The impacts of deterrence, social norms and legitimacy on forest rule compliance in Ghana

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ABSTRACT

Compliance is one of the central, but often overlooked challenges that actors face as they seek to devise and implement environmental policies. Therefore this paper draws upon multiple models of rule compliance to assess the factors influencing compliance in the high forest zone of Ghana. Specifically, the paper considers whether compliance with formal laws that prohibit the felling of timber trees, farming in forest reserves and the use of fire to clear land is explained by perceptions of government enforcement, social norms and/or the perceived legitimacy of rules and government officials while controlling for a number of potentially intervening factors, and each other. The results indicate that compliance is affected by deterrence, social norms, and the perceived fairness of laws; but more importantly it demonstrates that the factors affecting compliance vary across the three studied rules. Whereas compliance with the tree-felling rule is driven by government enforcement; compliance with the fire and farming rules appears to be linked to social norms and the fairness of rules. Given that levels of compliance are considerably higher for the bushfire and farming rules; we conclude by suggesting greater attention on the normative aspects of the compliance decision, and legal reforms that might align legislation with the social norms and practices of local users.

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1. Introduction

Legal and regulatory compliance plays a central role in good governance, democratic stability and sustainable development. Zaelke et al. (2005:30), for instance suggest that "sustainable development depends upon good governance, good governance depends upon the rule of law, and the rule of law depends upon effective compliance". Indeed formal laws, informal rules and social norms act as an important form of social capital that may guide groups towards socially efficient solutions where individual and collective interests diverge (Coleman, 1987; Ostrom, 1990; Rayner et al., 2010). However, the ability of those rules to generate efficient solutions depends on the extent to which they are able to produce high levels of compliance among affected parties. In fact a number of recent initiatives including the EU Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan (EC, European Commission, 2003) highlight illegal harvesting as a key driver of deforestation; and place compliance at the centre of the policy agenda. Therefore a core question for scholars of social–ecological systems and policymakers, alike, is to better understand the factors affecting compliance with forest laws and the ways in which policies might be designed to encourage broad-scale compliance (Cashore, 2002; Bernstein, 2005; Hansen, 2011).

High levels of non-compliance and other illegal forest activities are ubiquitous in many developing tropical countries (SCA and WRI, 2004; Tacconi, 2007; Turner et al., 2007). In recognition of this problem, the European Commission coordinated discussions that culminated in the EU FLEGT Action Plan (EC FLEGT briefing notes, 2004–2007). The Action Plan aims to combat illegal logging by strengthening the enforcement of forestry laws in timber-producing countries, and prohibiting imports of illegal timber into the EU. Moreover, it seeks to strengthen forest governance and build capacity in partner countries with the long-term goal of enhancing the social and economic well-being of forest communities (EC, 2003, 2005). In September 2008, the first of these voluntary partnership agreements (VPAs) was finalised with Ghana (EC-Ghana, 2009).

