Governing forest supply chains: ratcheting up or squeezing out?

Introduction

This chapter employs inductive reasoning to assess two key initiatives of EU foreign forest policy from two contrasting theoretical perspectives, referred to as "Trading Up" and "Ecologically Unequal Exchange" (EUE) respectively. Trading Up is focused on the impacts of global trade on the content of environmental regulation, while EUE examines the inequalities of global production and consumption. The purpose of this comparative analysis is not to definitively evaluate EU policy from either perspective, but rather to illustrate how different assumptions about the roles of policy and trade in shaping environmental and social outcomes may drive different policy choices. Awareness of these different policy logics can then inform the design of a policy mix that accommodates insights from both perspectives.

In recent years the EU has engaged in a growing suite of 'global forest policy', i.e. initiatives designed to influence the governance and management of forests outside the EU. Central among these, and the focus of this chapter, are policies to implement the 2003 Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan, and EU engagement with Reducing Emissions from Deforestation and forest degradation (REDD+) under the UN Framework Convention on Climate Change (UNFCCC). FLEGT aims to eliminate imports of illegally produced timber into the EU, while REDD+ provides economic incentives to developing countries to reduce forest loss.

While both FLEGT and REDD+ are based on inter-governmental agreements and include strong state participation, they are also accompanied by a wide range of multi-lateral and bi-lateral regulatory, financing and support arrangements, national and subnational government policies and private market initiatives such as legality and forest carbon certification schemes. In other words, FLEGT and REDD+ have become prime examples

of multi-scale policy 'mixes', as described by Gunningham and Grabrosky[1] and discussed in Chapter 1 of this book. The complexity of these policy mixes complicates evaluations of their effectiveness or 'smartness'. But it also offers two important analytical opportunities: to consider 1) how the core logics of FLEGT and REDD+ shape the types of policy instruments they generate and 2) how those instruments nevertheless vary in their assumptions, priorities, and strategies for environmental and social impacts.

In regards to overarching logics, a core rationale for the EU's engagement in both FLEGT and REDD+ is to address the region's role as a world-leading producer and consumer. There is little dispute that the EU has played a significant role in driving global forest change. For example, EU countries are major investors in, and importers of, palm oil and other agricultural products whose production has spurred the conversion of forestland to other uses. In 2012 the EU-27 was the world's third largest importer of palm oil, the leading driver of deforestation in Indonesia.[2] Likewise the EU is the second largest importer of tropical sawnwood and plywood, both contributors to deforestation in SE Asia.[3] While China leads the world in the import of tropical logs, a large fraction of this material is manufactured as furniture and re-exported to the EU.[4]

Increasing awareness of this interconnectedness has spurred a wide array of research, revealing differences in how the challenge of resource globalization is framed and evaluated. On the one hand, David Vogel's concept of 'Trading Up'[5] has helped to frame comparative research on environmental policy that focuses on differences among

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[1] Gunningham, N., Grabosky, P., 1998. Smart Regulation: Designing Environmental Policy, In: Studies, O.S.-L. (Ed.). Oxford University Press, Oxford.

[2] Oosterveer, P., 2014. Promoting sustainable palm oil: viewed from a global networks and flows perspective. Journal of Cleaner Production, Rudel, T., DeFries, R., Asner, G.P., Laurance, W., 2009. Changing drivers of deforestation and new opportunities for conservation. Conservation Biology 23, 1396-1405.

[3] ITTO, 2011. Annual Review and Assessment of the World Timber Situation 2011. International Tropical Timber Organization (ITTO), Yokohama, pp. 1-206.

[4] Xiufang, S., Canby, K., 2011. FLEGT Asia, Baseline Study 1, China: Overview of forest governance, markets and trade. EFI - FLEGT Asia Regional Office, Forest Trends, Washington DC, pp. 1-52.

[5] Vogel, D., 1997. Trading up and governing across: transnational governance and environmental protection. Journal of European Public Policy 4, 556 - 571.

countries in the stringency of their environmental regulations, policies and standards.[6] The questions posed by these studies revolve around where, and under what conditions, does global trade favor a 'race to the bottom' or a 'race to the top' in the stringency of environmental standards. Often inherent in this argumentation, is the association of stringent standards and regulations with 'high' environmental performance. From this perspective the EU and member states are considered environmental leaders, due to relatively stringent and well enforced environmental regulations. In contrast, developing countries are environmental laggards, due to inadequate regulatory frameworks or lack of enforcement.[7] A possible conclusion to draw from these findings, is that the EU should leverage its dominant position in global markets to ratchet up environmental standards and squeeze out producers who do not meet them.

On the other hand, work inspired by Hornborg's theory of 'Ecologically Unequal Exchange' (EUE) has highlighted the inequality of global resource distribution.[8] This perspective explains forest loss and other environmental problems as the result of excessive consumption in the developed world and displacement of environmental harms elsewhere. According to this theory, poor countries suffer these harms because much of their population is unable to accumulate the economic and social capital necessary to safeguard their local welfare and natural resources.[9] The solution, from this perspective, is to decrease consumption in the developed world while improving the equity of resource distribution in the developing world.

