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TROPICAL AGRICULTURAL SCIENCE

Journal homepage: http://www.pertanika.upm.edu.my/

Domestic Demand for Certified Timber Products in Malaysia: A Case Study of Pahang State

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ABSTRACT

Forest certification has become an important market-based instrument in promoting sustainable forest management. Although the Malaysian Timber Certification Scheme (MTCS) has been implemented for more than two decades, information on the domestic demand for MTCS-certified timber products remains limited. This study assessed the domestic demand for MTCS-certified timber products through a case study of 13 MTCS-CoC-certified companies in Pahang, Malaysia. A structured questionnaire survey was conducted to investigate the market distribution, certification practices, domestic and export sales and market opportunities of certified timber products in the domestic market. Document analysis was also performed to identify gaps in the institutional reporting practices. Results show certification remains primarily driven by international market requirements, where more than 90% of MTCS-certified timber products were supplied to export markets, while less than 10% were sold domestically. Sawn timber was the main certified timber product marketed locally, with traders serving as the main distribution channel. Domestic demand remained limited, with only 38% of respondents reporting that customers specifically requested certified timber products. The construction and furniture sectors were identified as priority market segments for expanding domestic demand. Institutional gaps in reporting of certified timber data highlight the need for an integrated national reporting system and stronger government policies in supporting the development of Malaysia's domestic market for certified timber products.

Keywords: Certified timber product, Chain of Custody (CoC), domestic demand, forest certification, MTCS

ARTICLE INFO

Article history:
Received: 20 July 2026
Accepted: 19 November 2026
Published: 02 December 2026

DOI: https://doi.org/10.47836/pjtas.49.6.08

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e-ISSN: 2231-8542

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INTRODUCTION

Forest certification has become one of the most widely adopted voluntary market-based instruments in promoting sustainable forest management. Through third-party recognition, timber products originating from responsibly managed forests can be distinguished and identified in the global market through Chain of Custody (CoC) certification. Forest certification aims not only to improve forest governance but also to provide market incentives for sustainable timber production by enhancing consumer confidence and market access.

Growing international concern over deforestation, illegal logging and biodiversity loss has significantly increased demand for certified timber products, particularly in environmentally sensitive markets such as the European Union, North America and Japan. Certification is seen as a significant tool to support Sustainable Forest Management (SFM) and improve the company image in supporting environmentally responsible business (Paluš et al., 2021). Kishor and Lescuyer (2012) suggested that forest certification can help reduce illegal logging, minimise forest-related offences and promote timber sourced from sustainably managed forests. Several studies have been conducted to analyse the motivation and drivers among timber companies for the adoption of CoC certification, such as gaining and maintaining market access, improving the company's image and fulfilling customers' demand (Halalisan et al., 2013, 2019; Owari et al., 2006).

The growing demand for certified timber products has been largely driven by international markets. Many developed countries have introduced timber legality regulations and green procurement policies that require timber imports to be obtained from sustainable and legal sources. Consequently, timber exporters are increasingly required to demonstrate the legality and sustainability of their products through recognised forest certification schemes to comply with importing countries' regulations. In several American countries, Basso et al., (2018) demonstrated that government regulations, public pressure and international market demand were among the principal external drivers influencing the adoption of forest certification.

Malaysia has consistently demonstrated its commitment to Sustainable Forest Management (SFM) through the establishment of the Malaysian Timber Certification Council (MTCC) in 1998 and the implementation of the Malaysian Timber Certification Scheme (MTCS). The scheme was internationally endorsed by the Programme for the Endorsement of Forest Certification (PEFC) in 2009. Since then, MTCS certification has become an important mechanism for strengthening Malaysia's competitiveness in global timber markets while supporting responsible forest management.

However, after two decades of MTCS implementation in Malaysia, no comprehensive studies have been conducted to assess the domestic demand for MTCS-certified timber.

For example, Saadun et al., (2019) evaluated the export performance of tropical timber products by MTCS. Previous studies have examined the participation of Malaysian furniture manufacturers in adopting CoC certification (Ratnasingam et al., 2008) and the cost of CoC certification among sawnwood furniture in Peninsular Malaysia by (Suryani et al., 2011). To date, comprehensive information on the domestic demand for MTCS-certified timber products remains unavailable. In particular, the actual volume of certified timber supplied to the domestic market and the factors influencing domestic demand have not been systematically investigated.

One possible explanation might be due to the loss of data or unreported information along the supply chain, which makes it difficult to see the potential and impact of MTCS certification in the Malaysian timber trade. Figure 1 illustrates the conceptual flow of certified timber products within the Malaysian timber supply chain. Timber harvested from MTCS-certified Forest Management Units (FMUs) maintains its certified status only when processed through MTCS-CoC certified companies. Although certified timber exported to international markets can be traced through certification records, the flow of certified timber within the domestic market remains uncertain. This uncertainty arises because certification reporting is voluntary; certified timber may enter through non-CoC-certified companies where certification status is no longer maintained. Consequently, the actual volume and market distribution of certified timber products within Malaysia remain largely unknown. This information gap forms the basis of the present study, which investigates the domestic demand for MTCS-certified timber products among certified timber companies in Pahang.

