



Task Force 04

TRADE AND INVESTMENT FOR SUSTAINABLE AND INCLUSIVE GROWTH

Advancing Fair and Sustainable Trade: Strategies for G20 Action in the Wake of Environmental Regulations

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Abstract

The new environmental regulations aimed at ensuring sustainable trade in commodity supply chains, exemplified by the EU Deforestation Regulation (EUDR), represent a significant step towards tackling global environmental issues such as climate change, deforestation, and biodiversity loss. However, international trade should not only be greener but also more just and inclusive, ensuring that the benefits and burdens of these measures are evenly shared among all countries and societal groups. Developing Countries (DCs) and Least Developed Countries (LDCs), but also certain vulnerable groups like smallholder farmers, risk being disproportionately affected by these new regulations, with potential detrimental effects on economic growth, human development, and integration within the global trade system. These obstacles stem from increased production costs, potential competitiveness loss and complex compliance requirements.

This brief delves into these hurdles and outlines immediate actions that the G20 should undertake in response. Even though there is no one-size-fits-all solution, the G20 can provide guidelines to address these shared challenges in three critical dimensions:

- I. Participatory governance: fostering multilateralism, open participation mechanisms and polycentric institutions.
- II. Capacity building: funding technological infrastructure, supplying technical assistance and supporting transparency tools.
- III. Economic incentives: designing and implementing market mechanisms that promote sustainable production.

The G20 must play a key role in outlining policy strategies that comprehensively integrate climate change, trade, and agrifood systems, and guarantee the participation of DCs and LDCs, in order to achieve SDGs worldwide.

Keywords: trade, deforestation, due diligence regulations, EUDR, commodities, supply chains.



Diagnosis of the issue

International trade affects climate change through many channels. Notably, **trade in agricultural goods is a major driver of deforestation, land-use change and biodiversity loss**. Agricultural expansion of globally traded commodities such as soy, beef, and palm oil, is responsible for almost 90% of tropical deforestation (Pendrill et al. 2022). This is critical since, according to the Intergovernmental Panel on Climate Change (IPCC), no further deforestation can occur from 2030 to meet the 1.5 C° target (Rogelj et al. 2018).

The empirical evidence shows the tight connection between trade and deforestation. Pendrill et al. (2019) estimated that, in the period spanning 2010 to 2014, 29–39% of deforestation-related emissions were attributable to international trade. This highlights that **trade policies can be leveraged as climate action tools** by shaping global patterns of consumption, production, and land use.

In recent years, many initiatives have been launched to address deforestation in agro commodities global supply chains. The number of Voluntary Sustainability Standards (VSS) has increased with the primary agricultural producer's sector representing the biggest share of this sustainability standards landscape (Papendieck and McNamara 2024). However, the growing complexity of their requirements and their voluntary nature often limit their level of adoption.

Governments are implementing new unilateral due diligence regulations to discourage trade-induced deforestation. Two outstanding examples are the UK Forest Risk Commodities Regime (UKFRCCR) and the European Union Deforestation Regulation (EUDR). The latter stands out because of its key leadership role in driving up standards globally (Bellfield et al. 2022). Commodities including soy, domestic cattle, palm oil,

wood, rubber, cocoa and coffee -as well as derived products like leather or chocolate- will have to be deforestation-free in order to access the EU market and require rigorous due diligence to demonstrate it.

Given the nonlinear nature of supply chains and the power and resource imbalances among different actors (Brooks et al. 2022), some stakeholders could be disproportionately affected by the EUDR. Developing Countries (DCs) and Least Developed Countries (LDCs) heavily rely on these commodities for export (Arias Mahiques et al. 2024). Beyond the national level, some vulnerable groups such as smallholder farmers, who produce roughly 35% of the world's food (Lowder et al. 2021), often lack the capacity to meet the new requirements. As argued by the leading producer countries of covered commodities in a joint letter to the WTO¹, “The EU's ‘one-size-fits-all’ approach [...] ignores different local conditions”, imposing obstacles that stem from increased production costs due to complex compliance requirements.