The following analysis begins with a further elaboration of the Trading Up and Ecologically Unequal Exchange (EUE) perspectives, and their implications for EU global forest policy design. It then assesses the EU's engagement with two core strategies, i.e. FLEGT and REDD+, from each of these vantage points, and in light of the following

[6] Cashore, B.W., Stone, M.W., 2014. Does California need Delaware? Explaining Indonesian, Chinese, and United States support for legality compliance of internationally traded products. Regulation & Governance 8, 49-73.
[7] McDermott, C.L., Cashore, B., Kanowski, P., 2010. Global Environmental Forest Policies: An international comparison. Earthscan, London.
[8] Hornborg, A., 1998. Towards an ecological theory of unequal exchange: articulating world system theory and ecological economics. Ecological Economics 25, 127-136.
[9] Rice, J., 2007. Ecological Unequal Exchange: Consumption, Equity, and Unsustainable Structural Relationships within the Global Economy. International Journal of Comparative Sociology 48, 43-72.

research questions: With which perspective is the design of EU global forest policies most closely aligned? How might policy implementation be evaluated from these two perspectives, and with what implications for sustainability? The latter question is further broken into two subquestions: Is the stringency of environmental standards actually a good proxy for environmental performance? How might raising formal standards to meet the demands of international trade impact equity, and hence the relative capacity of developing countries to tackle their own environmental problems? Finally, this chapter considers how the priorities and impacts of FLEGT and REDD+ might be deliberately altered through changes in their 'mix' of actors and policy instruments.

Contrasting perspectives

Trading Up

David Vogel, in his seminal work on "Trading Up", argues that international trade – a core driver of economic growth – can, under certain circumstances, have a "spill over" effect that leads to a global ratcheting up of environmental policies.[10] The reason for this, is that firms operating in jurisdictions with relatively high environmental standards will seek competitive advantage by supporting a "ratcheting up" of national or global environmental standards in order to create a "level playing field" where all firms must meet similar requirements. Vogel has applied this theory, for example, to understanding changes in auto emissions standards. He argues how firms operating in California state, a state with relatively high per capita wealth and stringent environmental requirements, have pressured for federal regulations to level the playing field across other states. California has also been an attractive market for German automobile manufacturers who in turn supported the European Commission's adoption of American emissions standards.

There is a growing literature on the conditions under which this 'ratcheting up' will, or will not happen. For example, Cashore and others have applied Trading Up theory to the forest sector, examining the role of international forest certification and the verification

[10] Vogel, D., 1995. Trading Up: Consumer and Environmental Regulation in a Global Economy. Harvard University Press, Cambridge, Mass.

of the legal origin of wood products as vehicles to promote improved forest standards. [11] They argue that ratcheting up requires support from large firms with sufficient influence in the industry, and that such support is most likely to be gained through initially modest environmental requirements that do not impose much additional cost for high performing firms. These firms will then join forces with environmentalists to exclude producers who do not meet these standards.

In sum, the Trading Up perspective would support using global trade as a lever to ratchet up environmental standards and practices. Furthermore, Trading Up theory argues that decision-makers can facilitate this spread by promoting the use of international environmental standards that are supported by large influential firms. These large firms will compete with each other to become environmental leaders as a means to gain competitive advantage over other firms that are environmental laggards, leading to a continual ratcheting up of environmental performance over time.

Ecologically Unequal Exchange

Alf Hornborg's theory of Ecologically Unequal Exchange (EUE), in contrast, focuses not on the presence or absence of environmental policy, but on the global drivers and distribution of production and consumption. In particular, EUE theory highlights major inequalities in the appropriation of natural resources by developed countries and the displacement of environmental pressures or environmental "cost-shifting" to lesser developed countries and regions. For example, when international trade is taken into account, the average EU citizen in 2004 induced more than twice the greenhouse gas emissions; appropriated roughly twice the land area, and consumed 10% more ground and surface water than the average global citizen. These percentages vary, furthermore, among EU countries and across scales. For example, the UK is the largest displacer of

[11] Cashore, B., Auld, G., Bernstein, S., McDermott, C., 2007. Can Non-state Governance 'Ratchet Up' Global Environmental Standards? Lessons from the Forest Sector. Review of European Community and International Environmental Law 16, 158-172.

environmental pressure in intra-EU trade while others such as Poland are net receptors of some environmental burdens.[12]

In general, research suggests that environmental footprints increase with income and, as a country's GDP grows, its footprints are increasingly displaced elsewhere.[13] For example, in most countries recently undergoing a forest transition, as in a transition from net forest loss to net forest gain, displacement of land use abroad has accompanied local gains in forest cover.[14] Understanding the full extent of this displacement, furthermore, requires consideration of the full material flows involved in product production. According to Wiedmann et al, a country's use of non-domestic resources is roughly three-fold larger than the physical quantity of the goods actually traded.[15] Furthermore many of these goods come from countries with lower environmental performance. Thus while the EU and other developed world regions appear to be ratcheting up environmental performance within their borders, this is supported by environmental degradation elsewhere.

