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REPORT

FEBRUARY

2011

ESTABLISHING A SUSTAINABLE PRODUCTION SYSTEM OF
RATTAN PRODUCTS IN CAMBODIA, LAOS, AND VIETNAM

GLOBAL RATTAN TRADE: PRESSURE ON FOREST RESOURCES

ANALYSIS AND CHALLENGES

February 2011

Global Rattan Trade: Pressure on Forest Resources

Analysis and Challenges

February 12, 2011

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Summary

The aim of this first-ever assessment of the global trade in rattan products is to map global rattan trade flows, identify key markets, and outline major trends. This is important background information for the WWF Sustainable Rattan Programme currently being implemented in Cambodia, Lao PDR, and Viet Nam.

This assessment is primarily based on trade data provided by the United Nations Commodity Trade Statistics Database (UN Comtrade). Due to shortcomings associated with data provided by some of the key rattan-producing countries, this assessment is based mainly on trade data reported by import countries. Other relevant reports and websites, such as the International Network for Bamboo and Rattan (INBAR), as well as various experts were also used as sources of information.

The main conclusions from this analysis are:

1. Rattan resources are declining

In all countries where relevant information is available, rattan resources are declining rapidly, particularly for commercially valuable species and species with large diameter. The primary reasons for this are forest loss, which reduces suitable habitat for rattan plants, and overexploitation. Inventories of rattan resources do not exist in most producer countries, and where they do exist, they are out-dated or just rough estimations. As the actual volume and growth rate of rattan resources are unknown, the annual allowable cut is not determined in terms of sustainability but by the current demand of the rattan industry. This leads to overexploitation of commercially valuable rattan resources.

2. Global trade in rattan canes has decreased significantly in recent years

Global imports of rattan canes decreased from an average of 87,500 tonnes annually between 2000 and 2006 to 62,000 tonnes in 2008. The import value also decreased, from US\$71.3 million in 2000 to US\$59.6 million in 2008.

3. Indonesia is the dominating rattan export country

Indonesia accounted for about 80 per cent of rattan in the global market in 2008, and was the leading exporter of rattan furniture and the second-largest exporter of rattan mats, plaits, and basketwork. The key market was the EU, which accounted for almost two-thirds of Indonesian rattan furniture exports and half of Indonesian basketwork exports.

4. China is the dominating import country for rattan canes

Although imports have decreased by almost half since 2003, China's imports accounted for 60 per cent of rattan canes traded globally in 2008. China sourced rattan canes almost exclusively from Indonesia and Myanmar, in order to produce rattan basketwork and furniture for export mainly to the EU and North America.

5. Viet Nam is the third-largest supplier of rattan furniture and basketwork to the EU

Eighty per cent of rattan furniture and about half of the basketwork exported by Viet Nam went to the EU in 2008, in particular to Germany and France. To produce these goods, Viet Nam imports rattan canes from Lao PDR, Indonesia, and, in previous years, Cambodia and the Philippines. Imports of rattan canes seem to have dropped sharply since 2005. However, due to weak and missing trade data it is impossible to exactly determine the rattan trade between Viet Nam and neighbouring countries. In addition, substantial unofficial imports to Viet Nam have been reported in recent years^{xviii}.

6. The Philippines ranks number four in the global export of rattan basketwork and furniture

The Philippines' primary market is the US, which accounted for 84 per cent of rattan basketwork and three-quarters of furniture exported by the Philippines in 2008. As the Philippines imported almost no rattan canes from other countries, these goods were produced from rattan harvested domestically in the Philippines.

7. Singapore imports rattan canes mainly from Indonesia and Malaysia in order to re-export them to developing nations and emerging economies.

Singapore's main market in 2008 was Egypt; other markets are China, India, Pakistan, and Thailand. As Malaysia also imports rattan canes from Indonesia, most rattan canes exported by Singapore were probably harvested in Indonesia. However, the rattan trade between these three countries is extremely untransparent, with the reported trade data being contradictory.