These constraints can be explained in part by the commodity value chain. Agricultural commodities undergo multiple intermediary stages in the supply chain, often being bulked and mixed, posing intra-coordination challenges for traceability and chain of custody development (West 2021), which vary depending on the size of the chain and its level of integration (fully integrated from cradle to port or has multiple origins). Diversity in information management systems is critical. The public sector has a challenge as existing public information systems regarding health, fiscal, and environmental data lack articulation and are often subject to tax secrecy regulations. The timeliness of information required is also key to meet the requirements, yet gaps persist particularly in land tenure

¹ <https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/G/AG/GEN223R1-02.pdf&Open=True>

and legal access rights, often due to commercial dynamics among producers, agents, and intermediaries (Frip et al. 2023).

The due diligence scheme also requires analysis software and an operating system capable of validating different layers of information (e.g. satellite, fiscal, public health). This entails capacity building programs among system users, mainly in primary producers. **Small non-EU suppliers are at risk of being excluded from international value chains, not because they have engaged in deforestation, but because they face struggles demonstrating compliance with the strict regulations**, in a context in which uncertainty still remains regarding who will cover the implementation costs (Cesar de Oliveira et al. 2024).

The G20s role

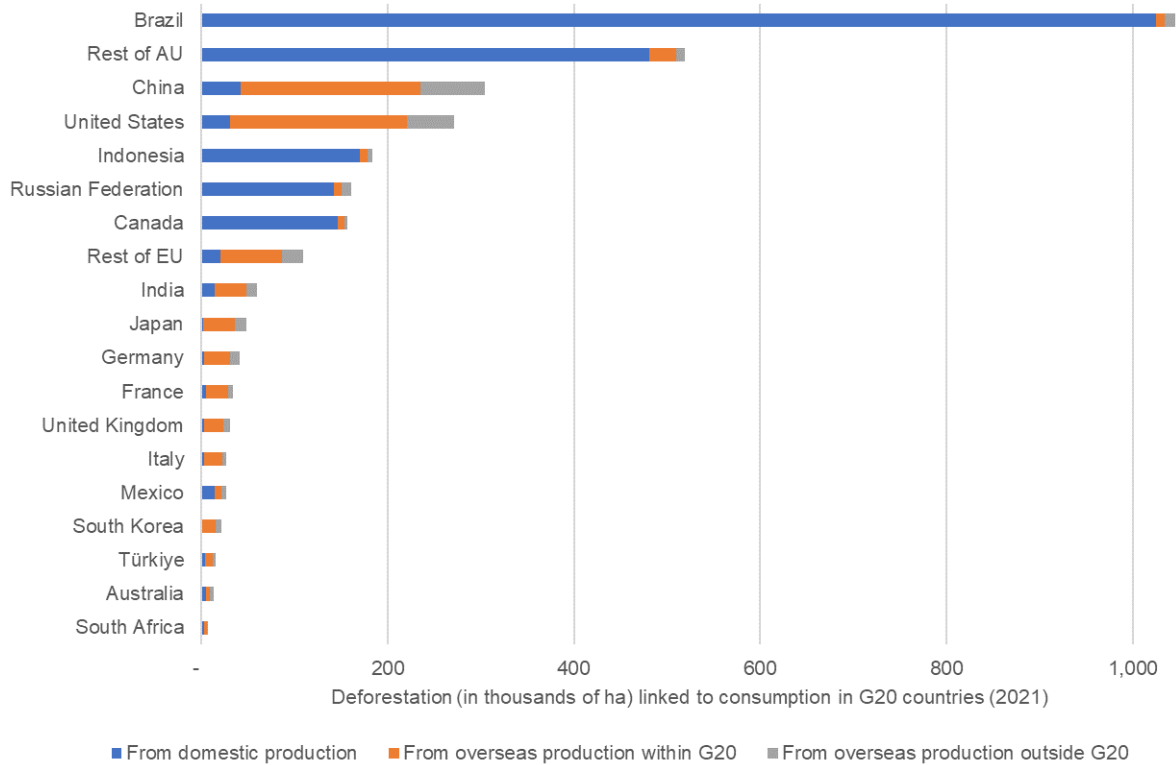
As the premier forum for international cooperation, the G20 holds a unique position to drive coordinated action and hold accountability upon its members in order to reduce trade-induced deforestation. Its members represent around 85% of the world's GDP, over 75% of world trade, and around two-thirds of the world's population².