Hornborg's EUE framework explains the reasons for these patterns by drawing on Marxist "world systems" analysis.[16] World systems theory views social, political and economic phenomena as embedded in a global system of economic exchange which pivots around competition for surplus capital. This has led to a tripartite of "core" countries who hold a dominant position in world trade through the exploitation of "peripheral" countries, with "semi-peripheral" countries situated in the middle and

[12] Steen-Olsen, K., Weinzettel, J., Cranston, G., Ercin, A.E., Hertwich, E.G., 2012. Carbon, Land, and Water Footprint Accounts for the European Union: Consumption, Production, and Displacements through International Trade. Environ. Sci. Technol 46, 10883-10891.
[13] Meyfroidt, P., Lambin, E.F., Erb, K.H., Hertel, T.W., 2013. Globalization of land use: distant drivers of land change and geographic displacement of land use. Current Opinion in Environmental Sustainability, Weinzettel, J., Hertwich, E.G., Peters, G.P., 2013. Affluence drives the global displacement of land use. Global Environmental Change 23, 433-438, Wiedmann, T.O., Schandl, H., Lenzen, M., Moran, D., Suh, S., West, J., Kanemoto, K., 2013. The material footprint of nations. Proceedings of the National Academy of Sciences.
[14] Meyfroidt, P., Rudel, T.K., Lambin, E.F., 2010. Forest transitions, trade, and the global displacement of land use. Ibid. 107, 20917-20922.
[15] Wiedmann, T.O., Schandl, H., Lenzen, M., Moran, D., Suh, S., West, J., Kanemoto, K., 2013. The material footprint of nations. Ibid.
[16] Hornborg, A., 1998. Towards an ecological theory of unequal exchange: articulating world system theory and ecological economics. Ecological Economics 25, 127-136, Rice, J., 2007. Ecological Unequal Exchange: Consumption, Equity, and Unsustainable Structural Relationships within the Global Economy. International Journal of Comparative Sociology 48, 43-72.

playing the role of political mediators.[17] This dynamic of core and periphery also applies to the quality of governance. According to Wallerstein, the strength of the state in core countries is a function of the weakness of other states.

While world systems theory has historically focused on the accumulation of surplus economic capital, EUE employs similar arguments for the flow of natural resources or 'natural capital', and the ways in which core countries benefit from the extraction of natural capital from the periphery. Global trade, Hornborg reasons, enables those in a strong position in the world trading system (i.e. developed countries) to maintain economic growth without exhausting their resources by exploiting the resources of those in the periphery (i.e. least developed countries). The peripheral countries are unable to accumulate the capital needed for their own economic and political development and hence remain "stuck at the bottom" without a sufficiently affluent civil society to demand environmentally and socially sustainable resource management.[18]

Environmental harms may be displaced across sectors as well as countries. For example, commercial agriculture, not wood production, is the primary driver of forest loss in developing countries. Analysis of the deforestation embedded in agricultural production reveals that a significant portion of this production is destined for developed countries in the EU and elsewhere.[19]

The issue of displacement is a concern even within sectors where developed countries appear to produce as much as they consume. For example, the EU is estimated to consume only about 1/3 of the amount of wood its forests are able to produce, and the quantity (by volume and weight) of its wood product production is nearly equal to the

[17] Wallerstein, I., 1974. The Rise and Future Demise of the World Capitalist System: Concepts for Comparative Analysis. Comparative Studies in Society and History 16, 387-415.
[18] Hornborg, A., 1998. Towards an ecological theory of unequal exchange: articulating world system theory and ecological economics. Ecological Economics 25, 127-136, Rice, J., 2007. Ecological Unequal Exchange: Consumption, Equity, and Unsustainable Structural Relationships within the Global Economy. International Journal of Comparative Sociology 48, 43-72.
[19] Cuypers, D., Geerken, T., Gorisson, L., Lust, A., Peters, G., Karsten, J., Prieler, S., Fisher, G., Hizsnyik, E., van Velthuizen, H., 2013. The impact of EU consumption on deforestation: Comprehensive analysis of the impact of EU consumption on deforestation. EU, pp. 1-348.

quantity of its apparent consumption.[20] But this does not mean that all of the wood the EU consumes is sustainably produced nor that the costs and benefits of production and consumption are equally distributed. For example, there has been rapid growth of intra-EU trade from new member states in Central and Eastern Europe, regions known to have problems with illegal logging and unsustainable harvest practices. Likewise, the EU is an important importer of tropical wood. For example it is the largest importer of sawnwood, by volume, from Cameroon, a country where there are high rates of "illegal" logging and where even the legal rates of harvest intensity exceed estimates of maximum sustainable yield.[21]

Thus the problem is not simply the quantity of the EU's consumption of wood and agricultural products associated with deforestation, but the "quality" of this EU footprint. From an EUE perspective, therefore, effective environmental governance would require not just reducing the overall quantity of EU consumption, but ensuring a more globally equitable distribution of resource production and consumption. In contrast to Trading Up, and EUE perspective would not support policies that favor large, multi-national companies over local and small-scale producers. Rather it hypothesizes that capturing more benefits locally is necessary to incentivize and enable local populations to practice environmental stewardship.

