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# The Global Governance of Flex Trees: Considerations for Environmental, Agrarian and Social Justice

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### The Global Governance of Flex Trees: Considerations for Environmental, Agrarian and Social Justice<sup>1</sup>

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#### Abstract

With the rise of 'bioeconomy', trees are receiving increasing attention. This paper conducts a preliminary analysis of the governance challenges and issues in the rise of new, flexible and multiple uses of trees, from the viewpoint of agrarian political economy/ecology. It assesses the potential political impacts involved in this transformation, which is simultaneously ongoing, anticipated and imagined. Notes are offered on the issues to be considered when the flex-crop framework is operationalized to include the study of trees, and additional conceptualizations that help in analysing the political economy of tree uses are provided. Areas needing further empirical study are identified and a preliminary governance agenda is suggested. The flexible and multiple use of trees and treederived commodities is having a large impact on power relations in the global political economy of forestry and the forest industry, the asymmetry of which is based on who is best able to flex or demultiply, thereby controlling commodity webs and processing technology. It is argued that while flexing seems to increase diversity, in practice it typically increases this only for the processing industry; the converse occurs in terms of the unification of the productive base into monocultures. However, these two processes go hand in hand, and illustrate how flexing is a deeply capitalist process. The losers in this process tend to be environmentalists that would like to preserve rich biodiversity, all the other species lost with the biodiversity, communities who do not have strong land tenure, and soils. The Paris December 2015 agreement promises particularly challenging times for governing the issue of flex trees: several parts of the agreement, and signatory countries' claims after the meeting, suggest that 'carbon capture' by tree plantations, and other new tree uses, will become a huge issue in the coming years. In the absence of a global governance structure for this new global regime of flex trees, problems are bound to accumulate. Some of the key issues for governance are considered in this paper.

<sup>&</sup>lt;sup>1</sup> Discussion note. More analysis coming up.

#### Introduction

How to govern the increasingly varied and massive use of trees in industrial forestry? This paper seeks for preliminary questions that should be asked when seeking to identify the key points to be considered on the road towards a more sustainable governance of what can be called 'flex trees'. Flex crops such as oil palm, soybean, corn and sugarcane and commodities such as tree products have received increasing scholarly attention recently (see Borras et al. 2015 etc). The flexing turn signifies that instead of relying on producing just one kind of a product, a crop can be turned more flexibly from a prior use to another use, flexing between the different options depending on market fluctuations for example. Examples include the rise in industrial-scale biofuels, new industrial materials that replace oil-based products, such as bioplastics, feed, and carbon capture schemes. All of these examples apply also to trees.

There are major changes ongoing in global industrial forestry, and these changes can be epitomized under the concept of 'flex trees'. As a concept, 'flex trees' takes a different kind of approach than a focus at the 'bioeconomy' of forests or tree plantations. Most of the current analysis focuses on the 'bioeconomy', and is overtly directed at making analysis of production, markets and economy. The flexing framework (which studies both the flexing and multiple-ness increase) includes such technical analysis, but focuses more on the political economy and political ecology of the change, addressing the power relations involved. Of particular interest is what political and power change the flexing turn may bring; how do land and nature control relations change is a pivotal topic.

With this in mind, a focus at how the flexing turn could be better governed can provide an out-of-thebox viewpoint into the current debates on the governance of bioeconomy – the little that there exists, in theory or practice.

I will start this paper by first discussing what are the current tools and platforms of global governance that exist and have an impact upon the flexing and multiplying of tree uses. I assess pitfalls based on the existing structures, which are quite weak in many senses: for example, the Forest Stewardship Council (FSC) and similar certificate schemes have failed to ensure due diligence or ethical sourcing of wood on a sustainable basis. Industrial tree plantation operations that damage indigenous or other peasant population rights are methodically provided with these certificates, although they were designed by global environmental NGOs and the industry to voluntarily address and avoid precisely such problems.