In terms of deforestation, the G20 (including AU) accounted for 78% of deforestation embedded in worldwide consumption in 2021³. Figure 1 presents the distribution of this deforestation, distinguishing between three types of origin: “from domestic production”, “from overseas production within G20” and “from overseas production outside G20”. This significant supply chain coverage demonstrates the potential impact the G20 can have in reducing trade-induced deforestation.

² These official statistics are prior to the AU joining.

³ Own calculation based on data from SEI/JNCC (2023).

Figure 1. Deforestation linked to consumption by G20 members (2021)



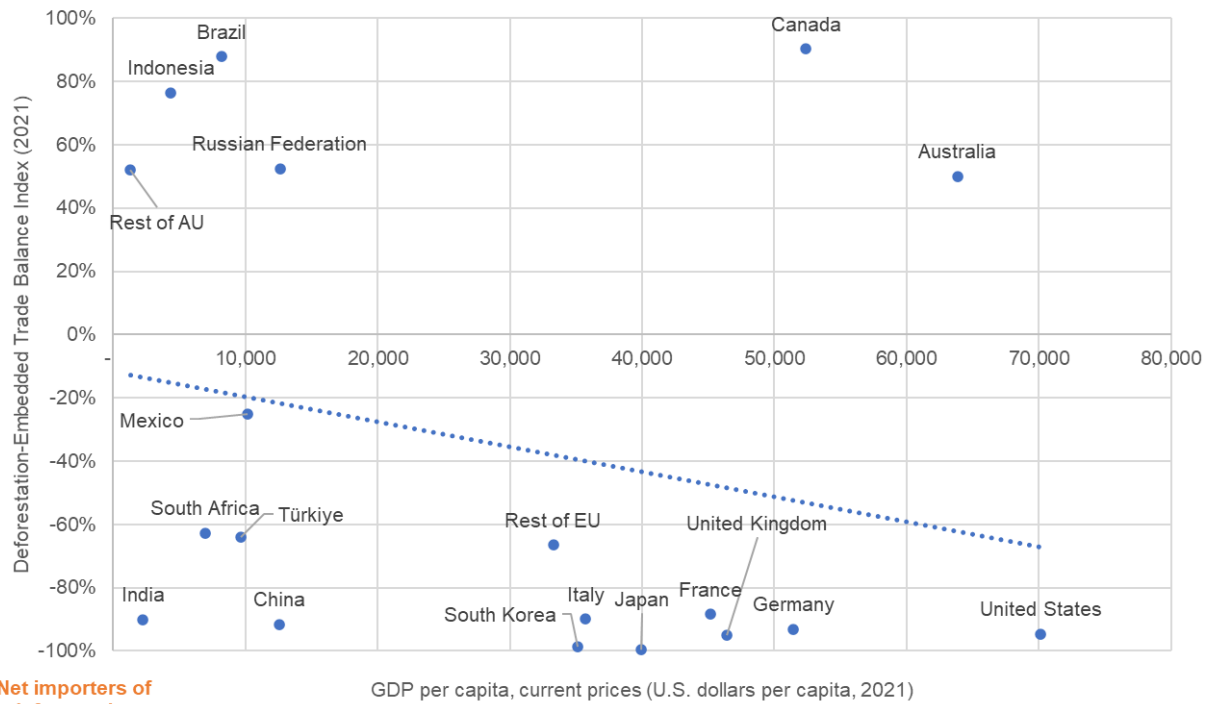
Source: own elaboration based on data from SEI/JNCC (2023). Unfortunately, data for Argentina and Saudi Arabia are unavailable.

Furthermore, Figure 2 reveals that rich countries tend to act as net importers of deforestation. The graph shows a negative correlation between GDP per capita and our calculated “Deforestation-Embedded Trade Balance Index”, where positive and negative index values indicate a country's role as a net exporter and importer of deforestation, respectively. This highlights the need for the G20 to take into account the disparities between countries when addressing trade-induced deforestation.



