

Article

Barking Up the Right Tree? NGOs and Corporate Power for Deforestation-Free Supply Chains

Anne-Kathrin Weber ^{1,*}  and Lena Partzsch ² 

¹ Department of Political Science, University of Freiburg, 79085 Freiburg im Breisgau, Germany

² Chair Group of Sustainability Governance, University of Freiburg, 79085 Freiburg im Breisgau, Germany; lena.partzsch@envgov.uni-freiburg.de

* Correspondence: anne-kathrin.weber@politik.uni-freiburg.de; Tel.: +49-761-203-3474

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Abstract: Supply chain sustainability has become a key issue for multinational corporations (MNCs). Hundreds of MNCs in agri-commodity sectors have recently committed to eliminate deforestation from their supply chains. In this article, we examine the power of non-governmental organizations (NGOs) participating in two initiatives that support the implementation of such commitments: the Accountability Framework initiative (AFi) and Transparency for Sustainable Economies (Trase). Drawing on document and literature research, participant observation as well as semi-structured interviews, we find that these NGOs exercise *power with* MNCs, in particular in terms of raising awareness and changing corporate self-perceptions. At the same time, though, there is a bias towards representing the positions and interests of materially strong actors in global supply chains. In doing so, NGOs risk reinforcing MNCs' *power over* more marginalized actors. In this light, we argue that initiatives such as AFi and Trase can only be a first step towards a new economic system that respects ecological limits and delivers social justice. In order to shape transformative change, NGOs need to more actively push discussions about equitable distribution, emancipation and justice in natural resource governance.

Keywords: deforestation; deforestation-free supply chains; forest risk commodities; MNCs; NGOs; power asymmetries; power with; power over

1. Introduction

With Sustainable Development Goal (SDG) 15.2, the United Nations (UN) have pledged to “promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally” by 2020 [1] (p. 24). As commodities grown on deforested land are increasingly traded on global markets [2], multinational corporations (MNCs) are often accountable for deforestation. Against the backdrop of rising public awareness and pressure, hundreds of MNCs in agri-commodity sectors have committed to eliminate deforestation from their supply chains [3]. However, implementation is lagging [4]. In this article, we assess the power of non-governmental organization (NGOs) that monitor and support corporate action, seeking to accelerate progress towards fulfilling supply chain commitments. We particularly focus on two NGO-led initiatives that have been newly created for this purpose: the Accountability Framework initiative (AFi) and Transparency for Sustainable Economies (Trase).

Serious progress in sustainable supply chain and forest management is inextricably tied up with questions of power, understood here as conscious, structural mechanisms that shape decisions affecting a collective environment [5,6]. While admitting that structure and agency are mutually constitutive in an ongoing process, we make a strong claim for acknowledging the agency of NGOs in natural resource governance. In the spirit of Arendt [7], who understands power as communicating with

one another and acting in concert, AFi and Trase define themselves as collaborative initiatives whose ability to initiate change stems from cooperation among diverse actors [8,9].

At the same time, NGO power analyses tend to be based on Weber's [10] (p. 53) definition of power as the "probability that one actor within a social relationship will be in a position to carry out his own will despite resistance, regardless of the basis on which this probability exists." In this vein, NGOs participating in initiatives such as AFi and Trase have been shown to be subject to a neoliberal discourse, which can be defined as a way of thinking that strongly emphasizes the value of economic growth and free markets. As a result, NGOs are prone to reinforce asymmetrical power relations—which result from supply chain operations that link the local socio-ecological system with global markets ('telecouplings')—and thus legitimize the "global plunder of resources" [11] (p. 221) instead of contributing to emancipation and justice in natural resource governance. We contrast these two perspectives in this article by answering the question: Does the transformational potential of NGO-led initiatives such as AFi and Trase rely on NGOs' *power with* MNCs? Or do the two initiatives contribute to manifesting the *power* of materially strong actors *over* more marginalized actors in the global economy?

The article proceeds as follows. After explaining the issue of commodity-driven deforestation, we present relevant literature on (i) the 'watchdog' role of NGOs, (ii) economic concepts associated with global supply chains and (iii) related North-South asymmetries. These insights are necessary to better understand the normative environment in which the research objectives operate. Afterwards, we introduce AFi and Trase as new efforts of coordination and cooperation for deforestation-free supply chains. The analysis is divided into two parts: one that focuses on *power with* (i.e., cooperation and learning) and one that focuses on *power over* (i.e., coercion and manipulation). In each part, we first explain the conception of power itself. Afterwards, we apply it to AFi and Trase. The empirical data that is examined has been compiled through comprehensive document and literature research, participant observation [12] and semi-structured interviews [13]. Finally, we discuss our results and draw some conclusions. Our key finding is that, while standing for NGOs' *power with* other NGOs, research institutions as well as with MNCs, both initiatives have so far not been able overcome power asymmetries associated with commodity-driven deforestation. Actors from the Global North are overrepresented in the decision-making processes and this is reflected in the positions and interests advocated by AFi and Trase. In order to provoke a transformative change, NGOs participating in AFi and Trase need to more actively push discussions about equitable distribution, emancipation and justice in natural resource governance.