The performance of the VPA between Ghana and the EU will ultimately depend upon its ability to generate sufficient and appropriate incentives to encourage individuals to forego the short-term benefits of illegal harvests. Thus it is crucial to develop a better understanding of the factors affecting compliance in order to design and implement forest policies that are likely to resolve the problem of illegal forest activities. Contemporary compliance theory recognises three main classes of compliance motives; i) instrumental factors which include the expected benefits of illegal harvests and expected costs imposed by monitoring and sanctioning systems (i.e. deterrence), (ii) social norms, and (iii) the perceived legitimacy of rules, rulemaking processes, and the actors charged with designing and implementing those rules
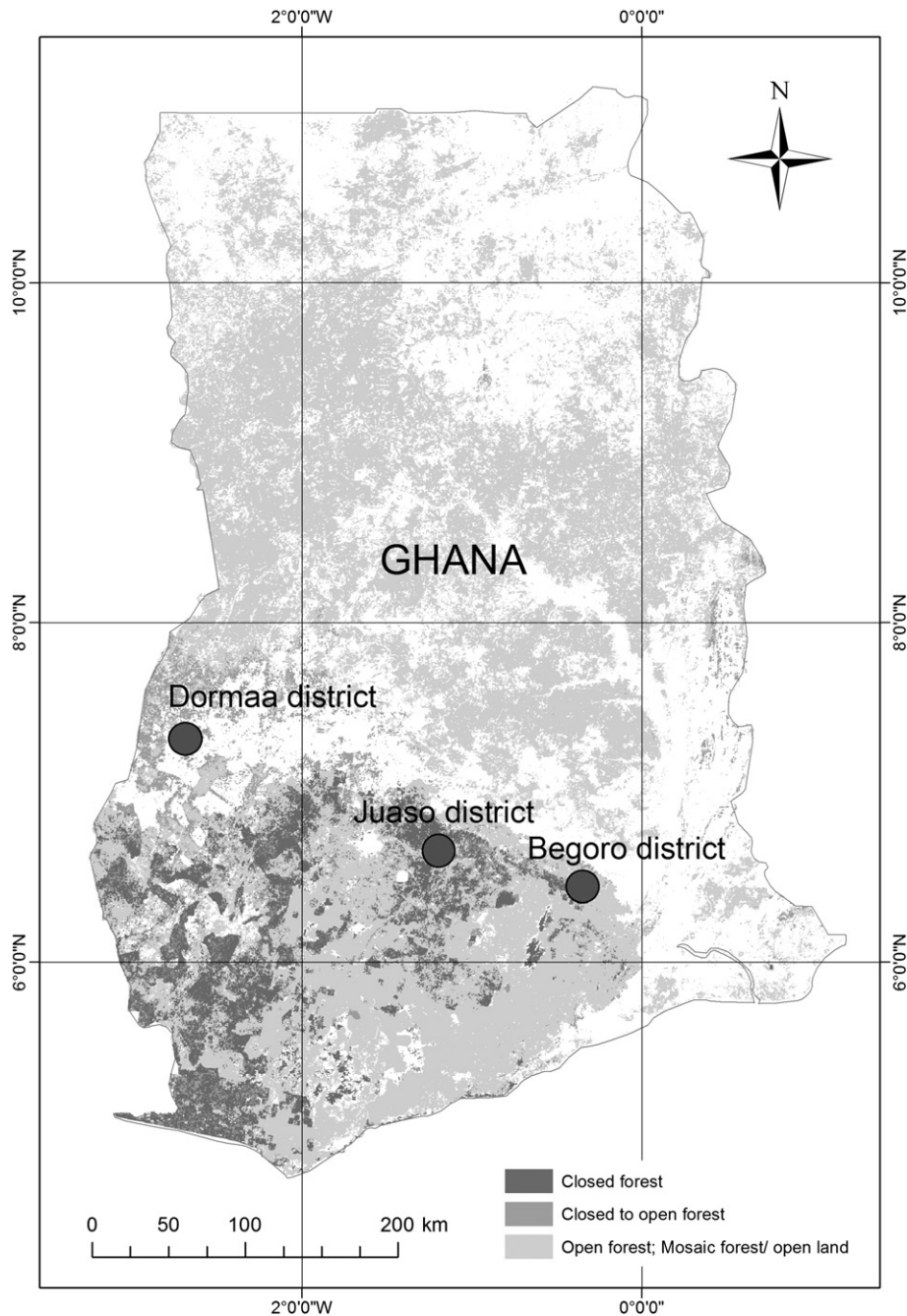
Fig. 1. Map of Ghana showing Districts included in this study and the forest cover. The map is based on Food and Agriculture Organisation of the United Nations (FAO) Global Cover Regional Africa Achieve.

(Ramcilovic-Suominen and Epstein, 2012). However, important gaps remain with respect to our understanding of which, if any, of these factors have a greater influence on individual rule compliance; and whether the factors affecting compliance vary across rules and regulatory contexts. Therefore this paper considers the factors affecting compliance with three separate forest rules in Ghana's high forest zone. The results broadly support each major component of contemporary compliance theory by showing that compliance tends to increase as perceptions of peer compliance, deterrence and the fairness of rules increase; but that the effects of compliance motives vary across the three studied rules.

The remainder of the paper is structured as follows. First we begin by providing some background information about forest governance in Ghana and introduce the specific forest rules used in this analysis. In

Section 3 we discuss theoretical models of rule compliance and the analytical framework used in this study. Section four describes the data collection protocol and statistical methods used in this analysis; the results of which are presented in Section 5. Finally, Sections 6 and 7 conclude the paper by discussing the implications of the results for the development of compliance theory and the design of forest policies.

2. Forest governance in Ghana

Over the last century, Ghana has lost nearly 80% of its original forests (Repetto, 1990); and recent studies suggest that illegal harvests are a leading cause of deforestation. Hansen and Treue (2008) estimated that 70% of all timber in Ghana is harvested illegally and that informal small-scale operators serving domestic markets are responsible for