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Transformation or more of the same? The EU's deforestation-free products regulation through a radical transformation lens

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ABSTRACT

The European Union (EU) is a major consumer of forest-risks commodities and therefore a key contributor to imported deforestation. In 2023, the EU Regulation on Deforestation-Free Products (EUDR) entered into force, which aims to counter the imported deforestation resulting from EU consumption of cattle, cocoa, coffee, palm oil, rubber, soy, wood and derived products. With this regulation, the EU is seemingly recognising its position as one of the world's largest consumers of natural resources and land-consuming agricultural products and adjusting its economy in the face of the global biodiversity, climate and planetary justice crises. In this article, we develop a radical transformation framework to put the EUDR to the test, asking to what extent the EUDR provides a truly transformative response to today's planetary socio-ecological and justice crises. We develop a four-pronged radical transformation framework bridging insights from transformation, degrowth, Indigenous and decolonial environmental justice, restorative justice and science and technology studies. Concretely, we distil four tenets of radical transformation. We apply our framework tentatively to the EUDR to illustrate its practical use, raise questions and highlight possible points of tension. Our preliminary findings point to the simultaneous existence in the EUDR's design of elements protentially paving the way for counter-hegemonic (re)interpretations and uses on the ground and elements reflecting and reinscribing existing hegemonies.

1. Introduction

Agricultural expansion and trade in agricultural commodities and forestry products are major drivers of global forest loss (FAO and UNEP, 2020; Pendrill et al., 2019a; 2019b). As one of the world's largest consumers of natural resources and land-consuming agricultural products, the European Union (EU) is an importer of deforestation embodied in agricultural and timber commodities (Kumeh and Ramcilovic-Suominen, 2023; Pendrill et al., 2019a; 2019b). In recognition of its role in fuelling embodied deforestation through trade and consumption, the EU adopted the EU Regulation on Deforestation-Free Products (EUDR) in June 2023. This regulation intends to minimise embodied deforestation resulting from the raising, production and consumption of cattle, cocoa, coffee, palm oil, rubber, soy, wood and derived products by mandating due diligence practices throughout commodity supply chains. With this policy, the EU is seemingly acknowledging its responsibility for causing forest loss and related

socio-ecological injustices and initiating the necessary transformative change (EC, 2019b, p. 4). As such, the EUDR is part of a broader governance shift towards unilateral regulatory responses to socio-ecological supply chain injustices, alongside, among others, the French Duty of Vigilance Law, the UK Modern Slavery Act, the German Supply Chain Due Diligence Act, the EU Conflict Minerals Regulation and the EU Corporate Sustainability Reporting Directive (Bastos Lima and Schilling-Vacaflor, 2024; Gustafsson et al., 2023). In the EUDR's wake, similar deforestation due diligence regulations are being developed in the United Kingdom (UK) and the United States (US) (Barclay, 2023; Bond et al., 2023).

In this article, we develop an analytical framework to put the EUDR to the test, asking to what extent the EUDR provides a truly transformative response to today's global biodiversity, climate and planetary justice crises. While different interpretations of "transformation" exist (Feola, 2015; Massarella et al., 2021; Scoones et al., 2015), we approach it as a dislocation of the hegemonic status quo in favour of more

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regenerative, just and convivial alternatives (Hamilton and Ramcilovic-Suominen, 2023; Verhaeghe, 2023a). Although many transformation scholars adhere to the idea that public policy interventions have a role to play in upscaling transformational alternatives to a meaningful societal level (Brand and Wissen, 2021; Büscher and Fletcher, 2019; Krüger, 2020; Martin et al., 2020; Temper et al., 2018), the term "transformation" is easily manipulated by policymakers to justify all sorts of interventions (Blythe et al., 2018, p. 1210; see also Ramcilovic-Suominen et al., 2022). Consequently, many alleged "transformative" policy interventions de facto reinforce, rather than disrupt, existing power relations and inequalities by co-opting radical ideas into mainstream policy formats (Ajl, 2022; Eversberg et al., 2023).

In response to these concerns, we propose an integrated analytical framework to allow for the practical application of radical transformative ideas to EU policy assessment. For the purpose of this article, we frame "transformation" as a counterhegemonic alternative to the capitalist, extractivist, imperial and racist relations and discourses that are the foundations of the contemporary global socio-political and economic order and which form the roots of today's climate, biodiversity, and planetary justice crises (Gonzalez, 2021; Kothari et al., 2019; Smith, 2016; Temper et al., 2018). We deem such a framework necessary to raise the standards to which EU policies are held and to open the scope of imagination from "same, same but different" policy revisions towards truly transformative, if perhaps utopian, policy interventions. We develop our radical transformation framework by combining insights from a wide array of critical, decolonial and justice-oriented literatures, including transformation (Ramcilovic-Suominen, 2022; Temper et al., 2018), degrowth (Dengler and Seebacher, 2019; Hickel, 2020a; Nirmal and Rocheleau, 2019), Indigenous and decolonial environmental justice (McGregor, 2018; Whyte, 2016), restorative justice (Forsyth et al., 2021), and science and technology studies (Turnhout, 2018, 2024).

Building on these strands of literature, we define four central tenets of transformation, including *onto-epistemic* transformation, i.e., the shift towards onto-epistemological plurality, *political* transformation, i.e., the fundamental redistribution of power and the endorsement of self-determination and self-governing authority, *economic* transformation, i.e., the shift to a sufficiency economy in areas of consumption and distributive justice in environmental value chain governance and *judicial* transformation, i.e., the recentring of victims of corporate deforestation and the prioritisation of environmental restorative justice. We tentatively apply our framework to the case of the EUDR to demonstrate its utility in practice and to raise questions and highlight possible points of tension regarding the EUDR's policy design.

