



Intersectional Environmental Justice in Dutch-Brazilian Beef and Soy Trade: Challenges for the EU Regulation on Deforestation-Free Products

**RESEARCH ARTICLE** 

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#### **ABSTRACT**

Intensive agricultural trade is associated with environmental injustice, affecting marginalised populations while depleting forests, rivers and biodiversity. Brazil is the leading soy exporter globally, while the Netherlands is the main soy importer in the EU. This bilateral soy trade is connected to forest degradation, rising emissions, and pesticide pollution. Similarly, international beef trade connects the Netherlands with deforestation and land conflicts in Brazil. In 2023, the EU approved the Regulation on Deforestation-free Products (EUDR) to tackle biodiversity loss and forest degradation, to decouple agricultural imports from deforestation in producing countries. However, civil society organisations claim that the EUDR overlooks the underlying drivers of environmental injustice, for humans and non-humans. For example, land tenure conflicts between local communities and large soy farmers (whose growing use of land is influenced by international trade markets), and the financial stakeholders linked to activities leading to forest loss and land dispossession. In this article, we assess the Dutch-Brazilian beef and soy trade through the lenses of intersectional environmental justice (IEJ) and suggest how to improve the EUDR in light of the findings. Intersectionality helps us identify injustices, the drivers and associated actors. Yet, no previous study has mapped intersectional environmental injustices in these supply chains. Our data includes 20 semi-structured interviews with environmental NGOs, businesses, government and academics from both countries, besides secondary sources (15 NGO reports and policy papers). Our recommendations include amendments to be incorporated into the existing version of the EUDR. Specifically, geolocation tools that help businesses track not only deforestation risks, but also intersectional injustices and human rights threats along soy and beef supply chains. And, more broadly, measures to track risks associated with pollution, land dispossession, hunger, health and the impacts of infrastructures on IPLCs. The article contributes to the Commons literature by providing empirical evidence on the interconnections between forests loss, commodity trade and human rights abuses, supporting a diagnosis of the necessary transformations that can positively impact biodiversity in social-ecological systems in both countries.

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#### INTRODUCTION

Biodiversity loss, connected with climate change, pollution and the degradation of human and non-human rights¹ is part of the *triple planetary crisis*.² Intergovernmental organisations (EEA, 2023; IPCC, 2022; IPBES, 2019), NGOs (Proforest, 2024; WWF, 2022; Kuepper, 2022), and academic scholarship (Chan et al., 2023; Fletcher et al., 2019) have documented that biodiversity is not only deteriorating worldwide but also "declining faster than at any time in human history" (IPBES, 2019, p.10). Land use change, e.g., via deforestation and soaring croplands/agricultural supply chains, is a key factor leading to biodiversity depletion (IPBES, 2019, p.12; Green et al., 2019). Agricultural supply chains are also linked to human rights violations, impacting Indigenous peoples and local communities (IPLCs) (Pickering et al., 2022).

In this article, we assess how agri-food trade is linked to biodiversity loss and human rights violations, through the case of beef and soy trade between Brazil and the Netherlands. We selected this case because Brazil is the largest soy producer in the world, and the Netherlands is the main importer of Brazilian soy into the EU, directly connecting Europe with soy-driven deforestation in South America (Newig et al., 2020). Regarding beef, the Netherlands imported 35Mt from Brazil in 2017, corresponding to a land footprint 282 thousand ha of pasture area, according to Trase.<sup>3</sup> Pasture for cattle raising is often an intermediate step between conversion and final land use: soy plantations (Ermgassen et al. 2020a). The bilateral soy and beef trade is also linked to human rights violations (Lopes et al., 2021). This includes land tenure conflicts (Kröger, 2022; Thives et al., 2022), problems for Indigenous lands' demarcations (Begotti and Peres 2020), threats to local women's health and livelihoods caused, among other things, by pesticide pollution in soy plantations surrounding communities. Such problems were intensified during the Bolsonaro administration (2019-2022), when agribusiness expansion was prioritised at the expense of the environment (Pompeia, 2021), and Brazil faced backlash in environmental regulations (Rajão et al., 2020). For some, the compounded effects of the Covid-19 pandemic and the Bolsonaro administration inaugurated a period of "necropolitics" against forest peoples in Brazil (Lopes and Bastos Lima, 2020). Specific groups across soy and beef supply chains are more impacted by these issues than others, depending on identity attributes like race, gender, ethnicity, economic status, and the like. In light of this, intersectionality helps us identify and discuss socialenvironmental injustices across these supply chains.4 The concept of intersectional environmental justice (IEJ) equips us to produce a detailed analysis of processes, drivers and actors linked to such injustices.

This is a crucial debate, in the context of the recent EU Regulation on Deforestation-free Products (EUDR). The EUDR was approved in 2023 aiming to decouple commodity imports by the EU (including soy and beef) from deforestation in sourcing countries. Although the EUDR cites human rights in some passages, and Article 2 mentions that due diligence must be in line with 'relevant legislation of the country of production' concerning justice aspects (e.g., land use rights, labour rights, the principle of free, prior and informed consent (FPIC)), the regulation does not detail how human rights violations should be mapped, nor how they could potentially be targeted. The approach of IEJ helps us identify specific examples of violations, the perpetrators, the groups more intensively impacted, and how such impacts are transmitted (and contested) across the supply chains. Equipped with this understanding, we suggest how revisions of the EUDR could make it more aligned with justice and equity considerations. Cooperation between actors in these social-ecological systems for improving the regulation in light of IEJ might be achieved through roundtable discussions between the main actors involved (companies, communities, governments). This can lead to improvement on the state of biodiversity. As suggested by Ostrom (2007, p.15183): "enabling subjects to engage in face-to-face communication between decision rounds enables them to approach socially optimal harvesting levels rather than severely overharvesting the commons." Our article points actors that should participate in such roundtable discussions, and issues at stake, to improve EUDR implementation and compliance in line with IEJ.

The paper is divided as follows. Section 2 introduces and discusses the concept of IEJ. Section 3 briefly sketches our methodology. Section 4 addresses the EUDR and the beef and soy supply chains through the lenses of IEJ. Section 5 concludes the article.

## INTERSECTIONAL ENVIRONMENTAL JUSTICE

Only a few studies have addressed how intersectionality can contribute to broadening the scholarly understanding on environmental justice (EJ). EJ studies originally discussed how marginalised groups, ethnic minorities, Indigenous peoples (IP), Black communities, women and low-income neighbourhoods would face "a higher burden of environmental exposure from air, water, and soil pollution," as a consequence of "environmental racism" (Mohai, Pellow, and Roberts, 2009, p.406). Environmental racism would entail not only isolated acts of discrimination, but also "state and institutional violence" (Kojola and Pellow, 2021, p.102). In practice, however, "corporate" or "market-

based" environmental policies (Arsel and Büscher, 2012) have done little to eliminate these injustices. Such policies are problematic because, as Martin et al. (2020, p.27) argue, "singular conceptions of justice, such as the emphasis on distributive equity that dominates current environmental interventions (payments for ecosystem services, fair trade, compensation schemes, etc.) will not in themselves ensure that such interventions are just." Corporate EJ approaches do not tackle the underlying causes of social-environmental injustice, thus failing to achieve EJ.

More recently, EJ scholarship has emphasised the need for a revised understanding of the term, in light of deepening global environmental problems and rising inequality. Marginalised groups face significant exposure to the outcomes of the triple planetary crisis – such as floods, extreme heat waves, hunger, pesticide poisoning (UNFCCC, 2022). In this context, emergent EJ movements call for a new approach that engages with the histories of racial capitalism and settler colonialism, thus "cantering more radical, transformative theorising" into analyses of the causes of and solutions to environmental injustice (Kojola and Pellow, 2021, p.110). A contemporary understanding of EJ would address: a) justice outcomes, such as the maldistribution of risks, but also attend to its underlying causes, such as institutionalised cultures of discrimination based on failures of recognition; b) transformative strategies to reduce repressive forms of power while enhancing community agency, e.g., via protests, formal government procedures, nurturing of local and alternative values and knowledge; c) actions to ensure that a greater plurality of environmental knowledge and worldviews is recognized and respected; and d) radical research and engagement processes, truly incorporating plural voices (Martin et al., 2020, p.28).