A comparative assessment framework

The Trading Up and EUE theories are based on significant empirical study. However, the consideration of both theories together highlights differences in their framing that obscure some challenges while emphasizing others. The EUE theory does not address the potential role of global trade in redistributing environmental and social goods as well as

[20] McDermott, C., Koulelis, P., Kubo, K., Barron, D., 2014. Integrating global forest footprints into forest management scenarios, In: Hinterseer, T., Koulelis, P., Jonsson, R., McDermott, C.L., Sallinas, O., Schull, E., Schwingsmehl, M., Sotirov, M., Barron, D., Kubo, K. (Eds.), Synthesis report on integrated forest management scenarios in Europe including the national case study reports and the report on the role of EU commodity consumption. INTEGRAL, EU FP7 Programme, Uppsala. "Apparent consumption" is calculated as production plus imports minus exports, consistent with the methodology of the Global Footprint Network Ewing, B., Moore, D., Goldfinger, S., Oursler, A., Reed, A., Wackernagel, M., 2010. ECOLOGICAL FOOTPRINT ATLAS 2010. Global Footprint Network, Oakland, pp. 1-113.

[21] Cerutti, P.O., Tacconi, L., Nasi, R., Lescuyer, G., 2011. Legal vs. certified timber: Preliminary impacts of forest certification in Cameroon. Forest Policy and Economics 13, 184-190.

harms. The Trading Up perspective, on the other hand, overlooks the issues of consumption and displacement, i.e. the degree to which developed countries have achieved growth by displacing environmental and social harms elsewhere. A focus on overall consumption and displacement, in turn, highlights the finite nature of global resources and calls into question the ability of poorer countries to emulate the development pathways previously experienced by developed countries.

Both the Trading Up and EUE perspectives are focused on the dynamics of self-interest and economic competition, but predict different outcomes. Trading Up explains how powerful interests may support a ratcheting up of global environmental standards as a means to gain advantage over those with lesser capacities, and implies that the net result of such competition will be good for the environment. However from an EUE perspective such strategies reinforce global inequities and leave poor countries and actors "stuck at the bottom" in a downward spiral of environmental degradation.

The following analysis of EU global forest policy therefore compares and contrasts the logics of key EU policy initiatives from both perspectives. In regards to Trading Up theory, it considers whether or not the approach uses global trade as a lever to ratchet up environmental policies. For EUE theory, it considers whether a core logic of the initiative is focused on reducing consumption and/or enhancing the sharing of benefits from global trade across actors and countries. It then briefly reviews the evidence of how policy instruments associated with the initiative have been designed and implemented thus far, and consistent with what logic. Finally, it considers the implications of the mix of actors and instruments for overall policy effectiveness.

The intent of this analysis is not to empirically evaluate the outcomes of EU global forest policy - an endeavor well beyond the scope of this chapter - but rather to explore the logical implications for EU strategy of different theoretical perspectives or assumptions. We argue that such examination of underlying assumptions is a critical first step in evaluating forest policies, and provides a useful foundation for later assessing how well different theories explain on-the-ground results. Such reflexive learning and self

awareness is arguably essential to the achievement of a policy mix that is not only 'smart', but also capable of achieving widespread legitimacy and support.

EU global forest policies

The 2013 EU Forest Strategy articulates the EU's current strategic orientation for forests and the forest sector. The strategy is primarily focused on forest issues internal to the EU. However it also acknowledges that EU consumption "has implications for consumption worldwide" and includes a segment on "forests from a global perspective". This segment outlines the following priorities: to ensure **consistency** between the EU and member states in their **international forest policies**; to promote the **role of sustainable forest management across Europe and globally, in the transition to a green economy**; to ensure continued support **to fight illegal logging through the Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan**; **to support developing countries to improve forest governance and address the drivers of forest loss through REDD+**; and to assess the environmental impact of **EU consumption of products related to deforestation** outside the EU and consider options for limiting such impacts.[22]

The following analysis of EU global forest policies focuses on the two most fully institutionalized of the above strategies, i.e. the EU FLEGT Action Plan and REDD+. The assessment of the effectiveness of these instruments from a Trading Up and EUE perspective will in turn be relevant to the other action items as well, i.e. the goal of policy consistency, the transition to a green economy and limiting the consumption of products associated with deforestation.