In the remainder of this article, Section 2 introduces the emergence, scope and main provisions of the EUDR as the first EU policy measure to directly address the issue of embodied deforestation. Subsequently, Section 3 outlines the article's aims and methods. In section 4, we introduce the four tenets of our radical transformation framework. We do so by, first, outlining the main steering principles and concepts and, second, translating them into concrete guiding questions for EUDR analysis. Section 5 then applies our framework tentatively to the case of the EUDR. Finally, section 6 highlights the main findings and offers some concluding remarks.

1.1. The EU regulation on deforestation-free products

The EUDR (Regulation (EU) 2023/1115) is the first EU regulatory measure to directly address the issue of deforestation and forest degradation in EU supply chains. The groundwork for the EUDR can be traced back to the 2003 Forest Law Enforcement, Governance and Trade (FLEGT) action plan, which aimed to tackle global deforestation through the proxy of illegal logging and trade in illegally logged timber (EC, 2003). In 2005, the FLEGT regulation laid the foundation for the negotiation of Voluntary Partnership Agreements (VPAs) between the European Commission (EC) and timber-producing countries to minimise

trade in illegally logged timber via a traceability and legality verification system for timber products (Council Regulation (EC) No 2173/2005). In 2010, the VPAs were accompanied by the European Union Timber Regulation (EUTR) (Regulation (EU) No 995/2010). The EUTR entailed a due diligence obligation for timber products placed on the EU market for the first time, including proof of a legality risk assessment and risk mitigation, while also prohibiting the placing of illegal timber products on the EU market.

By the second half of the 2010s, the initial enthusiasm about the FLEGT programme had started to wane (Rutt et al., 2018), and a political momentum was emerging for a new EU anti-deforestation policy which could more comprehensively tackle imported deforestation. In July 2019, the EC issued a communication on "Stepping up EU Action to Protect and Restore the World's Forests" (EC, 2019a), from which the policy option to develop regulatory measures for deforestation-free gained particular traction supply chains (Kumeh and Ramcilovic-Suominen, 2023). The EC's legislative proposal for the EUDR came out in November 2021 (EC, 2021). Following trilogue discussions between the EC, the Council and the European Parliament (EP), the EUDR compromise text was signed in May 2023. The EUDR entered into force for member states and the EC in June 2023. Depending on company size, it will apply to companies from 30 December 2024 and 20 June 2025 onwards (art. 38).

The EUDR replaces the EUTR and expands its scope from timber to include also cattle, cocoa, coffee, palm oil, rubber, soy and derived products (art. 1) and from illegality to the issues of deforestation and forest degradation (art. 2.13.b, art. 3). It also extends the obligations from importers to exporters (both captured by the term "operators") and traders, with some exemptions made for small and medium enterprises (SMEs) (art. 5). Due diligence obligations include the establishment and implementation of a due diligence mechanism as well as the issuance to member state "competent authorities" of a diligence statement, in which operators and traders assume responsibility for their commodities (art. 4-5). Due diligence includes, first, the collection of relevant data, including geo-location on the plot of land or farm of origin, second, risk assessment and, third, risk mitigation (art. 8-12). A prohibition clause criminalises the placing and trading on the EU market of products linked to deforestation, forest degradation or illegalities in production (art. 3). The stringency of due diligence procedures is defined by a benchmarking system classifying producer countries as low, standard, or high risk (art. 29). In addition to the due diligence obligations, the EUDR also promises accompanying partnerships with producer countries, focused broadly on forest conservation and restoration, including through land use planning processes, legal reforms, multi-stakeholder processes and improved transparency (art. 30).

As mentioned above, similar regulatory measures are being developed in the UK and US. Schedule 17 of the Environment Act (2021) prohibits illegal deforestation in UK supply chains and requires the establishment of a due diligence system for forest risk commodities. Secondary legislation to operationalise these commitments for beef, leather, cocoa, palm oil and soy products are still under development (Barclay, 2023). In 2023, a bill was submitted to the US House of Representatives and the Senate for the Fostering Overseas Rule of Law and Environmentally Sound Trade Act of 6 2023 (or FOREST Act of 2023a, 2023b for short). The bill aims to prohibit the imports of products produced on illegally deforested land, covering palm oil, soybeans, cocoa, cattle, and rubber products (Bond et al., 2023).

2. Article aims and methods

In this article, we develop a four-pronged radical transformation framework tailored to the EU's response to imported deforestation. Our framework is constructed through an iterative back-and-forth between, on the one hand, academic literature and, on the other hand, the concrete justice concerns and policy proposals from NGOs, Indigenous leaders and fair trade organisations as expressed in statements and reports, open letters and interventions in policy events and informative webinars. Recognising knowledge production as a political act (Turnhout, 2018), we present our framing of transformation as normative in nature, embedded within radical (Pelenc et al., 2019; Temper et al., 2018), decolonial (Gram-Hanssen et al., 2022; Ramcilovic-Suominen et al., 2023), and justice-oriented approaches to transformation (Bennett et al., 2019; Martin et al., 2020; Ramcilovic-Suominen, 2022) and building on degrowth scholarship (Dengler and Seebacher, 2019; Hickel, 2020a; Nirmal and Rocheleau, 2019), Indigenous and decolonial environmental justice scholarship (McGregor, 2018; Whyte, 2016), restorative justice scholarship (Forsyth et al., 2021) and science and technology studies (Turnhout, 2018, 2024). Recognising the commonalities and complementarities between these literatures, we pool their various insights and arguments into a single framework, with the purpose of enabling the practical application of radical transformative ideas to EU policy assessment (Fig. 1). We believe that an integrated transformation framework for policy assessment is useful to raise the standards to which EU policies are held and to evaluate their transformative potential in a holistic and multi-dimensional manner.