Intersectionality brings a pivotal contribution to this new phase of EJ because it provides a more nuanced lens to investigate how power and oppression operate. Although challenging to define, in this article we understand intersectionality in line with Hill Collins (2019, p.23), according to whom intersectionality is "an analytical sensibility whose meaning emerges through use." An intersectional way of thinking is devoted to "the problem of sameness and difference and its relation to power." Citing Vivian May, Hill Collins (2019, p.118-9) also suggests that intersectionality is "a form of resistant knowledge developed to unsettle conventional mindsets, challenge oppressive power, think through the full architecture of structural inequalities and asymmetrical life opportunities, and seek a more just world." Intersectionality focuses on the compounded, or intersecting, relations among distinct identity markers, thus explaining why and how some social groups face conditions of higher vulnerability in comparison to others. As Hill Collins (2019) argues, social identities are not only individual or subjective, but also a product of structural oppressions resulting from neoliberal capitalism, patriarchal relations, and colonialism. Our paper unpacks how soy and beef supply chains often are the result of (and reproduce) such oppressive structures.

Only a few studies have used the term intersectional environmental justice (IEJ) (Alvarez and Evans, 2021; Malin and Ryder, 2018). Malin and Ryder (2018, p.4) conceive IEJ as approaches that "recognize and iteratively analyse the contextual/historical, often mutually reinforcing, inseparable, and multiply oppressive structures that intersect to control and dominate marginalized individuals and communities while simultaneously privileging powerful actors." IEJ scholarship "investigates intersecting drivers and forms of environmental (in)justice by tracing threads of oppression across relevant historical and contemporary social contexts and injustices at multiple levels and/or social locations" (Malin and Ryder, 2018, p.5). In essence, then, an IEJ approach traces environmental injustices in a multiscalar (across time and space), multi-level (from local to global) and contextualized manner (in varied social and cultural settings, at the community and institutional levels).

Attuned to intersectionality as a form of "theorizing through social action" (Hill Collins, 2019), IEJ can be operationalized through environmental mobilizations that advance social justice through relationality and solidarity politics (Luft and Ward, 2009). IEJ is also visible in dialogues for collective deliberation, attentive to the voices of marginalized actors and communities, and to the everchanging and subjective nature of identity (Hill Collins, 2019, p.183). Respecting diverse knowledge and experiences, IEJ would contribute to epistemic and ontological justice for humans and non-humans (Escobar, 2019). From this perspective, more-than-human solidarity (Tschakert, 2022) and multispecies environmental justice (Haraway, 2016) would be aligned with IEJ. An IEJ approach deepens our understanding of soy and cattle trade between Brazil and the Netherlands by helping us identify how injustices operate against humans and non-humans in these commodities' supply chains. The approach also helps us better understand resistance practices against such injustices.

#### **METHODS AND DATA**

We performed 20 semi-structured interviews online (11 focusing on Brazil, and 9 on the Netherlands) with representatives from environmental NGOs, academia, business, government, and one Intergovernmental Organisation (IGO). The sample of interviewees included experts, selected via snowball sampling, and the total of

20 was deemed sufficient (reaching saturation). Interview questions varied according to the expertise of each participant. We sought to understand how the supply chains are structured, who the main actors are, what power relations exist, and how IEJ plays out in these supply chains. Besides, we aimed to understand the political process of the EUDR policy development, the challenges for its implementation, the profile of companies involved, and how the regulation might impact social-environmental justice across both countries. Our primary interview data was complemented and triangulated with secondary material, including NGO reports, policy papers, and corporate briefs. Secondary data was used in particular to understand the perspective of the affected communities. For data analysis, we conducted an inductive coding of interview transcripts. Coding was performed through MS Excel in three successive rounds.

Our coding resulted in a total of 27 different codes in a universe of 277 excerpts, with the most representative code being "human rights and intersectionality," with 59 interview excerpts, i.e., 21,5% of the total.<sup>5</sup> The coding file is publicly accessible at: https://doi.org/10.5281/zenodo.13254987. In addition, we used the following secondary sources:

- Brasil (2022). PL 572/2022 Lei Marco Nacional sobre Direitos Humanos e Empresas no Brasil.
- Brasil (2023). Política Nacional de Desenvolvimento Sustentável dos Povos e Comunidades Tradicionais.
- Brazilian Climate Observatory (2022). Position Paper on the European Commission's Proposal for a regulation on deforestation-free products.
- Carta das Mulheres do Cerrado (2022). Carta das Mulheres do Cerrado.
- EEA European Environmental Agency (2023). Biodiversity: states of habitats and species.
- European Union (2025a). The European Green Deal: a growth strategy that protects the climate.
- Global Witness et al. (2023). JBS S.A. Dual Listing:
   A collective warning of risks to people, planet and investors.
- IPBES (2019). Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services.
- IPCC (2022). Fact sheet Biodiversity.
- IUCN NL (2022/2023). Sustainable plant-based worldwide. Guide for value chain management in the protein transition.
- Observatorio do Clima (2022). Posicionamento do Observatório do Clima sobre a Proposta da Comissão Europeia para uma regulamentação sobre produtos livres de desmatamento.

- Proforest (2024). Opportunities for deforestation-free supply chains through producer-consumer country partnerships.
- TPP (2019). Tribunal Permanente dos Povos em Defesa dos Territórios do Cerrado.
- UNFCCC (2022). What is the Triple Planetary Crisis?
- WWF (2022). The impact of Dutch imports on Nature loss worldwide.

The qualitative analysis of primary and secondary data, as above presented, was complemented by several discussion meetings between the co-authors, which also followed closely newspaper articles and political debates about the topic. Two of the co-authors were living in the Brazilian Amazon during a considerable part of the writing process. In the next section we present our analysis and discussion.

# INTERSECTIONAL ENVIRONMENTAL (IN) JUSTICE AND RESISTANCE IN DUTCHBRAZILIAN BEEF AND SOY SUPPLY CHAINS

Here we apply the concept of IEJ to identify (1) socioenvironmental injustices in Dutch-Brazilian beef and soy supply chains, (2) resistance movements against such injustices, and (3) how the EUDR processes and mechanisms are related to these issues. We demonstrate how intersectionality adds to current EJ debates on two fronts (which we highlight in our analysis below). First, instead of focusing on the oppressions per se, we illustrate how particular groups are more impacted than others by beef and soy supply chains, depending on identity attributes like gender and social class (e.g., peasant women's reproductive health). Second, intersectionality helps us better analyze mobilizations, activisms and political alliances against soyand beef-driven injustices (e.g., intersectional alliances against projects such as Ferrogrāo). Our analysis thus highlights how revisions of the EUDR could benefit people and biodiversity by adopting IEJ criteria.

In Brazil, multiple actors compose soy supply chains. First, inputs (seed, fertilizers, machinery, etc.) are sold to producers/farmers, usually provided by multinational corporations (MNCs). Farmers sell their production either domestically or internationally. On the domestic market, they supply the soybean meal and oil industries, which are intermediaries for the industries of animal feed, refined oil and other soy products. In the cattle supply chain, production involves the breeding, rearing and fattening phases, and most farmers specialize in only one phase. Cattle travel from one farm to another throughout their lifecycle. When ready, cattle are sold to slaughterhouses,

whose production is distributed internally or exported. Once beef and soy are placed onto the Dutch market, the following industries are part of the chain: soy crushers, animal feed and food processing companies, and retailers (Kuepper 2022; Loomis and Oliveira, 2024). As the Netherlands is the main EU entry point for these commodities—receiving, processing, and redistributing them across the bloc—Dutch authorities hold significant influence in enforcing the EUDR, considering also the country's role in assessing due diligence statements and in defining compliance standards.

