



The financial benefits of forest certification: Case studies of acacia growers and a furniture company in Central Vietnam



Tek Narayan Maraseni^{a,*}, Hoang Lien Son^b, Geoff Cockfield^a, Hung Vu Duy^b, Tran Dai Nghia^c

^a University of Southern Queensland (USQ), Toowoomba, Queensland, 4350, Australia

^b Vietnamese Academy of Forest Science (VAFS), Vietnam

^c Institute of Policy and Strategy for Agriculture & Rural Development (IPSARD), Vietnam

ARTICLE INFO

Keywords:

Acacia plantation
Certified forest
Vietnam
Grower
Sawmill
Furniture industry

ABSTRACT

The demand for forest products is growing and plantation forests are supplying an increasing proportion of wood to industry. There are also increasing market requirements to demonstrate the sustainability of timber supply. Vietnam has some 3.9 M ha of plantation forests, 44% of which is on short-rotations managed by smallholders. More than 80 percent of the harvested volume from the plantation forests is used for woodchip production to serve domestic and international markets. The Vietnam Government has goals to increase the domestic supply of suitable wood for furniture production to international markets by increasing the supply of larger logs grown in plantations and the supply of certified wood to industry. However, it is not clear that these objectives will necessarily benefit growers and processors. This study compared financial returns from certified and non-certified forest products for: (1) growers with 10-year rotation acacia plantations; and (2) a furniture processing business (battens for chair and table) in Quang Tri Province, Central Vietnam. The data were collected from smallholder tree growers and a sawmilling company, triangulated with and supplemented by formal and informal interviews with other stakeholders. Currently, much of the cost of certification is met by external aid donors. Results showed that net returns from both certified and non-certified timber products are positive for both actors and are higher from certified timber production than non-certified timber production. When the full costs of certification are included, the benefits to growers of certification are much reduced and potentially negative unless the fixed costs can be spread over a large group of growers. A minimum of group with 3000 ha may be required to make certification cost effective. In recent years, the price difference between the certified and non-certified logs is narrowing and this may discourage farmers from attaining certification. For the saw-miller, the benefit of certified timber production is greater. It would be in their interests to increase prices paid to growers for certified logs. Government policy measures to support certification should include consideration of who bears the cost, support for aggregation of smallholder growers and improved communication in timber supply chains.

1. Introduction

The demand for forest products is increasing, and the planted forest area has been increasing globally and supplying an increasing proportion of total wood supplied to industry (Maraseni and Cockfield, 2015; Schönfeld, 2015; Tim et al., 2015). The planted forest area in Vietnam has been increasing rapidly, from about 2.5 M ha in 2006 to 3.9 M ha in 2015 (Luong, 2014; MARD, 2016a). Approximately 44% of the planted forests are managed by smallholders, with an average lot size of 1.27 ha per household, and these contribute to the livelihoods of more than 1.4 million families. The rapid expansion of smallholder plantations may be due in part to three policies introduced in the 1990s –

‘decollectivisation of agriculture’ and ‘distribution of forestlands to local households’ – and accession to the World Trade Organization in 2006 (Meyfroidt and Lambin, 2008). Other factors include the availability of an appropriate fast-growing tree species, increasing national and international demand for forest products, and agricultural intensification (Byron, 2001; Meyfroidt and Lambin, 2008; Truong et al., 2016).

The Ministry of Agriculture and Rural Development (MARD)–through its Forestry Sector Reform Proposal (2013)–aims to improve the quality, efficiency and competitiveness of the forestry sector. In order to realise this goal, the MARD is giving high priority to value-adding in the forestry sector, particularly through planted forests

* Corresponding author.

E-mail address: Maraseni@usq.edu.au (T.N. Maraseni).

<http://dx.doi.org/10.1016/j.landusepol.2017.09.011>

Received 9 June 2017; Received in revised form 24 August 2017; Accepted 8 September 2017

Available online 12 September 2017

0264-8377/ © 2017 Elsevier Ltd. All rights reserved.

and the timber processing industry (MARD, 2013). Moreover, the MARD (2007) aims to increase forest cover from 38% in 2006 to 45% by 2020 to result in 8.4 M ha of productive forests, including 4.15 M ha of plantations. The intention is that tree plantations will assist in meeting economic development and poverty alleviation goals and will also reduce the pressure on natural forests and Vietnam's reliance on imported timber (Pistorius et al., 2016).

The wood processing sector in Vietnam has also been expanding rapidly. From 2006, the number of registered timber processing and furniture exporting industries grew at an annual rate of 16%. There are more than 3900 timber-processing companies in Vietnam, with 72% and 25% of those being of extremely small size and small size with financial capital less than US\$223,714¹ and US\$223,714 to US\$2,237,140, respectively (MARD, 2014). Despite their relatively small scale, these processing companies provide employment and livelihood opportunities for thousands of people. In 2014, Vietnam earned US\$6.3 billion from the export of timber, timber products and non-timber forest products, with 13–15 M m³ of wood produced from planted forests (MARD, 2015). Currently, Vietnam is ranked as the fourth largest furniture exporter in the world after China, Germany and Italy (Lam, 2016). Many foreign companies are interested in furniture manufacturing in Vietnam because of the availability of cheap labour and accessible transport systems (Hoang et al., 2015). Therefore, the popularity of Vietnam as a major furniture exporting country is growing rapidly, with more than 120 export destination countries (ITA, 2014), and in 2015, major markets in the US (>US\$2.5 billion), Japan (>US\$1 billion), China (>US\$0.9 billion), the EU (>US\$0.5 billion) and Korea (US\$0.5 billion) (I and T, 2016).