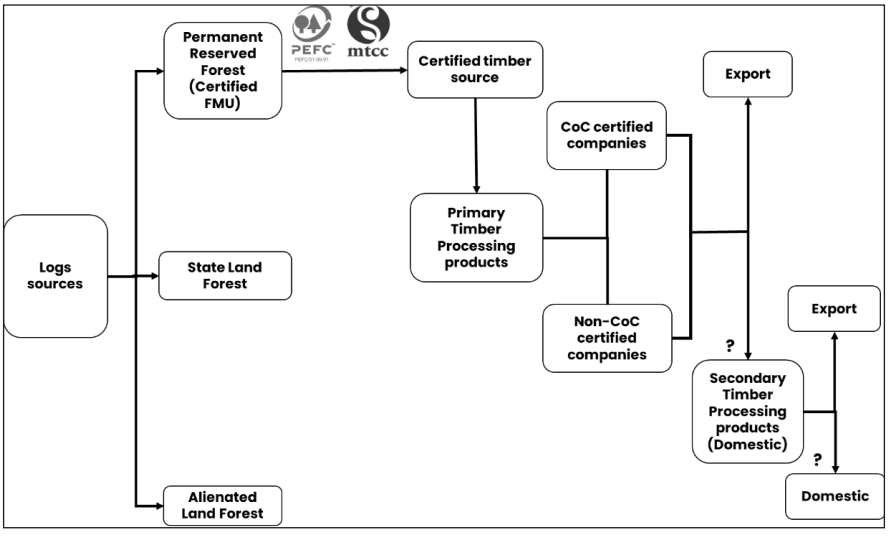


Figure 1. Supply chain of certified timber products in Malaysia

This information gap should be understood within the broader context of Malaysia's timber industry development, which was historically export-oriented. The previous Malaysian timber development policies in the Industrial Master Plan (IMP), namely 1st IMP (1986-1995), 2nd IMP (1996-2005), 3rd IMP (2006-2020), supported by the National Timber Industry Plan (2009 - 2020) (NATIP), were primarily formulated to strengthen Malaysia's competitiveness in the global timber market. Nevertheless, the domestic timber market also contributes substantially to the national economy. Figure 2 shows the comparison between the value of domestic and export of Malaysian timber and timber products from the year 2012 to 2021. From this data, the lowest value of the domestic market value was RM16.69 billion in 2013, and the highest value was RM20.76 billion in 2019. Shukri, (2008) also stated that despite being a certified timber producer and exporter, no effort has been made to market certified timber domestically. Shukri and Mardhiah (2014) also noted that certified joinery manufacturers in Malaysia use certified sources mainly to fulfil the demand for the international market.

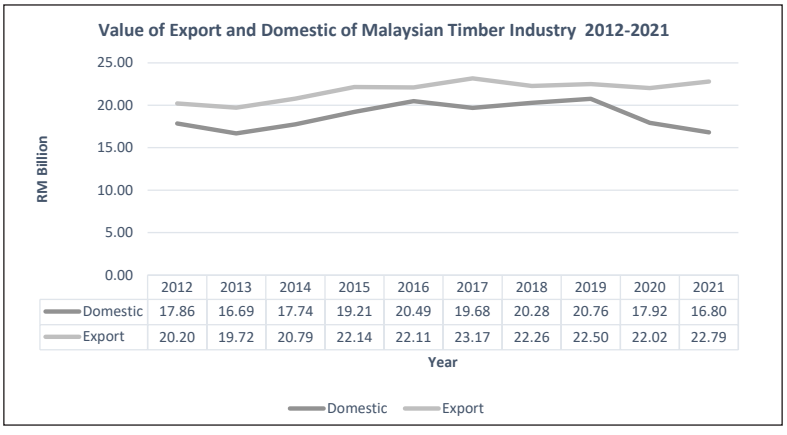


Figure 2. The export and domestic performance of Malaysia timber and products

The performance of MTCS-certified timber products export also shows progressive growth since 2002, with exports of a mere 732.00 m^3 and cumulatively increased to 2,465,420.65 m^3 in 2020 (Malaysian Timber Certification Council [MTCC], 2021). In this regard, although the forests in Malaysia have been sustainably managed through MTCS certification, the domestic demand for certified timber products is still unknown. While previous Malaysian studies have examined certified timber markets and willingness to pay, limited empirical evidence is available on the actual distribution of certified timber products between domestic and export markets at the company level. Furthermore, little is known about the timber industry's perceptions of factors that may influence domestic demand and the existing practices for collecting domestic certified timber sales data.

Against this background, this study investigates the domestic demand for MTCS-certified timber products through a case study of certified timber companies in Pahang. The findings provide insights into domestic certified timber markets and offer policy recommendations to strengthen sustainable timber consumption in Malaysia.