2. Background: The Challenge of Deforestation-Free Supply Chains

2.1. Commodity-Driven Deforestation

In the last decade, the two-way linkages between deforestation and climate change have gained new political and academic attention [14]. Recent assessments have shown that halting and reversing deforestation can significantly contribute to the goal of holding global warming well below 2 °C [15]. Apart from being key to solving the climate crisis, forests provide essential ecosystem functions and social services to humans, particularly in terms of resilience, biodiversity, Indigenous livelihoods and food security. If deforestation continues at current rates, scholars expect severe ecological, social and economic consequences, ranging from soil erosion, water pollution and flooding to carbon emissions, climate instability and wildlife extinction [16]. The most immediate impact of deforestation occurs at the local level, "[posing] threats to the livelihoods and cultural integrity of forest-dependent people and the supply of timber and non-timber forest products for future generations" [17] (p. 5).

Projects to reduce deforestation are taking place at the local, regional, national and international level. Well-known examples at the international level are REDD+ [18] as well as the Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan. While REDD+ financially compensates developing countries that are willing and able to prevent deforestation, FLEGT regulates timber

imports into the European Union, aiming to prevent the trade of illegally logged wood. However, neither of the two mechanisms *directly* addresses the main driver of global deforestation: the rising demand for agricultural commodities [19]. This demand particularly refers to large-scale cattle, soy, palm oil and timber as so-called forest risk commodities (FRCs). While global demand for FRCs drives deforestation especially in South America and Southeast Asia, there are signs that commercial pressure on African forests will increase as well [20].

Against this backdrop of commodity-driven deforestation, many MNCs have committed to eliminate deforestation from their supply chains. As of October 2018, Forest Trends' *Supply Change Initiative* has tracked commitments from 471 MNCs that produce, procure or use FRCs as part of their core business [3]. Assessments have shown that most of them have so far failed to turn rhetoric into action [21–23], which is why NGOs have started to track progress, identify barriers and provide support to these MNCs. While NGOs are non-state actors whose activities are non-profit-driven and oriented towards the common good, we define MNCs as corporate businesses that generate income through cross-border trade [24].

2.2. The 'Watchdog' Role of NGOs

Scholars often consider NGOs to be a counterpart to MNCs in global economy. As 'watchdogs,' NGOs are expected to denounce non-ethical corporate behaviour [25,26]. Greenpeace often serves as an example for fulfilling such a watchdog role; for instance, when it mobilized public resistance to Shell's plan to dispose its defunct oil rig in the North Sea in 1995 [27]. In recent years, however, an increasing number of NGOs has entered into comprehensive partnership arrangements with MNCs. Assuming that both actor groups can achieve more when working together, it has been argued that such partnerships open up new perspectives and produce innovative solutions to common problems [28,29]. However, studies have demonstrated that arrangements between NGOs and MNCs are prone to weaken the credibility, autonomy and agency of the non-profit sector [30,31]. It is argued that MNCs work with NGOs to establish credentials for their marketing strategies. From this perspective, joint action primarily serves the assertion of corporate interests [32]. At the same time, while being oriented towards the common good, NGOs have been shown to pursue strategic self-interests as well. As trustees and donors increasingly ask for partnerships with MNCs as evidence of influence, NGOs are tempted to engage in cooperative arrangements, even if they are foreseeably not effective or require opportunistic behaviour to be maintained [33]. The competition for donor money thus leads to "a considerable danger of 'co-optation out of cooperation'" [34] (p. 178). In this view, scholars have questioned the ability of NGOs to still act as independent watchdogs that hold MNCs responsible for environmental and social harm caused in their supply chains [35].