## MULTI-SCALAR, MULTI-LEVEL AND CONTEXTUALISED INJUSTICES

Around 60% of the Brazilian soy production comes from consolidated soy regions (centre and south of the state of Mato Grosso in the Cerrado, and from southern states), thus not associated with Amazon deforestation. However, soy production in the Brazilian Legal Amazon<sup>7</sup> has grown consistently since the 1970s. "In 1974, the Brazilian Legal Amazon produced less than 200 tons of soybeans, sharing just under 0.02% of national production, but it reached 50 million tons in 2022 or 41.5% of the Brazilian total" (Haddad et al., 2024, p.1141). In Brazil, three soy-driven environmental issues are critical: biodiversity loss, especially in the Cerrado; water depletion ("virtual" water ingrained in the exported soy), affecting the hydrological cycle; and pesticide contamination of water, land and people. Another problem are diseases associated with the excessive use of pesticides, often via aerial fumigation. Depending on the amount of soybean crops planted and the technique used, the soils can deplete substantially. As a consequence, farmers need to undertake invasive chemical procedures to continue soy monocrops. Social-economic inequalities are widespread in soy regions, particularly in the agricultural frontier, the MATOPIBA region, which includes the state of Tocantins and parts of the states of Maranhão, Piauí and Bahia (Martinelli et al., 2017).

Beef supply chains are linked to deforestation and exploitative production relations. Livestock farming in southern Amazonia is "the main economic agent that pressures large areas of deforestation, since livestock farming is practised extensively" (Santos et al., 2021, p.1). If in 1974 the Brazilian Legal Amazon had 8.9 million cattle (9,5% of the country's herd), in 2022 the number jumped to 104.3 million, i.e., 44,5% of the Brazilian total (see. Haddad et al., 2024, p.1141). This is illustrative of the "cattle economy" in the Amazon. Social-environmental injustices spread through cattle ranching. "Production relations between smallholders provisioning calves to large ranching operations often resemble what has been referred to as 'contract farming' land grabs, given the exploitative

terms of trade" (Pereira, Simmons, and Walker, 2016, p.1). Exploitative production relations in the region work through "informal calving contracts that often leave smallholders in debt. Such arrangements make settlement projects residents "contract" ranchers, who bear a disproportionate share of risk in the supply chains to which they deliver calves (...). Smallholders maintain a tenuous link to the land they own, and, as such, are subject to a form of land grab" (Pereira, Simmons, and Walker, 2016, p.2–14).

In this context, the Dutch-Brazilian beef trade is connected, for example, with recurrent episodes of slave labour in Brazil (Phillips and Sakamoto, 2012). As an interviewee stated: "when there are problems in the beef supply chain, it is very intensive in terms of social impacts because it involves more labour than the soy sector. So, you also have cases, many cases, of slave labour." From 1995 to 2020, around 17,253 workers in the cattle industry were rescued from conditions akin to slavery in Brazil (Brandão et al., 2024, p.2). In 2022, 2,218 people were freed from slave labour in the agribusiness sector. Conflicts in the countryside increased by 8% between 2022 and 2023. In total, 973 conflicts were identified in Brazil in 2023, the majority of which due to land disputes (714), rural slave labour (102), conflicts over water (80), occupation and restitution of land (71) (Comissão Pastoral da Terra, 2023). In that year, a group of NGOs and an Indigenous association (Tato'a) issued a letter for investors, denouncing JBS (Brazilian MNC, the world's largest beef exporter) for being implicated with climate change, deforestation, biodiversity loss, corruption and human rights abuses (Global Witness et al., 2023). The Brazilian government has sought solutions for such abuses. One example is the new law proposal PL 572/2022, establishing a national landmark on Human Rights and Business (Brasil, 2022).

The dichotomy between food security (the need to produce more food to feed a growing world population) and food sovereignty (the basic idea that food should be considered a human right, not a commodity) reveals another layer of injustice: prioritising commodity production instead of combating hunger locally. An interviewee observed, "soy cultivation actually reduces food security. You might say: yes, soy is a food product. But it is just an export product." Indeed, family farming is responsible for an important portion of the food supply in Brazil. According to the World Bank (2024, p.1), family farmers "account for 87 percent of cassava, 70 percent of beans, 34 percent of rice, and 21 percent of wheat, 60 percent of milk and 50 percent of poultry" production in Brazil. Therefore, the focus of Brazil's government on agro-commodity exports instead of paying more attention to the family farming sector is associated with food insecurity and hunger. Over the years, the government has promoted dubious

responses to hunger and food supply. On the one hand, institutions such as the National Supply Company (Conab), under the Ministry of Agrarian Development (MDA), execute important policies such as the Food Acquisition Program (PAA), orchestrating family farmers to tackle hunger. On the other hand, the Ministry of Agriculture and Livestock (MAPA) has historically partnered with agribusiness players to support industrialised soy and beef production, with little attention to the social-environmental injustices linked to the sector (Maluf et al. 2022a; Pompeia, 2021).

Health issues are another concern. The growing use of pesticides, and excessive nitrogen emissions connect both soy and beef to diseases in Brazil and the Netherlands. The aerial spraying of pesticides in the surroundings of soy farms crossing watercourses (underground water streams) was identified in Santarém, Amazon region (Morgado et al., 2023). Often, "local health agents deny this, out of fear of being targeted by large farmers, responsible for the use of pesticides" (interviewee). This exemplifies "toxic coloniality" (Pesa, 2023), characterised by the unequal relations between global South and North countries when it comes to producing and being impacted by pesticides. Bombardi (2021) has used the terms "molecular colonialism" and "chemical violence" to characterize the EU exports of pesticides (forbidden within the EU's own territory) to Brazil. In 2018/2019, the EU exported to Mercosur countries nearly 7 million kilos of pesticides whose use is prohibited within the EU. The main companies, per substance/pesticide, percentage of total volume, and country of origin of the agrochemicals were: Syngenta (paraquat, 72% of volume, UK); Corteva (picoxystrobin, 14% of volume, France/Spain), and Arysta (propargite, 5% of volume, The Netherlands) (Bombardi, 2021, p.28). The consequences are severe. Between 2010-2019, 3750 children between 0-14 years old were poisoned by pesticides used in local agriculture in Brazil (Bombardi, 2021). Soy-driven poisoning threatens Indigenous people's health, for example, the Munduruku and the Guarani-Kaiowá IPs, as well as family farmers (Capella et al., 2023). Pesticide contamination threatens the reproductive health of women exposed to chemicals such as glyphosate (Centro de Derechos Reproductivos, 2020). As Brazilian soy is exported to the Netherlands mainly to feed cattle, additional health problems emerge. Dutch livestock production has impacted human health, including pneumonia, asthma, antimicrobial resistance, nitrate pollution of groundwater, and surface water eutrophication (Post et al., 2020). Pesticides have also been detected in drinking water sources across the country (Sierps et al., 2019).

Spatial and historical injustices are visible in land tenure disputes involving large farmers (cattle ranchers and soy producers alike), the Brazilian government and traditional communities of the Cerrado. While IPs and Quilombolas<sup>8</sup>

have obtained formal land tenure rights over the years (despite many still struggling for this right), the same is not true for other forest peoples. For the babassu coconut breakers, the "raizadeiras" (root collectors), the "sempre viva" flower pickers, and some of the local communities from the Cerrado, the legal instruments for demarcating land are even more fragile than for IPs and Quilombolas. The fight for recognition as traditional communities, the struggles for land (recognition, access, and ownership), and the efforts to keep their sustainable livelihoods, provides clear examples of how intersectionality sheds light on (often neglected) injustices against the "raizadeiras," "sempre viva" flower pickers, and coconut breakers (usually Black women) amid soy and beef supply chains pressures in the Cerrado.