MATERIALS AND METHODS

Study Area

This study adopted a case study approach to investigate the domestic demand for MTCS-certified timber products in Malaysia. Pahang was purposively selected as the study area because it is the largest timber-producing state in Peninsular Malaysia and has a long-established role in sustainable forest management. Pahang was among the first FMUs in Peninsular Malaysia to be assessed under the Malaysian Criteria and Indicators (MC&I) for Forest Management Certification. In addition, Pahang has the largest area, covering approximately 1.5 million hectares and contributed approximately 36.5% of the total log production in Peninsular Malaysia in 2021 (Pahang State Forestry Department, 2021). Based on the MTIB Industrial Census 2017, Kuantan and Temerloh districts were purposively selected as the primary study locations. The selection of companies was based on three criteria: (i) registered with MTIB, (ii) possess a valid licence issued by the Pahang State Forestry Department and (iii) MTCS-CoC certification. A total of 23 companies were approached to participate in the questionnaire survey, of which 13 companies responded, representing a response rate of 56.5%. Although the findings cannot be generalised to the entire Malaysian domestic market, this study will provide useful baseline information for future studies.

Questionnaire Survey

A structured questionnaire survey was conducted among 13 MTCS-CoC certified timber companies in Pahang using purposive sampling. The questionnaire comprised sections: (1) company profile, (2) raw material profiles, (3) certification practice, (4) market distribution, (5) characteristics of domestic market, (6) domestic demand for certified timber products, (7) perceptions regarding factors that may influence domestic demand for certified timber products, (8) potential market and (9) reporting practices of certified timber products. The data on certified timber production, market distribution, domestic and export sales, certification practices and market perceptions were collected between 2017 to 2021.

The questionnaire was reviewed and pretested with representatives from the timber industry and MTIB officials to ensure the questions were relevant. The questionnaires were distributed via email and collected during company visits. The respondents were from the upper management of the surveyed companies. Data on MTCS-certified timber sales were

obtained from the participating companies' monthly sales records and accumulated into annual figures for the 2017-2021 period. The analysis focused on reported sales volume of MTCS-certified timber products in domestic and export markets. However, each transaction between participating companies was not independently traced, and the potential for double counting could not be entirely ruled out.

Semi-Structured Interviews

To further investigate the collection and reporting of MTCS-certified timber products, semi-structured interviews were conducted in 2021 with three senior officials' representatives from the Forestry Department of Peninsular Malaysia (FDPM), Malaysian Timber Industry Board (MTIB) and Malaysian Timber Certification Council (MTCC). These interviews focused on reporting practices, what types of information are collected by each agency and the availability of data related to certified timber production, domestic trade and exports

To complement the interview findings, secondary data were obtained from the agency's official annual reports, statistical publications and other records. Subsequently, the information collected by respective agencies was compared to identify institutional gap in collecting and reporting of MTCS-certified timber products.

Descriptive Analysis

The data from the survey were analysed using descriptive analysis such as frequencies, percentages and weighted ranking scores. Companies' monthly sales records were compiled into annual figures to determine domestic and export market shares. A weighted ranking method was used to assess factors influencing domestic demand and potential market segments, with scores ranging from most important to least important. The scores were then converted into percentages to display which factors were considered more important by the respondents. The findings were presented in tables and figures and interpreted qualitatively.

RESULTS AND DISCUSSION

Company's Profile

A total of 13 certified timber companies located in Pahang participated in this study. More than half of the respondents (53%) were small-sized enterprises with a number of employees between five to 75 workers, while 30.8% were medium-sized enterprises employing 76 to 200 workers. The remaining 15.4% comprised large enterprises with more than 200 workers. The surveyed companies were primarily involved in primary timber processing, with 84.6% manufacturing products such as sawn timber, plywood and particleboard. With regard to certification schemes, 76.9% of the companies were certified solely under the Malaysian Timber Certification Scheme (MTCS), while the remaining 23.1% maintained

dual certification under both MTCS and the Forest Stewardship Council (FSC). None of the surveyed companies relied exclusively on FSC certification. This finding reflects the dominant role of MTCS as the national forest certification scheme and its widespread adoption among timber manufacturers in Peninsular Malaysia.

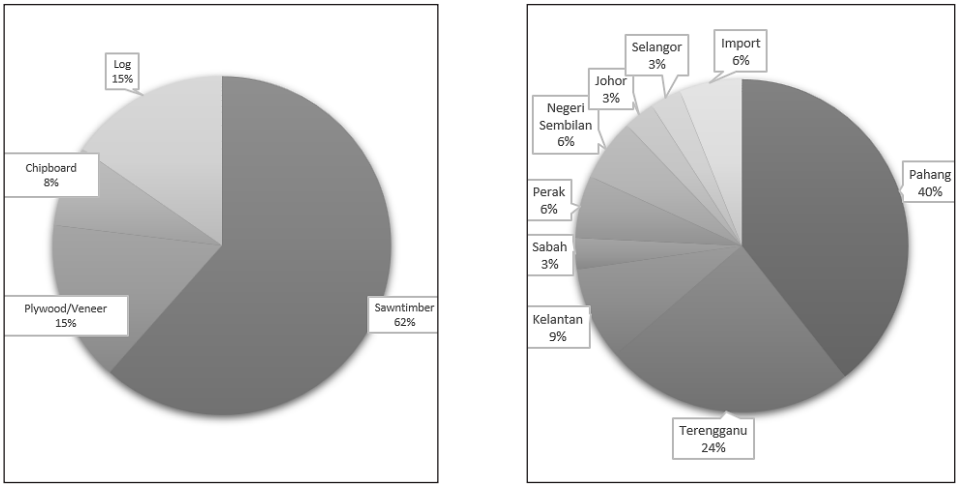
The survey also revealed a high level of dependence on certified raw materials. Over 60% of the surveyed companies reported that over 80% of their raw material supply originated from certified sources, while only two companies used less than 20% certified timber in their manufacturing processes (Table 1). The respondents also demonstrated a high level of awareness, as nearly all companies (92.3%) indicated that they were aware of the availability of certified timber originating from certified forest management units. Such awareness is expected because maintaining a reliable supply of certified raw materials is a fundamental requirement for CoC certification.