The second section takes a look at the issue of governance in the light of the Paris 2015 climate agreement, wherein individual countries were given ample rights to themselves define how to pursue the goals discussed in the meeting. Countries can define not only what actions they will take, but also produce their own mechanisms to measure whether they have been advancing on those grounds, and to develop also procedures to verify the studies they themselves do. Such a global agreement of disparity in schemes of control suggests that the near future will include a maze of differing governance schemes and settings, for example national carbon markets for tree planting. This push by the Paris 2015 agreement suggests for activists and others interested in governance that instead of only global governance, attention should and could now be placed even more at the national levels, wherein they could be seen to have opened up a 'political opportunity' to influence the designing of future governance schemes – for better or worse. Some emerging differences in these national governance setting are discussed. I also make notes on how the maze of these differing schemes is likely to influence flex tree markets and political ecology.

The third section takes a look at governance by making notes on the specific pathways of tree flexing, including a discussion of how they are being and should be governed. There are multiple pathways along which flexible-ness and multiple-ness of the industrial use of trees is currently being transformed globally. A preliminary analysis on the political economy of flex trees suggests there are several pathways or main routes through which the transformation with tree uses is currently unfolding. Technologically, it is possible to use a tree stand either for producing biofuels (flexing method 1); electricity and heating (flexing method 2); lumber (flexing method 3); or fibre-wood (flexing method 4). Methods 1-4 all represent genuine flexing, and a wide range of companies already make use of them. Then there is also carbon capturing by planting trees, but it a highly contested issue

whether this type of flexing of tree use constitutes a real flexing, and whether this is even technologically possible or measurable. For this reason, carbon trees are rather a narrative form of flexing, but nonetheless, such moves are made. Furthermore, carbon trees are in practice quite liberally combined with any of the four options above, suggesting that the governance of carbon markets and what can be said to be a carbon sink is an especially dire issue. Biofuel produced directly from solid wood is also a product whose increased production has to be carefully observed, as pilot plants sell technology around the world for economic actors to tap into all types of tree sources for oil replacement. The third section addresses such potential pitfalls and dangers of each pathway.

#### What is to be Governed, for Whom, and by Whom?

Starting from the viewpoint of political ecology and critical agrarian studies it is essential to ask first: what is to be governed, for whom, and by whom?

To answer these important questions right on, in this paper I seek the thing to be governed is the possibly wanton and uncontrollable, dangerous entrance of a new value web of flex trees (see Kröger 2016, and JPS Flex Crop Forum articles) that can cause serious damage to environments and livelihoods. Of particular worry is the expansion of tree plantations (TP) that the flex-boom has been already causing – biodiversity, soil quality, socio-economic equality and power relations between landholders, industry and other forest/tree land users are in danger with the expansion of TPs to offer wood for increased tree usage.

The issue of governance of trees or forests is currently approached within forestry science typically from a productivist or industry-viewpoint, with the idea being to govern tree growth so that yields increase in a way that the industry considers sustainable (but what environmentally concerned entities do not see as sustainable practices in the long-term). But in this article I try to take a more critical viewpoint, where the potential and possibility of flex trees is acknowledged, but its dangers are also addressed – this has been a rare focus in the studies on the new forest bioeconomy of biorefineries and oil-replacing materials and tree-derived commodities, which tend to emphasize the possibility. GM-trees and carbon sinks are the areas that have received criticism from some analysts, but they are also mostly seen in a positive if cautious way by the typical analyses. Most of the prior studies have thus been, implicitly, studies about governance for the forest industry's needs (including the needs of states relying strongly on that industry's development) – not for the needs of a larger audience including also other forest users – a larger constituency. I think of governance for such a larger constituency here.

The question "by whom" is quite complex, as it opens up a new arena of analysis, moving towards one of these two directions: a) an analysis that starts from what there is, trying to show that what would be realistically (politically) feasible and attainable, given the existing power relations. B) An approach that some would call "utopian", where the focus is on the ideal state of affairs, trying to explain what would be the ideal model of governance – for example one where there would be global democracy in decision-making about these issues, in spite of economic inequalities. I do not delve deeply to this question in this paper: of course the turn to flex trees and the increasingly multiple and flexible use possibilities and actual uses of trees should be decided upon (governed) democratically and particularly by those whose lands are used to produce the trees in question. This is the ethical and moral answer - producers should have a say, but so should also those who do not own the lands but use forests for pleasure and who may have been displaced from the forests. The issue of who should govern the deepening use of trees in industrial scale in new ways than before was done (in the same scale as now) is a complex one and deserves an article or book of its own. One book should focus on the realist perspective, in a how-to guide for how to actually forge a global governance model. Another book should show what would be the goal, the ideal model towards which to strive. Both books would have to rely on grounded field research on a global scale in several areas.

