Linking the past to the future: A reality check on cross-border timber trade from Myanmar (Burma) to China

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ABSTRACT

The rapid development of China's economy, changing of domestic forestry policy and economic globalization are gradually pushing China to the position of the largest timber importer worldwide. The issue of China's increasing timber imports is now receiving extensive attention from the international community. Existing studies that analyze China's global timber sourcing focus on international trade data or rules at a predominantly macro-level, while few empirical studies exist. This paper takes a grounded approach to empirically study the timber trade from Myanmar to China via Yunnan Province. Using a global value chain analysis, the research identifies the flow of timber along the value chain, the different actors involved in the trade, and the institutions that shape the actor's access to the value chain, before calculating the profits among the different actors. The results show the Sino-Burmese border timber trade originated from traditional border trade and was recently booming along with the economic development of China. Along the timber value chain, however, a few privileged actors parasitize the timber value by exploiting real market participants with the power entitled to them by both governments. The research argues the challenges to improve sustainable timber trade lie not only in national law enforcement, but also improving the governance structure of the value chain by improving the transparency and account-ability of timber harvesting concessions and trade permits.

1. Introduction

With nearly 40 years of economic reform, China has become the world's second largest economy. Along with its booming economy, in the forest sector, China's engagement with the global forest products market has dramatically increased since 1998, following implementation of The Natural Forest Protection Program and other policies to restrict logging in the country (Sun et al., 2004; White et al., 2006). These policies have gradually oriented the management focus of the nation's forests from timber production to ecological protection. The result has been a sharp decline in domestic timber production, while at the same time domestic consumption and exports of processed wood products have increased rapidly (Liu, 2014; White et al., 2006). China is now recognized as the world's largest importer of timber products (Kleinschmit et al., 2016; Mayer et al., 2005; Zhang and Gan, 2007). From 2000 to 2014, raw log imports into China increased 2.8 fold, and it reached more than 50 million m^3 in 2014 (Dong et al., 2016). The value of raw logs imported to China now exceeds 10 billion USD per annum, which is 38% of total world exports (Sun, 2014). At present, the country's dependence on timber imports is above 50% (Dong et al., 2016; Xu et al., 2015).

China's growing timber imports have received extensive attention around the world, with many observers concerned that the country's increasing demands could have a huge impact on global timber markets and forest resources. Many studies have documented the overall trends and predicated the future demands, concluding there will be a huge increase in demand from China into the future (Liu, 2014; White et al., 2006; Zhang and Gan, 2007). Studies have also found that China's timber imports are not just sourced from tropical regions such as Southeast Asia, Africa and the Amazon Basin (Huang et al., 2013; Katsigris et al., 2004; Obidzinski et al., 2007; Putzel et al., 2008), with huge volumes also being imported from the temperate zone including Russia (Kaplinsky et al., 2011; Katsigris et al., 2004; Kleinschmit et al., 2016; Narins, 2015). Many scholars have raised concerns about the environmental impacts of China's increasing timber imports, arguing there is an urgent need to externalize the environmental costs of the country's increased consumption of illegally logged timber (Eisenbarth, 2017; Kleinschmit et al., 2016; Laurance et al., 2008; Liu, 2014; Liu and

Diamond, 2005, Mayer et al., 2005, Nie et al., 2010). Apart from these macro-level analyses, some research has more closely investigated China's timber trade with Africa, particularly to examine issues surrounding environmental and livelihood sustainability in the trading partner countries. Huang et al. (2013) noted that African host countries' weak forest governance and poorly implemented regulations are major drivers of illegal logging and Chinese firms exercising a low-level of social responsibility. Asanzi et al. (2014) found that the Chinese timber trade contributes little to local livelihoods in Zambia, given that Chinese logging companies provide few local employment opportunities. Wertz-Kanounnikoff et al. (2013) is calling on Chinese actors to improve the sustainability of their operations in Mozambique by more positively adapting to the country's environmental laws. Overall, given the complexity of the global timber trade, few researchers have taken a grounded empirical approach to examine the Chinese timber trade using a global value chain analysis. Therefore, there is little understanding of who most benefits along the timber value chain and how the value chain could be improved toward environmental and social sustainability.

Internationally, a global value chain analysis has been widely applied to examine benefit distribution, power relations and institutional structure in the trade of forest products. Notably, Ribot (1998) highlighted that value chain analysis should go beyond the cost-benefit analysis that many economists focus on; and instead, the analysis needs to examine the governance structures and power relations along the value chain. This is important because these governance structures and power relations shape how the value chain is formulated and also eventually determine the pattern of benefit distribution among the actors. Ribot and Peluso (2003) further suggest the analysis should examine legal and extra-legal mechanisms along the value chain. Empirically, Sikor and To (2011) and He (2016) have used case-studies in Vietnam and China, respectively, to reveal how powerful actors reap most of the benefit from timber trade due to their access to authorities to obtain logging permits and enable illegal logging. In Cambodia, there is a great involvement of indirect market actors who formulate policy and control the market, thereby enabling them to determine who is involved in the trade as well as the profit distribution among actors (Le Billon, 2000). To et al. (2014) and He (2010) have suggested that institutions shape the value chain and that benefit distribution can be culturally and historically embedded, which may be more influential than political and economic powers. The value chain is therefore shaped by a range of historical, political, economic, social and international factors with involvement of both direct and indirect actors, particularly in developing countries. Given this complexity, research into the Myanmar-China timber trade can make a valuable addition to the international discussion of timber value chain analysis.