Figure 2. Deforestation embedded in goods tend to flow from low-income to high-income countries through trade

Net exporters of deforestation



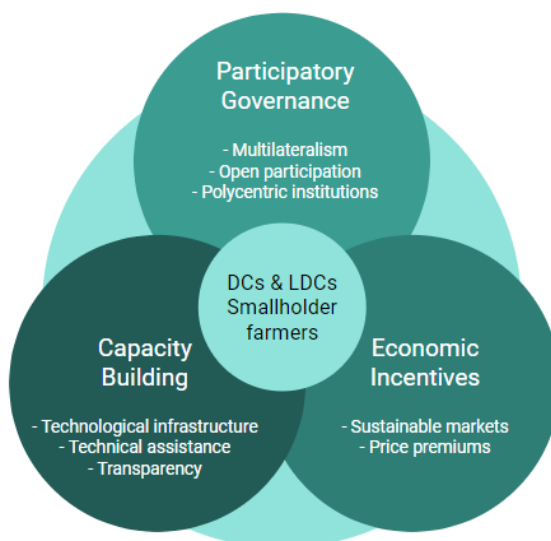
Net importers of deforestation

Source: own elaboration based on data from SEI/JNCC (2023) and IMF. Unfortunately, data for Argentina and Saudi Arabia are unavailable. Note: The "Deforestation-Embedded Trade Balance Index" is calculated using the formula: $DTBI = (X - M) / (X + M)$, where X and M denote deforestation embedded in exports and imports of goods, respectively.

Recommendations

The new due diligence regulations aimed at discouraging overseas deforestation run the risk of disproportionately affecting DCs and LDCs, as well as certain vulnerable groups. **Although G20 members contribute to deforestation through consumption, they can also be part of the solution through new patterns of production.** To ensure sustainable, fair and inclusive growth, G20 members can take immediate actions addressing three critical dimensions: (1) participatory governance, (2) capacity building, and (3) economic incentives.

Figure 3. Critical dimensions for G20's action



(1) Participatory governance

The unilateral nature of new due diligence regulations has been challenged by third countries, which, despite being affected by them, lack clear or official means to influence the legal process behind the design of such measures. Furthermore, these regulations often operate in silos, addressing only a narrow set of sustainability dimensions across limited

jurisdictions and towards short-term goals. Integrating both domestic and multilateral measures is essential for addressing sustainability issues in global trade.

Considering its diverse integration, the G20 is uniquely positioned to promote the creation of a more inclusive governance. Its members can strengthen and foster **multilateral efforts** to tackle climate change, deforestation, and biodiversity loss with a comprehensive approach. This can be achieved by setting **guidelines for wider stakeholder participation** during the design and implementation of these regulations.

Additionally, the G20 can promote **greater harmonization** and mutual recognition between international standards and national legislations, while also supporting the development of **local and regional anti-deforestation strategies** in partnership with all stakeholders, including smallholder farmers, local communities and indigenous people, institutions, CSOs, and businesses. For instance, a unified deforestation cut-off date across standards would prevent redundant analysis of satellite imagery and algorithms.

In this context, the institutional dimension becomes highly relevant. Effective governance of complex socio-economic and environmental systems requires **polycentric institutions** (Ostrom 2010), consisting of multiple decision-making centers, each formally independent but with the potential to function as a system (V. Ostrom et al. 1961).

For polycentric institutions ‘*vertical integration*’ (across ecosystems and jurisdictions) and ‘*horizontal integration*’ (across supply chain actors and stakeholders) are complementary and necessary tools to ensure that different policies, commitments, and initiatives act in synergy, producing the desired results, limiting unsolicited leakage effects, reducing risk and uncertainty, and increasing the level of trust among different stakeholders (De Maria et al. 2022).



(2) Capacity building

There have been increasing concerns about the ability of DCs and LDCs to meet the complex data requirements outlined in the new due diligence regulations. Smallholder farmers, in particular, are at risk of being excluded from international value chains, not because they have engaged in deforestation, but due to their struggles in demonstrating compliance with the strict regulations. These groups urgently need **access to financing schemes, new technologies, and technical assistance** to overcome the administrative burden related to geolocation and traceability requirements, certifications, and customs procedures. Programs such as AL-INVEST supported by the EU are starting to show interesting results, such as Uruguay's implementation of a public geo-referencing system for its deforestation-free timber exports.

G20 members can play a vital role in bridging regulatory gaps by targeting investments in capacity building in DCs and LDCs.⁴ Funding deployment should focus on solutions from blockchain, geospatial AI, RFID to software development. Strengthening linkages across existing systems, protocols, datasets, and certifications in both public and private sectors is crucial (Frip et al. 2023). Increasing funding for **scaling up existing systems** and incorporating additional layers of information such as land use change into traceability schemes is essential. These investments need to be accompanied by technical training and assistance to transfer technical skills to local producers.