In section 5 we tentatively apply our framework to the EUDR to illustrate its applicability in practice. We analysed the EUDR text and triangulated our findings with insights from existing FLEGT, Human Rights Due Diligence (HRDD) and EUDR literature. This article therefore builds on existing literature, while also providing a provisional update of the EUDR literature, which at the time of writing has mostly analysed draft texts and positions but not the final legislation (e.g., Berning and Sotirov, 2023; Cesar de Oliveira et al., 2024; Schilling-Vacaflor and Lenschow, 2021; for exceptions, see, Berning and Sotirov, 2024; Perram and Jiwan, 2023). As the UK and US regulatory responses to imported deforestation are still under development (cf. Section 2), they fall outside of the scope of our analysis. Due to the broadness of our framework, we do not claim to investigate each tenet in a systematic and exhaustive way. Rather, we apply our framework to highlight emerging questions and tensions and to offer some preliminary insights. Moreover, while the EUDR covers commodities and products traded in the EU market irrespective of their place of origin, our framework and analysis respond in particular to the economic structures, power relations and historical contexts between the EU as consumer region and non-EU countries as places of production.

2.1. A radical transformation framework

In the following sections, we introduce the four tenets of our radical transformation framework. We do so by, first, outlining the main steering principles and concepts and, second, translating them into

concrete guiding questions for EUDR analysis. A summary of the four tenets of our framework and their operationalisation for the EUDR is provided in Table 1.

2.2. Onto-epistemic transformation: towards epistemic plurality

In developing our framework, we firstly emphasise the need for a decolonisation of mind and knowledge and a disruption of the ontoepistemic hegemonies underlying the status quo, as the very basis upon which the other three tenets hinge. Environmental knowledge is not neutral, as it represents "nature" in one particular way, while obscuring other possible interpretations, meanings and modes of being with(in) the natural world (Agrawal and Bauer, 2005; Turnhout, 2018, 2024). As particular ways of knowing the environment become hegemonic, their partiality and subjectivity are forgotten and the underlying knowledge production processes are granted the aura of "neutrality", "objectivity" and "universalism". To rupture onto-epistemic hegemony is to recognise the inherent normativity of knowledge production, including scientific knowledge production (Turnhout, 2018) and to embrace the plurality of environmental knowledges (epistemologies) and ways of knowing the world (ontologies) (Gebara, 2020; Haraway, 1988; Zanotti, 2021; Zanotti and Palomino-Schalscha, 2016). This entails making space for embodied and situated ways of knowing that may not meet the scientific criteria of objectivity and universality, but which are created and enacted through daily practices, lived experience and anti-colonial and environmental struggle (Demaria et al., 2019; Fanon, 1963; Santos, 2018).

It also entails the active dismantling of harmful hegemonic epistemes legitimising the status quo. Decolonial feminism and Indigenous justice literature have called specific attention to the hegemonic onto-epistemic duality between humans and nature underlying mainstream environmental knowledge and policy (Gebara, 2020; Gram-Hanssen et al., 2022; Ramcilovic-Suominen, 2022; Ramcilovic-Suominen et al., 2023; Temper et al., 2018). This dualistic onto-epistemology separates humans from nature and places (Western, white, 'civilised') humans above other species and forms of life (Hickel, 2020a; Kröger, 2022; Whyte, 2016). Onto-epistemic dualism inhibits true transformative change, as it leaves intact the extractivist human-nature relations underlying the capitalist and growth-oriented economy (Gebara, 2020; Hickel, 2020a; Kröger, 2022; Ramcilovic-Suominen et al., 2022). It also poses ontological violence towards non-dualistic ways of being with the non-human world, as engrained in many Indigenous cosmovisions to this day (Gebara, 2020; McGregor, 2018; Whyte, 2020) and misrecognises the interconnectedness between environmental and human harms (Schilling-Vacaflor, 2021a).

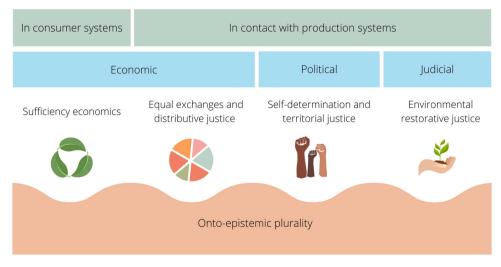


Fig. 1. A Radical Transformation Framework for the EU's Response to Embodied Deforestation.

