



***MATERIALS USE TRENDS OF MALAYSIAN FURNITURE EXPORTERS IN  
KLANG VALLEY***

**ONG SIN LEI**

**FH 2019 57**

**MATERIALS USE TRENDS OF MALAYSIAN FURNITURE EXPORTERS IN  
KLANG VALLEY**

By

**ONG SIN LEI**

**A Project Report Submitted in Partial Fulfillment of the Requirements  
for the Degree of Bachelor of Wood Science and Technology in the  
Faculty of Forestry  
Universiti Putra Malaysia**

**2019**

## DEDICATION

For my beloved family:

Ong Hui Leong

Teoh Geok Mooi

Also my siblings.

To all my friends,

Interviewees and residents I had done my interview

Thank you for your encouragements supports

And the sacrifices that you have given,

Last but not least,

I dedicated this dissertation to Prof Dr Jegatheswaran Ratnasingam

Who has encouraged me, helped and give so much support during

Conducting this research and in my study.

Thank you for everything. May God Bless All of us.

## ABSTRACT

The objective of this study were to identify the most common materials used and the reasons for the popularity of these commonly used raw materials in Malaysian furniture exports. Secondary data published from Department of Statistic from 2010 – 2017 is collected to fulfil the first objective and questionnaire survey was carried out to gather information from the 25 largest furniture manufacturers and exporters in the Klang Valley. The results indicated over 80% of the furniture products are made from wooden furniture. Cost is the most important reason of the raw material being used followed by availability, profitability, market demand government policy and lastly technology used in processing raw material. The results would be beneficial to supplier of furniture manufacturer as to achieve higher performances in their businesses.

## ABSTRAK

Objektif kajian ini adalah untuk mengenal pasti bahan mentah yang paling biasa digunakan dan sebab-sebab bahan mentah tersebut digunakan dalam eksport perabot Malaysia. Data sekunder yang diterbitkan oleh Jabatan Statistik Malaysia dari tahun 2010 – 2017 dikumpulkan untuk memenuhi objektif pertama dan kajian kaji selidik telah dijalankan untuk mengumpul maklumat daripada 25 pengeluar and pengekspor perabot terbesar di Lembah Klang. Hasilnya menunjukkan lebih daripada 80% produk perabot dibuat daripada kayu. Kos adalah sebab yang paling penting bagi bahan mentah yang digunakan dalam pembuatan perabot diikuti oleh ketersediaan, keuntungan, permintaan pasaran, dasar kerajaan dan teknologi terkini yang digunakan dalam memproses bahan mentah tersebut. Dapatan kajian ini akan memberi manfaat kepada pembekal pengeluar perabot untuk mencapai prestasi yang lebih tinggi dalam perniagaan mereka.

## ACKNOWLEDGEMENTS

First and foremost, I would like to express my gratitude to my supervisor, Prof. Dr. Jegatheswaran Ratnasingam for the support and inspiring guidance. With the suggestion and constructive criticism provided by him, I able to complete this final year research for Bachelor Wood Science and Technology.

My appreciation also extend to the examiners, Dr. Khamurudin Mohd Noor and Dr. Zubaidah Harun, for their patient to evaluate my presentation and final year report project. They had given critical remarks and suggestion for me during the proposal presentation. Not forgetting to thank Dr. Mohamad Roslan Mohamad Kasim, for his suggestion and guidance in data analysis.

I would like to express my appreciation to all respondents who willing to spend their time to answer my questionnaire.

My sincere thanks goes to my project team, Tan Xu Chee, Liow Ting Yi, Low Shi Qin, Tan Zheng Shing and other course mates for their cooperation, encouragement and moral support throughout this study.


Lastly, I would like to convey my special gratitude to my beloved parents, Ong Hui Leong and Teoh Geok Mooi, and my siblings for their concern, love and encouragement.