Table 1
Characteristics of the CoC-certified companies (n = 13)

Characteristic (n= 13)		**Frequency (n)**	**Percentage (%)**
Company size	Small	7	53.8
	Medium	4	30.8
	Large	2	15.4
Business sector	Primary timber processing	11	84.6
	Secondary timber processing	0	0
	Both	2	15.4
Number of employees	5-75	7	53.8
	76 - 200	4	30.8
	More than 200	2	15.4
Certification scheme	MTCS	10	76.9
	FSC	0	0
	Both	3	23.1
Use of certified timber raw materials	1-20%	2	15.4
	21-40%	0	0
	41-60%	1	7.7
	61-80%	2	15.4
	More than 80%	8	61.5
Product market	Local	1	7.7
	International	1	7.7
	Both	11	84.6
Awareness of the availability of certified timber resources	Yes	12	92.3
	No	1	7.7

Profile of the Raw Material

The distribution of raw materials used by the surveyed MTCS CoC-certified companies is presented in Figure 3. Based on the results, most of the respondents use sawn timber (62%) as the main raw material for the manufacturing of the products. Other raw materials that were used for the manufacturing of the products were mainly plywood or veneer (15%) and logs (15%), followed by chipboard (8%). These raw materials were obtained mostly from Pahang state (40%), followed by Terengganu (24%), Kelantan (9%), Negeri Sembilan (6%), and Perak (6%), while some of the raw materials were imported (6%). This data reflects that most of the local timber business depends largely on domestic forest resources, largely from Pahang state.



(a) (b)

Figure 3. Profile of the raw material of the surveyed MTCS -CoC certified companies in Pahang: (a) types of raw materials used; and (b) geographic sources of raw materials

Certification Practices Among Timber Companies

The certification document practices adopted by the surveyed companies are presented in Figure 4. This question is important to identify the awareness of timber industries regarding certification as evidence that the timber is sourced from sustainably managed forests. A total of 92% of the respondents reported that their suppliers voluntarily provided the certificates to them, whereas only 8% indicated that certification documents were not supplied. On the other hand, 85% of the respondents requested certificates from their suppliers as part of the business procedure, while 15% did not request such documentation. The findings indicate that certification documents have become a common

practice in certified timber businesses' transactions and an important aspect in chain of custody requirements. However, a small proportion of companies did not request certification documents, suggesting that certification practices were not consistently applied across all companies.

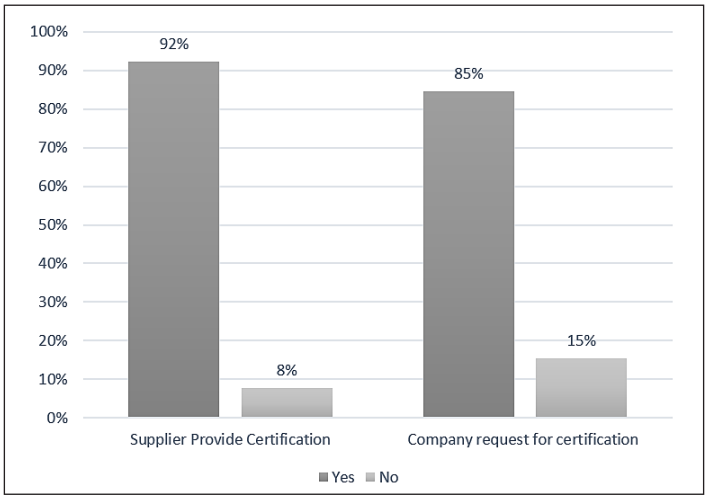


Figure 4. Certification document practices among the surveyed companies

Market Distribution of MTCS-Certified Timber Products

The distribution of MTCS-certified timber products between the export and domestic markets during the five-year period from 2017 to 2021 is presented in Figure 5 and Table 2. The result indicates that less than 10% of the MTCS-certified timber was for the domestic market, while more than 90% of the certified timber products were for export. The average volume of certified timber products that were exported to the international market is 623,840.62 m^3, while for the local market it is 45,907.07 m^3. Although the surveyed companies supplied certified timber products to both domestic and international markets, the export market remained the dominant destination. These findings indicated that the demand for MTCS-certified timber products continues to be driven primarily by international markets rather than domestic consumption. The strong dependence on the export markets is likely influenced by greater demand for certified timber and green procurement policies from environmentally sensitive markets where certification is often required to demonstrate that timber is sourced from legal and sustainable sources. Similarly, (Lewin et al., 2019) emphasised that forest certification is not solely on market mechanisms but also supported by government policies and regulatory initiatives.

