

Author: Shefali Sharma, Institute for Agriculture and Trade Policy, December 2020 – www.iatp.org

Climate, land use change and the EU-Mercosur Agreement: Accelerating tipping points

Provisions in the EU-Mercosur FTA conflict with ambitious climate action. If enacted, the agreement would result in an increase in EU imports of primary agricultural commodities from a region critical for maintaining global biodiversity and regulating climate. Based on available information, if ratified, the EU-Mercosur agreement would:

- > Incentivize socially and environmentally destructive land use change, edging the Amazon further towards its “tipping point”
- > Facilitate further destruction of the Gran Chaco and the Cerrado
- > Increase greenhouse gas emissions, undermining climate goals in both regions
- > Fail to ensure supply chain traceability and sustainability standards, effectively empowering agribusinesses in both regions to expand business as usual

The current European Commission came in pledging climate action and launched the European Green Deal in 2019. In the coming weeks, the EU is set to increase its climate pledge to 55-60% below 1990 levels and become carbon-neutral by 2050. While 64% of EU’s [greenhouse gas emissions embedded in its food supply](#) come from intra-EU trade and production (over half from meat and eggs), 25% are displaced emissions from Latin American imports.¹ [Seventy-six percent](#)² of all EU land use change emissions are related to the imports of oilseeds (mostly soy) and vegetable oils and tied to EU meat production.

Brazil, the largest trading partner from the Mercosur countries, pledged to reduce by 2025 its net greenhouse gas emissions by 37% compared to 2005 levels. Under President Jair Bolsonaro’s administration, however, Brazil is going in the opposite direction, recording the highest levels of deforestation in a decade, [deregulating and weakening institutions](#) responsible for climate policy and environmental protection and transferring the administration of indigenous lands to the Ministry of Agriculture. Based on Brazil’s [Greenhouse Gas Estimates System \(SEEG\)](#), the country [increased its emissions by 9.6%](#) in 2019, failing to meet its 2020 target. [Seventy-two percent](#) of these emissions are due to agriculture and land use change. According to a 2018 peer-reviewed study, a quarter of [EU food supply emissions](#) were imported from Latin America. Agricultural goods accounted for half of [EU imports from Mercosur](#) countries in 2018. This agreement would expand this trade by increasing European quotas for beef, poultry, pork, sugar, ethanol, rice, honey and sweet corn. It will also eliminate EU import duties on hard commodities that are mined in the region, such as iron ore, silver and kaolin.

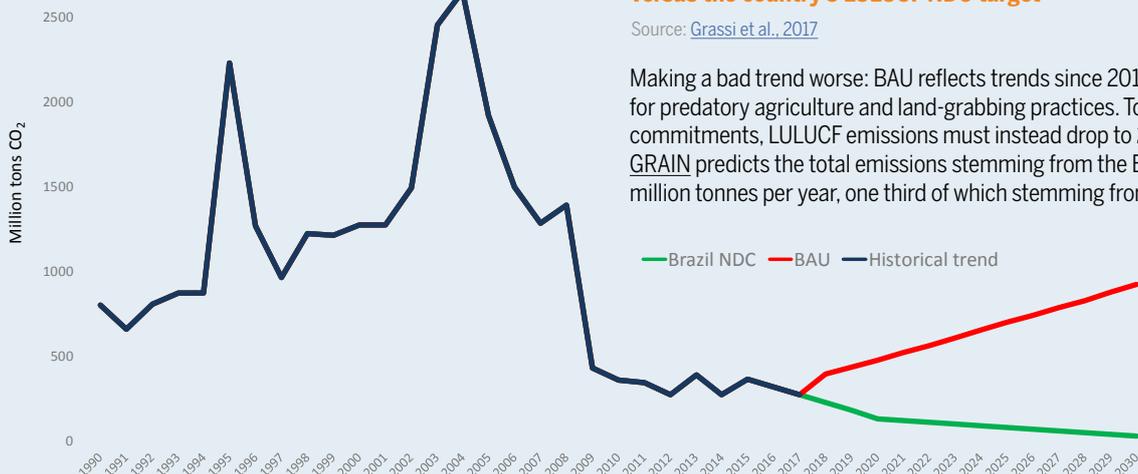
INCENTIVES FOR LAND USE CHANGE AND LAND DEGRADATION EXACERBATED BY THE FTA

The FTA will create new incentives for exports and the resulting land use change. The Amazon, the Brazilian Cerrado and the Gran Chaco, traversing Argentina, Paraguay, Bolivia and Brazil, hang in the balance. The FTA increases EU’s beef [quota for Mercosur countries](#) by 50% to 99,000 tons, poultry by 180,000 tons (expanding total poultry imports to the EU from 900,000 tons to over 1 million tons), pork to 25,000 tons and creates a six-fold increase of bioethanol imports to the EU to 650,000 tons. The [ethanol quota](#) is equivalent to the Mercosur’s total global exports of ethyl alcohol. The agreement also [eliminates the use of export taxes for soy](#) (applied in Argentina and Paraguay), likely to result in greater soy exports to the EU and boosting domestic production.