## APPROVAL SHEET

I certify that this research project report entitled “Materials use trends of Malaysian Furniture Exporters in Klang Valley” by Ong Sin Lei has been examined and approved as a partial fulfillment of the requirements for the degree of Bachelor of Wood Science and Technology in the Faculty of Forestry, Universiti Putra Malaysia



Prof. Dr. Jegatheswaran A/L Ratnasingam  
Faculty of Forestry  
Universiti Putra Malaysia  
(Supervisor)



Prof. Dr. Mohamed Zakaria Hussin  
Dean  
Faculty of Forestry  
Universiti Putra Malaysia

Date: January 2019

## TABLE OF CONTENTS

<b>DEDICATION</b>	ii
<b>ABSTRACT</b>	iii
<b>ABSTRAK</b>	iv
<b>ACKNOWLEDGEMENTS</b>	v
<b>APPROVAL SHEET</b>	vi
<b>LIST OF TABLES</b>	ix
<b>LIST OF FIGURES</b>	x
<b>CHAPTER 1</b>	1
<b>INTRODUCTION</b>	1
<b>1.1 Background</b>	1
<b>1.2 Problem statement</b>	3
<b>1.3 Justification</b>	4
<b>1.4 Objectives</b>	4
<b>CHAPTER 2</b>	5
<b>LITERATURE REVIEW</b>	5
<b>2.1 Malaysia Wood Based Industry</b>	5
2.1.1 Wood Processing Mill	6
2.1.2 Furniture Industry	8
<b>2.2 Industry Profile of the Malaysian Furniture Industry</b>	9
2.2.1 Types of Furniture	9
2.2.2 Classification of the Industry	10
2.2.3 Performance of the Industry	11
<b>2.3 Raw Material used in Malaysian Furniture Industry</b>	12
2.3.1 Wood	12
2.3.2 Non-Wood	18
2.3.3 Metal	22
2.3.4 Plastic	23
2.3.5 Panels	24
<b>CHAPTER 3</b>	26
<b>METHODOLOGY</b>	26
<b>3.1 Research Approach</b>	26
<b>3.2 Location of study</b>	26
<b>3.3 Questionnaire Design</b>	27



3.4 Pre-test of questionnaire	28
3.5 Data collection	29
3.6 Data analysis	29
<b>CHAPTER 4</b>	<b>30</b>
<b>RESULT AND DISCUSSION</b>	<b>30</b>
4.1 The most common materials used in Malaysian furniture exports from 2010 – 2017	30
4.2 The popularity of these commonly used raw materials in Malaysian furniture exports	35
4.2.1 Respondent's company background	35
4.4.2 Raw Material of Products	36
4.4.3 Reason of Raw Material used	44
<b>CHAPTER 5</b>	<b>47</b>
<b>CONCLUSION AND RECOMMENDATION</b>	<b>47</b>
5.1 Conclusion	47
5.2 Recommendation	48
<b>REFERENCES</b>	<b>49</b>
<b>APPENDIX</b>	<b>52</b>
Appendix A	52

## LIST OF TABLES

		PAGE
Table 1	Wood processing mills in Malaysia	7
Table 2	Product categories and total value of furniture product export	9
Table 3	The commercial rattan species and their uses.	19
Table 4	Respondent's company background	35
Table 5	The reason of raw material used by respondents	44

## LIST OF FIGURES

		<b>PAGE</b>
Figure 1	Rubberwood ( <i>Hevea brasiliensis</i> )	12
Figure 2	Sepetir	13
Figure 3	Nyatoh	14
Figure 4	Kembang Semangkok	15
Figure 5	Dark Red Meranti	16
Figure 6	Merbau	17
Figure 7	Oil Palm Wood	21
Figure 8	Type of furniture export from Malaysia in export value (RM), 2010-2017	32
Figure 9	Type of furniture export from Malaysia in percentage (%), 2010-2017	34
Figure 10	Type of wooden furniture product produced	36
Figure 11	Raw material used in furniture manufacturing	37
Figure 12	Type of wood if wood as raw material	38
Figure 13	Supplier of respondent's company	40
Figure 14	Purchasing model of respondent's company per year	41
Figure 15	Market of furniture business	42
Figure 16	Export country of respondent's company	43

# CHAPTER 1

## INTRODUCTION

### 1.1 Background

The Malaysian wood products sector is an important socioeconomic sector in the country, generating foreign exchange in excess of RM 22 billion in 2017 and provides employment to 92,000 workers (Ratnasingam & McNulty, 2017). The furniture exports constitute almost 35% of the total exports earning of the wood products sector. Malaysia is now among the 10 largest exporter of furniture in the world (Malaysia Furniture Council, 2015). The Malaysian furniture industry has grown from a small industry to become a major foreign exchange earner in the country and all types of furniture exported to over 144 countries around the world.