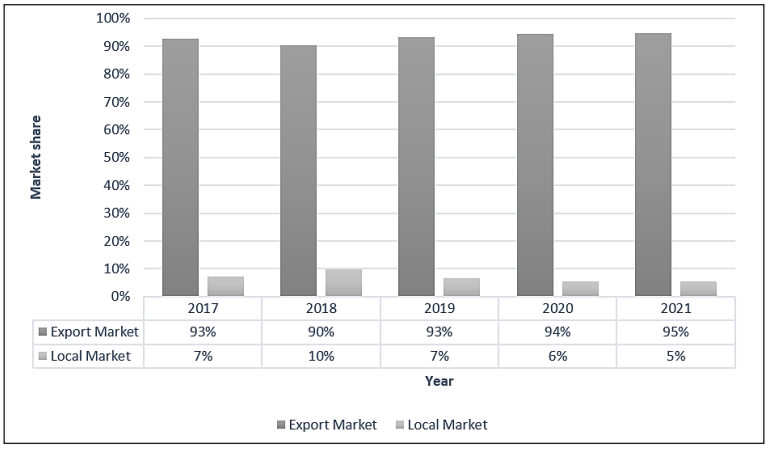


Figure 5. Export and domestic performance of MTCS-certified timber products among the surveyed MTCS-CoC certified companies in Pahang (2017-2021)

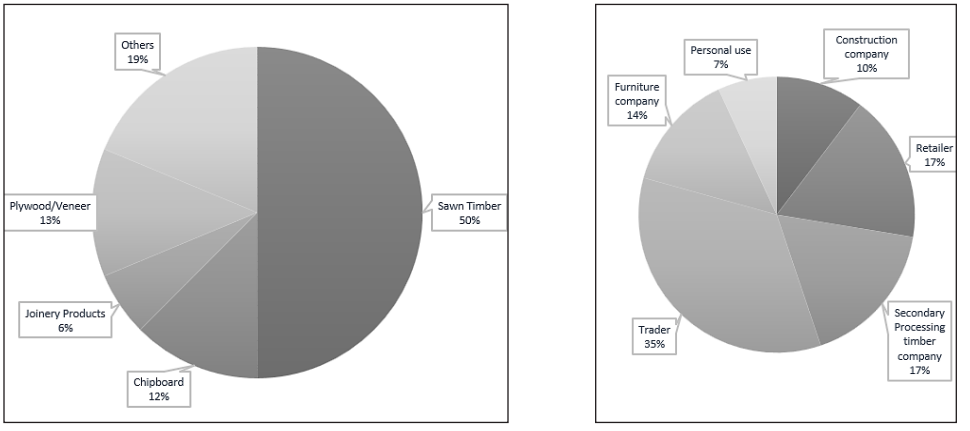
Table 2
Volume of MTCS-certified timber products sold in the domestic market and export for five years

Market of MTCS-Certified Timber Products	Year / Volume (m^3)				
	2017	**2018**	**2019**	**2020**	**2021**
Domestic	57,675.66 (7%)	55,277.16 (10%)	48,401.51 (7%)	35,789.31 (6%)	32,391.69 (5%)
Export	745,091.06 (93%)	514,097.54 (90%)	688,018.29 (93%)	601,566.02 (94%)	570,430.18 (95%)

Characteristics of the Domestic Market For MTCS-Certified Timber Products

The distribution of MTCS-certified timber products marketed in the domestic market and their major buyers is presented in Figure 6. Among all timber products, sawn timber (50%) is the major timber product marketed in the local market. Additionally, plywood and veneer (13%) are also the major products sold in the domestic market, followed by particle board (12%) and joiner products (6%). Other products sold in the domestic market include furniture, wood pallets, laminated timber and wood dust. The survey also identified the major buyers of MTCS-certified timber products in the domestic market. Traders represented the largest customer group (35%), followed by retailers (17%), secondary timber processing companies (17%), furniture manufacturers (14%), construction companies (10%), and individual consumers (7%). Most timber companies use traders to connect with buyers and suppliers to market their certified timber products. The inclusion of intermediaries such as traders, brokers, or agents in the distribution channel becomes part of the domestic market despite them not taking ownership of the product. Some of the local furniture companies or secondary timber processing companies purchase certified

timber to produce value-added products and supply them to the international market. This finding indicates that although these transactions are recorded within the domestic market, a proportion of certified timber ultimately contributes to international markets through downstream manufacturing activities.



(a) (b)

Figure 6. Domestic market characteristics of MTCS-certified timber products in Pahang: (a) distribution of certified timber products marketed domestically; and (b) major buyers of MTCS-certified timber products

Domestic Demand for Certification in Purchasing MTCS-Certified Timber Products

The level of customer demand for MTCS-certified timber products in the domestic market is presented in Figure 7. A total of 62% of the respondents reported that their local customers did not specifically request certification evidence when purchasing timber products, while only 38% indicated that customers requested certified timber. This response suggests that the certification is not yet a major purchasing consideration among local customers of the surveyed companies.