It is challenging to address these issues, since agribusiness is a powerful sector (Pompeia, 2021). Even in more environmentally progressive governments (such as in the first and second periods of the Lula administration, from 2003–2010), agribusiness had a high degree of political power and influence. An interviewee observed: "Soybean exports have been incredibly stimulated, even before Bolsonaro came to power (...). Lula has supported it. And even when Dilma was in power, they have always supported the agribusiness tremendously, both with (indirect) subsidies and with investments for exporting."

Brazil has developed instruments to decouple beef and soy supply chains from deforestation, and the "moratoriums" for soy (2006) and beef (2013) are two cases in point. These are multi-stakeholder agreements (involving firms, government, NGOs and sectorial associations) to deflect commodity-driven deforestation from the Amazon. Although Brazil's soy moratorium helped reduce soy expansion into the Amazon for a while, "the soybean production replaced cattle production in the savanna region (Cerrado), which in turn, migrated to the Amazon rainforest" (Maranhão et al., 2019, p.2150). What is more, these moratoriums do not tackle social injustice or human rights abuses (Maluf et al., 2022b). The following section illustrates how local communities have been resisting such problems via political alliances and mobilisations.

## RESISTANCE PROJECTS AND POLITICAL MOBILISATION

Civil society has articulated resistance projects (Hill Collins, 2019) against injustices driven by/connected to soy and beef supply chains in both countries. In Brazil, in 2019 a group of 56 social movements (Indigenous, Quilombola, peasants, and others) organised the Cerrado People's Permanent Court (TPP) (Tribunal Permanente dos Povos em Defesa dos Territórios do Cerrado). The symbolic trial judged the crime of ecocide against the Cerrado and the genocide of its people. Accordingly, if nothing is done

to stop the degradation of the biome, there will be an irreversible deepening of ecocide in the coming years, and, along with it, the depletion of the material base for the social reproduction of IP, Quilombolas and other traditional communities. In 2022, a collective of women from the Cerrado launched a letter<sup>10</sup> to claim their right to live with dignity on the occasion of the thematic hearing on Food Sovereignty and Socio-Biodiversity of the TPP. The two initiatives demonstrate attention to IEJ. The repercussion of these events across social media and public spaces raises awareness of Brazilian citizens and the international community about Cerrado's ecocide. In addition, these mobilisations resulted in the TPP platform, an online repository with documents and reports about Cerrado's ecocide and conservation efforts.

At the government level, policies have aimed to promote EJ. The National Policy for the Sustainable Development of Traditional Peoples and Communities (PNPCT; Política Nacional de Desenvolvimento Sustentável dos Povos e Comunidades Tradicionais) aims to recognize, strengthen and guarantee territorial, social, environmental, economic and cultural rights to traditional communities, respecting identity, forms of organization and institutions. Other examples are the project "Opportunities for All", 11 from the Ministry of Racial Equality, and the support to practices of aquilombamento at the Ministry of Agrarian Development (MDA), referring to the practice through which "the government picks a land, that is not necessarily a Quilombo, and transforms it into a Quilombo." (interviewee).

Since the 1998 Constitution, important changes in legislation have included IP in some governance instruments like the FPIC (Gustafsson and Schilling-Vacaflor, 2022, p.71). Yet, FPIC has not been implemented in recent soy driven developments, particularly infrastructural projects such as the Ferrograo railway (EF-170). The railway would connect the 933 km between Sinop (Mato Grosso state) and the port of Miritituba, in Itaituba (Pará state), around the Tapajós and Xingu rivers. When finished, Ferrogrão would have the capacity to transport more than 50 million tons of soybeans and corn annually. For that, expresident Michel Temer issued a Provisional Measure then turned into law to exclude around 862 hectares from the Jamanxim National Park, a large area of environmental preservation with indigenous lands. The Federal Supreme Court has temporarily suspended the effectiveness of the law. To resist the project, in March 2024, representatives from the Munduruku, Panará, Apiaká, Tupinambá, Xavante and Kayapó IPs joined forces with Quilombolas, peasants, landless workers and other social movements to perform a symbolic, live broadcast trial. In the trial, trading companies, in particular Cargill, were "accused" of partnering with the Brazilian government in a development project that overlooks the very existence of IPLC in the Tapajós and Xingu River basins. This example illustrates "indigenous-led intersectional resistance" against soy-driven injustices.

In the Netherlands, La Via Campesina organised "Peasant Struggles", an event held in 2024 to reflect on food sovereignty in Europe and Latin America. A speaker reiterated that "food is not a commodity; it is a human right!" The speaker noted that "as long as agriculture remains incorporated in the regulatory governance within the WTO, it will be considered a commodity, thus will not solve pressing problems such as hunger, land conflicts, the disconnection between farmers and their lands." La Via Campesina pushes for a "new trade framework based on food sovereignty." And it is critical of the EU Common Agricultural Policy (CAP), which allows farmers to produce below the true cost of production, but, eventually, MNCs are the most privileged groups. The network advocates for changes in the EU Commission's current market-driven ideology. This is important in the context of the Netherlands, as it is connected with the nitrogen crisis. 12 "Behind this (the nitrogen crisis) are those mega-corporations that import soybean for animal feed. It is all related to a system in which as much soy as possible must be produced, for as many animals and as many dairy products as possible." (interviewee). Dutch farmers have been opposing government measures aimed at reducing nitrogen emissions.

These examples illustrate how actors mobilize against some of the injustices in beef and soy supply chains in both countries, as well as the IEJ principle of "social action as a way of knowing." (Hill Collins, 2019). Such practices beget alliances between different identity groups, including peasants, Indigenous peoples, Quilombola communities, NGOs, transnational networks, and academics, to resist/fight socio-environmental injustices emerging from (or intensified by) global soy and beef trade.

## EUDR POTENTIAL EFFECTS: TACKLING INTERSECTIONAL ENVIRONMENTAL INJUSTICES?

The EUDR is part of the EU Green Deal, a set of policies that, among other things, aim to promote EU climate neutrality by 2050 and to put Europe's biodiversity on a path to recovery by 2030 (Berning and Sotirov, 2023). The EU Green Deal aims to "protect vulnerable workers and societies," 13 through policies like the Just Transition Fund and the Social Climate Fund. It also proposes to "put a price on carbon", "enhance the competitiveness of Europe's net-zero industry", and "economic growth," 14 signalling what Renckens (2021) called EU's public-private model of sustainability governance, which has been heavily criticized. For some, the EU Green Deal is the EU's strategy to "turn ecological crises into profitable opportunities," to keep its

economic and political leadership (i.e., the status quo), while preserving neo-colonial relations with sourcing countries of agricultural and mineral raw materials (Almeida et al., 2023). In keeping the status quo, tackling intersectional injustices would not be the goal of the EU Green Deal.

In the history of EU-Brazil environmental relations, EU foreign policy has been termed 'soft imperialism', for prioritizing trade competitiveness and economic growth instead of sustainable development. This has led to policy incoherence and contradictory actions in EU foreign environmental behaviour (Afionis and Stringer, 2014, p.47). For some interviewees, this would apply to the case of the EUDR: "The European Commission's goal with this legislation is to keep the European supply chain clean. (...) And that is different from saying: 'I want legislation that prevents deforestation." (interviewee). The categorisation of countries into low, medium or high deforestation risk has been criticised. Some interviewees argued that this is a highly political process, that can potentially compromise the exporting profile of countries considered high risk, not necessarily because they have had high deforestation, but because they might be unable to comply with the regulation, for example, because of the lack of technical capacity. "There's no point in considering low risk, medium risk, high risk for a country. Where are the commodities coming from? The regulation is not looking at who are the actors that are making this risk increase, which isn't just the farmer at the end, right?" (interviewee). Accordingly, more attention is needed to the specific places (i.e., amplifying the definition of forest lands) and actors (directly and indirectly involved in deforestation, e.g., the finance sector) in the risk assessment of the EUDR. Needless to say, few of these international policy discussions about country risk assessment incorporate the intersectional drivers of human rights abuses in the targeted supply chains.