2.3. The New Forest Economy

The New Forest Economy, a concept that shifts the focus from forest conservation to sustainable and productive forest management, is gaining popularity among actors in global climate governance. Anticipating a growing market for 'sustainable' forest products, the New Forest Economy is expected to provide 'green' jobs and contribute to the reduction of poverty [36]. Such ideas are accompanied by the adoption of a new language that frames deforestation issues as business opportunities instead of risks [37]. Opportunities are expected to arise from increased reputation as well as from "boosting sales through offering the right products at the right time" [38] (p. 21). Against this background, MNCs increasingly agree that addressing deforestation within their supply chains makes business sense and that even competitors can work together to secure the long-term availability of natural resources [39,40]. With regard to partnerships, MNCs and their business associations advocate for new efforts of coordination and cooperation with NGOs, instead of both sides getting "bogged down in arguments over burden-sharing" [41] (p. 1). Such partnerships are expected to provide a 'triple win' by serving individual businesses, the economy and the environment [41].

2.4. The Neoliberal Discourse, North-South Asymmetries and Alternative Economic Concepts

‘Triple win’ and ‘win-win’ ideas are inherent to the neoliberal discourse that dominates global environmental governance [42]. Concepts like ‘market environmentalism’ claim that environmental problems can be solved through the expansion of free markets as well as through the privatization, commercialization and commodification of natural resources [43,44]. In this vein, market-based forest conservation projects—usually in the form of payments for environmental services (PES)—have been promoted as a “win-win for both conservation and development objectives” [45] (p. 412).

Scholars have criticised these ideas, arguing the ‘neoliberalisation of nature’ reflects the interests of global capitalist elites while ignoring local contexts and the rights and needs of local communities that “lack the resources to play the neoliberal game effectively” [46] (p. 446). As such, the neoliberal discourse is believed to reinforce the distribution of inequalities and power asymmetries between actors from the Global North and actors from the Global South [47]. Moreover, it has been argued that this discourse undermines efforts of emancipation and justice in natural resource governance [48]. In the context of global deforestation, scholars have particularly pointed out the structural disadvantages of developing countries and countries with weak institutions [49,50]. In addition, North-South asymmetries have been discussed with regard to interest representation. For instance, Dingwerth [51] shows that Southern stakeholders are still underrepresented in decision-making processes—even in governance systems that explicitly promote North-South parity, such as the Forest Stewardship Council (FSC) [51,52].

In reference to the ‘limits to growth’ debate [53], several scholars have proposed alternatives to neoliberalism. This includes alternative economic concepts such as de-growth or post-growth (e.g., [54–56]). De-growth theorists do not advocate for economic recession or depression that would cause deteriorating social conditions and thus instability [55,56]. Instead, they discuss the concept of ‘sustainable de-growth,’ which is defined as

an equitable downscaling of production and consumption that increases human wellbeing and enhances ecological conditions at the local and global level, in the short and long term [55] (p. 512).

Paech [54] suggests a post-growth economy that is based on regional production and shortened supply chains. He criticizes efforts that only combat the symptoms but not the root causes of global problems—such as deforestation—that, according to him, are caused by economic globalization.

3. New Efforts of Coordination and Cooperation for Deforestation-Free Supply Chains

We chose our case studies for two reasons: First, the Accountability Framework initiative (AFi) and Transparency for Sustainable Economies (Trase) are the only *NGO-led* initiatives operating *at global scale* that have been created *in direct response* to challenges associated with the implementation of corporate supply chain commitments (namely the lack of common understanding and uniform guidelines as well as the lack of supply chain information and transparency). They are also the only NGO-led initiatives for deforestation-free supply chains that have attracted considerable attention within the international climate community. Second, AFi and Trase have been developed jointly by diverse actors. As such, they present new efforts of coordination and cooperation for deforestation-free supply chains that have not been covered by scientific research yet. For an overview of the initiatives’ main characteristics and more detailed information, see Table 2.

Table 1. The Accountability Framework initiative (AFi) and Transparency for Sustainable Economies (Trase).