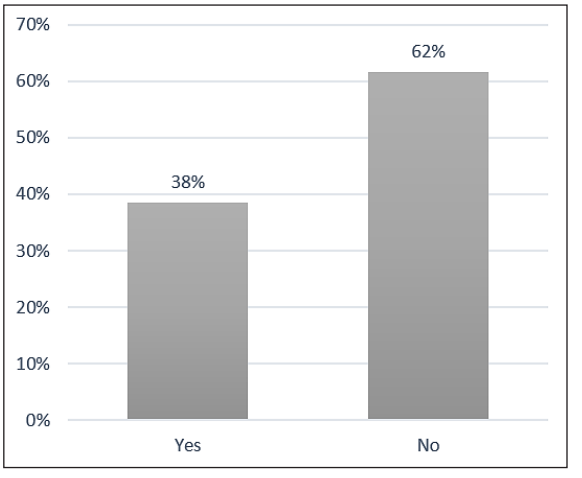


Figure 7. Domestic buyers requesting certification when purchasing MTCS-certified timber products

The finding is consistent with manufacturers' preference to sell the MTCS timber products to the international market compared to the domestic market as discussed in the previous

section. Similarly, Attah et al., (2011) reported that the domestic market demand for timber originating from sustainably managed forests in Ghana was relatively low due to low consumer demand for certified timber products.

Premium Price of MTCS-Certified Timber Products

The willingness of the domestic market to pay a premium price for MTCS-certified timber products is presented in Figure 8. The premium price of certified timber is one of the leading factors for the timber industry to adopt timber certification (Cha et al., 2009; Ota et al., 2022; Ratnasingam et al., 2008). In this survey, a total of 69% of the surveyed companies reported receiving a premium price when selling certified timber products in the domestic market, whereas 31% indicated that they did not receive any price premium. Among the companies receiving a premium price, 56% reported a premium of less than 5%, while 22% received premiums ranging from 5-10% and another 22% received premiums between 10-20% (Figure 8). Similarly, Iwanaga Seiji et al. (2019) and Halalisan et al. (2013) reported that premium price is one of the key economic benefits and motivating factors to encourage timber companies to adopt forest certification. The findings indicate that some surveyed companies received premium prices for MTCS-certified timber products in the domestic market, with the majority reporting an additional price of less than 5%, suggesting that price premiums may provide an economic benefit for timber companies to maintain CoC certification.

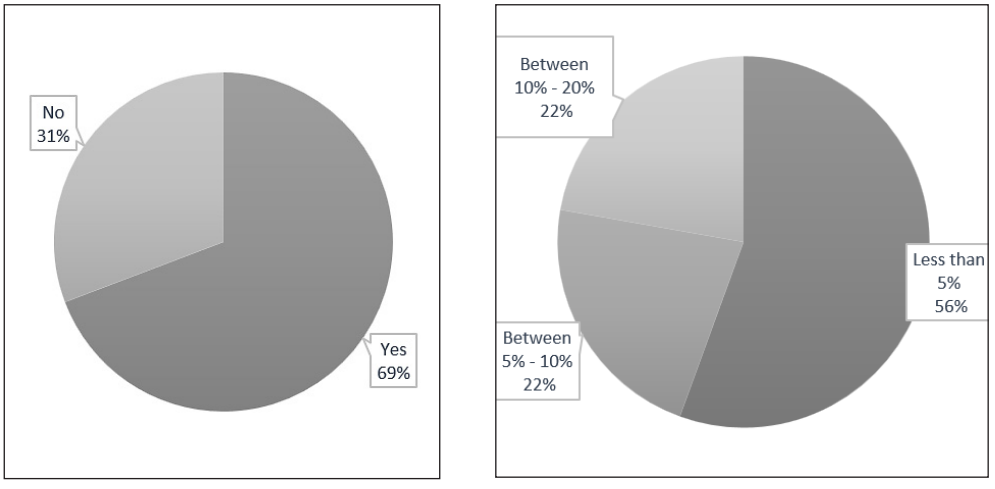


Figure 8. Premium pricing of MTCS-certified timber products in the domestic market: (a) companies receive a premium price; and (b) range of premium prices received

Factors Influencing the Demand for MTCS-Certified Timber Products in the Domestic Market

This study also sought respondents' views on the factors that could influence the demand for MTCS-certified timber products in Malaysia's domestic market, as presented in Figure 9. Government procurement policies received the highest weighted score (22%), followed by price (20%), Green Building Index (GBI) requirements (18%), product quality (16%), environmental awareness (16%), and the retail sector (7%). The prominence of government procurement policies indicated that respondents perceived public sector purchasing as a key driver for expanding the domestic market for certified timber products. These findings are consistent with Malaysia's Government Green Procurement (GGP) initiative, which encourages government agencies to incorporate environmental criteria into the procurement of timber-based products from sustainable sources (Kementerian Tenaga, Teknologi Hijau dan Air [KeTTHA], 2018). Likewise, the Green Building Index (GBI) initiative highlights the growing importance of sustainable building certification, which could further promote the use of certified timber in the construction sector. The overall findings suggest that policy-driven initiatives, such as government policy and green building certification, are perceived by the timber industry as more effective in stimulating domestic demand for certified timber products than market-driven factors alone.