In EUDR's current version, the EU Commission shows a willingness to cooperate with sourcing countries, but on demand. This is addressed in Chapter 5 (Country Benchmarking System and Cooperation with third countries), which includes Articles 29 (Assessment of Countries) and 30 (Cooperation with third countries). Intersectional experiences of marginalisation and impact associated with the production of such commodities do not figure in neither of these articles.

Regarding digital systems to support traceability, Brazilian actors have developed some solutions, but integration with the EUDR-specific system might be challenging. Examples: The Tax Invoice, a proof of transaction that links the tax information of the entities involved (for cattle and soy), and the GTA (Guia de Trânsito Animal) (for cattle). The GTA is mandatory, including information to comply with safety and health standards, attempting to guarantee "non-

violent treatment" of the animals while in transit (Freire et al., 2024, p.14). However, the GTA is issued for the batch, not for individual animals. Information on the product's origin is non-mandatory, as well as information of the previous GTAs. So, it does not include farms that have previously hosted the cattle. The GTA is self-declaratory, although verified by the Brazilian government. The Brazilian Service for the Traceability of the Bovine and Bubaline Production Chain (SISBOV) is a compulsory register for all producers exporting to the EU. Animals are individually identified through ear tags. Yet, SISBOV does not address socioenvironmental compliance, it is not mandatory for non-EU exports, and the traceability ear tags are only required three months before slaughter or shipment abroad (Freire et al., 2024). In 2024, MAPA, together with the Federal Data Processing Service (Serpro) have been developing a public platform to facilitate rural producers' adherence to the EUDR, the AgroBrasil+Sustentável. The platform provides information about farm polygons and product origin, as well as the status of legal compliance. The platform is free of charge and can potentially become a tool for small and medium producers to document EUDR compliance. However relevant, these platforms are not designed, nor sufficient, to guarantee alignment with IEJ. There is no collection of information on human rights or intersectional injustices across these supply chains (e.g., land conflicts, pesticide pollution of villages surrounding soy farms, cases of slave labour, health issues, etc.). Moreover, multispecies environmental justice (Haraway, 2016) and solidarity for the more-than-human (Escobar, 2019), e.g., cattle, are not considered, since these tools are not equipped to document compliance with "non-violent treatment" of animals.

NGOs are closely following these developments. An interviewee from a Dutch-based NGO observed: "During the development of the EUDR, we tried to bring the voices of Global South people into the decision-making. We had lobby tours with many global South activists in Brussels. We tried to influence the policy development." Another Dutchbased NGO emphasizes the EUDR-related lobbying on the following fronts: a) how to operationalize EUDR's Article 30 (Cooperation with third countries) within the Dutch government; b) the revisions of the regulation towards including other wooded lands; and c) on including the financial sector as an accountable part. For another NGO, traders and operators are secretive about their strategies to comply with the EUDR: "Our communication with those who import soy, such as Bunge and Cargill is super complicated (...). Those who discuss this, in particular our Brazilian colleagues, do so with smaller traders, who have shown a willingness to take steps. But Bunge, Cargill and ADM are a bit more difficult parties for us (to reach)." In the Netherlands, some NGOs opted to collaborate more closely with retailers,

such as Albert Heijn. Dutch supermarkets have made a commitment to a deforestation- and conversion-free soy chain by 2025. At the time of writing, these retailers work on operationalizing the commitment, collaborating with the Central Bureau of Food Trade (CBL), the trade association for supermarkets and food companies in the country. While these collaborations focus on guaranteeing compliance with the EUDR, stronger action on understanding the impacts of Dutch retailers on communities affected by soy and beef production/trade on the Brazilian Amazon and Cerrado, as well as how to empower these communities' political demands (e.g., land demarcations, pesticide reduction), would be important steps for these EU companies to more effectively contribute to IEJ.

For civil society groups, the conceptualisation of forests adopted in the EUDR is too restrictive. In March 2022, a coalition led by the Climate Observatory in Brazil issued a letter<sup>17</sup> supporting but suggesting the expansion of the adopted concept of "forest," including ecosystems such as the Cerrado; the addition of the corn and cotton supply chains as deforestation risk products; and requesting that, beyond traders and operators, the EUDR should focus on EU-headquartered financial institutions funding agribusiness. The current version of the EUDR adopts the term "forest degradation," beyond deforestation. This is an important step. Yet, as an interviewee has argued, the regulation is not clear about what exactly "degradation" entails. "We need a slightly more elaborate discussion about what degradation means, including violations of territorial rights, human rights." (interviewee). The timing for the impact assessment is another controversial point. The EUDR' impacts on smallholders will only be measured after five years, but some interviewees believe that impact should be measured much earlier.

When analysing EUDR's current text, we observe that the EU commission is aware of some of these criticisms. For example, article 34 states that "no later than 30 June 2024, the Commission shall present an impact assessment accompanied, if appropriate, by a legislative proposal to extend its scope (...) to include other wooded land." Yet, so far, even with the amendments of November 2024, the discussion on other wooded land remains unsettled. Moreover, the current text states that the EU will support IPLCs based on the FPIC principle:

[...] The Commission should reinforce its support and incentives concerning protecting forests and the transition to deforestation-free production, acknowledging and strengthening the role and rights of indigenous peoples, local communities, smallholders and micro, small and medium-sized enterprises (SMEs), (...). In doing so, the Commission should fully recognise the role and rights of

indigenous peoples and local communities in protecting forests, taking into account the principle of free, prior and informed consent. (EUDR, 2023, p.30).

In light of the above, the EUDR could potentially become more aligned with IEJ by adopting mechanisms to tip the power balance in favour of IPLCs, small holders and other marginalised groups across beef and soy supply chains. Such mechanisms should demonstrate awareness of the intersectional nuances (power relations, processes and actors) leading to injustices affecting biodiversity and people along the production, distribution, and trade of these commodities. But also supporting the political demands of IPLCs for land ownership, pesticide reduction, and the right to food, health and education.

#### **CONCLUSION**

In this article, we discussed intersectional environmental issues associated with the Dutch-Brazilian beef and soy trade, suggesting how such issues could be potentially targeted via EUDR. Cattle ranching and soy monocrops are key drivers of land use change, biodiversity loss and the violation of human and non-human rights in Brazil's Amazon and Cerrado biomes, as well as in the Netherlands. Examples include land grabbing, exploitative labour relations, pesticide pollution of forests and rivers affecting people' and ecosystems' health, and infrastructural projects that cross IPLC's lands and, in doing so, threaten their culture, livelihoods and territories. The concept of IEJ helped us better analyse these problems, illustrating how intersectionality adds to current EJ debates on two fronts. First, instead of discussing structural and political oppressions, the lenses of IEJ equipped us to assess how injustices materialise in the experiences of particular groups and communities when affected by soy and beef supply chains. Additionally, the IEJ lenses allowed us to better assess how distinct social groups (e.g., Indigenous peoples, peasant women, Quilombolas, etc.) co-create political mobilisations and resistance projects against such injustices. We discussed some gaps in the current version of the EUDR that either support or deepen the status quo of socio-environmental injustices across the studied supply chains. Our findings demonstrate that, despite being an important instrument for sustainable trade, the EUDR could benefit from more sophisticated mechanisms to tackle the underlying causes of oppressions linked to the international trade of beef and soy. The article contributes to the Commons literature (Ostrom 2007) by providing empirical evidence on the interconnections between deforestation, commodity trade and human rights abuses, supporting a diagnosis of the necessary transformations

that can positively impact people and biodiversity in socialecological systems in Brazil and the Netherlands.