Table 1

Operationalising Radical Transformation for the EUDR

Tenet of transformation	Hegemonies in need of transformation	Steering principles and concepts	Guiding questions for the EUDR	Hypothetical / imagined manifestations of transformation in the EUDR
Onto-epistemic	Universality of knowledge Human-nature dualism	Epistemic plurality Relational ways of being	How does the EUDR construct socio-ecological harm? How is knowledge produced in day-to-day EUDR policy-making and enactment? Who is knowledge produced for? Who has access to it?	Full integration of social and ecological harm in policy scope, enforcement, monitoring and assessment Ground-truthing and epistemic plurality in company risk assessment Accessible feedback loops from places of production to competent authorities Public access to EUDR due diligence reports and audit findings
Political	Imperialism Internal colonialism Settler colonialism	Self-determination Territorial justice Indigenous rights	How are producer regions included in EUDR policy development? How do the EUDR's interactions with international and domestic legislation alleviate or reify existing forms of domination? How is the EUDR used in ongoing anti-colonial struggles?	Procedural inclusion of voices from producer regions in policy development and revision Primacy of customary land rights and international self-determination principles over domestic state law Strong FPIC requirements in company-risk assessment Prioritisation of FPIC, customary land rights and Indigenous self-determination rights due diligence by competent authorities
Economic	Capitalist growth Extractivism Consumerism	Degrowth Sufficiency Equal exchanges Distributive justice	How does the EUDR enable, maintain or shrink space for a shift towards a sufficiency economy? How does the EUDR distribute the burden of environmental protection across economic actors in consumer and producer systems? How does the EUDR impact vulnerable actors in the supply chain?	EUDR embedded in holistic post-growth economic policies EUDR embedded in holistic fair trade economic policies Targeted measures to avoid disengagement from small-scale suppliers Targeted measures to support small-scale suppliers in complying with EUDR
Judicial	Business- and consumer- centredness Punitive justice	Victim-centredness Environmental restorative justice	How does the EUDR prevent socio-ecological harm? How does the EUDR provide access to justice for victims? Which repairs for harm does the EUDR offer?	Effective risk analysis and mitigation Access to justice through civil liability mechanisms and mandatory company-based grievance mechanisms Administrative measures at the member-state level focused on remedy and redress for victims Establishment of member-state and EU institutions to support and advise victims

Our framework therefore calls for a power-sensitive deconstruction of the knowledge produced throughout the policy process, from problem setting to policy scoping, day-to-day implementation and enactment, and monitoring and evaluation. We can, for instance, ask how the EUDR articulates the interconnectedness between environmental and human harm by investigating the EUDR's policy ambitions and scope (Dehbi and Martin-Ortega, 2023; Schilling-Vacaflor, 2021a) and by unpacking how EUDR successes and failures in preventing and correcting harm are monitored, measured and narrated (Chambers et al., 2022; Massarella et al., 2020; Svarstad and Benjaminsen, 2017). Shifting our attention to the day-to-day policy enactment, we might ask how due diligence procedural requirements articulate valid knowledge by investigating which evidence and voices are included in companies' risk assessment procedures (Boillat et al., 2020, p. 5). To assess its intersection with anti-colonial struggle, we could also ask who the produced knowledge is for, i.e., who can access and act on it (Gupta et al., 2020), by asking, for instance, how the EUDR enhances value chain transparency for environmental defenders struggling against corporate ecocide, environmental degradation or land dispossession.

2.3. Political transformation: Towards self-determination and territorial justice

Secondly, we highlight the need for a rupture of *political* hegemonies and a fundamental redistribution of power and an active rejection of imperial and colonial claims to authority (Martin et al., 2020; Nirmal and Rocheleau, 2019; Temper et al., 2018). EU policy responses to deforestation are not singular points in time but inevitably interact with histories of colonialism and imperial rule, as well as with ongoing anti-colonial struggles (Kumeh and Ramcilovic-Suominen, 2023). Given the colonial roots of both global environmental governance and international law, there is a real danger that EU regulatory responses to embodied deforestation perpetuate historical Western domination over areas of production in the Global South (Dehbi and Martin-Ortega, 2023). From a post-colonial perspective, unilateral EU policy responses to deforestation may be perceived by receiving states as neo-imperial interventions by governments of countries with a history of European colonial rule, as has been the case for the FLEGT regime in Cameroon (Carodenuto et al., 2024) and the revision of the EU Renewable Energy Directive and its so-called "palm-oil ban" in Indonesia and Malaysia (Nessel, 2023).

In line with decolonial degrowth (Dengler and Seebacher, 2019; Nirmal and Rocheleau, 2019) and decolonial environmental justice scholarship (Álvarez and Coolsaet, 2018; Dhillon, 2022; Temper, 2019), we choose to look also beyond bilateral EU-to-state relations and to take into consideration internal colonialisms and forms of socio-ecological violence. We are weary of environmental governance approaches that treat the (post-)colonial state as the sole legitimate provider of transformative change and environmental justice, as they may obscure internal forms of domination, discrimination and colonialism. Post-colonial legal frameworks in many cases build on colonial legal frameworks, thereby perpetuating historic inequalities and the misrecognition of customary socio-ecological practices (Lesniewska and McDermott, 2014). In settler colonial contexts, state laws on tenure, benefit sharing and forest management activities by default legitimise the sovereignty of the state over Indigenous territories, thereby denving the full autonomous standing of Indigenous structures, authorities, and institutions in land and nature governance (Ramcilovic-Suominen et al., 2023; Whyte, 2016) and potentially misrecognising Indigenous epistemologies and ontologies (Li, 2007).

To assess the transformative potential of the EU's policy responses to deforestation therefore requires an investigation of their intersection with global and domestic power structures and inequalities. In-depth investigations into the EUDR's interactions with domestic legislation on the recognition of Indigenous and minority rights (Buhmann and Nathan, 2012) and political economies in producer countries (Li, 2024) could provide some information on how the EUDR counteracts or reifies existing forms of political domination. We could also probe to what extent the policy extends beyond state-centred approaches to justice by asking how it incorporates self-determination principles as entrenched in international law, for instance in the UN Declaration on the Rights of Indigenous Peoples (Ituarte-Lima et al., 2019). From a procedural and epistemic point of view, we might ask how the EUDR policy development included the voices of those on the EUDR's receiving end (Dehbi and Martin-Ortega, 2023, p. 7) and how the knowledge produced through the EUDR provides ammunition for anti-colonial struggles, movements and advocacy networks (Schilling-Vacaflor, 2021b).