The EU FLEGT Action Plan

The EU FLEGT Action Plan was launched in 2003 to support developing countries to combat illegal logging by blocking illegally harvested timber from entering the EU. According to the Plan, illegal logging is associated with corruption and violent conflict, undermines the competitiveness of "legitimate" industry operations, costs governments

[22] EC, 2013. A New EU Forest Strategy: for forests and the forest-based sector, In: EC (Ed.). European Commission, pp. 1-17.

"vast sums of money" in lost revenue and causes "enormous environmental damage and loss of biodiversity".[23] Stopping illegal logging has therefore become a central pillar of the EU's efforts to promote sustainable forest management globally.

As is evident in the "T" in FLEGT", this Action Plan aims to leverage the power of EU trade to achieve its objectives. Specifically, the EU proposes to sign voluntary partnership agreements (VPAs) with developing countries to enact legality licensing schemes. Once these schemes are in place, wood products coming from VPA countries must be licensed as legal before they are allowed into EU markets.[24]

The core logic of the FLEGT Action Plan appears most coherent with a Trading Up perspective. That is, its focus is on creating a 'level playing field' whereby all forest producers will be required to adhere to the laws of the country if they are to access EU markets. However, the Action Plan also includes language consistent with an EUE perspective. Specifically, the Plan states a commitment to "promoting equitable and just solutions to the illegal logging problem that do not have an adverse impact on poor people".[25]

Currently twenty-six countries have engaged in various degrees with the EU VPA process. Six have signed VPA agreements, nine are in active negotiation, and another eleven have initiated discussions.[26] Of these, Ghana and Indonesia are arguably the closest to full VPA implementation. We therefore draw on case studies of these two countries for our analysis of VPA implementation.

In regards to "ratcheting up", there is more than one way to interpret changes in forest governance in Indonesia and Ghana. As part of their VPA negotiations, both countries have engaged in multi-stakeholder processes to improve the coherence and consistency of their legal frameworks governing timber harvest. Both have also developed systems for

[23] EC, 2003. Forest Law Enforcement, Governance and Trade (FLEGT) Proposal for an EU Action Plan. European Commission, pp. 1-32.
[24] Ibid.
[25] Ibid.
[26] EFI, 2014. EU FLEGT Facility > Voluntary Partnership Agreements. European Forest Institute. http://www.euflegt.efi.int/vpa-countries

independent monitoring and legality licensing.[27] Assuming these policy instruments lead to more consistent enforcement this could be viewed as a type of "ratcheting up".[28] However, given past contradictions in forest laws and policies in both countries it is difficult to determine whether their previous legal content was more or less environmentally stringent. Employing inductive logic, it would seem the enforcement of legality could provide incentives to reduce legal requirements to make legality more easily attainable – at least in the short term. Thus for our purposes we note potential for a ratcheting up effect in terms of compliance but uncertain effect in terms of legal content.

In regards to EUE theory, there is little evidence to suggest that the FLEGT VPAs will lead to a marked reduction in the EU's overall consumption of wood products. While Indonesia is a leading source of tropical timber for the EU, tropical timber contributes only a very small percentage (less than 1%) to overall EU consumption and there are many substitute products available.[29]

The effects on the distribution of benefits may be more significant. EU member states have invested aid money to support civil society engagement in the negotiation of VPA processes in both Indonesia and Ghana. There is some evidence these processes which were thus incentivized through non-market channels, may have enhanced local participation in decision-making.[30] At the same time, both processes seem to be decreasing local access to forest products. It has been estimated that roughly 80% of wood production in both Indonesia and Ghana is produced for domestic markets, mostly by small-scale producers and chainsaw millers.[31] Yet in both countries the VPAs cover domestic as well as exported timber. Many of the smallholders who produce for domestic markets lack formal land or tree tenure rights, and many of those who hold such rights

[27] Lesniewska, F., McDermott, C.L., 2014. FLEGT VPAs: Laying a Pathway to Sustainability via Legality: Lessons from Ghana and Indonesia. Forest Policy and Economics 48, 16-23.
[28] Cashore, B., Stone, M.W., 2012. Can legality verification rescue global forest governance?: Analyzing the potential of public and private policy intersection to ameliorate forest challenges in Southeast Asia. Ibid., 13-22.
[29] FAOSTAT, 2014. Forestry Trade Flows, In: UN, F.a.A.O.F.o.t. (Ed.). http://faostat3.fao.org
[30] Overdevest, C., Zeitlin, J., 2012. Assembling an experimentalist regime: Transnational governance interactions in the forest sector. Regulation and Governance.
[31] Lesniewska, F., McDermott, C.L., 2014. FLEGT VPAs: Laying a Pathway to Sustainability via Legality: Lessons from Ghana and Indonesia. Forest Policy and Economics 48, 16-23.

lack capacity to navigate the complex wood harvest permitting processes. The VPAs add to these challenges by requiring third party verification of legality. In Indonesia, where the policy instrument used to verify compliance is private, third party certification, producers are expected to pay for the costs of private auditing. These additional requirements have created disproportionate barriers for smallholders and domestic producers, while favoring large-scale, high capacity forest producers, and less heavily regulated large-scale, intensive plantation production.[32]

