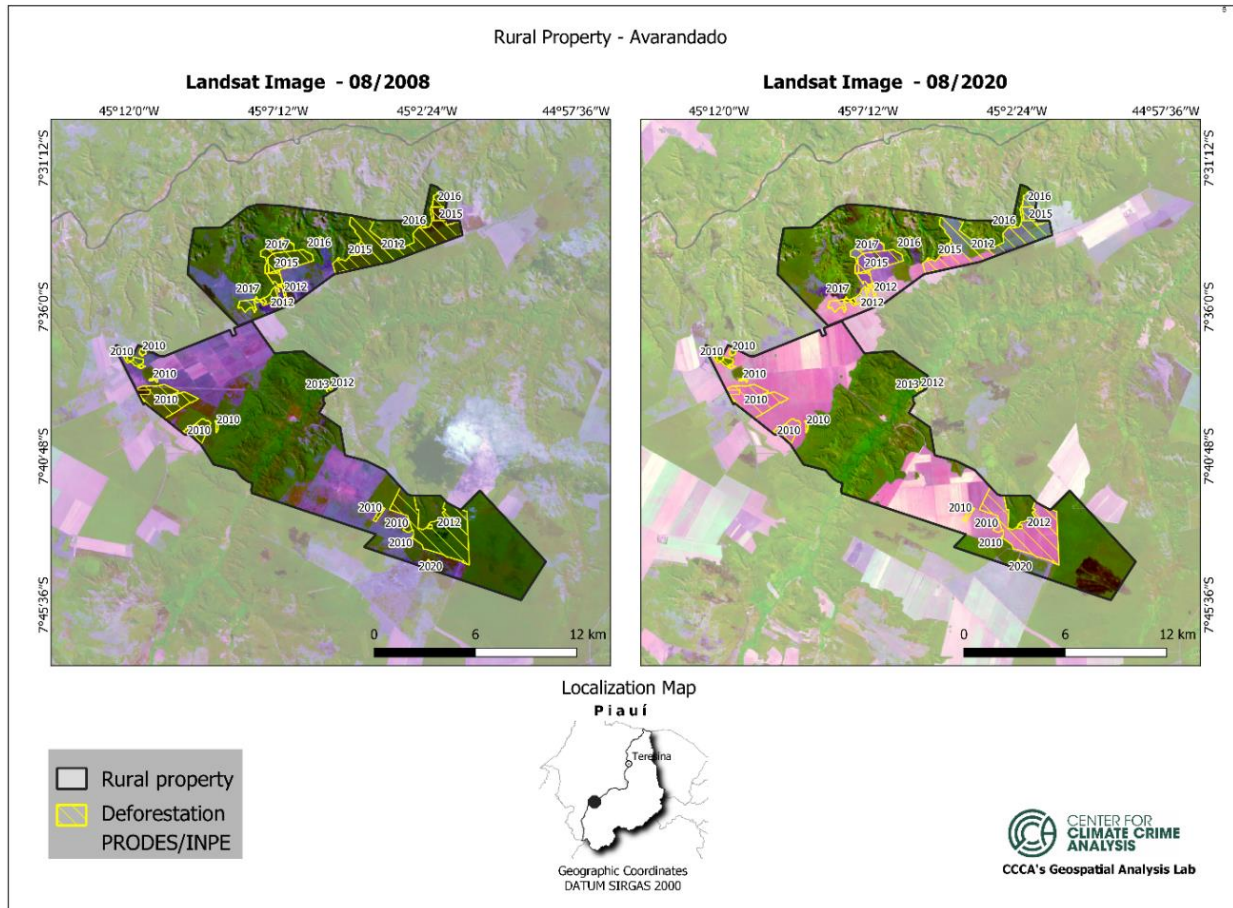


Figura 5 - Comparative map before and after deforestation.

NOTE: For explanation of the color coding on the images, see Annex 1.

Environmental and social risk policy framework

Comprehensive, highest industry standards, deeply rooted in our culture

Our comprehensive environmental and social risk framework is deeply rooted in our culture, and

- governs client and supplier relationships and applies firm-wide to all activities
- meets the highest industry standards as recognized by environmental, social, governance ratings
- is integrated in management practices and control principles and overseen at the most senior level of our firm.

This framework is aligned with our **UBS in society** organization that covers all the activities and capabilities related to sustainable finance (including sustainable investing), philanthropy, environmental, climate and human rights policies governing client and supplier relationships, our environmental footprint, human resources as well as community investment.

Introduction

We live in a world that is more interconnected, more interdependent and more interactive than ever before. Rapid technological advances in particular continue to have a profound effect on the economic, political, cultural, environmental and social landscape. These advances have changed the way we think and act. They have altered the way we do business. They have transformed the products and services we consume, and reshaped the perceptions of the world around us. While this has brought with it significant benefits and opportunities, it has also created far greater awareness of the challenges we all face.

As a global company, and the largest truly global wealth manager to high net worth and ultra high net worth clients, UBS is in a unique position to help address these challenges, both together with our clients and through our own efforts. Our principles and standards clearly define how we want to do things at UBS. They apply to all aspects of our business and the ways in which we engage with our stakeholders. Our Code of Conduct and Ethics documents our corporate responsibility. Our work in key societal areas such as protecting the environment and respecting human rights are part of this. Living up to our societal responsibilities contributes to the wider goal of sustainable development. As a global firm we take responsibility to lead the debate on important societal topics, contribute to the setting of standards and collaborate in and beyond our industry.

Managing environmental and social risks is a key component of our corporate responsibility. We apply an environmental and social risk policy framework to all our activities.

This helps us identify and manage potential adverse impacts to the environment and to human rights, as well as the associated risks affecting our clients and us. We have set standards in product development, investments, financing and for supply chain management decisions. We have identified certain controversial activities we will not engage in, or will only engage in under stringent criteria. As part of this process, we engage with clients and suppliers to better understand their processes and policies and to explore how any environmental and social risks may be mitigated.

The foundation of UBS's environmental and social risk policy framework is established in the Code of Conduct and Ethics of UBS and the **UBS in society** constitutional document.