2.4. Economic transformation: Towards degrowth, sufficiency and decolonised trade

Thirdly, we emphasise the need to rupture the *economic* hegemonies underlying environmental harms and related racialised global injustices (Feola et al., 2021; Gonzalez, 2021; Hickel et al., 2021). We are inspired by the broader demand for degrowth and the move towards a post-growth society (Demaria et al., 2013; Hickel, 2020a; Kallis, 2021; Latouche, 2009). The degrowth movement challenges the notion that growth, being inherently expansionary, can be effectively decoupled from negative social, environmental and climate impacts (Hickel, 2020a; Hickel and Kallis, 2020; Parrique et al., 2019) and pleads for a shift to an economic system in which "growth" becomes obsolete, and other indicators, such as global well-being, take its place (Hickel, 2020b; Parrique et al., 2023). Building on degrowth scholarship, we assume that a transformative response should entail a two-fold economic transformation. First, we call to address the overconsumption of resources and commodities in systems of consumption (Feola et al., 2021; Kissinger et al., 2011). This requires a shift from an economy prioritising individual liberties and wants towards a sufficiency economy respectful of basic needs and well-being for all within planetary boundaries (Di Giulio and Fuchs, 2014; Parrique, 2022), allowing a slowing down of the economy's "metabolism" or throughput economy and thus reducing the sheer volume of consumption and production (Hickel, 2020a, 2020b; Kallis, 2011, p. 874; Kallis et al., 2020).

Second, we call to decolonise production and trade by halting plunder and exploitation in systems of production. As argued by Hickel, capitalist growth inherently relies on processes of colonisation - colonisation of commons (the enclosure of lands), resources (the plundering of colonised geographies) and bodies (slavery and other forms of labour exploitation) (Hickel, 2020a, pt. 1, Hickel, 2020b, Chapter two, p. 1109). Unequal economic and ecological exchanges between economic cores and peripheries, often established in colonial times and perpetuated into the post-colonial era, displace these forms of colonisation predominately to geographies in the Global South (Givens et al., 2019; Hickel et al., 2021; Rice, 2007). A transformative EU response to deforestation therefore entails a rectification of unequal ecological exchanges, such as imported deforestation (Givens et al., 2019) as well as unequal economic exchanges by ensuring fair pricing and the equal integration of smallholder producers and other vulnerable actors into global value chains (Hickel, 2020b, p. 1109; Hickel et al., 2021).

These economic transformations arguably require a multitude of intersecting policies and can therefore never be achieved by one policy alone. Nonetheless, we can reflect on how the EUDR intersects with global economic structures. From a distributive justice perspective, we might investigate how EUDR complementary measures address economic inequalities between the EU and producer regions, how the EUDR distributes the burden of compliance across economic actors in the relevant value chains, and how it affects vulnerable economic actors, such as smallholder producers (Grabs et al., 2021; Zhunusova et al., 2022). We could equally probe how its articulation of problems and solutions enables, maintains or shrinks space for a shift towards a sufficiency economy by investigating if and how it serves as a legitimation of the green economy (Dunlap, 2023).

2.5. Judicial transformation: Towards environmental restorative justice

Finally, we call for situated policy responses that answer to the experiences and needs of those people living and working in geographies of production and extraction (Demaria et al., 2019; Nirmal and Rocheleau, 2019; Temper, 2019). We call for the integration of restorative (Forsyth et al., 2021; Gibbs, 2009; Hazrati and Heffron, 2021; McCauley and Heffron, 2018) and reparative justice principles (Buxton, 2019; Weitekamp, 1993; White, 2017) in EU policies. Unlike retributive or punitive forms of justice, restorative and reparative justice¹ are victim-centred approaches, oriented at "making things right" by acknowledging harms done, restoring what was and healing relations and the dignity and wellbeing of all actors involved (Almassi, 2020; Gibbs, 2009; Hazrati and Heffron, 2021). Environmental restorative justice applies these insights to environmental harm and considers the interconnectedness between human and ecological relationships (Forsyth et al., 2021, p. 2). Building on these principles, we argue that a transformative EU response to embodied deforestation should enable victimised communities to demand repair and healing for ongoing injustices related to, e.g., altered or enclosed landscapes, commodified human-nonhuman relations, and dispossession and displacement. This can also take preventative forms, stopping socio-ecological harm before it takes place (Deva, 2021). In line with Indigenous worldviews and justice approaches, restorative justice scholarship generally proposes a participatory approach to justice based on healing dialogues between offenders and affected communities as an alternative to traditional litigation, in which the offender takes responsibility for their actions (Schormair and Gerlach, 2020). However, in recognition of the particularities of corporate environmental harm, we follow White (2017) that reparative justice, when necessary, can also be imposed upon offenders.

