

Financing options for enhancing the value and productivity of production forests in Viet Nam

Accelerating green growth by investing in forests



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Key points

- After dramatically reducing deforestation and increasing forest cover since 1990, Viet Nam is at a key transition period to transform its forestry sector
- Business models for high value, long-rotation forestry are profitable and can attract private sector investment, while also increasing environmental benefits
- The models still face significant barriers to implementation, including many years of negative cash flows and a liquidity gap
- Existing financing options offer some support to address the liquidity gap, but public programs need to be scaled up and private investment attracted in order to fully take advantage of high value forestry

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Introduction

While forest cover in Viet Nam has increased dramatically in recent decades, the quality of forests, particularly planted forests, leaves room for improvement and creates an opportunity to significantly increase forests' economic and environmental benefits. Between 1943 and 1990, forest cover in Viet Nam fell from 43% to 27% as agricultural expansion, illegal logging, urban development, and other factors drove large scale deforestation. The Government of Vietnam (GoV) has since taken many important steps to reverse this trend and to increase forest cover, in particular by revising the Land Law and respective policies, issuing logging bans, and implementing the 5 million hectare program (MARD 2017). However, the quality of these forests is generally low. Approximately 68% of broadleaf forests in the country are degraded or severely degraded (MARD 2016). Production forestry is dominated by low-value, short rotation models – mainly with Acacia – that produce chip wood (FPD 2017). Acacia has made a significant contribution to the rehabilitation of soils and created a basis for taking the next big step towards sustainable management of forests.

Viet Nam now faces an important inflection point to ensure that the economic and ecological value of forests continue to improve; increasing the production of high value forest products is a critical element to advancing the transition of Viet Nam's forests and forestry sector. Developing profitable business models for production forests can accelerate this transition by attracting investment to the sector. Against the background of green growth objectives in Viet Nam, UNIQUE has developed appropriate and feasible business models for Viet Nam's production forests and aims in its final phase to support their implementation by addressing key challenges. This brief presents high value forestry business models and considers how the implementation of these models can be scaled up by attracting investment. This policy brief is a product of the project 'Business Models in the context of REDD+', financed through the German International Climate Initiative (ICI) by the German Federal Ministry for the Environment (BMUB).

Investing in productive forests can drive green growth

The forestry sector plays an important role in achieving mitigation goals through reducing emissions from deforestation and forest degradation (known as REDD+) and increasing forest cover to 45% by 2020. In its National Green Growth Strategy, the GoV has set the objective of achieving inclusive economic growth while reducing greenhouse gas emissions by 8-10% by 2020. Planted forests – and their potential to create economic returns through the sale of harvested wood products (HWP) – can increase forest cover while reducing pressure on natural forests. There is large and growing Vietnamese demand for HWP; meeting this demand through domestic timber production would create nearly 250,000 full-time jobs, add USD 5 billion to the Vietnamese GDP, and sequester the equivalent of 70 million tons CO₂ by 2040 (World Bank 2017). However, investment and policy changes are needed to spur this green growth.

The GoV has made strides to restructure the forestry sector and promote high value forest products, most notably via the Forestry Development Strategy 2006-2020, which aims to increase the value of forestry exports by transitioning away from short rotation plantations to long rotation plantations for higher value

timber products. The GoV has established a number of incentives for long rotation plantations, including direct subsidies and low cost loans via state-owned banks. In addition to policies to financially support high value timber production, the ownership of the forestry sector is being restructured, as State Forest Companies (SFCs) go through a process of “equitization,” or privatization.

REDD+ and the international development community complement existing activities and should be considered as instruments that help Viet Nam in its aspired transition to high value forests and forestry (Hoan and Catacutan 2014). In 2009, the GoV’s request for financing support for the readiness process was approved by the board of the UN-REDD Programme (UN-REDD 2010). Since then, Viet Nam has prepared its REDD Readiness Preparation Proposal (R-PP) and the Prime Minister approved the National REDD+ Action Plan (NRAP). With these developments, Viet Nam is a candidate to move into phase III of REDD+: full implementation with activities that generate performance based payments (Pistorius et al 2017).