	AFi	Trase
Officially launched	2016	2016
Type of actors involved	Environmental and social NGOs	Environmental NGOs and research institutions
Founding members	<ul style="list-style-type: none"> • Greenpeace International [The Netherlands] • Institute of Agricultural and Forest Management and Certification [Brazil] • National Wildlife Federation [USA] • ProForest [UK] • Rainforest Alliance [The Netherlands/USA] • Rights and Resources Institute [USA] • The Nature Conservancy [USA] • World Resources Institute [USA] • WWF [Switzerland] 	<ul style="list-style-type: none"> • Global Canopy Programme [UK] • Stockholm Environment Institute [Sweden] • Founded in close cooperation with Vizzuality [Spain] and European Forest Institute [Finland]
Actors involved in decision-making processes	<p>Members of the Steering Group (SG):</p> <ul style="list-style-type: none"> • Forest Peoples Programme [UK] • Greenpeace International [The Netherlands] • Institute of Agricultural and Forest Management and Certification [Brazil] • National Wildlife Federation [USA] • ProForest [UK] • Rainforest Alliance [The Netherlands, USA] • ResourceTrust [Ghana] • Social Accountability International [USA] • The Nature Conservancy [USA] • World Resources Institute [USA] • WWF [Switzerland] • Verité [USA] • Experts from Indonesia and Liberia 	<ul style="list-style-type: none"> • Global Canopy Programme [UK] • Stockholm Environment Institute [Sweden]
Objectives	<ul style="list-style-type: none"> • Facilitate <i>consensus</i> about basic terms, definitions, norms, principles and tools • Help MNCs and others overcome barriers to <i>transform</i> supply chains 	<ul style="list-style-type: none"> • <i>Map</i> trade routes and associated risks for production in major forest risk commodities • <i>Transform</i> understanding of sustainability issues in forest risk supply chains

Table 2. The Accountability Framework initiative (AFi) and Transparency for Sustainable Economies (Trase).

	AFi	Trase
Officially launched	2016	2016
Type of actors involved	Environmental and social NGOs	Environmental NGOs and research institutions
Tools	<ul style="list-style-type: none"> Guidelines that serve as a good practice benchmark 	<ul style="list-style-type: none"> Open-access platform that links production landscapes to ports of import and identifies the actors along the supply chain Information on sustainability impacts associated with a given area of production
Donors	<ul style="list-style-type: none"> Gordon and Betty Moore Foundation [USA] Norwegian Ministry of Climate and Environment [Norway] Initial funding by SEM Charitable Trust [UK] 	<ul style="list-style-type: none"> European Commission [EU/Belgium] Global Environment Facility [USA] Gordon and Betty Moore Foundation [USA] Swedish International Development Cooperation Agency [Sweden] The Nature Conservancy [USA] The Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning [Sweden] UK Department for International Development [UK] WWF [Switzerland]

Headquarters in square brackets. Sources: [8,9,57–66]. October 2018.

3.1. The Accountability Framework Initiative (AFi)

At the moment, it is difficult to compare MNCs' supply chain commitments and assess progress. One reason for this is the lack of common understanding of the most basic terms, such as forest and deforestation [67]. To facilitate consensus about terms and definitions as well as underlying norms and principles, nine environmental and social NGOs launched the Accountability Framework initiative (AFi) in 2016 [57]. AFi is currently developing guidelines that are intended to serve as a good practice benchmark and should provide a uniform directive on how to formulate, operationalize and measure progress towards corporate supply chain commitments [58,59]. The initiative's Steering Group (SG)—which provides leadership and decision-making [60]—comprises representatives of member and partner organisations as well as two independent experts from Indonesia [61] and Liberia [62]. AFi receives financial support from the Gordon and Betty Moore Foundation and from the Norwegian Ministry of Climate and Environment [63]. Initial funding was also provided by the SEM Charitable Trust [60]. Several initiatives—such as Global Forest Watch and High Carbon Stock (HCS) Approach—have announced they will use the initiative's output once it is available [57].

3.2. Transparency for Sustainable Economies (Trase)

Trase aims to provide support to MNCs by increasing supply chain transparency. The initiative was officially launched in 2016 and is managed by the Global Canopy Programme (GCP) and the Stockholm Environment Institute (SEI) [9]. GCP and SEI have developed an open-access platform, which currently maps the trade flows of soy, beef and palm oil from Argentina, Brazil, Paraguay and Indonesia [64]. The platform links production landscapes—at municipality or department level, depending on the country—to ports of import. It also identifies the actors that export, trade, ship and import the given commodity. This data is linked to information on sustainability impacts associated with the given area of production, including deforestation rates, greenhouse gas (GHG) emissions, biodiversity threats and human rights issues [9]. Users of the platform are thus able to (a) identify which actors are involved in the trade of commodities produced in areas that face deforestation and other sustainability issues and (b) quantify risks in particular supply chains [65,66]. The list of donors ranges from NGOs to government agencies and philanthropic foundations [64].

4. Analysing *Power with* and *Power over*

In the following subsections, we assess the ways in which NGOs participating in AFi and Trase exercise power for deforestation-free supply chains. We apply a multidimensional power framework, arguing that only the integration of different perceptions on power allows examining the complex power relations between NGOs and other actor groups. In addition, we stress the fact that the exercise of power takes various forms and happens at various levels. That means, it is not always visible and conscious but also materializes in communication practices and knowledge production.