Our focus

Our industry is playing an active role in addressing global issues such as human rights and the protection of our environment. Climate change impacts ecosystems, societies, and economies worldwide, and we support clients achieving their goals in support of the transition to a low-carbon economy. Growing environmental and human rights concerns have resulted in a fast-changing regulatory and competitive landscape which is affecting our firm, our suppliers and our clients. In response to these emerging risks and opportunities, we are shaping appropriate solutions and commitments.

Over twenty-five years ago, UBS was one of the first financial institutions to sign the United Nations (UN) Environment Programme's "Statement by Financial Institutions on the Environment and Sustainable Development." We were also among the first companies to endorse the UN Global Compact, we were an original signatory of the CDP, and our Asset Management (AM) business is an Investment Manager signatory to the Principles for Responsible Investment.

In 2019, we became a founding signatory of the UN Principles for Responsible Banking. The Principles constitute a comprehensive framework for the integration of sustainability across banks. They define accountabilities and require each bank to set, publish and work toward ambitious targets.

In 2000, our firm was a founding member of the Wolfsberg Group of banks, which was originally set up to promote good practice in combatting money laundering. In 2011, the firm was a driving force behind the establishment of the Thun Group of Banks, which has in the meantime published two discussion papers that seek to establish a framework to facilitate the identification of the key challenges and best

practice examples for the banking sector's implementation of the UN Guiding Principles on Business and Human Rights (UNGPs). We are a member of the Roundtable on Sustainable Palm Oil (RSPO), and joined its complaints panel in 2014. Also in 2014, we endorsed the Banking Environment Initiative's and Consumer Goods Forum's "Soft Commodities" Compact, which reconfirms our commitment to developing and implementing responsible business standards.

Progress made in implementing **UBS in society** is reported as part of UBS's annual reporting. This reporting is reviewed and assured externally according to the requirements of the Global Reporting Initiative's (GRI) Sustainability Reporting Guideline. UBS is certified according to ISO 14001, the international environmental management standard.

■ Refer to the "Driving change in business" section of the [Sustainability Report 2019](#) for an overview of external commitments and memberships

Climate change

Climate change is one of the most significant challenges of our time. The world's key environmental and social challenges – such as population growth, energy security, loss of biodiversity and access to drinking water and food – are all closely intertwined with climate change. This makes the transition to a low-carbon economy vital. We support this transition through our comprehensive climate strategy, focusing on four pillars:

- Protecting our own assets: We have reduced carbon-related assets on our balance sheet to 0.8% or USD 1.9 billion as of 31 December 2019, down from 1.6% at the end of 2018 and 2.8% at the end of 2017. In 2019 we also revised our standards in the energy and utilities sector and further embedded climate-related risk into our standard risk management framework.
- Protecting our clients' assets: We support our clients' efforts to assess, manage and protect them from climate-related risks by offering innovative products and services in investment, financing and research. We also actively engage on climate topics with companies that we invest in.
- Mobilizing private and institutional capital: We mobilize private and institutional capital towards investments facilitating climate change mitigation and adaptation and in supporting the transition to a low-carbon economy as corporate advisor, and/or with our lending capacity.
- Reducing our direct climate impact: We have committed to using 100% renewable electricity by mid-2020. This will reduce our firm's GHG footprint by 75% compared with 2004 levels.

We publicly support international, collaborative action against climate change. Our Chairman is a signatory to the European Financial Services Round Table's statement in support of a strong, ambitious response to climate change. Our Group CEO is a member of the Alliance of CEO Climate Leaders, an informal network of CEOs convened by the World Economic Forum and committed to climate action. Our Head Sustainable Equity Team within AM is a member of the Task Force on Climate-related Financial Disclosures (TCFD).

■ Find our Climate strategy under www.ubs.com/climate

Forests and biodiversity

Deforestation and forest degradation can cause biodiversity to decline. As approximately 80% of the world's documented species are found in tropical rainforests, deforestation will impact global biodiversity. Deforestation is, in fact, second only to the energy sector as a source of global greenhouse gas emissions and accounts for up to 20% of emissions, more than the entire global transport sector.

It is further estimated that more than 50% of tropical deforestation is due to the production of soy, palm oil, timber and beef. In human terms, millions of people rely directly on forests (small-scale agriculture, hunting and gathering, and harvesting forest products such as rubber). Yet, deforestation continues to cause severe societal problems, sometimes leading to violent conflict.

Recognizing these risks, we:

- became member of the RSPO in 2012
- endorsed the Banking Environment Initiative's and Consumer Goods Forum's "Soft Commodities" Compact. In doing so, we aim to support the transformation of soft commodity supply chains by expecting producers to be committed to achieving full certification according to applicable sustainability certification schemes, such as the RSPO. We acknowledge that land acquired without adequate consultation, compensation, and consideration of customary land rights (commonly referred to as land grabbing), can significantly impact local communities: often smallholders who primarily rely on subsistence farming to sustain their livelihood.
- have identified and will not engage in certain activities that contribute to deforestation and its related impacts (sections Controversial Activities – Where UBS will not do business and Areas of Concern – Where UBS will only do business under stringent criteria).

Human rights

UBS is committed to respecting and promoting human rights in all our business activities. We believe this is a responsible approach underlining our desire to reduce as far as possible potentially negative impacts on society. Our commitment in this important area is long standing. In July 2000, UBS was one of 43 companies that pledged to adhere to the Global Compact.

The principles of the Global Compact, today the largest corporate responsibility initiative globally, stem from the Universal Declaration of Human Rights, the International Labor Organization's Declaration on Fundamental Principles and Rights at Work, the Rio Declaration on Environment and Development and the UN Convention Against Corruption. The United Nations took a significant step in 2011 by endorsing the UNGPs. At this point, UBS together with other banks formed the Thun Group of Banks to jointly consider these developments and conclusions and to share experiences and ideas regarding the implementation of the UNGPs. To this end, the Thun Group of Banks has published two discussion papers that seek to establish a framework to facilitate the identification of the key challenges and best practice examples for the banking sector's implementation of the UNGPs.

Both discussion papers were also intended to inform other pertinent initiatives, in the specific case of the second the OECD's proactive agenda on Responsible Business Conduct, which released in 2019 its guidance on due diligence for Responsible Business Conduct in General Corporate Lending and Securities Underwriting. UBS is a member of the Advisory Group to the OECD's project.