Meanwhile, until November 2016,[33] none of the VPA countries had FLEGT legality licenses recognized by the EU. Nevertheless, the EU continued apace in implementing another key piece of legislation to implement the FLEGT Action Plan -- The EU Timber Regulation (EU TR) 2010 (EC, 2010). The EU TR came into force in March 2013 and is a policy instrument designed to complement FLEGT by requiring due diligence in assuring the legality of internationally traded timber. It therefore follows a similar logic as the VPA processes but takes the form of a unilateral EU regulation, without the emphasis on negotiated agreements with developing countries or on local stakeholder participation. The EU TR was intended to support the FLEGT VPA process by recognizing FLEGT licenses as sufficient proof of due diligence. However, until the EU approves the legality licensing schemes of VPA countries, importing timber from these countries faces the same due diligence requirements as elsewhere.

There is as yet a lack of published research on the net impacts of the EU TR either inside or outside of the EU. Furthermore, assessing impacts at this scale presents major challenges of attribution, since it is difficult to determine the degree to which changes in forest governance and trade can be attributed to the EU TR as opposed to a myriad of other factors. However it is possible to observe a certain coherence of the EU TR with a Trading Up perspective, in that it is designed to enforce an international standard of

[32] Obidzinski, K., Hernawan, D., Dermawan, A., Andrianto, A., Komarudin, H., 2012. Timber legality verification system and VPA in Indonesia: the challenge of small scale forestry sector, Illegal logging and legality verification -- the FLEGT/VPA as new modes of governance, Copenhagen, pp. 1-20. , Setyowati, A., McDermott, C.L., 2016. Commodifying Legality? Who and What Counts as Legal in the Indonesian Wood Trade. Society and Natural Resources, 1-15.

[33] November 15, 2016 marks the first shipments of FLEGT licensed products from Indonesia. See: http://www.flegtlicence.org/flegt-licensed-products-from-indonesia

legality and exclude producers who are unable to demonstrate compliance. At the same time, the exclusive focus on legality offers no apparent incentive to raise environmental standards and could have the effect of driving standards down to make compliance less difficult. Furthermore, there is a risk that supplier countries will respond by shifting their exports to other countries and regions without legality requirements.

In regards to EUE, the EU TR further weakens the position of developing countries in the world trading system. This could exacerbate inequalities with the result of weakening rather than strengthening forest governance among peripheral trading partners. From the EUE perspective, the problem of weak governance is not simply a problem of inadequate enforcement, but rather a systemic problem relating to inequalities in the accumulation of capital and the ability of countries and producers to develop both economically and politically. This perspective would call for replacing or modifying the current mix of FLEGT policies with their heavy focus on state regulation and the licensing of wood for export, with a mix of policies expressly designed to support pro-poor governance reform and local, domestically-oriented forest enterprises.

The EU and REDD+

Reducing Emissions from Deforestation and Degradation (REDD+) is a mechanism under the United Nations Framework Convention on Climate Change (UNFCCC).[34] The core logic of REDD+ is to provide financial and technical support to developing countries to reduce their carbon emissions from forest loss and enhance forest carbon storage. The UNFCCC's emphasis on economic incentives as the central driver of REDD+ is similar to the EU's framing of FLEGT, and is consistent with a Trading Up perspective. However, as the EU has done with FLEGT, the UNFCCC has also integrated elements of an EUE perspective into its REDD+ text. Many REDD+ stakeholders have expressed concern that a market-based approach to REDD+ might spur the conversion of natural forests to more intensively managed plantations to maximize carbon uptake, or lead to dispossession and loss of traditional livelihoods among indigenous and local

[34] UNFCCC/AWGLCA, 2011. Report of the Conference of the Parties on its sixteenth session, held in Cancun from 29 November to 10 December 2010. United Nations Framework Convention on Climate Change/Adhoc Working Group on Long-term Cooperative Action.

communities.[35] As a result, the UNFCCC has developed a set of environmental and social safeguards.[36] The UNFCCC REDD+ safeguards state that REDD+ interventions should ensure effective and transparent governance, full and effective participation of relevant stakeholders including indigenous and local communities, and enhance environmental and social benefits. These safeguards have since been further defined in different ways by international aid agencies and financial institutions, including EU and member-state funding bodies, non-state certification schemes and other policy stakeholders. A comparison of the content of these various state and non-state-based safeguards reveals considerable variation in their content and stringency.[37]

The ways in which one might assess the effectiveness of these diverse REDD+ safeguards would vary if one adopted a Trading Up or an EUE perspective. A proponent of Trading Up might measure changes in state-based or private environmental and social regulation. As of the UNFCCC COP 19 in Warsaw, it has been decided that countries must provide a summary of how the REDD+ safeguards are being addressed and respected before receiving results-based payments.[38] This emphasis on making REDD+-related environmental and social policies internationally transparent could lead to norm diffusion and a ratcheting up effect.