Despite numerous economic downturns, Malaysian furniture industry is still supported by a strong global demand with a business-friendly environment, good quality products and a high potential market. According to the statistics from the International Trade and Industry Ministry, furniture exports charted a compound annual growth rate of about 3.5% between 2012 and 2016. Malaysia's furniture exports are expected to grow exceeding RM12 billion by year 2020 (MATRADE, 2017).

Malaysia is blessed with rich natural resources. There are a variety of raw materials such as wood, plastic, metal, rattan, bamboo and other resources consumed by the Malaysian furniture industry (Ratnasingam, 2005).

80% of Malaysia's furniture export were wooden furniture with valued at RM7.60 billion (MATRADE, 2017). The availability of raw materials gives Malaysia an edge in producing wooden furniture that meets international quality standard and requirement in export.

The government hopes to see Malaysian furniture exports improve further following the ban on Rubberwood exports effective on 1<sup>st</sup> July 2017 (Mah, 2017). Hence, materials use trends is very important to the industry as material used will directly affect in Malaysian Furniture Exports.

## **1.2 Problem statement**

The availability of raw material supply at competitive price, low labour cost and favourable internal price create positive conditions for growth of Malaysian furniture industry. However, the rapid growth of the furniture industry has brought new challenges relating to industry's future competitiveness and sustainability. Even through the Malaysian furniture industry is continuing its accelerated growth, there are several weaknesses that exist.

These problem include although Malaysia offers a variety of raw materials for the furniture industry, wooden furniture remains the predominant production from the industry. The apparent problem for small and medium local manufacturers dealing with a variety of raw materials is the lack of information and knowledge. Therefore, it is important to examine the trends in materials use in the furniture sector and also identify the main problems as to why other materials have not found widespread application in the sector.

Studying and understanding the different materials used in furniture export will help manufacturers and suppliers of materials understand the market requirements better. This research will look into the most common materials used and the reason for its high usage in furniture exports.

### **1.3 Justification**

Since wooden furniture is the most common type in Malaysian furniture export, the material of furniture is worth to be studied. This research mainly focused on the material used in Malaysian furniture export based on different type of materials and the different species of wood. This is very important to the supplier of furniture manufacturer. The study area focused on Klang Valley, which has about 37 exporters of furniture. Studying and understanding the different materials used in furniture export always help supplier to achieve higher performances in their businesses. Therefore, this research will look more into the popularity of these commonly used raw materials in Malaysian furniture exports.

### **1.4 Objectives**

The objective of this study are:

1. To identify the most common materials used in Malaysian furniture exports from 2010 – 2017.
2. To determine the reasons for the popularity of these commonly used raw materials in Malaysian furniture exports.

## REFERENCES

Department of Statistics. (2012). *Statistics on forest products industry*. Department of Statistics Database, Putrajaya, Malaysia.

Department of Statistics. (2014). *Statistics on the wooden furniture industry*. Department of Statistics Database, Putrajaya, Malaysia.

Forestry Department of Peninsular Malaysia. (2016). *Rattan and Bamboo*. Retrieved from <https://www.forestry.gov.my/index.php/en/buluh-dan-rotan>.

Hansen, E. C., & Andresen, R. C. (2004). Forest certification: Toward common standards. *Forest Product Journal*, 54(3), 42–50. Retrieved from: <http://hh.divaportal.org/smash/get/diva2:238641/fulltext01.pdf>.

Mah, S. K. (2017, July 3). Rubberwood export ban: RM12b target for furniture makers by 2020. *New Straight Times*. Retrieved from <https://www.nst.com.my/business/2017/07/254167/rubberwood-export-ban-rm12b-target-furniture-makers-2020>.

