

Evolution of drivers of deforestation and forest degradation in the Congo Basin forests: Exploring possible policy options to address forest loss



Yitagesu T. Tegegne^{a,b,*}, Marcus Lindner^a, Kalame Fobissie^b, Markku Kanninen^b

^a European Forest Institute, Sustainability and Climate Change Unit, Yliopistokatu 6, 80100 Joensuu, Finland

^b Viikki Tropical Resources Institute (VITRI), Department of Forest Sciences, University of Helsinki, P.O. Box 27, Latokartanonkaari 7, Helsinki, Finland

ARTICLE INFO

Article history:

Received 12 February 2015

Received in revised form

14 November 2015

Accepted 26 November 2015

Available online 8 December 2015

Keywords:

Institutional and governance causes

FLEGT

REDD+

Cameroon

Low carbon development

ABSTRACT

In the context of assessing drivers of deforestation and forest degradation (DD), for effective implementation of REDD+ (reducing emissions from deforestation and forest degradation) this study interviewed 50 experts and analyzed current political strategies in the forest related sectors of Cameroon and the Republic of Congo. The main research questions addressed in this study include: What do experts at the national level think of the drivers of DD and their evolution? What should, and must, be done at the national level to curb deforestation? How and where should governments focus their limited resources and capacity to address DD?

Our analysis shows that institutional and policy factors are more important than any other types of underlying causes in both countries and, thus, are indispensable to effectively combat DD in the long term. Expansion of agro-industrial plantation, subsistence agriculture and wood extraction continue as the most pressing threats to forest cover in these countries. Land use policy should, therefore, give high priority to selecting degraded and low carbon lands and to improving their productivity. Policy decision space and main challenges to effectively address forest conversion in these countries are also discussed in the paper.

© 2015 Elsevier Ltd. All rights reserved.

1. Introduction

Deforestation and forest degradation (DD) account for about 12% of global greenhouse gas emissions (van der Werf et al., 2009), and the global warming caused by CO₂ emissions from DD has become the central reason for the United Nations Framework Convention for Climate Change (UNFCCC) to develop a new international mechanism for reducing emissions from DD (REDD+).

With the emergence of the REDD+ mechanism, that aims to provide compensation for tropical nations to reduce DD, there is a need for further investigation on the drivers of DD. Many scholars (e.g., Boucher et al., 2011; Herold et al., 2012) have converged around the idea that a careful and systematic analysis that comprehensively addresses all direct and indirect drivers of DD is the key priority in every REDD+ country. This is seen as a prerequisite to effectively reducing emissions from DD and thus enhancing

forest carbon stocks (Herold et al., 2012). Moreover, the study on the drivers of DD is vital for the construction of national policies on REDD+ and for the development of REDD+ reference scenarios (Kanninen et al., 2007; Kissinger et al., 2012).

In REDD+ countries, a debate is underway as to whether slash and burn agriculture or industrial logging is the main cause of DD. It appears that the opinions expressed by the proponents of these arguments are still at the stage of speculative hypothesis, which must be confirmed by empirical data. However, studies assessing the extent and drivers of DD rely largely on remote sensing techniques (Campbell et al., 2008) and reviews of the literature, which seldom include knowledge, information, and the opinions of experts, policy makers and private sector actors. This can be seen as an indication of the gap between policy makers and key agents of DD (government and private sector) and the forests.

In the context of REDD+, it becomes increasingly relevant to place the analysis of drivers of DD into the perspective of possible policy responses to deforestation. Only then does it become clear which actors have the leverage to significantly reduce deforestation. However, in the context of the Congo Basin countries, none

* Corresponding author. Fax: +358 10 773 4377.

E-mail addresses: yitag2007@yahoo.com, yitagesu.tekle@efi.int (Y.T. Tegegne).