Applied to the concept of due diligence, HRDD scholars have pled for a "bouquet of remedies' with preventive, redressive and deterrent elements" (Deva, 2023, p. 406). From a preventative point of view, the due diligence concepts of risk analysis and mitigation are key, but never waterproof, creating the need for complementary redressive measures (Deva, 2023, p. 392). From a redressive point of view, several HRDD scholars have argued in favour of civil liability mechanisms to allow individuals and communities harmed to bring civil action and claim remedy (Deva, 2023; Methven O'Brien and Martin-Ortega, 2020; Quijano and Lopez, 2021). Yet, they also warn of legal and practical obstacles to justice through judicial measures, such as access to legal representation, information and evidence and burden of proof (Methven O'Brien and Martin-Ortega, 2020; Schilling-Vacaflor, 2021b). Among non-judicial measures, mandatory company-based grievance mechanisms have been put forward as a more low-cost and accessible pathway to redress (Methven O'Brien and Martin-Ortega, 2020), with the caveat that they need to recognise specific vulnerabilities of victims and take affirmative steps to overcome power imbalances (Deva, 2023, p. 393). Additionally, Methven O'Brien and Martin-Ortega (2020), p. 14 propose administrative measures at the member-state level focused on remedy and redress for victims and the establishment of member-state and EU institutions to support and advise victims. Drawing on these academic proposals, we may assess the EUDR's transformative potential by asking how it incorporates access to justice and remedy for victims of deforestation-related injustices, such as land dispossession, deforestation-related droughts, floods, or landslides, and cosmological

¹ We use the concepts of environmental 'restorative' and 'reparative' justice interchangeably, as the moral principle to centre the needs and experiences of the victims of environmental loss (Almassi, 2020; Weitekamp, 1993).

and spiritual harms.

2.6. The EUDR: A tentative analysis

We now turn to apply these tenets of transformation to the EUDR in a tentative way. Due to the broadness of our framework, we do not aim to answer each of the questions systematically and exhaustively; rather, we aim to illustrate how the framework could be applied in practice by connecting the questions raised to existing academic and non-academic debates and by highlighting some emerging concerns and points of tension. We encourage future studies to analyse each of these points carefully and in-depth.

Firstly, from an onto-epistemic transformation perspective, the EUDR provides first steps towards the integration of environmental and human harm. The EUDR product scope combines "deforestation-free" with "legal" according to the domestic laws of the exporting countries, the latter explicitly defined as encompassing also international human rights and the right to Free, Prior and Informed Consent (FPIC) (art. 2.40). In addition, the EUDR lists the protection of human rights, Indigenous rights, local community rights and customary land rights as potential criteria for the establishment of the country benchmarking system (art. 29.4) and commits to strengthening the rights of "forestdependent communities, including smallholders, local communities, and indigenous peoples" through partnerships with producer countries (art. 30.3). Furthermore, the intersection between human and ecological harm is incorporated in EUDR impact assessment, which includes, inter alia, social impacts on smallholders, Indigenous peoples and local communities (art. 34). This integrated approach is also visible in clauses on day-to-day knowledge production, as the EUDR includes the presence of Indigenous peoples and land claims and the consultation and cooperation with Indigenous peoples in company risk assessment (art. 10.2, see also art. 12.c).

Yet, in contrast to the requirement for sharing the geolocation of imported and traded products, Indigenous and customary rights and consultations with Indigenous people and local communities are not taken up in the provided template for the due diligence statement (Annex II), raising questions on their prioritisation by companies and competent authorities in practice. The example of the French Vigilance Law reveals the danger that companies will implement EUDR risk assessment in a partial way, prioritising certain issues that are high on the agenda of EU policymakers and consumers (e.g. deforestation) over others (e.g. Indigenous territorial rights) (Schilling-Vacaflor, 2021a, p. 10). Moreover, power inequalities between companies and affected communities may severely impact the legitimacy of due diligence consultations where they do take place. As noted by Deva (2023), pp. 399-400, due diligence processes reduce rightsholders to passive participants, rather than active agents, and generally do not take affirmative measures to counter information and resource asymmetries. The same has been noted for FPIC, which tends to serve as a legitimation of planned developments, rather than as a meaningful shift of power to affected communities (Dunlap, 2018; Schilling-Vacaflor, 2017). Hence, there is a significant risk that these processes will reinscribe, rather than rupture, existing power inequalities.

Company-steered risk assessment is complemented by the principle of "substantiated concerns", which allows any natural or legal person to submit claims of noncompliance to competent authorities based on "objective and verifiable information" (art. 31, art. 2). Questions arise on which information is deemed "objective and verifiable" and how substantiated concerns will be followed-up on in practice (McDermott and Sotirov, 2018, p. 187). Moreover, considering that affected communities likely do not know the details of product sourcing and trading and may not be aware of their rights under the EUDR, it seems safe to assume that substantiated concerns will most likely be submitted by international and European NGOs, raising further questions on their roles as gatekeepers and knowledge brokers.

Finally, we may ask who the EUDR generates knowledge for. In this

regard, the EUDR makes mention of an information system listing the final judgments against legal persons for infringements of this Regulation and the penalties imposed on them (preamble, para. 75; art. 33). The increased transparency resulting from this information system is argued to, inter alia, increase awareness of consumers and civil society about non-compliant operators and traders (preamble, para. 75). However, article 33 clarifies that the information system will be open to the public only in anonymised format, causing doubt on its added value for environmental defenders and anti-colonial struggles in practice.

Secondly, from a *political* transformation perspective, the EUDR remains embedded in hegemonic notions of legality and authority, as it upholds the FLEGT emphasis on state laws and law enforcement. At the same time, the EUDR fits within a broader trend of unilateralisation of EU external action, in which space for constructive engagement with third countries decreases (De Ville et al., 2023). The addition of "deforestation-free" as an additional due diligence criterium shifts the focus from, first, states as sovereign regulators and, second, sustainability certification as a globally adopted practice to unilateral EU-defined environmental policy objectives and implementation technologies. In response, the EUDR has been met with producer country accusations of discrimination and neo-imperialism (Berning and Sotirov, 2024; Li, 2024).

