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A TRANSITION TOWARDS HIGHER ADDED VALUE OF NATURAL RESOURCE BASED PRODUCTS: CASE STUDY OF ACACIA TIMBER VALUE CHAINS IN CENTRAL VIETNAM

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INTRODUCTION

OBJECTIVE

- Vietnam currently ranks as the fourth largest global furniture exporter and the largest woodchip exporter (1).
- High added value products such as wood furniture generated up to 70% of the total export turnover in the timber and timber product segment in 2017 (2).
- Forest plantations yielded around 18 million m³ of round wood p.a., 80% of plantation wood is processed into woodchip.
- Around half of the plantation forest area in Vietnam are managed by small-scale producers.
- Acacia hybrid (Acacia auriculiformis x Acacia mangium) gains popularity due to its multi-purpose use and shorter-rotation (3).

Compares the **financial** and **economic** performance of woodchip, non-FSC furniture and FSC-certified furniture VC in Thua Thien Hue province, central Vietnam

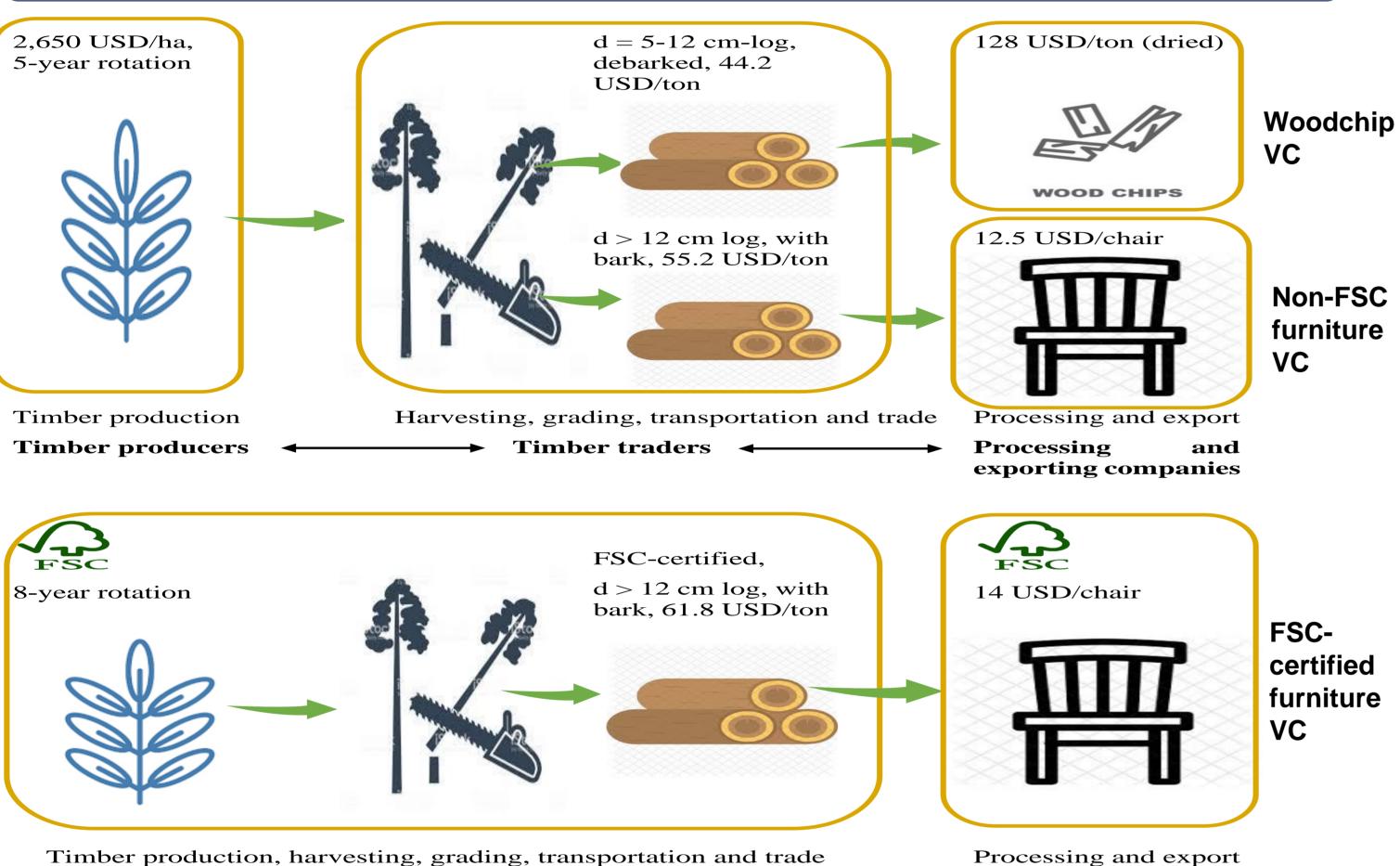
METHODOLOGY

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- Theoretical framework: Value chain framework