Transparency is a key enabling condition to make any traceability system operational, credible and robust. In the case of the EUDR, the upstream supply chain is essential in

⁴ For instance, this gap is evident in research and development (R&D) expenditure: with high-income countries allocating approximately 2.97% of GDP compared to around 0.53% in lower-middle-income countries (UNCTAD 2023).

providing information. The system requires express authorizations for data use at the public level that allow information to be shared with public and private systems. The G20 could support cooperation initiatives among countries to harmonize the means by which that information is provided, **taking into account the local characteristics of different suppliers**. This alignment needs to consider data protection policies and tax secrecy to prevent these policies from hindering the consolidation of traceability systems.

(3) Economic incentives

An important challenge posed by the new environmental regulations is to maintain the balance between sustainability and inclusion. The implementation of these regulations carries the risk of imposing high compliance costs, potentially resulting in producers or countries losing access to the global market, with a higher risk of exclusion for smallholder producers. Importers might end up changing suppliers, abandoning commercial relations with smallholder farmers while favoring larger producers better prepared to comply. Consequently, this can increase the risk of land conflicts between large-scale and small-scale agriculture (Zhunusova et al. 2022).

To mitigate these issues, it is imperative for G20 members to foster the **development of markets and value chains that incentivize sustainable farming practices**. Importers can offer **price premiums** for products adhering to sustainability standards, which could offset compliance costs borne by producers. These price premiums can be calculated using objective and technical measures of compliance costs. To ensure that these economic incentives effectively reach smallholder farmers, the design of any instrument must take into account the characteristics of the value chains such as **intermediaries and origins** (e.g multiple origins).

Scenario of outcomes

New trade regulations such as the EUDR and the UKFRRCR can contribute to reducing deforestation and reverting climate change. However, these new instruments have been linked with a risk of exclusion for supply chain actors in producing regions, particularly smallholders, family farms, and small-scale producers in DCs and LDCs. A more inclusive governance in the design and implementation of these tools, together with tailored capacity building efforts and clear economic incentives are needed to reduce these unintended consequences, while ensuring the creation of the information and data needed to meet social and environmental traceability requirements.

The effective implementation of these recommendations provides an opportunity for the G20 to address the key role it could play in outlining policy strategies that **comprehensively integrate deforestation, trade, and agrifood systems**, and guarantee the participation of DCs and LDCs, in order to achieve SDGs worldwide. Regarding governance, as it was pointed out, international and regional commitments are many, but an articulated implementation is difficult due to the **multiplicity of actors and interests** to be addressed. To deliver comprehensive and inclusive solutions, the G20 efforts to foster participatory instances should take **a solution-focused approach** as well as endorse **multilateral integrated actions**, bridging institutional and technical silos to deliver a consolidated response (UNEP 2024).

As an opportunity, implementing traceability and chain of custody systems with successive layers of verified information, not only environmental but also social and fiscal, allows increasing productive efficiency, making triple performance visible and achieving recognition through market access. However, due to the current **heterogeneous landscape of standards and metrics**, any initiative that promotes common guidelines

on traceability and transparency will require urgent work to ensure **alignment across data and measurements across these scales**, to allow the effective and coordinated implementation of policy and practice (Piñeiro et al. 2023). There is also a major challenge in relation to the accreditation of circumstances that do not rely solely on technology, such as verifying that production was carried out in compliance with legal frameworks (e.g. human rights standards).

Regarding economic incentives, evidence suggests that implementing the right positive incentives can effectively discourage deforestation in a cost-effective manner. Monetary incentives for forest preservation and reforestation, which are land-intensive and unskilled labor-intensive activities, can represent a **cost-effective opportunity in DCs and LDCs**, where associated land and labor costs are lower. For instance, Jayachandran et al. (2017) found that a payment for ecosystem services program in Uganda effectively reduced deforestation by 50%, leading to CO₂ emissions reductions at a fraction of the cost compared to similar programs in the US.

By fostering collaboration and inclusivity across regional, national, and local governance spheres, the G20 can play a key role in outlining **policies tailored to the local conditions of producing countries**, ensuring that the benefits of economic growth and environmental initiatives are equitably distributed across society and that vulnerable populations are not disproportionately impacted. Ultimately, any strategy implemented to address the outlined scenarios is based on considering the SDGs principle **to leave no one behind**.



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