From a decolonial and Indigenous justice perspective, the situation is more nuanced, as Indigenous organisations and activists have been strong proponents of an EUDR respectful of Indigenous rights (Amerindian Peoples Association et al., 2021; Asia Indigenous Peoples Pact et al., 2022; Greenpeace, 2019). In this regard, the inclusion of international human rights and the right to FPIC in the definition of domestic legality can be seen as an important win. However, their positioning in the EUDR text as part of the definition of domestic legality (art. 2.40) creates ambiguity and very likely leaves those Indigenous peoples whose rights are not recognised under domestic legislation unprotected. Perversely, the EUDR may even incentivise producer country governments to scale back the domestic protection of Indigenous rights in order to facilitate market access to the EU. For instance, in Peru, the EUDR has triggered changes to the Peruvian Forestry Law, legalising pre-2020 agro-industrial land clearings in violation of Indigenous rights (EIA, 2024). Similarly, the attention to consultation with Indigenous peoples in due diligence risk assessment is a positive but imperfect evolution, as concerns about power imbalances and dangers of co-optation underlying FPIC and due diligence consultations remain (cf. supra).

In addition to the due diligence requirements, the foreseen partnerships with producer countries touching on land use planning, tenure security, strengthened smallholder and Indigenous rights and the participatory development of national roadmaps (art. 30) could in theory entail opportunities for decolonising environmental and land governance within the domestic sphere. However, vigilance remains warranted on whether these clauses will aid decolonial struggles in practice or rather serve as window-dressing in defence of the status quo, as existing scholarship highlights the dangers of appropriation of multistakeholder processes by sectoral and bureaucratic interests and the de facto exclusion of vulnerable actors from decision-making power (Bastos Lima and Persson, 2020; Hansen et al., 2018; Ramcilovic-Suominen, 2024; Ramcilovic-Suominen et al., 2019; Verhaeghe, 2021).

Thirdly, our transformation lens raises concerns regarding the EUDR's capabilities to instigate *economic* transformation. While the EUDR addresses the detrimental impacts of the EU's production and consumption on forested landscapes, it does so in a decidedly growth-friendly manner, focussing on clean value chains and fair competition for European legal and deforestation-free businesses (Berning and Sotirov, 2024), rather than revising the demand in the first place. While clean value chains in themselves do not necessarily inhibit the shift towards a sufficiency economy, they do not enable one either. If the EUDR is not embedded in strong, holistic responses to growth-driven consumption and production at home, it may end up *sustaining* an inherently unsustainable and unjust economic system by masking its structural and

systemic problems (see also Deva, 2023, p. 403). While additional research is needed, existing research provides some disillusioning predictions, as several intersecting Green Deal policies have been critiqued for their extractivist nature, such as the Bioeconomy Strategy (Ramcilovic-Suominen et al., 2022), or for lacking teeth, such as the Farm-to-Fork Strategy (Alberdi et al., 2020).

From a distributive justice perspective, questions arise on how the EUDR intersects with the various political economies of production and trade. Notably, the EUDR does not make a distinction between activities exercised by large-scale agricultural corporations, as prevalent in the soy sector (Dauvergne and Neville, 2010; Oliveira, 2021) and smallholder operations, as prevalent in the cocoa and coffee sectors² (Harvey et al., 2021; Teye and Nikoi, 2021; Zhunusova et al., 2022). In sectors dominated by smallholder operations, concerns have been raised that the EUDR will create an additional market barrier for smallholder suppliers from global value chains and lead to disengagement from "high-risk" areas of production altogether, with detrimental impacts on local livelihoods (Naranjo et al., 2023; Perram and Jiwan, 2023; Zhunusova et al., 2022). In response to these concerns, the EUDR vaguely calls for "reasonable efforts" to ensure fair prices for smallholder producers (preamble, para. 50) and identifies "capacity building and investments" for smallholders as a potential but not obligated risk mitigation measure. It also calls to integrate the needs, rights and participation of smallholders in partnerships with producer countries (art. 30). Nonetheless, recent reports show that European coffee importers and traders have already started to turn away from smallholder producers in Africa (Angel and Kurniawati, 2023).

In corporation-dominated sectors, it has been argued that an EUDR respectful of customary rights could bring much-needed ammunition in the struggle against corporate land grabbing and dispossession, thereby improving, rather than undermining, smallholder positions (Li, 2024). In this regard, the EUDR occasionally mentions customary tenure rights holders in a single breath with Indigenous rights, i.e., in due diligence reporting (art. 12.c) and in the criteria for the establishment of the country benchmarking system (art. 29.4); however, this is not always the case. And while the definition of domestic legality (art. 2) makes explicit reference to FPIC and the UN Declaration on the Rights of Indigenous People, it does not do the same for customary rights. Future research could shed light on what power the EUDR holds for customary rights holders who do not self-identify or are not recognised as Indigenous (Baird, 2011; Forsyth and Sikor, 2013).

Fourthly and finally, our framework highlights several shortcomings regarding the issue of *restorative* justice. The EUDR does not establish civil liability, nor does it contain any provisions on grievance mechanisms or administrative measures providing remedy and redress for victims of deforestation or supply chain illegalities. Instead, the EUDR follows a purely deterrent approach, based entirely on punitive measures. Breaches of the regulation require "corrective action", solely focussed on the EU market, including preventing the relevant product from being placed on the EU market, recalling it, donating it or destroying it (art. 24). The same is true for possible penalties, which entail administrative measures without any feedback to humans and nonhumans in places of production, such as fines, the confiscation of commodities and revenues, and the suspension of economic activities (art. 25). EP demands notwithstanding (EP, 2022, amend. 189,190), the EUDR does not mention any administrative sanctions involving redress for harm done, such as nature restoration or compensation to victims.