Brazil's trajectory: Emissions from Land Use, Land Use Change and Forestry (LULUCF) to 2030. Projections for a business as usual (BAU) versus the country's LULUCF NDC target

Source: [Grassi et al., 2017](#)

Making a bad trend worse: BAU reflects trends since 2012 of political support for predatory agriculture and land-grabbing practices. To meet its climate commitments, LULUCF emissions must instead drop to 22 million tons by 2030.^(*) [GRAIN](#) predicts the total emissions stemming from the EU-Mercosur FTA to be 8.7 million tonnes per year, one third of which stemming from LULUCF.



(*) See pg. 49: <https://publications.jrc.ec.europa.eu/repository/bitstream/JRC117364/scienceforpolicy-follador-final14102019.pdf>

Taking deforestation trends since 2012 into account, a [Science for Policy report](#) of the European Commission's Joint Research Centre (JRC) estimates that under a business as usual scenario, Brazil could emit 900 million CO₂ tons above its own [Nationally Determined Contribution](#) (NDC) target by 2030. The expanded quotas in the Mercosur deal would boost such a scenario. To put this in perspective, if Brazil were to successfully reach its climate target, it would need to reduce its total land use change emissions to a total of 22 million tons CO₂ by 2030.³ While these are staggering figures, they likely underestimate existing emissions as governments fail to include deforestation-induced "edge effects" in their emissions calculations. Trees grow at slower rates and lose carbon near edges of forests. Carbon losses at forest edges due to forest fragmentation is widespread in the Amazon due to land use change. A recent peer-reviewed study found that [deforestation-induced edge effects](#) indirectly increased emissions by 37% from 2001-2015, even as direct deforestation and associated emissions declined.

At least 20% of the Brazilian Amazon and 17% of the entire Amazon Basin have already been deforested. The deal could thus propel the region closer to breaching the [Amazonian tipping point](#). The tipping point, according to renowned scientists, Thomas Lovejoy and Carlos Nobre, is anywhere between 20-25%. After that point, the Amazon will begin to switch from being a net carbon sink to a carbon source, debilitating the water cycle in the greater Mercosur region with catastrophic impacts for the population. The scientists have urged governments to take decisive action to limit the destruction to below 20%.

This map uses false-color satellite imagery to illustrate the varied landcover types in and around the Amazon Rainforest

- Densely vegetated areas are typically **rainforest**
- Water in **rivers, lakes, and reservoirs**
- Land cleared for **pasture**
- **Seasonally flooded savanna** and other wetlands
- **Bare ground** in farmland, savannas, and grasslands
- **Desert** areas with minimal vegetation
- Evaporation can produce **salt flats** in dry areas



"...build back a margin of safety against the Amazon tipping point, by reducing the deforested area to less than 20%, for the commonsense reason that there is no point in discovering the precise tipping point by tipping it"

Thomas E. Lovejoy and Carlos Nobre

Source: @ Earth Observatory – NASA

Edging closer to the tipping point

11,087 square kilometres were deforested in the Amazon between August 2019 and July 2020, according to Brazil's National Space Research Institute (INPE) data. It is the highest rate of deforestation on record since 2008. Scientists estimated in 2019 that 17% of the Amazon basin and 20% of the Brazilian Amazon has already been lost to deforestation. The tipping point, they believe, will be reached at 20% to 25% deforestation.

FACILITATING FURTHER DESTRUCTION OF THE GRAN CHACO AND THE CERRADO

Soy already accounts for 47% of the [EU's imported deforestation](#)⁴ from intra-EU production of agricultural and livestock commodities. Mercosur countries [accounted for 65%](#)⁵ of all soy exports to the EU in 2018 with Brazil and Argentina comprising the largest shares. In addition, the JRC Science for Policy report projects that by 2030, the EU will account for 30% of Brazilian ethanol exports if the EU phases out biodiesel.⁶ Sugar cane is the main source of Brazilian ethanol which is rapidly expanding in the species-rich Cerrado in central west and north-east of the country.⁷ However, Brazil is also increasingly using corn for ethanol.