Recognizing these risks, we:

- established a UBS Position on human rights in 2006. In 2013, we revised the firm's Environmental and Social Risk Framework to formalize accountability for human rights issues.
- stipulated that we will not engage in commercial activities that make use of child labor and forced labor, or that infringe the rights of indigenous peoples (see section Controversial Activities – Where UBS will not do business).
- will continue our work internally, and externally with the Thun Group of Banks and the OECD, to understand how best to implement the UNGPs across our operations.

Our standards

UBS has set standards in product development, investments, financing and supply chain management decisions, which include the stipulation of controversial activities and other areas of concern UBS will not engage in, or will only engage in under stringent criteria.

Controversial Activities – Where UBS will not do business

UBS will not knowingly provide financial or advisory services to clients whose primary business activity, or where the proposed transaction, is associated with severe environmental or social damage to or through use of:

- **World heritage** sites as classified by UNESCO;
- **Wetlands** on the "Ramsar list";
- **Endangered species** of wild flora and fauna listed in "Appendix 1" of the Convention on International Trade in Endangered Species;
- **High conservation value forests** as defined by the six categories of the Forestry Stewardship Council (FSC);
- **Illegal fire:** uncontrolled and/or illegal use of fire for land clearance;
- **Illegal logging** including purchase of illegal harvested timber (logs or roundwood);
- **Child labor** according to "ILO-conventions 138" (minimum age) and 182 (worst forms);
- **Forced labor** according to ILO-convention 29; and
- **Indigenous peoples' rights** in accordance with "IFC Performance Standard 7".

The same standards apply when UBS purchases goods or services from suppliers.

In addition, UBS does not directly or indirectly finance the development, production or purchase of controversial weapons of such companies determined to fall within the "Swiss Federal Act on War Materials."

On the topic of cluster munitions and anti-personnel mines:

UBS does not provide credit facilities to, nor conduct capital market transactions for, companies that are involved in the development, production or purchase of cluster munitions and anti-personnel mines. UBS does not include securities of affected companies in its actively managed retail and institutional funds and in discretionary mandates. UBS draws upon external expertise to decide whether a company is subject to the restrictions imposed by Swiss law.

Areas of Concern – Where UBS will only do business under stringent criteria

Specific guidelines and assessment criteria apply to transactions with corporate clients engaged in the areas of concern listed below. The guidelines and assessment criteria apply to loans, trade finance, direct investments in real estate and infrastructure, securities and loan underwriting transactions, and investment banking advisory assignments.

Transactions in the areas listed below trigger an enhanced due diligence and approval process. In addition to the assessment of regulatory compliance, adherence to UBS's controversial activities standards, past and present environmental and human rights performance, as well as concerns of stakeholder groups, these transactions require an assessment of the following criteria:

Soft commodities

- **Palm oil:** Companies must be a member of the RSPO and not subject to any unresolved public criticism from the RSPO. Companies must further have some level of mill or plantation certification and be publicly committed to achieving full certification (evidence must be available). Company must also be committed to "No Deforestation, No Peat and No Exploitation" (NDPE).
- **Soy:** Companies producing soy in markets at high risk of tropical deforestation must be a member of the Roundtable on Responsible Soy (RTRS) and not subject to any unresolved public criticism from the RTRS. Companies must further be publicly committed to achieving full certification (evidence must be available).
- **Timber:** Companies producing timber in markets at high risk of tropical deforestation must seek to achieve full certification of their production according to the Forest Stewardship Council (FSC) or a national scheme endorsed against the 2010 Programme for the Endorsement of Forest Certification (PEFC) meta standard for timber products. Company must also have fire prevention, monitoring and suppression measures in place.
- **Fish and seafood:** Companies producing, processing or trading fish and seafood must provide credible evidence of no illegal, unreported and unregulated fishing in their own production and supply chain.

Power Generation

- **Coal-fired power plants (CFPP):** We do not provide project-level finance for new coal-fired power plants globally and only support financing transactions of existing coal-fired operators (>30% coal reliance) who have a transition strategy in place that aligns with a pathway under the Paris Agreement, or the transaction is related to renewable energy.

- **Large dams:** Transactions directly related to large dams include an assessment against the recommendations made by the World Commission on Dams (WCD) and the International Hydropower Association Sustainability Assessment Protocol.
- **Nuclear power:** Transactions directly related to the construction of new, or the upgrading of existing nuclear power plants include an assessment on whether the country of domicile of the client / operation has ratified the Treaty on the Non-Proliferation of Nuclear Weapons.

Extractives

- **Arctic oil and oil sands:** We do not provide financing where the stated use of proceeds is for new offshore oil projects in the Arctic or greenfield¹ oil sands projects, and only provide financing to companies, which have significant reserves or production in arctic oil and/or oil sands (>30% of reserves or production), where the stated use of proceeds is related to renewable energy or conventional oil & gas assets.
- **Coal mining:** We do not provide financing where the stated use of proceeds is for greenfield¹ thermal coal mines and do not provide financing to coal mining companies engaged in mountain top removal operations. We continue to severely restrict lending and capital raising to the coal mining sector.
- **Liquefied Natural Gas (LNG):** Transactions directly related to LNG infrastructure assets are subject to enhanced ESR due diligence considering relevant factors such as management of methane leaks, and the company's past and present environmental and social performance.
- **Ultra-deepwater drilling:** Transactions directly related to ultra-deepwater drilling assets are subject to enhanced ESR due diligence considering relevant factors such as environmental impact analysis, spill prevention and response plans, and the company's past and present environmental and social performance
- **Hydraulic fracturing:** Transactions with companies that practice hydraulic fracturing in environmentally and socially sensitive areas are assessed against their commitment to and certification of voluntary standards, such as the American Petroleum Institute's documents and standards for hydraulic fracturing.
- **Precious metals:** Transactions directly related to precious metals assets that have a controversial environmental and social risk track record are assessed against the client's commitment to and certification of voluntary standards, such as the International Council on Mining & Metals' (ICMM) International Cyanide Management Code (ICMC).
- **Diamonds:** Transactions with companies that mine and trade rough diamonds are assessed on the client's commitment to and certification of voluntary standards, such as the ICMC, and rough diamonds must be certified under the Kimberley Process.