4.1. *Power with: Collaborative Efforts to Protect Global Forests*

There is a shared belief that—due to the complexity of the problem and the short period of time remaining to meet the SDGs by 2030—isolated activities are not able to effect transformative change. As in other spheres of social life, the idea of 'achieving more together' creates positive associations. It also implies a collaborative understanding of power:

No one company or sector can do it alone. We have a shared vision and the way to getting us there is through the strength of partnerships and joint impactful actions [68] (p. 1).

The assumption that actors only unfold their power when acting together can be linked to a perception of *power with*. *Power with* is exercised when actors are finding common ground among diverse interests, developing shared values and creating collective strength by organizing with one another [6,69]. It implies processes of learning from one another, questioning self-perceptions and

actively building up a new awareness of individuals or groups. These processes happen in conceptual and cognitive terms as well as through senses, emotions, creativity, intuition and bodily forms of knowledge [70] (pp. 8–9). This understanding of power has been elaborated with reference to Arendt [6,71]. Arendt [7] (p. 44) argues that power only exists between people who act in concert. She is interested in joint action, assuming that finding agreement can become an end in itself and does not only serve the assertion of particular interests [7].

Taking a perspective of *power with*, five insights are of particular relevance. First, we find that AFi and Trase emerged from the idea that joint action among diverse actors is possible to realize deforestation-free supply chains. In the case of AFi, a heterogeneous group of environmental and social NGOs is cooperating, including campaigning organisations (e.g., Greenpeace International) as well as organisations with traditionally close ties to MNCs (e.g., WWF). They have reached consensus on a set of Core Principles and thus created a joint understanding of specific terms, such as *forest* and *deforestation* [72]. In the case of Trase, environmental NGOs and research institutions joined forces. According to a Trase representative, the founders also seek to initiate learning processes by sharing data with other members of the global environmental community, which is why the usage of the platform is free of charge [73].

Second, actors in global climate governance developed the shared belief that (i) a deforestation-free economy is a key component of addressing climate change [74], (ii) global supply chains can be mechanisms for social and environmental reform [75] and (iii) MNCs increasingly care about where and how commodities are sourced and are willing to change their business behaviour [76]. Both AFi and Trase reproduce this belief:

AFi representative, interviewed on 15 November 2017:

We recognize that they [the MNCs] are partners (. . .) I see the willingness of companies to turn rhetoric into action. Some companies already have had an impact. There is clear evidence of that.

Trase representative, interviewed on 1 December 2017:

Our approach assumes that companies play a leading role in this, as well as governments but companies and governments together are key to the solution. And that companies are willing to take action—this is a premised partially. We assume that companies will act on this information.

Third, the guidelines developed by AFi and the platform created by Trase are intended to be enabling tools that improve the work of other actors:

AFi representative, cited after [77] (p. 1):

It [the AFi] will accelerate progress, foster transparency and better enable companies to track their progress as they accomplish important milestones.

Trase representative, interviewed on 1 December 2017:

At the core of Trase is the belief that the platform is an enabling tool (. . .) a tool that is able to help others do what they are aiming to do better.

Both tools have been developed in the context of regular interaction between NGOs and MNCs. In the case of AFi, discussions about the first draft of the Core Principles were held with members of the Consumer Goods Forum (CGF) as well as with partner companies of AFi member organisations [72]. The feedback has been integrated into the revised version of the Core Principles. Thus, corporate representatives have directly influenced the content of the document.

AFi representative, interviewed on 4 October 2018:

Their [the MNC representatives'] feedback was very helpful, in terms of telling us where the guidance resonated with them, where they found it helpful, where they wanted to see additional information and where it needed to be more detailed.

Similarly, when creating the platform that maps global supply chains, Trase members talked to corporate representatives. This includes conversations with downstream supply chain actors, such as Marks & Spencer, Nestlé, Tesco and Unilever, as well as with upstream supply chain actors, such as Amaggi, Bunge, Cargill, Cofco and Louis Dreyfus [78]. Based on these conversations, both sides developed a shared understanding of what information is needed to assess sustainable risks in global supply chains. In addition, the MNC representatives' feedback influenced the way in which the data is now presented [73].

The close interaction with MNCs shows that AFi and Trase participants do not use the initiatives to perform an *explicit* watchdog role over MNCs. AFi has compiled a diverse list of intended users that includes MNCs, investors and governments but also individual advocacy and watchdog groups [58]. Likewise, Trase itself does not aim to 'name and shame' supply chain actors either. The initiative does not publish confidential information but only data that is publicly available [73]. The idea is to increase the visibility of this data without predefining or controlling for what it is used.