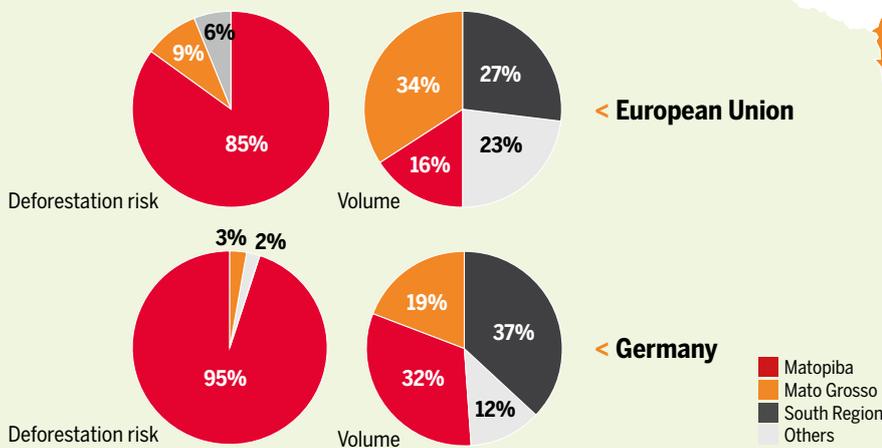
The [Gran Chaco](#), the “forgotten wilderness”, is an expanse of over a 65 million hectares of dry and wet forests and savanna and is 1.5 times the size of California. Sixty percent of it is in Argentina, 23% in Paraguay and 4% in Brazil. The [Chaco is rapidly being destroyed](#) due to the mass expansion of cattle ranching and soy production. The first ever [comprehensive assessment](#) of land use change in the Chaco and associated emissions between 1985-2013 found that “emissions were substantial and of similar magnitude as those from Amazonia or South-East Asia, resulting in 31.7 million tons of CO₂ annually.” In the Argentinian part of the Gran Chaco [five million hectares](#) of native forest has been lost in the past two decades (80% of all Chaco deforestation) at an average of 882 hectares a day⁸, enabled through a weak forest law, land grabbing and human rights violations. Paraguay registered an average deforestation rate of 192 hectares a day, 18% of total Chaco destruction during this time. The “[soyification](#)” of [Paraguay](#), a term used locally to describe the destruction, has contributed to peasant and indigenous movements such as the National Coordination of Peasant and Indigenous Women fighting for rights of those evicted from their lands or persuaded to sell or lease their lands for little. If the land use change trends in the Chaco continue at the rate between 2007-2014, another 4 million hectares will be lost by 2028.

Between 1985-2017, the Amazon lost nearly 36 million hectares of native vegetation, and the Cerrado lost 24 million hectares “due to predatory farming practices and land grabbing.”⁹ Soy from the Cerrado accounted for 16% of EU soy imports in 2017 and [carried 85% of the associated deforestation](#) risks. With the expansion of Brazilian ethanol production, the Cerrado is again the hotspot. The US Department of Agriculture (USDA) estimates that [Brazil's expansion of corn production](#) will result in more corn planted in the Cerrado. Though a large amount of corn is planted as a second crop, land acreage for corn is expanding as corn ethanol producers expand their processing capacity. Mato Grosso and several other regions are expected to expand production in the range of 20 to 40% by the end of this decade, exacerbating land use change and deforestation.

Embedded deforestation risk of EU soy imports by the EU and Germany 2013-2017

Source: [GIZ 2019](#)

[Soy accounts for 47 % of the EU's imported deforestation](#) from agricultural and livestock commodities. [Deforestation risks](#) associated with the EU's soy imports from 2013 to 2017: though only 16 percent of the EU soy imports came from Matopiba, they represented 85 percent of the soy embedded deforestation risk. In Germany, 32% of all soy imports had a 95% soy embedded deforestation risk.