Our processes and governance

UBS applies an environmental and social risk framework to all transactions, products, services and activities such as lending, capital raising, advisory services or investments that involve a party associated with environmentally or socially sensitive

activities. The framework seeks to identify and manage potential adverse impacts to the environment and to human rights, as well as the financial and reputation risks of being associated with them.

Integration in risk, compliance and operations processes

Procedures and tools for the identification, assessment and monitoring of environmental and social risks are applied and integrated into standard risk, compliance and operations processes.

- **Client onboarding:** Potential clients are assessed for environmental and social risks associated with their business activities as part of UBS's Know Your Client compliance processes.
- **Transaction due diligence:** Environmental and social risks are identified and assessed as part of standard transaction due diligence and decision-making processes in all business divisions and relevant product lines.
- **Product development and investment decision processes:** New financial products and services are reviewed before their launch in order to assess their compatibility and consistency with UBS's environmental and human rights standards. Environmental and social risks are also considered in investment decision processes and when exercising ownership rights like proxy voting and engagement with the management of investee entities.
- **Own operations:** Our operational activities and employees, or contractors working on UBS premises, are assessed for compliance with relevant environmental, health and safety, and labor rights regulations.
- **Supply chain management:** Environmental and social risks are assessed when selecting and dealing with suppliers. UBS also evaluates goods and services that pose potential environmental, labor and human rights risks during lifecycle (production, usage, and disposal) as part of its purchasing processes.
- **Portfolio review:** At portfolio level, we regularly review sensitive sectors and activities prone to bearing environmental and social risks. We assess client exposure and revenue in such sectors and attempt to benchmark the portfolio quality against regional and/or sector averages. Such portfolio reviews give us an accurate aggregated exposure profile and an enhanced insight into our transaction and client onboarding processes. Based on the outcome of these reviews, we can explore ways to improve the future portfolio profile along a range of risk parameters.

Clients, transactions or suppliers potentially in breach of UBS's position, or otherwise subject to significant environmental and human rights controversies, are identified as part of UBS's standard risk and compliance processes. Advanced data analytics on companies associated with such risks is integrated into the web-based compliance tool used by our staff before they enter into a client or supplier relationship, or a transaction. The systematic nature of this tool significantly enhances our ability to identify potential risk. In 2019, 1,889 referrals were assessed by our environmental and social risk unit, of which 82 were rejected or not pursued, 299 were approved with qualifications and 32 were pending.

¹ Greenfield means a new mine / well or an expansion of an existing mine / well which results in a material increase in existing production capacity.

Environmental and social risk assessments

	For the year ended			% change from
	31.12.19	31.12.18	31.12.17	31.12.18
Cases referred for assessment¹	1,889	2,114	2,170	(11)
by region				
Americas	248	288	305	(14)
Asia Pacific	479	718	604	(33)
Europe, Middle East and Africa (excluding Switzerland)	282	293	253	(4)
Switzerland	880	815	1,008	8
by business division				
Global Wealth Management ²	199	426	507	(53)
Personal & Corporate Banking	801	684	795	17
Asset Management	4	7	7	(43)
Investment Bank	849	980	852	(13)
Corporate Center ³	36	17	9	112
by sector				
Agribusiness ⁴	197	277	291	(29)
Chemicals	61	91	87	(33)
Financial ⁵	722	589	617	23
Infrastructure	82	109	53	(25)
Metals and mining	200	249	233	(20)
Oil and gas	150	187	207	(20)
Technology ⁶	105	164	140	(36)
Transport	40	51	53	(22)
Utilities	108	176	191	(39)
Other ⁷	224	221	298	1
by outcome⁸				
approved ⁹	1,476	1,648	1,679	(10)
approved with qualifications ¹⁰	299	358	397	(16)
rejected or not further pursued ¹¹	82	108	94	(24)
pending ¹²	32	0	0	

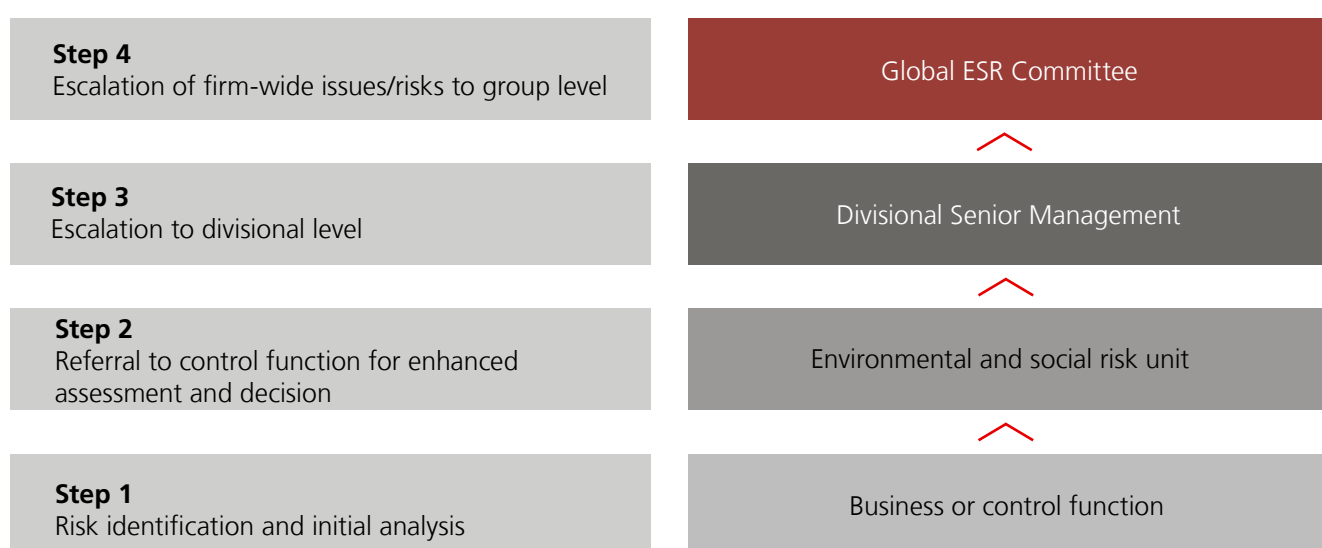
¹ Transactions and client onboarding requests referred to the environmental and social risk (ESR) function. ² Wealth Management and Wealth Management Americas reported as Global Wealth Management from 2018. Therefore, 2017 numbers were restated. ³ Relates to procurement / sourcing of products and services. ⁴ Includes, e.g., companies producing or processing fish and seafood, forestry products, biofuels, food and beverage. ⁵ Includes, e.g., banks, commodity traders, investments and equity firms. ⁶ Includes technology and telecom companies. ⁷ Includes, e.g., aerospace and defense, general industrials, retail and wholesale (from 2017). ⁸ "By outcome" 2019 data is from 22.1.2020. ⁹ Client / transaction / supplier subject to an ESR assessment and considered in compliance with UBS's ESR framework. ¹⁰ Client / transaction / supplier subject to an ESR assessment and approved with qualifications. Qualifications may include ring-fencing of certain assets, conditions towards client / supplier or internal recommendations. ¹¹ Client / transaction / supplier subject to an ESR assessment and rejected or not further pursued. ¹² Decision pending. Pending cases 2018 have been closed and reallocated to the other outcome categories.