- Conducted in-depth interviews with 30 timber producers, eight timber traders, one woodchip and one furniture processing and exporting company.
- Six group discussions and 26 expert interviews and direct observations.

KEY FINDINGS

a, Overview of three Acacia hybrid timber VCs



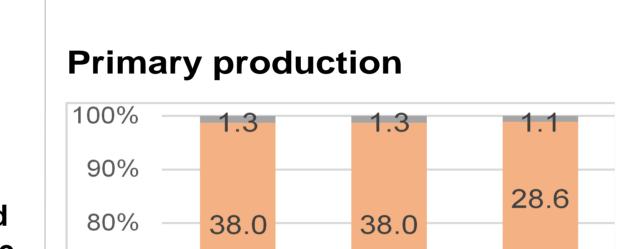
c, VC Comparison

Added value generation

Total **added value** and added value captured by chain participants in **FSC-certified furniture VC** was highest.

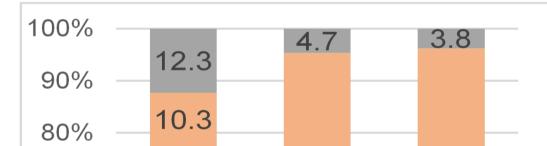
Woodchip VC		Non-FSC furniture VC		FSC-certified furniture VC	
USD/m³	%	USD/m³	%	USD/m³	%
7.9	30.0	7.9	1.4	9.1	1.4
6.9	26.2	14.6	2.6	-	-
11.5	43.8	534.7	96.0	659.4	98.6
26.3	100	557.2	100	668.5	100
	USD/m ³ 7.9 6.9 11.5	USD/m³ % 7.9 30.0 6.9 26.2 11.5 43.8	USD/m³ % USD/m³ 7.9 30.0 7.9 6.9 26.2 14.6 11.5 43.8 534.7	USD/m³ % USD/m³ % 7.9 30.0 7.9 1.4 6.9 26.2 14.6 2.6 11.5 43.8 534.7 96.0	Woodchip VC Non-FSC furniture VC VC USD/m³ % USD/m³ % USD/m³ 7.9 30.0 7.9 1.4 9.1 6.9 26.2 14.6 2.6 - 11.5 43.8 534.7 96.0 659.4

Added value appropriation



Most generated value was captured by the VCs' actors and **remuneration for workers**, followed by government attainment