For most parts, the turn to "forest bioeconomy", which the surge of flex trees includes, has been seen by policymakers for example in the EU as a solution to better govern the general global situation where there is a need to steer away from hydrocarbon and other non-renewable resource uses. Flex trees are rather seen as an input and solution to better govern larger problems, than an arena to be governed. But as non-renewable resources dwindle, and "bioeconomies" are given birth by strong government policies, there will be an increasing need to govern also these sectors – particularly in the critical sense of the word governance which carries with it the notion that a problem needs to be governed but a no-problem does not need to be governed as it takes care of itself.

I will next introduce some of the recent literature that can be seen as addressing the issue of flex trees (although not explicitly doing so).

#### **Theoretical Starting Points**

A Special Issue on "Biobased Economy" in the Scandinavian Journal of Forest Research (4/2014) has several articles that address the issues at hand. Pülzl et al. (2014) look at bioeconomy as an emerging meta-discourse that has also started to influence forest discourses. They take a framing or discourse perspective where discourses themselves are seen to have performative power to strongly influence actual land uses and power relations in the world. Pülzl et al. identify a marked rise in the use of the concept "forest bioeconomy" since 2011, and situate this new "forest discourse" as on the same level with many other prior forest discourses that have shaped forest governance in the international arena. From the 1960s onwards, based on a prior review by Arts et al. (2010), they identify as key forest discourses that have markedly shaped (and remained a part of) what we might call "global forest governance" (the extent to which this is global is another matter) the following ones. 1) "Industrial forest" and "wood fuel" around the oil crisis and the meta-discourse of modernity, which provoked the need to look for alternatives based on a modernist viewpoint. 2) "Deforestation", "conservation in forest parks", and "forest decline", following the meta-discourse of limits to growth in the late 1970s and 1980s. After this, the meta-processes of neoliberalism, civic participation and global governance have had a major impact, impacting first the ecological modernisation discourse, which in the 1990s provoked such forest discourses as "forest-related traditional knowledge" and "forest biodiversity". Coming to the mid-1990s and 2000s, further add-ons to the setting of "global forest governance" were forest discourse flowing from the sustainable development meta-discourse, such as "illegal logging", "forest and climate change", and "sustainable forest management". Pülzl et al. (2014: 391) find that the above "classical" discourses on "deforestation, sustainable forest management, biodiversity and illegal logging take a back seat in the bioeconomy context", as bioeconomy is seen largely as referring to industrial production, energy, woody biomass, and carbon sinks that decrease the reliance on fossil fuels.

Thus, bioeconomy is a strongly technical term. This means that it operates to hide political aspects and address issues as mere technical ones: we do not need to discuss politics, distribution or power issues, or social problems, we just need to replace oil with biosources. Thus, "bioeconomy" can work as a type of anti-politics machine, in the same way as the language of adaptation, mitigation and resilience work in the sphere of climate change, as Marcus Taylor (2015) argues. In forest governance, the prior trend of having quite radical discourses and interventions inserted into the global consciousness around forests in the 1970s-90s, the development since late 2000s has been one where the discourse of bioeconomy, with its imbued optimism, has displaced such voices to the margins as non-productive as negatively charge. As Pülzl et al. (2014: 391) sum up, the bioeconomy discourse "interweaves arguments of doom (limits to growth) with technological arguments (ecological modernisation) and economic arguments (neoliberalism), while being concerned mostly about the economy" while "Social considerations are neglected and no importance to global governance and civic participation discourses are given."

Instead of "forest bioeconomy" or its sub terms such as "forest biorefinery", we need less technical terms, such as flex trees, which offer the possibility to better encapsulate also the political economic and political ecological dimensions of the current events. Bioeconomy is hardly a concept that could easily be used in critical analysis of forest governance, as the review by Pülzl et al. (2014) suggests, and as Levidow et al. (2012) and others have also argued in the context of agriculture.

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