Myanmar has a forest cover of 48%, making it the country with the largest remaining tracts of forest in Southeast Asia (FAO, 2010). This high forest coverage also contributes to the country being one of the world's biodiversity hotspots (Myers et al., 2000). However, Myanmar is currently facing rapid deforestation. Between 2000 and 2010, the country lost more than 21,000 km^2 of tropical forest (i.e. 8.1% of national forest cover loss), which amounts to an annual deforestation rate of 0.81% (Wang and Myint, 2016). It has been suggested that this was the one of highest deforestation rate experienced in any country across the world during that period (Webb et al., 2014). Agricultural expansion for food production and logging for local economic development are the two major causes of the rapid deforestation in Myanmar (Leimgruber et al., 2005; Songer et al., 2009; Webb et al., 2014). Commercial timber exports have mainly been to China and more recently India has become Myanmar's second most important timber export market. These timber export markets are the second most important source of foreign currency in Myanmar (Springate-Baginski et al., 2014). Despite the economic and environmental significance of Myanmar's international timber trade, there has been little research into its governance. The limited literature has paid special attention to

how Myanmar's state formation has impacted its timber trade (Woods, 2011) and how the international arena effects the country's regulation and forest law enforcement (Springate-Baginski et al., 2014). Few studies have taken an in-depth case-study approach to generate a holistic understanding of the global value chain of Myanmar's timber trade. Such research is particularly important for understanding how the sustainability of this trade can be improved.

This study investigates the value chain of timber trade from Myanmar to China via Yunnan Province. This route accounts for over 90% of the Burmese timber imported into China. The study pays particular attention to the development of the timber value chain since the year 2000, following the implementation of logging restrictions in China. The paper takes a grounded approach to empirically investigate the timber trade along the border areas between the two countries, based on the methodology of a global value chain analysis. We document the dynamics of this cross-border timber trade by examining the actors, governance and profit along the value chain. In response to the central research question of "how is the Myanmar-China timber trade organized and what are the implications for its sustainability?", the findings of the paper make three main scientific contributions: 1) building on the existing literature by providing in-depth insights into the Myanmar-China timber trade; 2) enhancing understanding of the timber trade between Myanmar and China by combining the analysis of profit distribution and institutions along the value chain; and 3) calling the Chinese government and private firms' attention to the issue of sustainability in their overseas investment and trade activities, particularly under "One Belt and One Road" initiatives.

2. Methods

This paper uses a global value chain framework for analysis, as informed by Gereffi et al. (2005). A value chain describes the full range of activities required to bring a product or service from conception, through the intermediary phases of production, delivery to final consumers, and final disposal after use (Gereffi et al., 2005; Ribot, 1998). This research identifies priority issues along the value chain of China importing timber products from border areas of Myanmar. That is, it pictures the main route of the value chain, describes institutions along the value chain and the actors directly involved in the value chain, and calculates the profit distribution within the value chain. In particular, we focus on the actors' access to trade (Ribot and Peluso, 2003) and institutions along the value chain (He, 2016). Our analysis ended before the consumption node of the value chain, as many other researches have also done (e.g. He, 2010; Sikor and To, 2011). This is because the consumption node of the value chain is beyond of the scope of this study and it is considered too complicated to examine the benefit distribution at this node.

The fieldwork was conducted between November of 2013 and March 2014. Winter is the main trading season for Sino-Burmese border timber trade. The research consists primarily of literature review, analysis of government documents and semi-structured interviews. Interviews were carried out in the border towns of Lushui County (Nujiang Prefecture), Tengchong County (Baoshan City), Ruili City (Dehong Prefecture) and Cangyuan County (Lincang City) in Yunnan Province, the border area of Kachin State of Myanmar, and wholesale markets of timber products in Kunming (capital of Yunnan). A total of 123 in-depth interviews were carried out. Interviewees included 'middlemen' who coordinate relations for transactions (n = 12), staffs managers of private logging companies (n = 20), timber businessmen (n = 40), managers of timber import companies (n = 16) and timber traders from Eastern and Central China (n = 20), as well as government officials at different institutional levels (n = 15). The research focuses only on the timber trade between border areas of Yunnan Province, Southwest China and Myanmar. Other routes of the trade are beyond the scope of this study. All the collected data was inter-examined among the different groups of actors at different nodes of the value