From an EUE perspective, however, the more important questions would be whether REDD+ will foster reduced consumption and facilitate more equitable benefit-sharing. Analysis of the evidence on consumption is not encouraging. The amount of finance currently available for REDD+ is inadequate to cover the opportunity costs of converting forests to palm oil or cattle.[39] Even if such finance were made available, this may not

[35] McDermott, C.L., Coad, L., Helfgott, A., Schroeder, H., 2012. Operationalizing Social Safeguards in REDD+: Actors, interests and ideas. Environmental Science and Policy 21, 63-72.
[36] UNFCCC/AWGLCA, 2011. Report of the Conference of the Parties on its sixteenth session, held in Cancun from 29 November to 10 December 2010. United Nations Framework Convention on Climate Change/Adhoc Working Group on Long-term Cooperative Action.
[37] McDermott, C.L., Coad, L., Helfgott, A., Schroeder, H., 2012. Operationalizing Social Safeguards in REDD+: Actors, interests and ideas. Environmental Science and Policy 21, 63-72.
[38] UNFCCC, 2014. Report of the Conference of the Parties on its nineteenth session, held in Warsaw from 11 to 23 November 2013: Part two. UNFCCC, pp. 1-43.
[39] Borrego, A., Skutsch, M., 2014. Estimating the opportunity costs of activities that cause degradation in tropical dry forest: Implications for REDD+. Ecological Economics 101, 1-9, Butler, R.A., Koh, L.P., Ghazoul, J., 2009. REDD in the red: palm oil could undermine carbon payment schemes. Conservation Letters 2, 67-73.

necessarily reduce consumption. For example, the recent dramatic decline of forest loss in Brazil was achieved in part by the intensification of cattle production, with no net loss of production.[40] This suggests that reducing forest loss did little to address consumption.

The ability of REDD+ to promote equitable resource distribution is also uncertain. The UNFCCC empowers country parties to develop nationally appropriate REDD+ strategies and safeguards. While it is still too early to tell how these strategies will materialize at the country level, there is a growing body of research on REDD+ preparation activities at the national and project levels. Some countries, such as Indonesia and Mexico, have developed REDD+ strategies or visions that situate REDD+ within the broader goals of sustainable forest management, participatory decision-making and social equity.[41] While reduction of emissions from forest loss is one objective, this is to be achieved only in concert with other sustainable development goals. Furthermore participatory REDD+ processes in some cases appear to have enhanced civil society participation in forest governance more generally.[42] Importantly from an EU perspective, EU donor countries such as Germany and the UK have helped to encourage as well as financially support this enhanced participation. However, it is unclear whether current priorities for public participation will be sustained if REDD+ transitions into a purely "performance-based" policy instrument, as envisioned under the UNFCCC.[43] In the absence of sustained finance for safeguard activities, and without associated policy instruments that support safeguards monitoring and implementation that are proportionately equivalent to

[40] Nepstad, D., McGrath, D., Stickler, C., Alencar, A., Azevedo, A., Swette, B., Bezerra, T., DiGiano, M., Shimada, J., Seroa da Motta, R., Armijo, E., Castello, L., Brando, P., Hansen, M.C., McGrath-Horn, M., Carvalho, O., Hess, L., 2014. Slowing Amazon deforestation through public policy and interventions in beef and soy supply chains. Science 344, 1118-1123.
[41] CONAFOR, 2010. VISIÓN DE MÉXICO SOBRE REDD+. CONAFOR, SEMARNAT, Gobierno Federal, Mexico City, p. 57. , Ituarte-Lima, C., McDermott, C.L., Mulyani, M., 2014. Assessing equity in national legal frameworks for REDD+: The case of Indonesia. Environmental Science and Policy.
[42] Ituarte-Lima, C., McDermott, C.L., Mulyani, M., 2014. Assessing equity in national legal frameworks for REDD+: The case of Indonesia. Environmental Science and Policy, Mulyani, M., Jepson, P., 2013. REDD+ and Forest Governance in Indonesia: A Multistakeholder Study of Perceived Challenges and Opportunities. The Journal of Environment and Development.
[43] Barron, D.P., McDermott, C.L., 2014. Private Funder Perspectives on Local Social and Environmental Impacts in 'Reducing Emissions from Deforestation and Degradation+'. Journal of Environmental Policy & Planning, 1-17.

investments in the monitoring and sale of carbon, the EU would have little leverage or legitimacy to insist on rigorous safeguards implementation.

At the project level, case study evidence suggests that REDD+ carbon payments have favored relatively large landowners with secure tenure over smaller landholders and the landless.[44] However REDD+ projects, which are frequently implemented by a mix of private sector and civil society actors and draw on voluntary certification, have in some cases provided important non-carbon benefits, including the strengthening of tenure rights for some farmers.[45]

In sum, the effect of REDD+ on benefit-sharing will be variable at both national and project levels. At the same time, the influence of the EU on REDD+ priorities will depend on the particular mix of REDD+-related actors and state and non-state policy instruments that the EU and its member states support, and the degree to which this promotes participatory processes and non-carbon benefits.