3. Conclusion

We proposed a radical transformation analytical framework for

analysing the EU response to embodied deforestation, which we tentatively applied to the case of the EUDR. Our framework bridges insights and arguments from a wide array of critical, decolonial, Indigenous and justice-oriented literatures into a single framework, with the purpose of enabling the practical application of radical transformative ideas to EU policy assessment. We distilled four elements of a radically transformative EU anti-deforestation approach, including onto-epistemic transformation, political transformation, economic transformation and judicial transformation, each concerned with a specific dimension of transformation and offering concrete research questions for empirical policy assessment.

Applying our framework to the EUDR, we conclude that the EUDR in its current form contains certain promises of transformative change, which may pave the way for counter-hegemonic (re)interpretations and uses by actor groups on the ground (Santos, 2018, p. 34). The EUDR's conjoined attention to environmental and human harm and the rights of Indigenous people in both policy scope and knowledge production may provide an important precondition for the EUDR to be used as a tool in ongoing and multifaceted anti-colonial struggles. However, caution remains of the essence, as there is a clear tension between, on the one hand, the opportunities brought by well-intended, but ultimately reformist and affirmative policies for counterhegemonic action, and, on the other hand, the danger of institutional co-optation and depoliticisation of counterhegemonic demands in favour of transformative change (Blythe et al., 2018; Leach and Scoones, 2015, p. 130). Context matters here, as does agency; much will depend on how the regulation intersects with place-based environmental struggles and how it will eventually be appropriated and used by resistance movements on the ground (Pelenc et al., 2019; Verhaeghe, 2023b) and hegemonic actors (Ramcilovic-Suominen, 2024; Verhaeghe, 2023b).

In other areas, the EUDR mostly reflects and reinscribes existing hegemonies, thereby increasing the likelihood of window-dressing in defence of the status quo. From an economic and judicial point of view, the EUDR turns a blind eye to situated needs, including fair compensation for labour as well as restitution and restoration in case of socioecological harm. Hence, the EUDR stands to do little for communities harmed by corporate ecocide, while in all likelihood hugely impacting the livelihoods of small-scale producers. Additionally, the EUDR largely fails to instigate the shift towards a sufficiency economy at home, thereby leaving intact the root causes of global ecological destruction. Its inclusive rhetoric notwithstanding, the EUDR may therefore end up centring global and European needs, such as the global need for biodiversity conservation and carbon storage and the demand of EU consumers for "green" consumer products, while leaving intact the systemic causes of the biodiversity and climate crises. Our acknowledgement of potential gains towards localised transformative struggles should therefore not be misunderstood for acquiescence, as we continue to plead for a fully radical transformation in response to embodied deforestation and ecosystem destruction and related socio-ecological injustices.

In the background of these preliminary findings, this article has raised several questions that are yet to be answered. Due to the EUDR's recency, it is still too early for meaningful empirical observations on the interpretations, enactments and impacts of the EUDR in practice. Future research may investigate these questions in a more systematic and exhaustive way once the implementation phase commences. Moreover, while our analysis uncovered several points of tension in the EUDR in its current form, it could not deliver detailed solutions to each of the issues raised. Although our framework and analysis provided some tentative suggestions for a transformative EUDR (summarised in Table 1), further exploration is needed to see how shortcomings may be alleviated through mitigating measures in the context of the EUDR, or whether they need more systemic transformations beyond the EUDR. Thematic policies such as the EUDR are inevitably part of a broader governance regime regulating human-non-human interactions and therefore cannot serve as standalone embodiments of a particular (counter)hegemonic

² This of course does not mean that these sectors are purely smallholderdriven or that agribusiness and related injustices are not present in these sectors, see e.g., Reichman (2018).

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discourse. Hence, multi-scalar and multi-method research could bridge insights on the EU's anti-deforestation policies with insights on the EU's agricultural, trade, bioeconomy and other relevant policies.

Future contributions may also broaden our framework's empirical scope and assess its applicability in different contexts and domains. Regulations similar to the EUDR are being developed in the UK and US. Comparative research covering all three pieces of legislation may uncover the parallels and differences between them from a radical transformation perspective. Additionally, we tailored our framework specifically to the EU's response to embodied deforestation, responding in particular to the dynamics between the EU as a commodity consumer and non-EU countries as commodity producers. Yet, the EU itself is by no means free of internal colonialism and frontier-making, as showcased by the ongoing encroachments into Saami pastoral landscapes in Northern Scandinavia for industrial forestry (Harnesk and Jakobsen, 2023) and the Swedish, Finnish and French resistance against strong FPIC and Indigenous rights references in the EUDR (Gibert, 2023). Future research may unpack how our framework applies also to commodities produced within the EU's borders. Finally, while our framework was designed specifically for the EUDR as the EU's main regulatory response to embodied deforestation, it may equally prove useful for the study of similar regulatory action in other domains, such as the EU Conflict Minerals Regulation, the Battery Regulation or the Corporate Sustainability Due Diligence directive. We welcome adaptations of our framework for tailored use in each of these fields.

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CRediT authorship contribution statement

Sabaheta Ramcilovic-Suominen: Writing – review & editing, Writing – original draft, Methodology, Funding acquisition, Conceptualization. Elke Verhaeghe: Writing – review & editing, Writing – original draft, Visualization, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Conceptualization.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data Availability

All date used is publically available and can be found in the reference list.

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