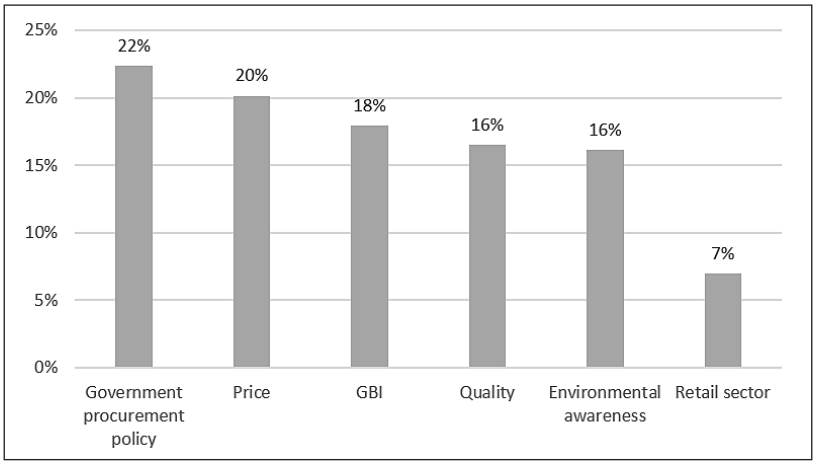


Figure 9. Factors influencing the demand for MTCS-certified timber products in the domestic market

Potential Market Segments For MTCS-Certified Timber Products

The study also examined respondents' perceptions of potential market segments for MTCS-certified timber products (Figure 10). The market segments evaluated in this study were aligned with the domestic timber sector identified under the National Agricommodity Policy 2021-2030 (DAKN2030). Based on the survey, the respondents identified the

construction sector (26%) as the market segment with the greatest potential for promoting the consumption of MTCS-certified timber products in Malaysia. This was followed by the furniture sector (25%), public infrastructure (20%), boat manufacturing (11%), handicraft (10%), and wood carving (8%). The findings suggest that respondents perceive the construction and furniture industries as the most promising sectors for expanding the domestic market for certified timber products. Particularly, the construction sector offers significant opportunities for increasing the use of certified timber due to its sustainable building materials. Compared with conventional construction materials such as concrete, steel and glass, which will help to reduce carbon emissions and support life-cycle assessments (LCA) in green building practices (Rojas Briales & Flinn, 2023). According to Shukri et al. (2018), in Malaysia, timber and timber products accounted for an average of 7.6% of the total material cost in building construction, with common applications including sawn timber, plywood and structural wood components.

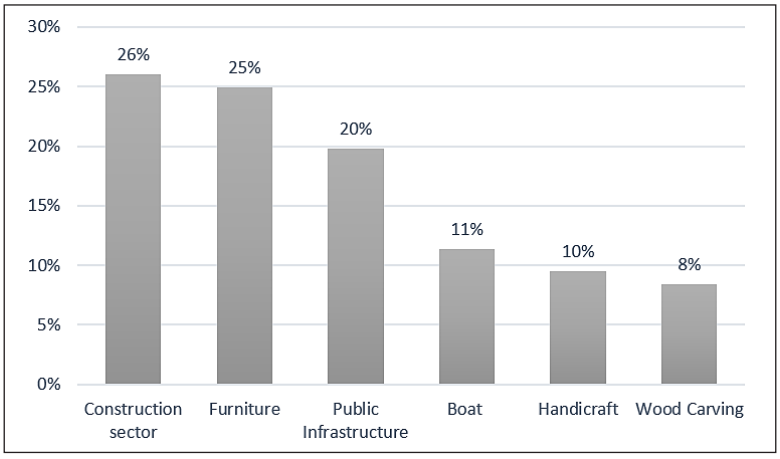


Figure 10. Potential market segments for MTCS-certified timber products

Reporting Domestic Sales of MTCS-Certified Timber Products

In order to understand the reporting practices for domestic sales of MTCS-certified timber products, the survey included questions on whether companies were required to report domestic sales to MTCC, as presented in Figure 11. Only 30.8% of the respondents indicated that MTCC requested companies to report domestic sales of MTCS-certified timber products, while 69.2% indicated that no such information was requested by MTCC. Similarly, only 30.8% of the surveyed companies reported voluntarily submitting information on domestic sales of MTCS-certified timber products to MTCC, whereas 69.2% indicated that they did not report such information. These findings suggest that information on the domestic trade of MTCS-certified timber is not collected consistently and does not

fully reflect the actual volume of MTCS-certified timber products traded in the domestic market. Consequently, the absence of systematic reporting may limit the availability of reliable data on domestic consumption of certified timber.