8. Legal frameworks and credible certification can offer solutions to declining rattan resources

Illegal rattan harvesting is widespread as monitoring is weak and difficult^{iii, xxvi, xxv}. The US amended the Lacey Act in 2008 in order to prohibit imports of illegally harvested plant materials and products made from illegally harvested plants. This import regulation by a key market for rattan basketwork and furniture may have significant implications for the rattan industry. However while it may reduce illegal rattan harvesting, the Lacey Act does not address unsustainable harvesting if such harvesting is in line with the legislation of the country of origin. The other key rattan market, the EU, does not have any import regulations for rattan, as coming legislation under the Forest Law Enforcement, Governance, and Trade (FLEGT) Action Plan only covers timber and not other forest products.

Credible forest certification can be used as an instrument to promote sustainable rattan management. The world's first FSC (Forest Stewardship Council) certification of a rattan forest is currently underway in Lao PDR, and includes FSC Chain of Custody certification of the local rattan industry. The WWF Sustainable Rattan Programme is working with rattan producers and processors in Lao PDR, Viet Nam, and Cambodia to develop a more sustainable rattan sector. This will generate additional jobs, income, and foreign exchange revenues for the rattan sector in these countries, and will hopefully be an incentive for other Southeast Asian countries to follow suit.

The promotion of FSC-certified rattan products by furniture importers and traders in the US and Europe, as well as demand from consumers for certified rattan, are also steps towards creating a more reliable supply in the face of dwindling rattan resources.

Summary in German

Zusammenfassung

Das Ziel dieser weltweit ersten Beurteilung des Handels mit Rattan-Produkten ist es, die globalen Handelsströme von Rattan aufzuzeigen, Schlüsselmärkte zu identifizieren und bedeutende Trends zu skizzieren. Diese wichtigen Hintergrundinformationen dienen dem WWF Programm für umwelt- und sozialverträglich produzierten Rattan, das zurzeit in Kambodscha, Laos und in Vietnam durchgeführt wird.

Die Beurteilung basiert in erster Linie auf Daten aus der Warenhandelsdatenbank der Vereinten Nationen (UN Comtrade). Da es schwierig war, Zahlen von den wichtigsten Rattan-Erzeugerländern zu bekommen, stützt sich diese Beurteilung im Wesentlichen auf Handelsdaten, die von den Einfuhrländern zur Verfügung gestellt wurden. Als Informationsquelle wurden weitere relevante Berichte und Websites herangezogen, beispielsweise vom International Network for Bamboo and Rattan (INBAR). Zudem floss die Einschätzung verschiedener Experten ein.

Die wichtigsten Schlussfolgerungen aus dieser Analyse sind:

1. Rattan-Bestände nehmen ab

In all jenen Ländern, für welche aussagekräftige Informationen zur Verfügung stehen, gehen die Rattan-Bestände schnell zurück, insbesondere bei den kommerziell wertvollen Arten und jenen Arten mit größerem Durchmesser. Hauptgründe hierfür sind einerseits die Entwaldung, durch die Rattan-Pflanzen geeignete Lebensräume verlieren, und andererseits die Übernutzung der Rattan-Pflanze. In vielen Rattan produzierenden Ländern fehlen Verzeichnisse der Rattan-Bestände. Wo es sie trotzdem gibt, sind sie meist veraltet oder basieren auf groben Schätzungen. Das tatsächliche Volumen und die Wachstumsraten von Rattan-Ressourcen sind nicht bekannt und die jährlich zulässigen Erntemengen bestimmt die Rattan-Industrie. Dadurch fehlt der Aspekt der Nachhaltigkeit, was zu einer Übernutzung der kommerziell wertvollen Rattan-Arten führt.

2. Weltweiter Handel mit Rattan-Rohren ist in den letzten Jahren deutlich rückläufig

Die weltweiten Importe von Rattan-Rohr gingen von durchschnittlich 87'500 Tonnen pro Jahr im Zeitraum 2000 bis 2006 auf 62'000 Tonnen im Jahr 2008 zurück. Auch der Wert der Importe fiel von USD 71.3 Millionen im Jahr 2000 auf USD 59.6 Millionen im Jahr 2008.

3. Indonesien - das dominierende Rattan-Exportland

2008 hatte Indonesien einen Anteil von etwa 80 Prozent am globalen Rattan-Markt und war führendes Exportland von Rattan-Möbeln sowie zweitgrößtes Exportland von Rattan-Matten, -Geflecht und – Korbwaren. Der wichtigste Absatz-Markt von Indonesien ist die EU, in die fast zwei Drittel der Rattan-Möbelexporte sowie die Hälfte der Korbwarenxporte fließen.