However, the current global political context represents a challenge for implementing the EUDR in line with IEJ. While sustainability is still a central part of the EU agenda, in recent years, supply security and inflation control have gained more importance. Internally, the Russian invasion of Ukraine in 2022 provoked a surge in inflation of basic goods, such as foodstuffs, pressuring for price alleviation measures. Moreover, the EU has seen large farmers' protests, in light of their discontent with what they characterize as costly environmental demands. Externally, EU retaliation against soy from the United States as part of the ongoing trade war could raise demand for Brazilian products. While it is impossible to predict the specific causal pathways through which the EUDR could encounter novel challenges, the geopolitical scenario can impact social-environmental commitments. This raises questions about how to guarantee alignment with IEJ criteria in EU regulations such as the EUDR.

#### DATA ACCESSIBILITY STATEMENT

The coding file for the article is publicly accessible at: https://doi.org/10.5281/zenodo.13254987.

#### **NOTES**

- 1 Non-human rights, or more-than-human rights, are the rights of non-human entities, including animals, elements of the natural world, objects, and the like.
- 2 More information on the triple planetary crisis here: <a href="https://unfccc.int/news/what-is-the-triple-planetary-crisis">https://unfccc.int/news/what-is-the-triple-planetary-crisis</a>.
- 3 The Trase database (https://trase.earth/) provides detailed supply chain data on commodities whose production and trade presents global environmental risks.
- 4 In this article, we use the terms 'supply chains' and 'value chains' interchangeably.
- 5 All codes with number of experts and % representation in parentheses: human rights and intersectionality (59; 21,5%); MNCs soy (26; 9,5%); Soy supply chains (23; 8,4%); EUDR and environmental NGOs (20; 7,3%); EUDR and international political economy (19; 6,9%); Agribusiness and environmental degradation (14; 5,1%); Biodiversity Netherlands (13; 4,7%); Socioenvironmentalism (13; 4,7%); Agribusiness and international political economy (11; 4,0%); Agribusiness Netherlands (11; 4,0%); EUDR soy (9; 3,3%); Pesticides (9; 3,3%); EUDR Brazil (7; 2,6%); EUDR Netherlands (7; 2,6%); Agribusiness Brazil (5; 1,8%); Agribusiness MNCs (5; 1,8%); Biodiversity Brazil (5; 1,8%); EUDR due diligence (4; 1,5%); EUDR limitations (3; 1,1%); Agribusiness Netherlands (2; 0,7%); Land use change (2; 0,7%); Water (2; 0,7%); Beef supply chains (1; 0,4%); EUDR beef (1; 0,4%); Literature (1; 0,4%); Media (1; 0,4%); MNCs beef (1; 0,4%); Literature (1;
- 6 The Cerrado is the second largest ecosystem/biome in Brazil.
  According to the IUCN, "Stretching over 200 million hectares, the size of Germany, France, England, Italy, and Spain combined, the Cerrado is a wooded grassland that provides critical ecosystem services to the world. It protects biodiversity, stabilizes regional climate, and regulates watersheds that provide 40% of Brazil's fresh water." More information here: https://www.iucn.nl/app/

- uploads/2022/10/Factsheet-Soy\_IUCN-NL-2022\_Guide-for-value-chain-management-in-the-protein-transition.pdf.
- 7 The Brazilian Legal Amazon is a socio-geographic division in Brazil encompassing nine states and a portion of another (Maranhão). It was established to promote special protection and development policies for the Amazon region. Besides the Amazon biome, it also includes parts of the Cerrado and Pantanal biomes.
- 8 Quilombolas are Afro-Brazilians, descendants of ex-slaves, who live in quilombo settlements, which are scattered all over Brazil.
- 9 TPP (2019). Tribunal Permanente dos Povos em Defesa dos Territórios do Cerrado. Available from: <a href="https://tribunaldocerrado.org.br/">https://tribunaldocerrado.org.br/</a>.
- 10 Carta das Mulheres do Cerrado. (2022). Mulheres do Cerrado clamam pelo direito à vida com dignidade. Available from: <a href="https://www.campanhacerrado.org.br/noticias/346-carta-das-mulheres-do-cerrado-mulheres-do-cerrado-clamam-pelo-direito-a-vida-com-dignidade">https://www.campanhacerrado.org.br/noticias/346-carta-das-mulheres-do-cerrado-clamam-pelo-direito-a-vida-com-dignidade</a>.
- 11 Brasil (2023). Política Nacional de Desenvolvimento Sustentável dos Povos e Comunidades Tradicionais. Available from: <a href="https://www.gov.br/igualdaderacial/pt-br/acesso-a-informacao/acoes-e-programas-1/politica-nacional-de-desenvolvimento-sustentavel-dos-povos-e-comunidades-tradicionais-1">https://www.gov.br/igualdaderacial/pt-br/acesso-a-informacao/acoes-e-programas-1/politica-nacional-de-desenvolvimento-sustentavel-dos-povos-e-comunidades-tradicionais-1</a>.
- 12 The excessive deposition of nitrogen, especially in the form of ammonia (NH3) and nitrogen oxides (NOx), is a form of nutrient pollution with deleterious effects to the quality of soil, water, air and nature, due to eutrophication. The Netherlands emits more nitrogen compounds per land area than any other EU member state.
- 13 European Union (2025a). The European Green Deal. Available from: https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal\_en.
- 14 European Union (2025b). The European Green Deal: a growth strategy that protects the climate. Available from: <a href="https://ec.europa.eu/stories/european-green-deal/">https://ec.europa.eu/stories/european-green-deal/</a>.
- 15 https://vakbladvoedingsindustrie.nl/en/article/a-deforestation-and-conversion-free-soy-chain-in-2025.
- 16 https://www.cbl.nl/het-bureau/.
- 17 Please, refer to the "Position Paper on the European Commission's Proposal for a regulation on deforestation-free products" (14/03/2022), put forward by the Brazilian Climate Observatory, and available at: https://www.oc.eco.br/en/posicionamento-sobrea-proposta-da-comissao-europeia-para-uma-regulamentacao-sobre-produtos-livres-de-desmatamento/.

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#### **COMPETING INTERESTS**

The authors have no competing interests to declare.

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We have not used any AI or AI-assisted technology in the process of writing this paper.

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#### REFERENCES

- Afionis, S., & Stringer, L. C. (2014). The environment as a strategic priority in the European Union–Brazil partnership: is the EU behaving as a normative power or soft imperialist? International Environmental Agreements: Politics, Law and Economics, 14(1), 47–64. https://doi.org/10.1007/s10784-013-9232-3
- Almeida, D. V., et al. (2023). The "Greening" of Empire: The European Green Deal as the EU first agenda. *Political Geography*, 105, 102925. https://doi.org/10.1016/j.polgeo.2023.102925
- **Alvarez, C. H.,** & **Evans, C. R.** (2021). Intersectional environmental justice and population health inequalities: A novel approach. *Social Science & Medicine*, 269, 113559. https://doi.org/10.1016/j.socscimed.2020.113559
- **Arsel, M., & Büscher, B.** (2012). Nature™ Inc.: Changes and continuities in neoliberal conservation and market-based environmental policy. *Development and change*, 43(1), 53–78. https://doi.org/10.1111/j.1467-7660.2012.01752.x
- **Begotti, R. A.,** & **Peres, C. A.** (2020). Rapidly escalating threats to the biodiversity and ethnocultural capital of Brazilian Indigenous Lands. *Land Use Policy*, *96*, 104694. https://doi.org/10.1016/j.landusepol.2020.104694
- **Berning, L.,** & **Sotirov, M.** (2023). Hardening corporate accountability in commodity supply chains under the European Union Deforestation Regulation. *Regulation & Governance*, 17, 870–890. https://doi.org/10.1111/rego.12540
- Bombardi (2021). Geography of asymmetry: the vicious cycle of pesticides and colonialism in the commercial relationship between Mercosur and the European Union. https://ocaa.org.br/en/publicacao/geography-of-asymmetrythe-vicious-cycle-of-pesticides-and-colonialism-in-the-commercial-relationship-between-mercosur-and-the-european-union/
- **Brandão, A.,** et al. (2024). Behind the cattle industry: Behind the Cattle Industry: Modern Slave Labor Used to Produce Brazil's Beef and Leather. *Environmental Development*, 101000. https://doi.org/10.1016/j.envdev.2024.101000
- **Brasil.** (2022). PL 572/2022 Lei Marco Nacional sobre Direitos Humanos e Empresas no Brasil (pp. 1–30).