Summary and Conclusion

The EU's global forest policy goals, as currently stated in its 2013 Forest Strategy and associated action plans, are resonant with two contrasting theoretical perspectives: Trading Up and EUE. The Trading Up perspective frames the EU as an environmental leader whose role is to leverage its influence on global trade to bring the rest of the world up to standard. The EUE perspective, in contrast, acknowledges the EU's role as a leading consumer, and views its dominant position in world trade as driving a downward spiral of inequality and environmental degradation. From this perspective, effective policies must lead to a reduction in EU consumption and foster a more equitable distribution of the world's resources, thereby enabling developing countries to shape their own strategies for environmental stewardship.

[44] Peskett, L., Schreckenberg, K., Brown, J., 2011. Institutional approaches for carbon financing in the forest sector: learning lessons for REDD+ from forest carbon projects in Uganda. Environmental Science and Policy 14, 216-229.
[45] Osborne, T.M., 2011. Carbon forestry and agrarian change: access and land control in a Mexican rainforest. Journal of Peasant Studies 38, 859-883.

The assessment of EU global forest policy according to both the Trading Up and EUE perspectives yields mixed results (see Table 1). The FLEGT VPAs, EU TR and REDD+ all place heavy emphasis on verification and international reporting as a means to incentivize desired behavior. In the case of the VPAs and TR the focus is on compliance with forest law, while the focus of REDD+ is on carbon accounting and reporting on safeguards compliance. From a Trading Up perspective, this emphasis on internationally transparent compliance with laws and standards could foster a type of "ratcheting up" of environmental enforcement by squeezing out those actors unable or unwilling to meet reporting requirements. However it could also incentivize a weakening of the content of environmental and social policies in order to make compliance easier to achieve.

Table 1 An evaluation of FLEGT and REDD+ from the Trading Up and Ecologically Unequal Exchange (EUE) perspectives

Policy instrument	**Trading up**	**Ecologically Unequal Exchange**	
Outcome	**Ratchet up environmental standards?**	**Reduce Consumption?**	**Redistribute benefits?**
FLEGT VPAs	**Mixed.** Uncertain effect on environmental policies, displacement of timber trade, but may increase compliance.	**No.** Likely to hasten intensification of timber production.	**Mixed.** May enhance public participation. Has created disproportionate barriers for domestic/small-scale production.
EU Timber Regulation	**Mixed.** Uncertain effect on environmental policies, displacement of timber trade, but may increase compliance.	**No.** Likely to favor developed countries, large industry.	**No.** Likely to favor developed countries, large industry.
UNFCCC (REDD+)	**Mixed.** Increased emphasis on transparency of forest policies and safeguards may encourage ratcheting up of standards.	**No.** Likely to support intensification of timber and agricultural production.	**Mixed.** Depends on relative investment in safeguards and non-carbon benefits.

None of these policies address the role of net EU consumption. In regards to benefit distribution, the negotiation of FLEGT VPAs and REDD+ actions to date have created new platforms for previously marginalized actors to participate in forest-related decision-making. These platforms, furthermore, were realized via a variety of policy mechanisms, some of which emerged outside of the formal EU FLEGT and UNFCCC REDD+ governance structures – such as bi-laterally funded multi-stakeholder platforms and voluntary legality and forest carbon certification schemes. However it is unclear which actors and instruments will remain active, and how much priority either the VPAs or REDD+ will continue to place on safeguarding local participation or welfare, once they become fully operational and performance-based. Meanwhile, the procedural benefits gained through both the VPA and REDD+ projects have not necessarily enhanced local benefit capture: the VPAs have created disproportionate market barriers for small scale and domestic oriented forest producers, and REDD+ carbon payments have favored relatively large landowners with clear tenure.

In conclusion, there is a need to more carefully consider the evidence offered by both Trading Up and EUE perspectives in order to improve the likely impacts of EU global forest strategies. From a Trading Up perspective, there is a need to transition international attention beyond legality to assessing how current strategies impact the content, and social equity, of environmental and social rules and standards and their on-the-ground outcomes. From an EUE perspective, much greater attention needs to be placed on reducing the size, and improving the quality, of the EU's global footprint, supporting small-scale and domestic producers and promoting local benefit-sharing.

It is also important to recognize that the Trading Up and EUE perspectives are more contradictory than complementary, and that theoretical and political consensus on their relative value is unlikely. Nevertheless, achieving some degree of balance across the two perspectives may be necessary, both in terms of the overarching logics used to design policy initiatives, and in terms of the mix of policy instruments employed for their implementation, if the EU is to balance its goals for global leadership with its goals for equity, justice and a new green economy.

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