Trase representative, interviewed on 1 December 2017:

The tool can be used for quite different purposes, it can be used as an accountability tool to hold companies accountable but (. . .) it can also be used to highlight progress and performance and show that certain companies are performing better than others.

MNCs have welcomed these efforts, arguing that initiatives like AFi and Trase move the debate away from 'playing the blame game' and towards a joint search for solutions [79–81]. Corporate representatives also admit that MNCs would not have developed such tools by themselves.

Fourth, initiatives such as AFi and Trase have led to a new corporate self-perception. There is an increasing awareness among MNCs regarding their responsibility for global deforestation. Many of them have started to consider themselves to be part of the fight against deforestation:

Statement by Unilever:

[S]ince making our commitment to zero net deforestation, we've increased our work with industry partners, governments and non-governmental organisations (NGOs), advocating for change across the entire tropical forest commodities sector [82] (p. 1).

Statement by Procter & Gamble (P&G):

At P&G, we are unequivocally committed to zero deforestation in our palm supply chain and are using our innovation strength to drive positive change in the industry [83] (p. 1).

Although such statements are rhetorical in nature, they "express particular meanings and self-understandings" [84] (p. 152). Based on this new self-perception, MNCs increasingly pro-actively engage with initiatives such as AFi and Trase and are keen to learn more about implementation tools. In the case of AFi, the corporate sector even requested the development of uniform guidelines in the first place [85]. In the case of Trase, several MNCs showed interest in extending the tracking platform to commodities such as cotton or avocados [73].

Fifth, as we outlined above, de-growth and post-growth theorists assume that environmental objectives—including the protection of the world's forests—are incompatible with economic growth [54–56]. Meanwhile, AFi and Trase participants have developed a new understanding of forests that reconciles forest conservation and economic growth: Seven out of nine AFi founding members—all except for Greenpeace International and Rights and Resources Institute—as well as one of the two initiators of Trase—GCP—are partners of the Tropical Forest Alliance 2020 (TFA 2020) [86]. TFA 2020 is a public-private partnership, which seeks to make the case for "sustainable supply chains as an essential pathway towards a better economy" [87]. In this respect, TFA 2020 and its partners actively promote the idea of forests providing the opportunity of a 'triple win' of eliminating deforestation, boosting agricultural productivity and reducing poverty [88].

In sum, NGOs exercise *power with* MNCs and other actors in both initiatives. By finding common ground among each other, participants of the two initiatives have been able to develop tools that can change corporate behaviour in the context of global supply chains. Moreover, they further developed shared beliefs and understandings of issues related to commodity-driven deforestation. Finally, joint action between NGOs and MNCs has also led to changing corporate self-perceptions, in particular regarding the MNCs' role and responsibility for global deforestation.

4.2. Power over: Power Asymmetries through Deforestation-Free Supply Chains

While diverse actors have begun to exercise *power with* each other to address deforestation, initiatives such as AFi and Trase also represent *power over*. *Power over* refers to mechanisms of coercion and manipulation. Following this understanding of power, NGOs either may use initiatives such as AFi and Trase to exercise *power over* other actors or are themselves subject to more capable actors and structures, such as MNCs and the neoliberal discourse. Social change through initiatives such as AFi and Trase is thus seen as the result of competition. Scholars sharing this perspective of *power over* ask for winners and losers in and through such initiatives [5,6]. In order to systematically analyse *power over*, scholars have suggested the differentiation between four dimensions: visible, hidden, invisible and unconscious *power over* [6,69]. The first dimension refers to actors directly determining the actions of others following Dahl's [89] (p. 201) definition that "A has power over B to the extent that he can get B to do something that B would not otherwise do." When investigating the visible power of both MNCs and NGOs, scholars have referred to their capacity to influence the political agenda and decision-making processes (e.g., [25,26]). In the context of global climate governance, the number of non-state actors considerably exceeds the opportunities of access. Hence, the exercise of power is understood as a zero-sum game: Either the demands of "A" or "B" regarding deforestation are adopted; either NGOs or MNCs succeed with regard to interpretative authority over defining terms and concepts.

Applying this perspective on AFi and Trase, we find that both initiatives mainly represent the positions and interests of materially strong actors from the Global North. While the majority of AFi members are from Europe and the US, Trase was initiated by European actors only. Both initiatives are exclusively funded by institutions from developed countries (see Table 2). Furthermore, several AFi members have comprehensive partnership arrangements with large European and American consumer goods companies. Examples include the cooperation between ProForest and Nestlé [90] and between The Nature Conservancy and Cargill [91]. Most prominently, WWF has worked with Cargill, Danone, Kimberly-Clark, Nestlé, Procter & Gamble, Unilever and Walmart [92]. While some Northern NGOs claim to advocate for the interests of people in the Global South, the latter are not included themselves in decision-making processes.