INCREASES IN EMISSIONS RESULTING FROM EXPANDING EXPORTS

Over [74 percent of beef imports](#) into the EU came from Mercosur countries in 2019.¹⁰ The Mercosur meat supply chain is highly integrated. JBS, the biggest meat processor in the world, [along with Minerva, BRF and Marfrig](#) are all Brazilian companies with production units in Argentina, Paraguay and Uruguay. Paraguay's beef is largely exported and controlled by these companies. The NGO Repórter Brasil has [detailed human rights and environmental violations](#) associated with JBS, BRF, Marfrig and Minerva's cattle supply chains. In 2018, GRAIN and IATP, using the FAO's Global Livestock Assessment model which includes land use change, calculated that emissions from just these four companies combined equalled 377 million metric tons of CO₂ equivalent, nearly 42% of Germany's total 2015 emissions.¹¹ The expansion of demand implicit in this trade agreement will exacerbate those trends.

GRAIN estimates that the expanded trade through the FTA for eight agricultural products will result in a [34% increase in emissions](#) from 25.5 million tons CO₂ equivalent of the current trade quotas to an additional 8.7 million tons per year with quota expansion. Beef exports comprise 82% of those emissions, poultry 6% and ethanol 5%. The EU's exports of cheese and low-fat milk expanded through the deal will contribute another 5% of these emissions.¹²

The EU has made no commitments on agriculture in its NDC, let alone on livestock. In contrast, Uruguay committed to reducing emissions intensity (not total emissions) of both methane and nitrous oxide in the beef sector (59% and 52% respectively), based on per unit of GDP as opposed to per kilo of production from 1990 levels. This translates to further industrialization and intensification of cattle raising in Uruguay. As a major exporter, 80% of its emissions come from the livestock sector. Paraguay has committed to reducing 20% of its projected 2030 emissions, conditional on international support. None of these Mercosur countries have furnished an assessment of how the deal will impact their climate commitments, while the EU's Sustainability Impact Assessment is being challenged by European civil society organizations.

SUPPLY CHAIN TRACEABILITY AND THE SUSTAINABILITY PROVISIONS IN THE FTA

According to one estimate, 19% of the EU's soy imports come from so-called sustainable supply chains. Proponents of the FTA point to its Trade and Sustainable Development Chapter to claim that it will result in greater scrutiny of the sustainable sourcing of imports expanded through the deal. However, several peer reviewed studies have documented a series of "subversions" of sustainable supply chain initiatives such as the Soy Moratorium or the *Tac de Carne*, a voluntary zero-deforestation agreement by agribusinesses and an agreement signed between cattle ranchers, meatpackers and the Brazilian government, respectively. Both the soy and livestock supply chains are replete with corporate actors who both openly and secretly flout and weaken environmental regulations and human rights. In 2017, the CEOs of JBS were jailed and fined for bribing for years over 1,900 officials to pursue their business model with Brazilian taxpayers paying partially for their profits through the Brazilian National Development Bank as a major shareholder. Cargill, Bunge and ADM, global agribusinesses supplying feed grains to JBS, BRF, Marfrig and others, are all linked to deforestation and land use change for soybeans in the Gran Chaco and the Cerrado.

Subversive activities in the Amazon in the supply chain include shifting apparent sourcing from embargoed areas to certified areas, so the true source of soy or meat could remain "unknown" at the processor or retail end. Leakage occurs when deforestation expands for grazing cattle in one part of a property, while soy is grown in the area deemed to be sustainable. In reality, the implementation and enforcement are weak and riddled with corruption. This is evident in the alarming rates of deforestation witnessed in the last 8 years. Researchers have found that as many as 1,500 properties were deforested after 2008 and despite the Soy Moratorium, 91% of them likely illegally. They also found that nearly half (46% ± 7%) of all beef exports to the EU may have been obtained through illegal deforestation.¹³ In Argentina, which exported 21% of all EU imports of soy in 2018, traceability is non-existent. In short, traceability is extremely challenging in the region.

With the weakening of the weakening of environmental protections and accountability in Brazil, assurances of traceability in the FTA will do little to address deforestation. Civil society organizations and experts, including the report commissioned by French President Macron, conclude that the Trade and Sustainable Development (TSD) chapter of the FTA, as in all EU FTAs, is simply ineffective in holding Parties accountable for deforestation, adhering to their climate commitments or protecting human rights. The TSD chapter is not subject to dispute settlement, so is not enforceable through the FTA. Second, TSD chapters do not hold the EU responsible for its imported emissions. Instead, the deregulatory approaches enshrined in EU FTAs undermine governments' ability to strengthen environmental regulations, food policies and human rights.