Escalation and approval processes

Where business or control functions responsible for identifying and assessing environmental and social risks as part of due diligence processes determine the existence of potential material risks, they refer the client, supplier or transaction to a

specialized environmental and social risk unit for enhanced due diligence. If identified risks are believed to pose potentially significant environmental or social risks, they are rejected by the risk unit or are escalated according to the firm's reputation risk escalation process.

Environmental and social risk escalation process



Governance and oversight

In view of the many environmental and social challenges globally, these topics will continue to increase in relevance for banks. These developments therefore require regular and critical assessment of our policies and practices, based on an accurate monitoring and analysis of societal topics of potential relevance to UBS.

This process is the responsibility of a committee at Group Executive Board-level, the Global Environmental and Social Risk Committee, which sets the overall risk appetite for the firm and resolves and policy matters relating to environmental and social risks and their associated reputation risks.

It is chaired by the Group Chief Risk Officer, who is responsible for the development and implementation of principles and appropriate independent control frameworks for environmental and social risks within UBS.

All corporate responsibility and sustainability developments at UBS are monitored and reviewed by the UBS Corporate Culture and Responsibility Committee, a Board of Directors' committee of UBS Group AG. The Committee supports the Board in its duties to safeguard and advance UBS's reputation for responsible corporate conduct. In this capacity it reviews and monitors the implementation of UBS's ESR framework.



Environmental and social risk policy framework

Comprehensive, highest industry standards, deeply rooted in our culture

Our comprehensive environmental and social risk (ESR) framework is deeply rooted in our culture, and

- governs client and supplier relationships and applies firmwide to all activities;
- meets the highest industry standards as recognized by environmental, social, governance ratings; and
- is integrated in management practices and control principles and overseen at the most senior level of our firm.

This framework¹ is aligned with our *UBS in Society* organization, which covers all the activities and capabilities related to sustainable finance (including sustainable investing), philanthropy, environmental, climate and human rights policies governing client and supplier relationships, our environmental footprint, human resources as well as community investment.

Introduction

We live in a world that is more interconnected, more interdependent and more interactive than ever before. Rapid technological advances, in particular, continue to have a profound effect on the economic, political, cultural, environmental and social landscape. These advances have changed the way we think and act. They have altered the way we do business. They have transformed the products and services we consume, and reshaped the perceptions of the world around us. While this has brought with it significant benefits and opportunities, it has also created far greater awareness of the challenges we all face.

As a global company and the largest truly global wealth manager, UBS is in a unique position to help address these challenges, both together with our clients and through our own efforts.

Our principles and standards clearly define how we want to do things at UBS. They apply to all aspects of our business and the ways in which we engage with our stakeholders. Our Code of Conduct and Ethics guides our approach to corporate responsibility. Our work in key societal areas such as protecting the environment and respecting human rights are part of this. Living up to our societal responsibilities contributes to the wider goal of sustainable development. As a global firm, we take responsibility for leading the debate on important societal topics, contribute to the setting of standards and collaborate in and beyond our industry.

Managing ESR is a key component of our corporate responsibility. We apply an ESR policy framework to all our activities. This helps us identify and manage potential adverse impacts to the environment and to human rights, as well as the associated risks affecting our clients and us. We have set standards in product development, investments, financing and for supply chain management decisions. We have identified certain controversial activities we will not engage in, or will only engage in under stringent criteria. As part of this process, we engage with clients and suppliers to better understand their processes and policies and to explore how any environmental and social risks may be mitigated.

The foundation of UBS's ESR policy framework is established in the Code of Conduct and Ethics of UBS and the *UBS in Society* constitutional document.

¹ This document has been updated following the release of the UBS Net Zero Commitment Statement in April 2021.

Our focus

Our industry is playing an active role in addressing global issues such as human rights and the protection of our environment. Climate change impacts ecosystems, societies and economies worldwide, and we support clients in achieving their goals amid the transition to a low-carbon economy. Growing environmental and human rights concerns have resulted in a fast-changing regulatory and competitive landscape, which is affecting our firm, our suppliers and our clients. In response to these emerging risks and opportunities, we are shaping appropriate solutions and commitments.

Over twenty-five years ago, UBS was one of the first financial institutions to sign the United Nations' Environment Programme's "Statement by Financial Institutions on the Environment and Sustainable Development." We were also among the first companies to endorse the UN Global Compact, we were an original signatory of the CDP, and our Asset Management business is an Investment Manager signatory to the Principles for Responsible Investment.

In 2000, our firm was a founding member of the Wolfsberg Group of banks, which was originally set up to promote good practice in combatting money laundering. In 2011, the firm was a driving force behind the establishment of the Thun Group of Banks, which has, in the meantime, published two discussion papers that seek to establish a framework to facilitate the identification of the key challenges and best practice examples for the banking sector's implementation of the UN Guiding Principles on Business and Human Rights (UNGPs). We are a member of the Roundtable on Sustainable Palm Oil (RSPO).