Second, hidden *power over* refers to structural asymmetries that are not directly opposed by anyone. This dimension includes, for instance, coercion by MNCs that are able to influence political decision-making by the (unspoken) threat of shifting investments and funding elsewhere [93]. MNCs also exercise hidden *power over* through self-regulation as well as cooperative initiatives like AFi and Trase [94]. As discussed in the background section, there are fundamental conflicts over perspectives on economic growth, affecting the definition of terms and strategies to combat global deforestation. According to the documents analysed for this article (in particular [8,9,57–60,63–66]), neither AFi nor Trase actively promote de-growth or post-growth concepts. Participant observation at climate change conferences has shown that these concepts are not discussed at the international political stage either [76]. The exclusion of certain actors hence also leads to such neglect of their demands by AFi and Trase. De-growth and post-growth concepts remain hidden from the agendas of AFi and Trase. In this vein, an interviewee stated that AFi and Trase participants are not authorized to determine what understanding of terms like *forest*, *deforestation*, *sustainable production* as well as *sustainable consumption* should be applied globally [95].

More generally, scholars and practitioners have argued that the realization of deforestation-free supply chains could undermine the social and economic goals of developing and emerging countries, “if the appropriate conditions for transitioning towards more intensive and eco-efficient agriculture are not in place” [96] (p. 1). In this view, effort to increase supply chain transparency could oppose a socially and environmentally just transition to more sustainable production of FRCs. First, if MNCs divest from production sites that are associated with deforestation risks, imposing a *de facto* embargo on specific areas [97]. Second, if MNCs narrow down their supplier base to producers that are able to invest in improved practices. In this case, smaller market actors that lack the capacity to adopt higher standards may get excluded from profitable commodity chains [98,99]. Thus, the goal of halting deforestation could constrain efforts to alleviate rural poverty and increase smallholder livelihood opportunities [100]. Meanwhile, some producers operating in the Global South see the overall idea of deforestation-free supply chains “as a notion imposed from afar” [98] (p. 1). The associated tools are perceived as a threat to business and to the broader economic development. In this view, efforts to increase supply chain transparency are criticised for allowing powerful actors to “structurally advance themselves above more peripheral and dispersed small chain actors” [101] (p. 157), thereby reinforcing existing inequalities. However, there are also efforts to prevent negative consequences for smallholders and actively include them into deforestation-free supply chains. There is evidence that smallholders can benefit from new modes of production, if the implementation of deforestation-free supply chains is “supported by tenure reform, good governance and incentives that will lead to a transformed rural economy” [102].

Third, invisible *power over* refers to power asymmetries resulting from communication practices, discourses as well as cultural values and institutions [6,94]. It is assumed that power is exercised through the usage of symbols and storylines as well as the establishment of linkages between issues and specific norms. In doing so, powerful actors are able to influence, form and constitute the ideas and intentions of others [103]. Thus, the analysis of power requires the knowledge of the values held by the actors involved [104]. As mentioned above, scholars have argued that the dominant ‘win-win’ rhetoric serves a neoliberal discourse and respective inequalities between Northern and Southern actors, rather than promoting emancipation and justice in natural resource governance [46,48].

In this vein, NGOs from the Global South argue that by (i) supporting concepts such as the New Forest Economy, (ii) using business terms such as ‘stakeholder’ and (iii) presenting deforestation as an opportunity, initiatives such as AFi and Trase tend to overlook the interests of marginalized actors and thus trivialize conflicts over land tenure between MNCs and local communities [105]. In addition, deforestation-free supply chains are seen as a marketing tool of MNCs that respond to consumers who are interested in buying ‘sustainable’ or ‘green’ products [5].

NGO representative, interviewed on 10 July 2018:

Deforestation-free supply chains are not a concept but a fundraising tool. This tool only works in the Western world where NGOs and companies use it for advertising and campaigning.

However, we found that such supposedly ‘manipulative’ efforts are not necessarily effective. By contrast, they are broad forward against cooperation with MNCs. For example, a NGO representative stated that “smallholders should not be seen as stakeholders but as rightsholders” [95]. Following this interviewee, the rhetoric of NGO-led initiatives from the Global North tries to manipulate smallholders in a way that they do not demand their full rights anymore. Thus, while both AFi and Trase confirm the overall neoliberal discourse, the fact that Southern NGOs hardly participate in either initiative demonstrates that this discourse is not prevailing in affected countries.