Malaysia Timber Industry Board. (2017). *Malaysian Timber E-STATS 2017*. Retrieved from: [http://www.mtib.gov.my/index.php?option=com\\_content&view=article&id=2034&Itemid=65&lang=en](http://www.mtib.gov.my/index.php?option=com_content&view=article&id=2034&Itemid=65&lang=en).

Malaysian International Furniture Fair. (2018). *MIFF 2018 Post-Show Report*. Retrieved from: <http://2018.miff.com.my/about-miff/post-show-report/>

Malaysian Palm Oil Council. (2012). *The Malaysian Palm Oil Council launches a mark of provenance and an information campaign for more responsible palm oil*. Retrieved from <http://www.mpoc.org.my/default.aspx>.

MATRADE. (2017). *Malaysia's Furniture Sector Recognized Globally*. Retrieved from <http://www.matrade.gov.my/en/about-matrade/media/press-releases/4063-malaysia-s-furniture-sector-recognised-globally-2>.

Ministry of International Trade and Industry. (2015). *Malaysia International Trade and Industry Report 2015*. Kuala Lumpur: MITI.



Mohamad, A. (1995). Rattan in Malaysia: Conservation status, biodiversity base and its strategic programme. *FRIM Rep*, 67, 07-11.

MTC. (2018). *MTC Wood Wizard*. Retrieved from [http://www.mtc.com.my/wizards/mtc\\_tud/index.php](http://www.mtc.com.my/wizards/mtc_tud/index.php).

NATIP. (2009). *NATIP National Timber Industry Policy 2009-2020*, Malaysia: Ministry of Plantation Industries and Commodities.

Ponder, N. (2013). Consumer attitudes and buying behavior for home furniture. *Report prepared for the Furniture Outreach Program at Franklin Furniture Institute, Starkville, Mississippi, USA*.

Rashid, A. (2016, November 13). Industri perabot mampu capai sasaran eksport RM9.5b. *Utusan Malaysia*. Retrieved from <http://www.mtib.gov.my/repository/resourcescenter/industri%20perabot%20capai%20sasaran%20eksport%20rm9b.jpg>.

Ratnasingam, J. (2005). Status of Technology in the Malaysian Wood Industry. *Asian timber*, 24(4), 22 – 25.

Ratnasingam, J. (2015). *The Malaysian Furniture Industry – Unravelling its Growth and Challenges to Innovation*. Selangor: Universiti Putra Malaysia Press.

Ratnasingam, J. (2017). *Innovation and Its Status in the Malaysian Wood Industry*. Singapore: IFRG.

Ratnasingam, J., & Ioras, F. (2003). 'The sustainability of the Asian wooden furniture industry,' *Holz als Roh-und Werkstoff* 61(3), 233 – 237. DOI: 10.1007/s00107-003-0382-9.

Ratnasingam, J., Ioras, F., & Macpherson, T. H. (2007). Influence of Wood Species on the Perceived Value of Wooden Furniture: The Case of Rubberwood. *Holz Roh Werkst*, 65(6), 487- 489.

Ratnasingam, J., & Jalil, M. H. (2011). *Rubberwood - Its Future in Malaysia*. IFRG Report No. 23, Singapore, 39 p.

Rodgers, D. (2007). *A Guide to Outdoor Metal Furniture*. Retrieved from [http://www.sideroad.com/Outdoor\\_Spaces/outdoor\\_metal\\_furniture.html](http://www.sideroad.com/Outdoor_Spaces/outdoor_metal_furniture.html).

SMIDEC. (2002). *Small and Medium Enterprises*. Retrieved from <http://www.smecorp.gov.my/index.php/en/small-and-medium-sized-enterprises>.

Timothy, H. (2005). Timber Shortage and the Sustainability of the Malaysian Furniture Industry. *Scientific Journal of Forest Research*, 3(1), pp 1-17.

WWF. (2017). *Rattan facts and information*. Retrieved from [http://greatermekong.panda.org/our\\_solutions/projects/sustainablerattan/factsinformation/](http://greatermekong.panda.org/our_solutions/projects/sustainablerattan/factsinformation/)