Business models for high value forests

Long rotation production models are more profitable than current models and could attract private investment, while increasing climate benefits. Current plantation management is dominated by Acacia short rotation cycles (4-7 years) that primarily produce chip wood. Transitioning to a long rotation Acacia model would extend the final harvest, resulting in higher quality timber. A third business model introduces a variety

of native species into Acacia plantations, which would further increase the value of timber produced and promote greater climate and biodiversity benefits. Table 1 summarizes the economic and environmental impacts of these three business models if implemented in good site conditions and with professional management practices.

Figure 1: Cumulative cash flows for three business models

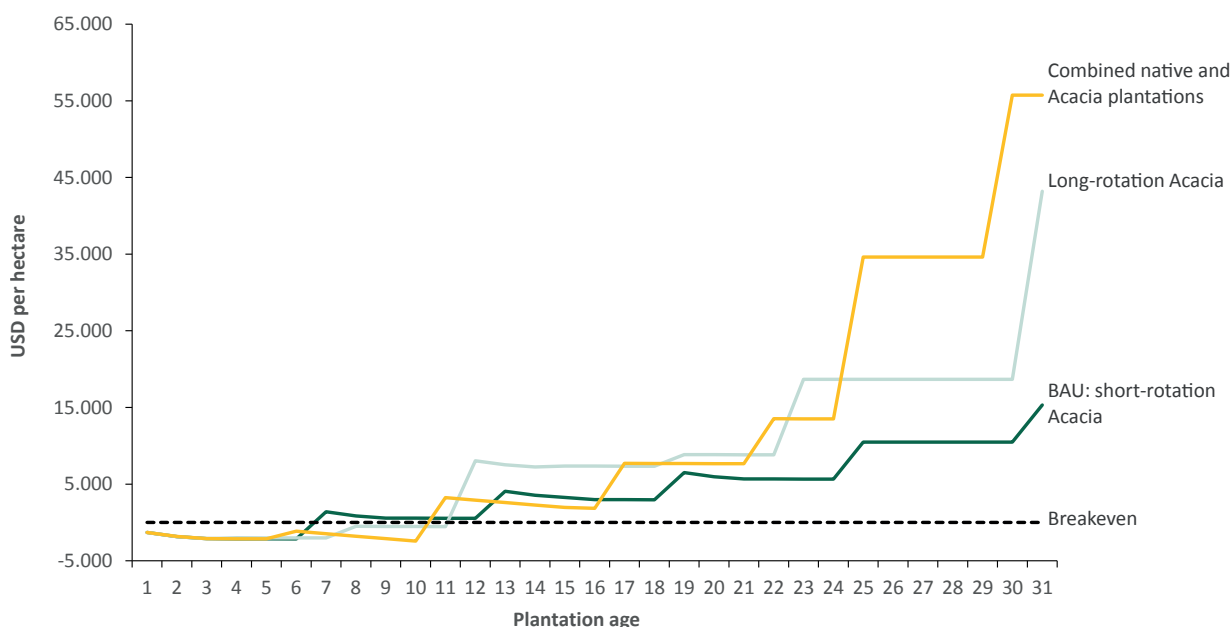


Table 1: Business model summaries

	Rotation length (years)	Commercial mean annual increment (m3 per ha)	Price of highest quality product (USD)	IRR	Tons CO2e sequestered (long-term average)
Short rotation Acacia	6	17.4	77-123	15.8%	65
Long rotation Acacia	11	17.1	77-123	19.1%	114
Combined native and Acacia	30	14.8 (Acacia) / 11.2 (native)	164-364	18.6%	146








The longer rotation models are more profitable and sequester more carbon, but do not generate significant revenues in early years and take longer to break even, as shown in Figure 1. The long rotation Acacia model has the highest IRR of the three models: more than 19%. Improved profitability is due to higher prices obtained for high diameter sawn logs, in compari-

son to the short rotation model that sells mostly chip wood. The combined native and Acacia model also has an attractive IRR, although lower than the long rotation model due to being cash flow negative for more than 10 years. Both models take many years to break even, creating a liquidity gap that may be difficult for forest owners to self-finance, requiring external investment.

Barriers and solutions to green growth forest investments

Despite the commercial potential of the two business models, a number of barriers hold back investments in long rotation plantations. As the models have not been implemented on a wide scale, there is significant skepticism about their viability. The combined native and Acacia model in particular is not yet implemented on a commercial basis and proof of concept needs to be demonstrated in order to increase confidence in the mo-

del. The lack of long-term financing options inhibits investment that could cover the liquidity gap. Moreover, bottlenecks at various stages of the forestry value chain discourage investment. For instance, nurseries that produce quality seedlings of the native species are extremely limited, making it difficult to establish plantations with these species.