In 2014, we endorsed the Banking Environment Initiative's and Consumer Goods Forum's "Soft Commodities" Compact, which reconfirms our commitment to developing and implementing responsible business standards.

In 2019, we became a founding signatory of the UN Principles for Responsible Banking. The Principles constitute a comprehensive framework for the integration of sustainability across banks. They define accountabilities and require each bank to set, publish and work toward ambitious targets.

In 2020 our firm became a founding member of the Net Zero Asset Managers initiative, and a founding member of the Net Zero Banking Alliance in 2021. These industry-led alliances bring together banks and asset managers committed to reaching net zero emissions by 2050. Progress made in implementing UBS in Society objectives is reported as part of UBS's annual reporting. This reporting is reviewed and assured externally according to the requirements of the Global Reporting Initiative's (GRI) Sustainability Reporting Guideline. UBS is certified according to ISO 14001, the international environmental management standard.

- › **Refer to the UBS Sustainability Report 2020 for an overview of our external commitments and memberships**

Climate change

Climate change is one of the most significant challenges of our time. The world's key environmental and social challenges – such as population growth, energy security, loss of biodiversity and access to drinking water and food – are all closely intertwined with climate change. This makes the transition to a low-carbon economy vital. We support this transition through our comprehensive climate strategy, focusing on four pillars:

- **Protecting our own assets:** We have reduced carbon-related assets on our balance sheet to 1.9% or USD 5.4 billion as of 31 December 2020, down from 2.3% at the end of 2019 and 2.8% at the end of 2018. In 2020, we further embedded climate-related risk into our standard risk management framework.
- **Protecting our clients' assets:** We support our clients' efforts to assess, manage and protect them from climate-related risks by offering innovative products and services in investment, financing and research. We also actively engage on climate topics with companies that we invest in.
- **Mobilizing private and institutional capital:** We mobilize private and institutional capital toward investments facilitating climate change mitigation and adaptation and in supporting the transition to a low-carbon economy as corporate advisor, and / or with our lending capacity.
- **Reducing our direct climate impact:** In 2020, we achieved the target of using 100% renewable electricity. This reduces our firm's greenhouse gas footprint by 79% compared with 2004 levels.

We publicly support international, collaborative action against climate change. Our Chairman is a signatory to the European Financial Services Round Table's statement in support of a strong, ambitious response to climate change. Our Group CEO is a member of the Alliance of CEO Climate Leaders, an informal network of CEOs convened by the World Economic Forum and committed to climate action. We also continue to support the TCFD development with formal representation in the Task Force since 2016.

In April 2021 we issued a Net Zero Commitment, pledging our firm to achieve net zero greenhouse gas emissions resulting from all aspects (Scope 1, 2, 3) of our business by 2050, with intermediate milestones established to ensure progress.

- › **Refer to www.ubs.com/climate for the UBS Net Zero Commitment Statement**
- › **Refer to the UBS Sustainability Report 2020 for the full climate strategy**

Forests and biodiversity

Deforestation and forest degradation can cause biodiversity to decline. As approximately 80% of the world's documented species are found in tropical rainforests, deforestation will impact global biodiversity. Deforestation is, in fact, second only to the energy sector as a source of global greenhouse gas emissions and accounts for up to 20% of emissions, more than the entire global transport sector.

It is further estimated that more than 50% of tropical deforestation is due to the production of soy, palm oil, timber and beef. In human terms, millions of people rely directly on forests (small-scale agriculture, hunting and gathering, and harvesting forest products such as rubber). Yet, deforestation continues to cause severe societal problems, sometimes leading to violent conflict.

Recognizing these risks, we:

- became member of the Roundtable on Sustainable Palm Oil (RSPO) in 2012
- endorsed the Banking Environment Initiative's and Consumer Goods Forum's "Soft Commodities" Compact. In doing so, we aim to support the transformation of soft commodity supply chains by expecting producers to be committed to achieving full certification according to applicable sustainability certification schemes, such as the RSPO. We acknowledge that acquiring land without adequate consultation, compensation and consideration of customary land rights (commonly referred to as land grabbing) can significantly impact local communities, often smallholders who primarily rely on subsistence farming to sustain their livelihood
- have identified and will not engage in certain activities that contribute to deforestation and its related impacts (see the subsequent "Controversial activities – where UBS will not do business" and "Areas of concern – where UBS will only do business under stringent criteria" sections)

Human rights

UBS is committed to respecting and promoting human rights in all our business activities. We believe this is a responsible approach underlining our desire to reduce, as far as possible, potentially negative impacts on society. Our commitment in this important area is long standing. In July 2000, UBS was one of 43 companies that pledged to adhere to the Global Compact.

The principles of the Global Compact, today the largest corporate responsibility initiative globally, stem from the Universal Declaration of Human Rights, the International Labor Organization's Declaration on Fundamental Principles and Rights at Work, the Rio Declaration on Environment and Development and the UN Convention Against Corruption. The United Nations took a significant step in 2011 by endorsing the United Nations Guiding Principles on Business and Human Rights (UNGPs). At this point, UBS together with other banks, formed the Thun Group of Banks to jointly consider these developments and conclusions and to share experiences and ideas regarding the implementation of the UNGPs. To this end, the Thun Group of Banks has published two discussion papers that seek to establish a framework to facilitate the identification of the key challenges and best practice examples for the banking sector's implementation of the UNGPs. Both discussion papers were also intended to inform other pertinent initiatives. The second paper, for example, focused on the Organisation for Economic Co-operation and Development's (OECD) proactive agenda on Responsible Business Conduct and in particular the OECD's 2019 guidance on due diligence for Responsible Business Conduct in General Corporate Lending and Securities Underwriting. UBS is a member of the Advisory Group to the OECD's project.

Recognizing these risks, we:

- established a UBS Position on human rights in 2006 and in 2013, we revised the firm's ESR framework to formalize accountability for human rights issues
- stipulated that we will not engage in commercial activities that make use of child labor and forced labor, or that infringe the rights of indigenous peoples (see the subsequent section "Controversial activities – where UBS will not do business")
- will continue our work internally, and externally with the Thun Group of Banks and the OECD, to understand how best to implement the UNGPs across our operations

Our standards

UBS has set standards in product development, investments, financing and supply chain management decisions, which include the stipulation of controversial activities and other areas of concern UBS will not engage in, or will only engage in under stringent criteria.