Finally, the fourth dimension of power over deals with the often-unconscious production and reproduction of knowledge [6,104]. More specifically, it is argued that “A” and “B” are both subject to social construction [106,107]. With regard to AFi and Trase, we find that especially member organisations and partners are themselves subject to a neoliberal discourse. The way in which the information is presented and correlated reproduces the shared understanding of MNCs as being in the

driving seat. Meanwhile, concepts like the New Forest Economy postulate that economic growth and environmental sustainability can go hand in hand [36]. As outlined above, de-growth and post-growth theorists have disclosed underlying norms and proposed alternative concepts [54–56]. From their perspective, the profit-orientation of MNCs contradicts sustainability, given the fact that the global demand for commodities is already exceeding finite supplies and planetary boundaries.

NGO representative, interviewed on 15 July 2018:

[C]ompanies in a capitalist system cannot accept limits to growth as they need to foster growth strategies to ensure returns on their investments. So while they can and often do accept policy measures that improve the quality of their production, they can never accept policy measures that limit the overall quantity of their production.

In the view of this interviewee, efforts by AFi and Trase to increase MNCs' accountability and transparency only combat the symptoms, not the norms and principles of the economic system that causes deforestation problems. We may argue from the fourth dimension of power over, that AFi and Trase participants are themselves subject to a global discourse, rather than agents promoting transformational change. In the following section, we contrast and discuss the different perspectives of power over against the self-perception of the two initiatives.

5. Discussion and Conclusions

Corporate commitments to deforestation-free supply chains are *en vogue*. To accelerate progress towards fulfilling them, NGOs not only monitor but also support MNCs. The power of NGOs that participate in two such initiatives has been analysed in this article. The application of concepts of *power with* and *power over* allowed us to assess their work from a multidimensional perspective and thus capture the complexity of their activities for change.

The analysis has shown that both AFi and Trase unfold *power with* by acting in concert. AFi has successfully aligned a considerable number of NGOs and is now able to propose concrete guidelines for action on commodity-driven deforestation. Trase has initiated learning processes, in particular in terms of an increased awareness of sustainability risks in global supply chains. This awareness has the potential to change corporate behaviour. In addition, we found that joint action between NGOs and MNCs has triggered the development of a new understanding and change of self-perceptions. However, the way in which both initiatives exercise *power with* others is not free from *power over*. Although the work of AFi and Trase is based on joint action, these processes are so far restricted to certain actors. Dominated by Northern NGOs and exclusively funded by Northern donors, AFi and Trase primarily reproduce the positions and interests of materially strong actors in global supply chains. This bias could only be removed if actors from the Global South are equally represented in the initiative's decision-making processes.

If NGOs exercise *power with* MNCs, this can certainly contribute to improvements in natural resources governance, especially in terms of creating a joint understanding of environmental and social problems associated with global supply chains. In this vein, (new) efforts of cooperation and coordination for deforestation-free supply chains can actively contribute to reducing the negative impacts of FRC production. However, given the fact that the global demand for commodities is already exceeding finite supplies and planetary boundaries, it is not enough to document trade activities, increase transparency and advocate for common definitions. In other words, deforestation-free supply chains should not be seen as a panacea. There is no alternative to reduce the quantity of FRC production. In this light, exercising *power with* MNCs in initiatives like AFi and Trase can only be a first step towards a new economic system that respects the ecological limits and respects social justice. The challenge is to develop multidimensional strategies at the international level, while making sure that projects get implemented at the local and national scale without hampering each other. For a transformative change, NGOs need to uncover 'hidden' agendas and more actively push for a more equitable resource distribution on a worldwide scale, especially by raising awareness among citizens and governments.

Blaming MNCs alone for exceeding ecological limits is barking up the wrong tree. However, when cooperating with MNCs, NGOs need to be more cautious of not simply reproducing the current economic system but rather changing the root causes of deforestation.

With regard to the wider field of critical and transformative sustainability sciences, our findings suggest, first, that the analysis of transformational change in natural resource governance requires a multidimensional power framework. Scholars need to question different understandings of power and ‘go beyond the obvious’ to detect processes of hidden, invisible and unconscious power. Second, our analysis shows that achieving sustainable supply chains requires “open knowledge systems (. . .) operating at the interfaces between science, policy and wider society” [108] (p. 68). In the cases of AFi and Trase, the cooperation of NGOs, research institutions and MNCs has led to a new understanding among participants of issues related to commodity-driven deforestation. However, there are still many actors who are not involved (yet), particularly, from the Global South.

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