The EU-Mercosur FTA stands to imperil both the integrity and the outcome of the climate commitments made by the EU and Mercosur countries. If the EU hopes to achieve the goals of the European Green Deal, it must reform its trade policy to ensure that both its imports and exports are counted in the region's greenhouse gas emissions. 21st century trade rules must fall in line with equity and humanity's goal to limit global warming to 1.5°C. The EU-Mercosur FTA is out of place in this vision.



For more information and a full list of sources see <https://eu.boell.org/EU-Mercosur-FTA> and <https://iatp.org>

¹ Sandströma, V. et al. "The role of trade in the greenhouse gas footprints of EU diets." *Global Food Security*: Volume 19, December 2018, Pages 48-55. <https://www.sciencedirect.com/science/article/pii/S2211912418300361?via%3Dihub>, Pg. 51.

² Ibid

³ Follador, M. et al. "Assessing the impacts of the EU bioeconomy on third countries." Publications Office of the European Union. Luxembourg. ISBN 978-92-76-09820-1 / doi:10.2760/304776. 2019. <https://publications.jrc.ec.europa.eu/repository/bitstream/JRC117364/scienceforpolicy-follador-final14102019.pdf>, Pg. 4.

⁴ Czaplicki Cabezas, S. et al. "Towards more sustainability in the soy supply chain: How can EU actors support zero deforestation and SDG efforts?" *Climate Focus*. 2019. https://irp-cdn.multiscreensite.com/be6d1d56/files/uploaded/Sustainability%20in%20Soy%20supply%20chain_consolidated%20study%20%282%29_final.pdf, Pg. 33.

⁵ 2018 total EU imports equaled 32 MMT, imports from Brazil 13.5 MMT, Argentina 7.2 MMT, Paraguay 1.3 MMT. See: Hiel, R. et al. "European Soy Monitor. Insights on European responsible and deforestation-free soy consumption in 2018." The Sustainable Trade Initiative. May 2020. <https://www.idhsustainabletrade.com/uploaded/2020/05/IDH-European-Soy-Monitor-v2.pdf>, Pg. 3.

⁶ Follador, M. et al. "Assessing the impacts of the EU bioeconomy on third countries." Publications Office of the European Union. Luxembourg. ISBN 978-92-76-09820-1 / doi:10.2760/304776. 2019. <https://publications.jrc.ec.europa.eu/repository/bitstream/JRC117364/scienceforpolicy-follador-final14102019.pdf>, Pg. 41.

⁷ Fritz, T. "EU-Mercosur Agreement: Risks to Climate Protection and Human Rights." MISEREOR e.V. Greenpeace e.V. CIDSE. June 2020. https://www.misereor.org/fileadmin/user_upload_misereororg/publication/en/Shaping_economic_processes/Study-EU-Mercosur-Agreement-Risks-to-Climate-Protection-and-Human-Rights....pdf, Pg. 15.

⁸ Guyra Paraguay, 2018. Informe de deforestación Junio 2018 (Executive Summary, June 2018). Available: <http://guyra.org.py/informe-de-deforestacion-2018/>

⁹ Follador, M. et al. "Assessing the impacts of the EU bioeconomy on third countries." Publications Office of the European Union. Luxembourg. ISBN 978-92-76-09820-1 / doi:10.2760/304776. 2019. <https://publications.jrc.ec.europa.eu/repository/bitstream/JRC117364/scienceforpolicy-follador-final14102019.pdf>, Pg. 35.

¹⁰ European Commission. "Meat Market Observatory – Beef and Veal." 22 October 2020. https://ec.europa.eu/info/sites/info/files/food-farming-fisheries/farming/documents/eu-bovine-trade_en.pdf, Pg. 6.

¹¹ The four companies' aggregate 2016 emissions = 377 million tons; Germany's 902 million tons. See: Heinrich Böll Foundation (HBS), Institute for Agriculture and Trade Policy Europe (IATP), GRAIN. "Factsheet: Big meat and dairy's supersized climate footprint." November 2017. <https://www.boell.de/sites/default/files/factsheet-big-meat-and-dairys-supersized-climate-footprint.pdf>

¹² GRAIN. "EU Mercosur Trade Deal will intensify the climate crisis from agriculture." November 2019. <https://www.grain.org/system/articles/pdfs/000/006/355/original/Mercosur%20EN%2004.pdf?1574417408>, Pg. 2/3.

¹³ Rajão, R. et al. "The rotten apples of Brazil's agribusiness." *Science*. Vol. 369(6501). Pg. 246-248. 2020. <https://science.sciencemag.org/content/369/6501/246>. Full. Pg. 247.