	Proof of concept 	Financing 	Nurseries 	Plantations 	Harvest and transportation 	Value-added 	Market 
Barriers	<ul style="list-style-type: none"> Lack of faith in viability of business models 	<ul style="list-style-type: none"> Liquidity gap Credit risk Supply of appropriate credit products Land tenure Perceived risk from wind, disease, fire 	<ul style="list-style-type: none"> Quality seedlings 	<ul style="list-style-type: none"> Technical management (e.g. forest inventory, pruning and thinning) Business management 	<ul style="list-style-type: none"> Poor infrastructure Social pressure to harvest early 	<ul style="list-style-type: none"> Shortage of high-quality inputs 	<ul style="list-style-type: none"> Accessing high prices offered in certain international markets
Solutions	<ul style="list-style-type: none"> Demonstration plots Outreach to promote models Identify local champions 	<ul style="list-style-type: none"> Appropriate financing products Technical support for land tenure Insurance products 	<ul style="list-style-type: none"> Subsidies for nurseries Improving genetics 	<ul style="list-style-type: none"> Forest management trainings Business planning Transition to commercial management Privatization of SFCs 	<ul style="list-style-type: none"> Focus on accessible areas Community-based programs 	<ul style="list-style-type: none"> Investments in own supply chain to increase production of timber 	<ul style="list-style-type: none"> Link existing FSC promotion projects to business models

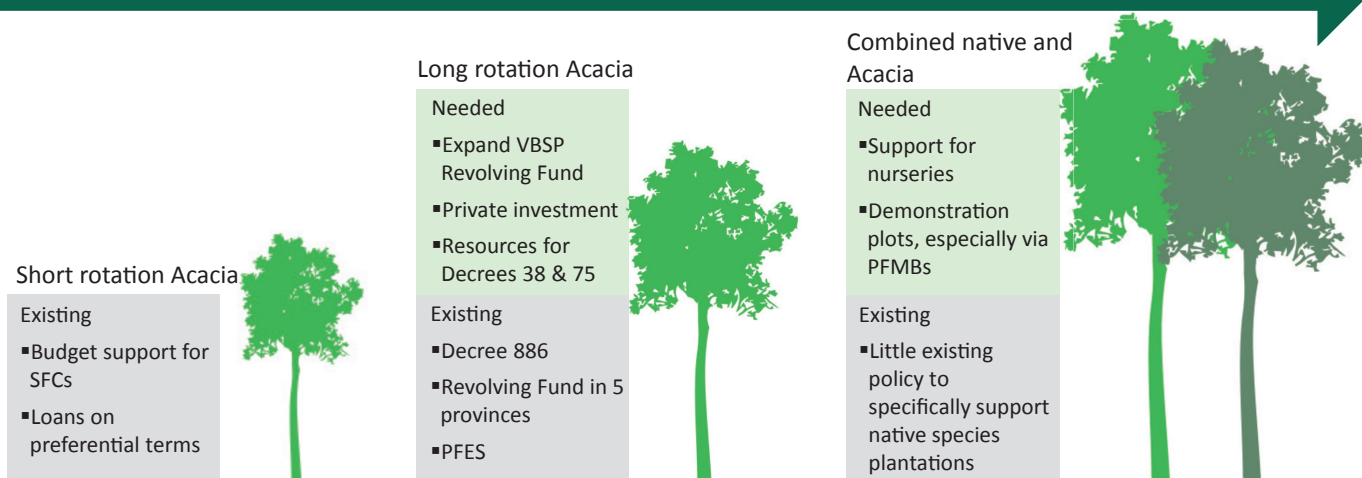
Financing options

There are a number of existing government policies that could be used to support high value productive forests. Through Decree 38 and 75, households are eligible to receive grants for forest plantation establishment and management. However, few resources have been allocated to these programs, limiting their effectiveness. Decision 886 of 2017 would distribute more resources to the sector. The Payment for Forest Ecosystem Services (PFES) program provides incentives for forestry owners to establish new forests or protect existing ones could also support the proposed business models.