Direct or proximate drivers

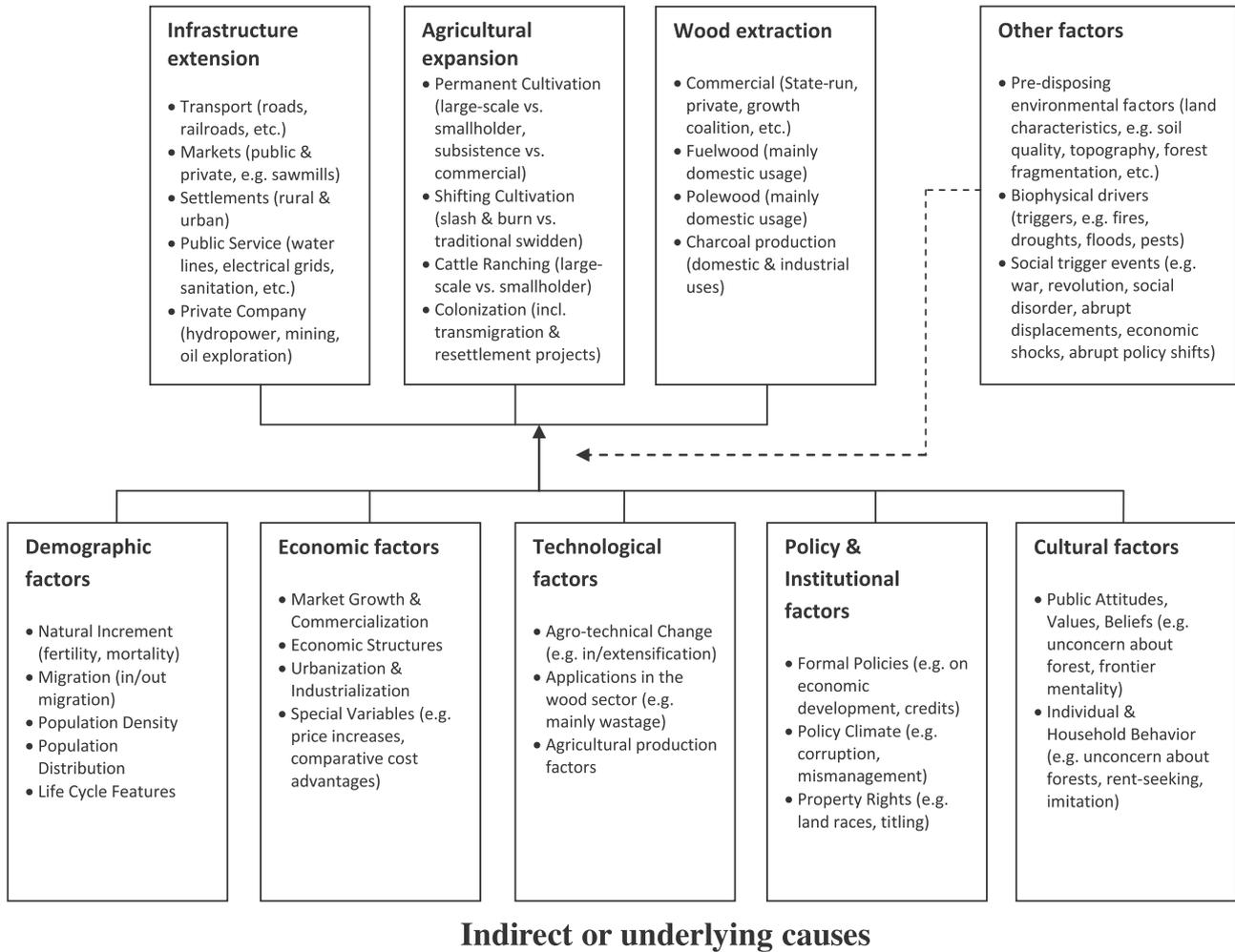


Fig. 1. A general theoretical framework (modified from Geist and Lambin, 2002).

of the studies conducted so far on the analysis of drivers of deforestation (e.g., Celine et al., 2013; Dkamela, 2010; Duveiller et al., 2008; Epule et al., 2014; Megevand et al., 2013) has prioritised drivers that are important for policy responses. Such prioritisation is very important for two reasons. First, many of the tropical countries, including the Congo Basin countries, have limited capacity and inadequate financial, human and materials resources necessary to comprehensively address all drivers of land use change simultaneously (Olander et al., 2011). Second, prioritising important drivers for policy response informs and facilitates a political decision making process to curb deforestation in the medium and long term.

Loveridge (2004) and Krueger et al. (2012) argued that the priorities and expectations of experts often determine the formulation and inclusion of policies and measures to curb deforestation. Moreover, consideration of expert perceptions is important for achieving effective policies and measures to curb deforestation at the global, national and subnational level. On the other hand, analysis of drivers has largely been based on local or regional case studies (Geist and Lambin, 2002) or on coarser assessments on the continental and global scales (DeFries et al., 2010), with less focus on the national level. We argue that experts and actors at the national level are the best suited to embrace and address a large variety of drivers of deforestation and to provide adequate national policy

responses (see e.g., Corbera and Schroeder, 2011; den Besten et al., 2014). Drawing on this framework, this study addressed the following questions: What do experts at the national level think of the drivers of DD and their evolution? What should, and must, be done at the national level to curb deforestation? How and where should governments focus their limited resources and capacity to address DD? Focusing on the Congo Basin countries of Cameroon and the Republic of Congo (hereafter Congo), this study has three research objectives: first, to analyze the perceived current and future direct and indirect drivers of DD; second, to identify and analyze the drivers of deforestation considered to have high priority for policy response by the experts; and third, to investigate strategies to reduce DD in Cameroon and Congo.

It is hoped that policy makers at the national level will be able to incorporate the findings of this study into their strategic policy formulation to address forest loss in both countries, as the countries are encouraged to gather and use information on current and future drivers to inform the development and implementation of national REDD+ strategies (Kissinger et al., 2012). This paper proceeds as follows. In Section 2 we discuss the forest sector in Cameroon and Congo; in Section 3 we present the research methods; Section 4 presents and discusses the results of the study along with comparative analysis of the results on Cameroon and Congo and the implications of key findings for further implementation of REDD+

Download English Version:

<https://daneshyari.com/en/article/92917>

Download Persian Version:

<https://daneshyari.com/article/92917>

[Daneshyari.com](https://daneshyari.com)