Controversial activities – where UBS will not do business

UBS will not knowingly provide financial or advisory services to clients whose primary business activity, or where the proposed transaction, is associated with severe environmental or social damage to or through use of:

- **World heritage sites** as classified by the United Nations Educational, Scientific and Cultural Organization (UNESCO);
- **Wetlands** on the Ramsar list;
- **Endangered species** of wild flora and fauna listed in Appendix 1 of the Convention on International Trade in Endangered Species;
- **High conservation value forests** as defined by the six categories of the Forest Stewardship Council (FSC);
- **Illegal fire**: uncontrolled and / or illegal use of fire for land clearance;
- **Illegal logging** including purchase of illegal harvested timber (logs or roundwood);
- **Child labor** according to ILO-conventions 138 (minimum age) and 182 (worst forms);
- **Forced labor** according to ILO-convention 29; and
- **Indigenous peoples' rights** in accordance with IFC Performance Standard 7.

The same standards apply when UBS purchases goods or services from suppliers.

In addition, UBS does not directly or indirectly finance the development, production or purchase of controversial weapons of such companies determined to fall within the "Swiss Federal Act on War Materials."

On the topic of cluster munitions and anti-personnel mines: UBS does not provide credit facilities to, nor conduct capital market transactions for, companies that are involved in the development, production or purchase of cluster munitions and anti-personnel mines. UBS does not include securities of affected companies in its actively managed retail and institutional funds and in discretionary mandates. UBS draws upon external expertise to decide whether a company is subject to the restrictions imposed by Swiss law.

Areas of concern – where UBS will only do business under stringent criteria

Specific guidelines and assessment criteria apply to transactions with corporate clients engaged in the areas of concern listed below. The guidelines and assessment criteria apply to loans, trade finance, direct investments in real estate and infrastructure, securities and loan underwriting transactions, and investment banking advisory assignments.

Transactions in the areas listed below trigger an enhanced due diligence and approval process. In addition to the assessment of regulatory compliance, adherence to UBS's controversial activities standards, as well as consideration of past and present environmental and human rights performance and concerns of stakeholder groups, these transactions require an assessment of the following criteria:

Soft commodities

- **Palm oil**: Companies must be a member of the RSPO and not subject to any unresolved public criticism from the RSPO. Companies must further have some level of mill or plantation certification and be publicly committed to achieving full certification (evidence must be available). Companies must also be committed to "No Deforestation, No Peat and No Exploitation" (NDPE).
- **Soy**: Companies producing soy in markets at high risk of tropical deforestation must be a member of the Roundtable on Responsible Soy (RTRS), or must apply a similar standard such as Proterra, International Sustainability & Carbon Certification (ISCC), Cefetra Certified Responsible Soya (CRS), and not be subject to any unresolved public criticism from these standards. When a company is not certified, it must credibly commit to RTRS or a similar standard, providing a robust time-bound plan or demonstrate a credible commitment toward an equivalent standard, to be independently verified.
- **Timber**: Companies producing timber in markets at high risk of tropical deforestation must seek to achieve full certification of their production according to the Forest Stewardship Council (FSC) or a national scheme endorsed against the 2010 Programme for the Endorsement of Forest Certification (PEFC) meta standard for timber products. Companies must also have fire prevention, monitoring and suppression measures in place.
- **Fish and seafood**: Companies producing, processing or trading fish and seafood must provide credible evidence of no illegal, unreported and unregulated fishing in their own production and supply chain.

Power Generation

- **Coal-fired power plants (CFPP)**: We do not provide project-level finance for new coal-fired power plants globally and only support financing transactions of existing coal-fired operators (>20% coal reliance) if they have a transition strategy that aligns with the goals of the Paris Agreement, or if the transaction is related to renewable energy or clean technology.
- **Large dams**: Transactions directly related to large dams include an assessment against the recommendations made by the World Commission on Dams (WCD) and the International Hydropower Association Sustainability Assessment Protocol.
- **Nuclear power**: Transactions directly related to the construction of new, or the upgrading of existing nuclear power plants include an assessment on whether the country of domicile of the client/operation has ratified the Treaty on the Non-Proliferation of Nuclear Weapons.

Extractives

- **Arctic oil and oil sands:** We do not provide financing where the stated use of proceeds is for new offshore oil projects in the Arctic or greenfield¹ oil sands projects, and only provide financing to companies with significant reserves or production in arctic oil and/or oil sands (>20% of reserves or production) if they have a transition strategy that aligns with the goals of the Paris Agreement, or if the transaction is related to renewable energy or clean technology.
- **Coal mining:** We do not provide financing where the stated use of proceeds is for greenfield¹ thermal coal mines and do not provide financing to coal-mining companies engaged in mountain top removal operations. We only provide financing to existing thermal coal-mining companies (>20% of revenues) if they have a transition strategy that aligns with the goals of the Paris Agreement, or if the transaction is related to renewable energy or clean technology.
- **Liquefied Natural Gas (LNG):** Transactions directly related to LNG infrastructure assets are subject to enhanced ESR due diligence considering relevant factors such as management of methane leaks, and the company's past and present environmental and social performance.
- **Ultra-deepwater drilling:** Transactions directly related to ultra-deepwater drilling assets are subject to enhanced ESR due diligence considering relevant factors such as environmental impact analysis, spill prevention and response plans, and the company's past and present environmental and social performance.
- **Hydraulic fracturing:** Transactions with companies that practice hydraulic fracturing in environmentally and socially sensitive areas are assessed against their commitment to and certification of voluntary standards, such as the American Petroleum Institute's documents and standards for hydraulic fracturing.
- **Precious metals:** Transactions directly related to precious metals assets that have a controversial ESR track record are assessed against the client's commitment to and certification of voluntary standards, such as the International Council on Mining and Metals' (ICMM) International Cyanide Management Code (ICMC).
- **Diamonds:** Transactions with companies that mine and trade rough diamonds are assessed on the client's commitment to and certification of voluntary standards, such as the ICMM, and rough diamonds must be certified under the Kimberley Process.