Although there are financing options for long-term forestry investments, these options are not available at sufficient scale to catalyze a transformation of the Viet Nam forestry sector. The Viet Nam Bank for Social Policies (VBSP) has a Revolving Fund that provides credit with a grace period of seven years

and tenor of 15 years. Timber processing companies, such as Scansia, offer long-term credit to their suppliers in order to encourage production of large diameter sawn logs. Beyond these options, most financing in the country does not provide long enough grace periods or tenors to support the proposed business models. High interest rates from commercial banks further discourage lending to the sector. Both forest households and SFCs are perceived as not having sufficient business management acumen, making private investors reluctant to lend to them. Continued state-ownership of SFCs and the slow implementation of privatization of state companies further discourages investment. Multilateral finance institutions are interested to lend to the sector, but, other than via local financial institutions, are unable to lend to the relatively small actors in the sector.

Existing and needed financing support for high value forests



Recommendations

While there are many programs that incentivize the long-rotation Acacia and combined native and Acacia business models, large-scale implementation of these models will remain low without additional support. The following steps can help to increase investment in forests.

Increase donor support for green growth through the forestry sector, including via the Green Climate Fund. The Vietnamese forestry sector has enormous potential to create jobs, increase economic growth, reduce foreign exchange losses, and increase carbon sequestration, making it an effective sector for achieving development objectives. Donor support can play a particularly catalytic roll by absorbing risk associated with long-term forestry investments.

Align existing programs that support the forestry sector with the needs of high value production forestry. There are currently a wide-range of grants and subsidized loans available to forest owners for transition to long-rotation forestry. However, no one policy or program on its own is sufficient to support the transition. Forest owners should have a “one-stop” program with the following characteristics:

- Technical support for sustainable forest management plans and certification, including to forest extension agents
- Support the establishment of smallholder associations and other groups
- Demonstration plots of innovative business models
- Business development support, including financial planning, business management, and access to markets and finance
- Low-interest loans with long grace periods and tenors
- Guarantees or other products to absorb credit risk
- Insurance options

Allocate resources to existing programs. Decrees 38 and 75 offer an appropriate mechanism to support the forestry sector, but the lack of resources distributed to the programs limits their effectiveness.

Create tailored support that fits the need of the two business models. The long rotation Acacia model is much closer to being implemented commercially at a large scale. Improved credit products, marketing, and business development support would be most helpful to encourage rapid transition from short to long rotation Acacia models. The combined native and Acacia model, on the other hand, is further from commercial implementation due to poor availability of quality seedlings and the lack of

demonstrated business success. Support for nurseries and demonstration plots are important ways to advance this model so that it can be successful in the long-term.

Facilitate private sector investment. Although private sector investment plays a limited role in the forestry sector in Viet Nam, high private investment in agriculture suggests there is potential to reverse this trend. Clear guidance from the GoV on land management, joint venture models, and foreign investment policy could increase private investment. Risk sharing mechanisms, such as credit guarantees or subsidized insurance, could also encourage private investors. The issuance of green bonds for the forestry sector would further help to attract investment to the sector.

Accelerate the process of privatization of SFCs. The lack of commercial motive is a barrier to attracting investment and transitioning to longer-term business models.

Learn from and replicate VBSP’s Revolving Fund. The unique terms available from VBSP, in particular the generous grace periods and tenors, are most closely aligned with the financing needs of the long rotation business models. The Fund should be studied as it is disbursed to understand the extent to which it promotes sawn log production. The VBSP’s model for reaching forest owners in remote communes should be replicated.

Target timber processing companies as intermediaries that can channel financing and technical support to forest owners. Given increased demand from international buyers like IKEA for sustainably produced sawn logs, Vietnamese timber processing companies, such as Scansia, are well placed to support high value production forestry, including through supply-chain financing.

Prioritize high-value added forestry with development resources lent to the GoV. The GoV’s debt ceiling places limits on the level of debt that the GoV can assume as a percentage of GoV. The GoV should prioritize the forestry sector and in particular the production of sawn logs through the proposed business models.

Address other non-financial barriers to long rotation forestry models. For instance, land tenure insecurity makes it difficult for forest owners to make long term plans and to receiving financing. The GoV should improve the enabling environment around the forestry sector.