- https://www.camara.leg.br/proposicoesWeb/prop\_mostrarintegra?codteor=2148124 (Accessed July 4, 2023).
- Brasil. (2023). Política Nacional de Desenvolvimento Sustentável dos Povos e Comunidades Tradicionais. https://www.gov.br/igualdaderacial/pt-br/acesso-a-informacao/acoes-e-programas-1/politica-nacional-de-desenvolvimento-sustentavel-dos-povos-e-comunidades-tradicionais-1
- Brazilian Climate Observatory. (2022). Position Paper on the European Commission's Proposal for a regulation on deforestation-free products. https://www.oc.eco.br/en/posicionamento-sobre-a-proposta-da-comissao-europeia-para-uma-regulamentacao-sobre-produtos-livres-dedesmatamento/
- **Capella, R.,** et al. (2023). Indigenous territories of the Brazilian Amazon facing agribusiness expansion: a pesticide exposure susceptibility index based on census data. *Environmental Challenges*, 11, 100702. https://doi.org/10.1016/j.envc.2023.100702
- Carta das Mulheres do Cerrado. (2022). Mulheres do Cerrado clamam pelo direito à vida com dignidade. https://www.campanhacerrado.org.br/noticias/346-carta-das-mulheres-do-cerrado-mulheres-do-cerrado-clamam-pelo-direito-a-vida-com-dignidade
- Centro de Derechos reproductivos. (2020). Salud reproductiva y glifosato en el contexto del conflito armado. https://reproductiverights.org/wp-content/uploads/2020/12/Salud-Reproductiva-y-Glifosato-en-el-Contexto-de-Conflicto-Armado.pdf
- **Chan, S.,** et al. (2023). The global biodiversity framework needs a robust action agenda. *Nature Ecology & Evolution*, 7(2), 172–173. https://doi.org/10.1038/s41559-022-01953-2
- Comissão Pastoral da Terra. (2023). Comissão Pastoral da Terra (CPT) divulga dados parciais de conflitos no campo brasileiro do 1º semestre de 2023. https://www.cptnacional.org.br/publicacoes-2/noticias-2/6563-cpt-dados-parciais-2023
- **EEA European Environmental Agency.** (2023). *Biodiversity: states of habitats and species*. <a href="https://www.eea.europa.eu/en/topics/in-depth/biodiversity">https://www.eea.europa.eu/en/topics/in-depth/biodiversity</a> (Accessed July 4, 2023).
- **Ermgassen, E.,** et al. (2020a). The origin, supply chain, and deforestation risk of Brazil's beef exports. *Proceedings of the National Academy of Sciences*, 117(50), 31770–31779. https://doi.org/10.1073/pnas.2003270117
- **Escobar, A.** (2019). Thinking-feeling with the Earth:

  Territorial Struggles and the Ontological Dimension of the Epistemologies of the South. In *Knowledges born in the struggle* (pp. 41–57). Routledge. <a href="https://doi.org/10.4324/9780429344596-3">https://doi.org/10.4324/9780429344596-3</a>
- **EUDR.** (2023). European Union Regulation on Deforestation-free Products. https://eur-lex.europa.eu/legal-content/EN/TXT/ PDF/?uri=CELEX:32023R1115
- **European Union.** (2025a). The European Green Deal. https://commission.europa.eu/strategy-and-policy/ priorities-2019-2024/european-green-deal\_en

- **European Union.** (2025b). The European Green Deal: a growth strategy that protects the climate. https://ec.europa.eu/stories/european-green-deal/
- Fletcher, R., Dressler, W. H., Anderson, Z. R., & Büscher, B. (2019).

  Natural capital must be defended: green growth as neoliberal biopolitics. *The Journal of Peasant Studies*, 46(5), 1068–1095. https://doi.org/10.1080/03066150.2018.1428953
- Freire, I., et al. (2024). Opportunities for deforestation-free supply chains through producer consumer country partnerships.

  Diálogo Agropolítico Brasil Alemanha. https://de.apdbrasil. de/wp-content/uploads/2024/01/Deforestation-free\_supply\_chains\_Brazil.pdf
- **Global Witness,** et al. (2023). *JBS S.A. Dual Listing: A collective* warning of risks to people, planet and investors. https://mightyearth.org/wp-content/uploads/2024/10/October-24\_JBS-Investor-Briefing.pdf
- **Green, J. M.,** et al. (2019). Linking global drivers of agricultural trade to on-the-ground impacts on biodiversity. *Proceedings of the National Academy of Sciences*, 116(46), 23202–23208. https://doi.org/10.1073/pnas.1905618116
- **Gustafsson, M.,** & **Schilling-Vacaflor, A.** (2022). Indigenous Peoples and multiscalar environmental governance: The opening and closure of participatory spaces. *Global Environmental Politics*, 22(2), 70–94. https://doi.org/10.1162/glep\_a\_00642
- Haddad, E. A., Araújo, I. F., Feltran-Barbieri, R., Perobelli, F. S., Rocha, A., Sass, K. S., & Nobre, C. A. (2024). Economic drivers of deforestation in the Brazilian Legal Amazon. *Nature* Sustainability, 7(9), 1141–1148. https://doi.org/10.1038/ s41893-024-01387-7
- **Haraway, D. J.** (2016). Staying with the trouble: Making kin in the *Chthulucene*. Duke University Press. <a href="https://doi.org/10.2307/j.ctv11cw25q">https://doi.org/10.2307/j.ctv11cw25q</a>
- Hill Collins, P. (2019). Intersectionality as Critical Social Theory. Durham, NC: Duke University Press. https://doi.org/10.1215/9781478007098
- IPBES. (2019). Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). In S. Díaz, J. Settele, E. S. Brondízio, H. T. Ngo .... & C. N. Zayas (Eds.). Bonn: IPBES secretariat. https://doi.org/10.5281/zenodo.3553579
- **IPCC.** (2022). Fact sheet Biodiversity. https://www.ipcc.ch/report/ar6/wg2/downloads/outreach/IPCC\_AR6\_WGII\_FactSheet\_Biodiversity.pdf (Accessed July 26, 2023).
- IUCN NL. (2022/2023). Sustainable plant-based worldwide.

  Guide for value chain management in the protein
  transition. https://www.iucn.nl/app/uploads/2022/10/
  Factsheet-Soy\_IUCN-NL-2022\_Guide-for-value-chainmanagement-in-the-protein-transition.pdf
- **Kojola, E.,** & **Pellow, D. N.** (2021). New directions in environmental justice studies: examining the state and

- violence. *Environmental Politics*, 30(1–2), 100–118. https://doi.org/10.1080/09644016.2020.1836898
- **Kröger, M.** (2022). Extractivisms, existences and extinctions: Monoculture plantations and Amazon deforestation. London/New York: Routledge. https://doi.org/10.4324/9781003102977
- **Kuepper, B.** (2022). *Brazilian Soy Imports to the Netherlands*. Greenpeace Report from May 2022. https://www.greenpeace.org/static/planet4-eu-unit-stateless/2022/05/970ccbb6-soytrade-brazil-netherlands-2205-final-gp-nl-1.pdf
- **Loomis, J., & Oliveira, J. A.** (2024). Understanding dynamics between public policy and global value chains (GVCs): governance for sustainability in the Brazilian Amazon beef cattle GVC. *The International Journal of Logistics Management*. https://doi.org/10.1108/IJLM-03-2024-0139
- **Lopes, G. R.,** & **Bastos Lima, M. G.** (2020). Necropolitics in the Jungle: COVID-19 and the Marginalisation of Brazil's Forest Peoples. *Bulletin of Latin American Research*, 39, 92–97. https://doi.org/10.1111/blar.13177
- Lopes, G. R., Bastos Lima, M. G., & Dos Reis, T. N. (2021).