Our processes and governance

UBS applies an ESR framework to all transactions, products, services and activities such as lending, capital raising, advisory services or investments that involve a party associated with environmentally or socially sensitive activities. The framework seeks to identify and manage potential adverse impacts to the environment and to human rights, as well as the financial and reputational risks of being associated with them.

Integration in risk, compliance and operations processes

Procedures and tools for the identification, assessment and monitoring of environmental and social risks are applied and integrated into standard risk, compliance and operations processes.

- **Client onboarding:** Potential clients are assessed for environmental and social risks associated with their business activities as part of UBS's Know Your Client compliance processes.
- **Transaction due diligence:** Environmental and social risks are identified and assessed as part of standard transaction due diligence and decision-making processes in all business divisions and relevant product lines.
- **Product development and investment decision processes:** New financial products and services are reviewed before their launch in order to assess their compatibility and consistency with UBS's environmental and human rights standards. Environmental and social risks are also considered in investment decision processes and when exercising ownership rights like proxy voting and engagement with the management of investee entities.
- **Own operations:** Our operational activities and employees, or contractors working on UBS premises, are assessed for compliance with relevant environmental, health and safety, and labor rights regulations.
- **Supply chain management:** Environmental and social risks are assessed when selecting and dealing with suppliers. UBS also evaluates goods and services that pose potential environmental, labor and human rights risks during life cycle (production, usage and disposal) as part of its purchasing processes.
- **Portfolio review:** At portfolio level, we regularly review sensitive sectors and activities prone to bearing environmental and social risks. We assess client exposure and revenue in such sectors and attempt to benchmark the portfolio quality against regional and / or sector averages. Such portfolio reviews give us an accurate aggregated exposure profile and an enhanced insight into our transaction and client onboarding processes. Based on the outcome of these reviews, we can explore ways to improve the future portfolio profile along a range of risk parameters.

Clients, transactions or suppliers potentially in breach of UBS's position, or otherwise subject to significant environmental and human rights controversies, are identified as part of UBS's standard risk and compliance processes. Advanced data analytics on companies associated with such risks is integrated into the web-based compliance tool used by our staff before they enter into a client or supplier relationship, or a transaction. The systematic nature of this tool significantly enhances our ability to identify potential risk. In 2020, 2,168 referrals were assessed by our ESR unit, of which 81 were rejected or not pursued, 342 were approved with qualifications and 56 were pending.

The number of ESR referrals compared to 2019 increased, driven mainly by higher volumes of transactions processed in the Investment Bank and Personal & Corporate Banking. The increase in referrals from Asset Management can be attributed to reviews performed by the ESR unit in the context of the Climate Action 100+ engagement program.

¹ Greenfield means a new mine / well or an expansion of an existing mine / well which results in a material increase in existing production capacity.

Environmental and social risk assessments

Environmental and social risk assessments

	For the year ended			% change from
	31.12.20	31.12.19	31.12.18	31.12.19
Cases referred for assessment¹	2,168	1,889	2,114	15
by region				
Americas	373	248	288	50
Asia Pacific	551	479	718	15
Europe, Middle East and Africa (excluding Switzerland)	223	282	293	(21)
Switzerland	1,021	880	815	16
by business division				
Global Wealth Management ²	170	199	426	(15)
Personal & Corporate Banking	933	801	684	16
Asset Management	56	4	7	1,300
Investment Bank	977	849	980	15
Group Functions ³	32	36	17	(11)
by sector				
Agribusiness ⁴	244	197	277	24
Chemicals	71	61	91	16
Financial ⁵	747	722	589	3
Infrastructure	95	82	109	16
Metals and mining	228	200	249	14
Oil and gas	216	150	187	44
Technology ⁶	140	105	164	33
Transport	52	40	51	30
Utilities	144	108	176	33
Other ⁷	231	224	221	3
by outcome⁸				
approved ⁹	1,689	1,483	1,648	14
approved with qualifications ¹⁰	342	302	358	13
rejected or not further pursued ¹¹	81	100	108	(19)
pending ¹²	56	4	0	1,300

¹ Transactions and client onboarding requests referred to the environmental and social risk function. ² Wealth Management and Wealth Management Americas reported as Global Wealth Management from 2018. ³ Relates to procurement / sourcing of products and services. Corporate Center (CC) has been renamed to Group Functions (GF) ⁴ Includes, e.g., companies producing or processing fish and seafood, forestry products, biofuels, food and beverage. ⁵ Includes, e.g., banks, commodity traders, investments and equity firms. ⁶ Includes technology and telecom companies. ⁷ Includes, e.g., aerospace and defense, general industrials, retail and wholesale. ⁸ "By outcome" 2020 data is from 27.1.2021. ⁹ Client / transaction / supplier subject to an ESR assessment and considered in compliance with UBS's ESR framework. ¹⁰ Client / transaction / supplier subject to an ESR assessment and approved with qualifications. Qualifications may include ring-fencing of certain assets, conditions towards client / supplier or internal recommendations. ¹¹ Client / transaction / supplier subject to an ESR assessment and rejected or not further pursued. ¹² Decision pending. Except for few cases still in progress from 2019, all 2019 pending cases have been closed and reallocated to the other outcome categories.

Governance and oversight

In view of the many environmental and social challenges globally, these topics will continue to increase in relevance for banks. These developments therefore require regular and critical assessment of our policies and practices, based on an accurate monitoring and analysis of societal topics of potential relevance to UBS.

This process is a responsibility at the level of the Group Executive Board, which sets the overall risk appetite for the firm and resolves policy matters relating to environmental and social risks and their associated reputational risks.

The Group Chief Risk Officer is responsible for the development and implementation of principles and appropriate independent control frameworks for ESR within UBS.

All corporate responsibility and sustainability developments at UBS are monitored and reviewed by the UBS Corporate Culture and Responsibility Committee, a Board of Directors' committee of UBS Group AG. The Committee supports the Board in its duties to safeguard and advance UBS's reputation for responsible corporate conduct. In this capacity, it reviews and monitors the implementation of UBS's ESR framework.

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