Production and export



Timber production, harvesting, grading, transportation and trade

Timber producers

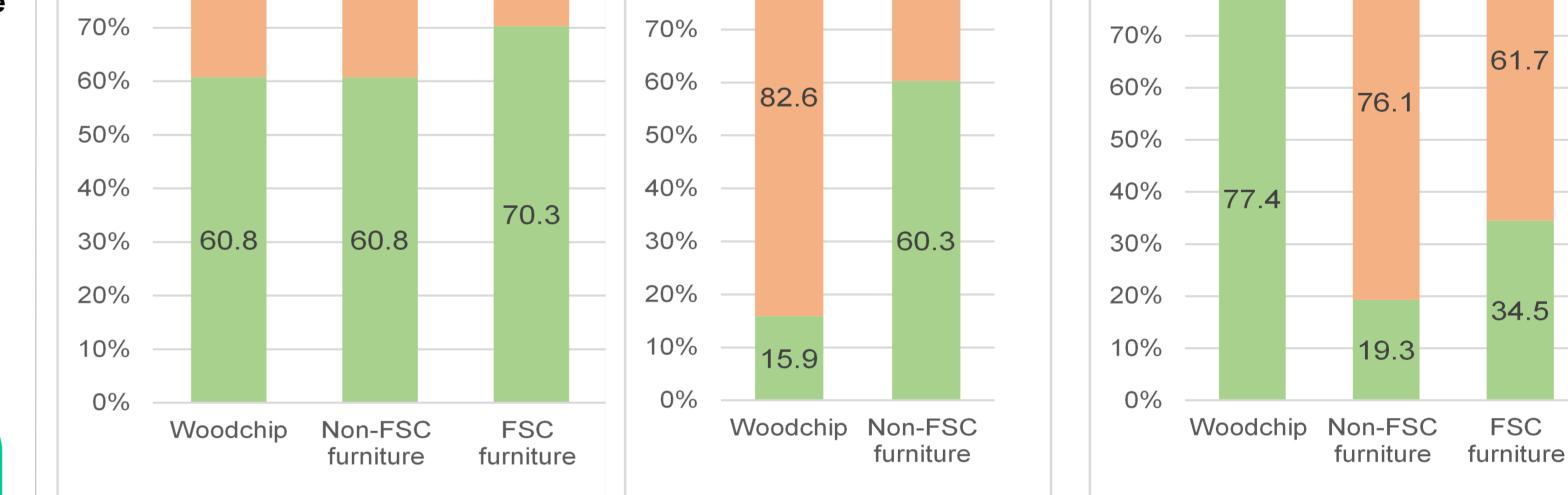
Processing and exporting companies

b, Performance of VC participants



Timber producers

- Forest land and usufruct rights belong to individual households Exempted from forest land tax
- Acacia hybrid plantations represented a key natural capital



Local trading

0.7

39.0

100%

90%

80%

Analyzed timber VCs

Labor remunaration ■ Taxes and duties Profit

CONCLUSION

- About 4-6 traders/village, > 10 years experience.
- Owns a truck used for log transportation.
- Acacia timber trade constitutes 30%-45% of household income.
- **Timber traders** Regulatory costs including income tax, business and road fees.





- Chipping-logs
- 7 companies.
- Annual chip revenue ranges 5.6-35 million USD.
- Location within 10 km radius to Chan May seaport.
- Sawn-size logs
- 154 companies.
- Annual revenue ranges 0.1-2.5 million USD.
- Location proximity to industrial plantations

Woodchip VC is financial profitability	FSC-certified furniture VC is relatively efficient in economic sphere	FSC certification application should be considered carefully	Expansion of single hybrid in short rotation plantation may lead to other land use competition, livelihood vulnerability and high environmental costs	Changes in political, social and economic onditions are required

References:

Processing and

exporting

companies

- (1) Maraseni, T.N., Son, H.L., Cockfield, G., Duy, H.V., Nghia, T.D., 2017. The financial benefits of forest certification: case studies of Acacia growers and a furniture company in central Vietnam. Land Use Policy 69, 56-63.
- (2) MARD, 2019. The Overall Status of Vietnam Timber and Forest Products Processing and Exporting Sectors. Presented at the Processing and Exporting Sectors of Timber and Forest Products in 2018-Sucess, Lessons Learned and Breakthrough Solutions for 2019, Hanoi, Vietnam.
- (3) Nambiar, E.S., Harwood, C.E., Kien, N.D., 2015. Acacia plantations in Vietnam: research and knowledge application to secure a sustainable future. Southern Forests: A Journal of Forest Science 77, 1–10.

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