  Maldevelopment revisited: Inclusiveness and social impacts of soy expansion over Brazil's Cerrado in Matopiba. *World Development*, 139, 105316. https://doi.org/10.1016/j. worlddev.2020.105316
- **Luft, R. E., & Ward, J.** (2009). Toward an intersectionality just out of reach: Confronting challenges to intersectional practice. In *Perceiving gender locally, globally, and intersectionally* (pp. 9–37). Emerald Group Publishing Limited. <a href="https://doi.org/10.1108/S1529-2126(2009)0000013005">https://doi.org/10.1108/S1529-2126(2009)0000013005</a>
- Malin, S. A., & Ryder, S. S. (2018). Developing deeply intersectional environmental justice scholarship.

  Environmental Sociology, 4(1), 1–7. https://doi.org/10.1080/2 3251042.2018.1446711
- Maluf, R. S., et al. (2022a). Sustainability, justice and equity in food systems: Ideas and proposals in dispute in Brazil.

  Environmental Innovation and Societal Transitions, 45, 183–199. https://doi.org/10.1016/j.eist.2022.10.005
- **Maluf, R. S.,** et al. (2022b). Global value chains, food and just transition: a multi-scale approach to Brazilian soy value chains. *The journal of peasant studies*, 1–24. https://doi.org/10.1080/03066150.2022.2105700
- **Maranhão, R.,** et al. (2019). The spatiotemporal dynamics of soybean and cattle production in Brazil. *Sustainability*, 11(7), 2150. https://doi.org/10.3390/su11072150
- Martin, A., et al. (2020). Environmental justice and transformations to sustainability. *Environment: Science and Policy for Sustainable Development*, 62(6), 19–30. https://doi.org/10.1080/00139157.2020.1820294
- Martinelli, L. A., Batistella, M., Silva, R., & Moran, E. (2017). Soy expansion and socioeconomic development in municipalities of Brazil. *Land*, *6*(3), 62. https://doi.org/10.3390/land6030062

- Mohai, P., Pellow, D., & Roberts, J. T. (2009). Environmental justice.

  Annual review of environment and resources, 34, 405–430.

  https://doi.org/10.1146/annurev-environ-082508-094348
- **Morgado, M. G.,** et al. (2023). Large-scale agriculture and environmental pollution of ground and surface water and sediment by pesticides in the Brazilian Amazon: the case of the santarém region. *Water, Air, & Soil Pollution, 234*(3), 150. https://doi.org/10.1007/s11270-023-06152-8
- **Newig, J.,** et al. (2020). Governing global telecoupling toward environmental sustainability. *Ecology and Society*, 25(4). https://doi.org/10.5751/ES-11844-250421
- Observatorio do Clima. (2022). Posicionamento do Observatório do Clima sobre a Proposta da Comissão Europeia para uma regulamentação sobre produtos livres de desmatamento, 15 Mar 2022. https://www.oc.eco.br/posicionamento-sobre-a-proposta-da-comissao-europeia-para-uma-regulamentacao-sobre-produtos-livres-de-desmatamento/
- **Ostrom, E.** (2007). A diagnostic approach for going beyond panaceas. *Proceedings of the national Academy of sciences*, 104(39), 15181–15187. https://doi.org/10.1073/pnas.0702288104
- **Pereira, R., Simmons, C. S., & Walker, R.** (2016). Smallholders, agrarian reform, and globalization in the Brazilian Amazon: Cattle versus the environment. *Land*, *5*(3), 24. <a href="https://doi.org/10.3390/land5030024">https://doi.org/10.3390/land5030024</a>
- **Pesa, I.** (2023). Toxic coloniality and the legacies of resource extraction in Africa. *International Review of Environmental History*, 9(2), 33–50. https://doi.org/10.22459/IREH.09.02.2023.03
- Phillips, N., & Sakamoto, L. (2012). Global production networks, chronic poverty and 'slave labour'in Brazil. Studies in Comparative International Development, 47, 287–315. https://doi.org/10.1007/s12116-012-9101-z
- **Pickering, J.,** et al. (2022). Rethinking and upholding justice and equity in transformative biodiversity governance. In: *Transforming Biodiversity Governance*. Cambridge University Press (pp. 155–178). https://doi.org/10.1017/9781108856348.009
- **Pompeia, C.** (2021). Formação política do agronegócio. Editora Elefante.
- **Post, P.,** et al. (2020). Effects of Dutch livestock production on human health and the environment. *Science of the Total Environment*, 737, 139702. <a href="https://doi.org/10.1016/j.scitotenv.2020.139702">https://doi.org/10.1016/j.scitotenv.2020.139702</a>

- **Proforest.** (2024). Opportunities for deforestation-free supply chains through producer-consumer country partnerships, 18

  Jan 2024. https://www.proforest.net/resources/publications/opportunities-for-deforestation-free-supply-chains-through-producer-consumer-country-partnerships/
- Rajão, R., Soares-Filho, B., Nunes, F., Börner, J., Machado, L., Assis, D., ... & Figueira, D. (2020). The rotten apples of Brazil's agribusiness. *Science*, *369*(6501), 246–248. https://doi.org/10.1126/science.aba6646
- **Renckens, S.** (2021). Disaggregating public-private governance interactions: European Union interventions in transnational private sustainability governance. *Regulation & Governance*, 15(4), 1230–1247. https://doi.org/10.1111/rego.12332
- Santos, A. M., et al. (2021). Deforestation drivers in the Brazilian Amazon: assessing new spatial predictors. *Journal of Environmental Management*, 294, 113020. <a href="https://doi.org/10.1016/j.jenvman.2021.113020">https://doi.org/10.1016/j.jenvman.2021.113020</a>
- **Sjerps, R.,** et al. (2019). Occurrence of pesticides in Dutch drinking water sources. *Chemosphere*, 235, 510–518. https://doi.org/10.1016/j.chemosphere.2019.06.207
- **Thives, V., Søndergaard, N.,** & **Inoue, C. Y. A.** (2022). Bringing states back into commodity-centric environmental governance: the telecoupled soy trade between Brazil and China. *Third World Quarterly*, 43(9), 2129–2148. https://doi.org/10.1080/01436597.2022.2081144
- **TPP.** (2019). Tribunal Permanente dos Povos em Defesa dos Territórios do Cerrado. https://tribunaldocerrado.org.br/
- **Tschakert, P.** (2022). More-than-human solidarity and multispecies justice in the climate crisis. *Environmental Politics*, 31(2), 277–296. https://doi.org/10.1080/09644016.2020.1853448
- **UNFCCC.** (2022). What is the Triple Planetary Crisis? <a href="https://unfccc.int/news/what-is-the-triple-planetary-crisis">https://unfccc.int/news/what-is-the-triple-planetary-crisis</a>
- World Bank. (2024). World Bank and Federal and State Governments Join Forces to Support Family Farmers in Brazil. https://www.worldbank.org/en/news/ press-release/2024/11/07/brazil-world-bank-federal-stategovernments-support-family-farmers
- **WWF.** (2022). The impact of Dutch imports on Nature loss worldwide: our land footprint for soy, palm oil, maize, coconut, cocoa, coffee, beef & leather, and timber. https://www.wwf.nl/globalassets/pdf/rapporten/wwf-nl-report-risky-business.pdf

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