A relatively small amount of the harvested wood from smallholder plantations in Vietnam is used for timber and furniture production, with more than 80 percent used for exported woodchips (Midgley et al., 2017; Maraseni et al., 2017). There is a high local and export demand for woodchips for medium density fibre (MDF) and pulp and therefore smallholder growers prefer short rotation plantations for quick returns from these markets (Forest Trend, 2013). This demand and associated good prices, the relative ease of handling and transporting smaller logs and the relatively low technology and management requirements, are driving production of small-sized, lower quality wood, grown on short-rotations (MARD, 2014).

In Vietnam, it is relatively easy to import wood from elsewhere and to meet furniture and construction needs. In 2015, Vietnam imported raw wood materials valued at \$1.639 billion, mainly from Laos, Cambodia, the US, China and Malaysia (MARD, 2016b). With shipping and raw wood costs varying over time, wood processing companies are facing difficulties in competing with those in China and Malaysia (MARD, 2015). While, Vietnam has a population of more than 90 million, the value of their average furniture consumption over the last 5 years was only about \$25 per person (MARD, 2015). With their economy booming, domestic demand for furniture is expected to increase, supplementing the demand for exports. Therefore, the Vietnam Government is developing policies such as land title reform and value chain development to promote smallholder plantations (Nambiar et al., 2015). Moreover, there is an intention to generate greater benefits to smallholders, processing companies and the timber industry by building partnerships and encouraging value adding activities.

The Vietnam Government has the policy objective of increasing the supply of domestic, plantation-grown wood to the furniture industry. One strategy to achieve this is to encourage growers to increase the rotation age of plantations and produce more sawlogs. The target is to increase the production of furniture wood from 4.5 million tonnes to 6.5 million tonnes by 2020, with a stated policy goal for woodchip exports to decrease from 6 million tonnes to 3 million tonnes by 2020 (MARD, 2015). Given that the furniture sector sells into international

markets within which there is an increasing demand for certified products, the Vietnam Government's aim is to increase the area of certified production forests to 30% by 2020 (MARD, 2007).

Forest certification is a market-based instrument, first established in 1993 under the Forest Stewardship Council (FSC) (Hain and Ahas, 2007). Nearly 500 M ha of forest are now certified worldwide under two dominant global schemes, the Forest Stewardship Council (FSC) covering 191 M ha (FSC, 2016) and the Programme for Endorsement of Forest Certification (PEFC) covering 301 M ha (PEFC, 2016; FSC, 2016). There are three main reasons for Vietnamese interest in certification: (1) As a response to criticisms of Vietnamese operations in, and imports from, natural forests in Cambodia and Laos and other parts of south east Asia; and (2) major customers such as EU and USA need proof of legality and, often, sustainability of sourced logs; and (3) the buyers of certified logs require for a minimum log size and therefore growers supplying this market are obliged grow trees over a longer rotation period. As these are the policy targets for Vietnam, the Government sees benefits of certification (Hoang et al., 2015a) and are actively pursuing a national standard consistent with the Programme for Endorsement of Forest Certification. So far the area of certified forests in Vietnam is small. As of July 30, 2016 only about 86,193 ha of natural forest and 113,008 ha of planted forests have been certified (FSC, 2016). Therefore, meeting the expected 30% certification target by 2020 (MARD, 2007) is highly unlikely. Barriers to adoption could include costs of certification, the ease of managing and financing current systems and a lack of reliable information about the financial returns of plantations with FSC certification. Research that compares financial returns from certified and non-certified timber production will inform decisions as to whether producers and processors may be better off over time, with certification.

A study by Hoang et al. (2015b) compared the financial returns from certified and non-certified acacia plantations for growers in Quang Tri Province. They found that the management of certified forests does not increase the cost that much, while the income of selling FSC wood logs for growers is very promising. However, the calculated cost of certification for growers was relatively low at US\$60/ha, which was based on number of working days people spent for FSC related work, although this is only a small part of the actual costs. They applied a relatively low discount rate (6%) and prices for logs did not vary by size. Also, they did not consider costs for sawmill and furniture companies.

This study aimed to further explore the implications of rotation length, certification costs and benefits and different discount rate for farmers that reflect the costs of capital to smallholder growers. The overarching goal is to provide better information for developing plantation policy in Vietnam. Specific objectives are to compare financial returns from certified and non-certified forest products for: (1) growers with 10-year rotation acacia plantations; and (2) a furniture processing business (battens for chair and table) in Quang Tri Province, Central Vietnam.

2. Methods

This study was undertaken in 10-year rotation acacia plantation in Kinh Mon Village, Gio Linh District, Quang Tri Province. In this area, WWF and SNV (Netherlands Development Organization) are organising growers supporting group certification. The donor is responsible for recurrent costs of certification and farmers are paying nominal fees.

2.1. Study region

Quang Tri province is located on the North Central Coast region of Vietnam and is characterized by steep slopes, sharp crests and narrow valleys covered mainly by a dense broadleaf evergreen forest. It is surrounded by the provinces of Quảng Bình, Thừa Thiên-Huế, Savannakhet (Laos) and the East Sea in the north, south, west and east,

¹ US\$1 = 22,350 VND (Vietnamese dollar)

Download English Version:

<https://daneshyari.com/en/article/6460320>

Download Persian Version:

<https://daneshyari.com/article/6460320>

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