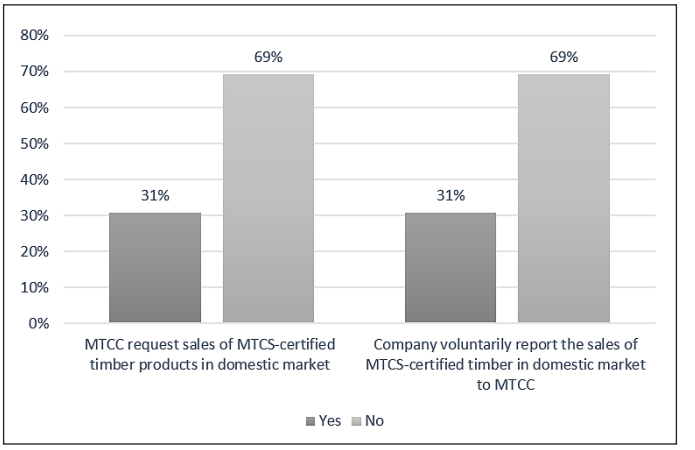


Figure 11. Reporting of MTCS-certified timber data to MTCC

Institutional Gaps in Data Collection For MTCS-Certified Timber Products

The analysis revealed several institutional information gaps in monitoring of MTCS-certified timber products, including certified timber production, export, domestic market and overall timber trade (Table 3). MTCC publishes information on certified forest area and certified timber exports through reports submitted by MTCS-CoC companies. While information on the export and domestic sales of certified timber products is collected and available, only export data are publicly reported, whereas information on domestic sales remains unavailable. The FDPM is responsible for monitoring timber production from forest resources and licensed primary timber processing companies. However, the analysis showed that timber production is reported as overall without distinguishing timber originating from FMUs. Similarly, MTIB compiles national timber trade statistics but does not separately record the production, export and domestic trade of MTCS-certified timber products. These findings indicate that information on certified timber products is fragmented across different agencies and not integrated into a single national reporting system. The absence of systematic reporting on domestic timber trade limits the ability of the policymakers and stakeholders to assess the domestic market performance of MTCS-certified timber products. Establishing a coordinated data collection and reporting mechanism among the relevant agencies would improve data availability and support evidence-based policies to strengthen Malaysia's domestic market for certified timber products.

Table 3
Information gap on MTCS-certified timber products among agencies involved in forest certification and timber trade in Malaysia

Agency	Data Source	Information Category	Information Gap
Forestry Department of Peninsular Malaysia (FDPM)	Timber production from licensed primary timber processing companies	Production of MTCS-PEFC certified timber	Not Available
		Export of MTCS-PEFC certified timber	Not Available
		Domestic sales of MTCS-PEFC certified timber	Not Available
Malaysian Timber Industry Board (MTIB)	National timber and timber products trade statistics by Department of Statistics Malaysia (DOSM)	Production of MTCS-PEFC certified timber	Not Available
		Export of MTCS-PEFC certified timber	Not Available
		Domestic sales of MTCS-PEFC certified timber	Not Available
		Overall timber industry trade	Available
Malaysian Timber Certification Council (MTCC)	Monthly reports submitted by MTCS -CoC certified companies	Certified FMUs Area	Available
		Production of MTCS-PEFC certified timber	Not Available
		Export of MTCS-PEFC certified timber	Available
		Domestic sales of MTCS-PEFC certified timber	Available
		Overall timber industry trade	Available

CONCLUSION

Overall, this study provides one of the first empirical assessments of the domestic demand for MTCS-certified timber products in Malaysia through a case study of MTCS-CoC certified companies in Pahang. The findings reveal that the market for MTCS-certified timber products remains predominantly export-oriented. Despite certified timber products being available in the domestic market, more than 60% of domestic buyers do not request any certification when purchasing MTCS-certified timber products. Traders, retailers and secondary processing companies constitute the largest customer groups, and the majority of the products are processed into value-added products or exported to the international market. This shows that forest certification in Malaysia continues to be primarily driven by international market requirements rather than domestic consumption. The study also identified several opportunities to strengthen the domestic market for certified timber products based on the views of the surveyed companies. The construction and furniture sectors were recognised as the most promising market segments in expanding domestic demand for MTCS-certified timber and timber products. Government purchasing policy, building rating tools, competitive pricing, product quality, and environmental awareness were perceived as factors that may influence domestic demand. Some companies received premium prices for certified timber products despite they were relatively modest.

This suggests that economic incentives in the domestic market remain uncertain compared with the available export market.

Another important contribution of this study is the identification of institutional information gaps in monitoring MTCS-certified timber products. The analysis showed that information on certified timber production, domestic trade and exports is collected by different agencies. However, the data were not integrated into a national reporting system. This limits the ability of policymakers and stakeholders to assess domestic market performance and evaluate the effectiveness of forest certification in supporting sustainable timber consumption in Malaysia. Based on these findings, it is recommended that certified timber products be incorporated into government procurement policy to promote the use of MTCS-certified timber in public infrastructure and government-funded construction projects. Furthermore, promotional programmes through green building assessment frameworks such as GBI and the Malaysian Carbon Reduction and Environmental Sustainability Tool (MyCREST) are recommended to encourage the adoption of certified timber among local industry and stakeholders. Finally, close collaboration among the MTCC, MTIB and FDPM is recommended to establish an integrated reporting system to monitor the trade of certified timber products in Malaysia. This would provide more reliable market information and help to develop evidence-based policies in expanding the domestic demand for MTCS-certified timber products in Malaysia.

This study has several limitations as it involved only 13 companies in Pahang selected through purposive sampling. The analysis was based on respondents' sales records from 2017-2021, which may contain incomplete data, while the findings on domestic demand were based on companies' perceptions rather than direct consumer responses. In addition, the final destinations of timber products sold domestically remain uncertain, as some may be further processed and exported. Therefore, the findings cannot be generalised to the entire Malaysian timber market but serve as a reference for future studies.

ACKNOWLEDGEMENT

The authors would like to thank the Malaysian Timber Industry Board (MTIB) and Malaysian Timber Certification Council (MTCC) for financial and technical support. The authors also thank all participating timber companies for their cooperation in this study.

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