4. China dominiert beim Import von Rattan-Rohr

Obwohl der Import seit 2003 um fast die Hälfte zurückging, importierte China 2008 60 Prozent des weltweit gehandelten Rattan-Rohrs. China bezieht Rattan-Rohr fast ausschliesslich aus Indonesien und Myanmar, um Rattan-Korbwaren und -Möbel für den Export herzustellen, der vorwiegend in die EU und nach Nordamerika fließt.

5. Vietnam ist drittgrößter Lieferant von Rattan-Möbeln und -Korbwaren der EU

Achtzig Prozent der von Vietnam exportierten Rattan-Möbel und etwa die Hälfte der Korbwaren gehen in die EU, insbesondere nach Deutschland und Frankreich. Für die Herstellung dieser Waren importiert Vietnam Rattan-Rohr aus Laos, aus Indonesien und früher auch aus Kambodscha sowie aus den Philippinen. Chinas Importe von Rattan-Rohr sind seit 2005 stark zurückgegangen. Aufgrund schlechter oder nicht vorhandener Handelsdaten ist es jedoch nicht möglich, den Rattan-Handel zwischen Vietnam und seinen Nachbarländern genau zu bestimmen. In den vergangenen Jahren wird zudem von erheblichen inoffiziellen Importen nach Vietnam berichtet ^{xviii}.

6. Philippinen nimmt Platz vier ein bei globalen Exporten von Rattan-Korbwaren und -Möbeln

Der wichtigste Markt der Philippinen sind die USA. Sie nehmen 84 Prozent der Rattan-Korbwaren und Dreiviertel der Rattan-Möbel von den Philippinen ab. Da die Philippinen fast kein Rattan-Rohr aus anderen Ländern importieren, stammt dieses aus philippinischen Wäldern.

7. Singapur importiert Rattan-Rohr aus Indonesien und Malaysia um wieder dieses zu exportieren

Singapurs Importe von Rattan-Rohr stammen vorwiegend aus Indonesien und Malaysia. Singapur exportiert vor allem nach Ägypten. Danach folgen China, Indien, Pakistan und Thailand. Da Malaysia auch Rattan-Rohr aus Indonesien importiert, stammt wahrscheinlich der größte Teil des von Singapur exportierten Rattans aus Indonesien. Der Rattan-Handel zwischen diesen Ländern ist äußerst intransparent, die Handelsdaten widersprüchlich.

8. Rechtliche Rahmenbedingungen und glaubwürdige Zertifizierungen zeigen Lösungen auf, den Rückgang der Rattan-Ressourcen zu stoppen

Illegales Ernten von Rattan ist weit verbreitet, da die Überwachung schwierig ist. Die USA haben 2008 den Lacey Act geändert, um Importe von illegal geernteten Pflanzenmaterialien und Produkten aus illegal geernteten Pflanzen zu verbieten. Solche Einfuhrbestimmungen auf einem Schlüsselmarkt für Rattan-Korbwaren und -Möbeln können bedeutende Auswirkungen für die Rattan-Industrie haben. Doch auch wenn der Lacey Act illegales Ernten eindämmt, so schränkt er umweltschädliches Ernten nicht ein, sofern dieses mit den gesetzlichen Bestimmungen des Herkunftslandes in Einklang steht. Der zweite Schlüsselmarkt für Rattan, die EU, kennt keine Einfuhrbestimmungen für Rattan, denn der EU-Aktionsplan zu Rechtsdurchsetzung, Politik und Handel im Forstsektor (FLEGT) deckt nur Bauholz und keine anderen Forstprodukte ab.

Eine glaubwürdige Forstzertifizierung kann Instrument für die Förderung eines nachhaltigen Rattan-Managements sein. Die weltweit erste FSC-Zertifizierung (Forest Stewardship Council) eines Rattan-Waldes läuft zurzeit in Laos und umfasst die Zertifizierung der lokalen Rattan-Industrie. Der WWF arbeitet in seinem Programm für umwelt- und sozialverträglich produzierten Rattan mit Produzenten und -Verarbeitern in Laos, Vietnam und Kambodscha zusammen, um eine nachhaltige Rattan-Nutzung zu entwickeln. Dies bringt neue Arbeitsplätze, die Gewinne und Deviseneinnahmen für die Rattan-Industrie bleiben in den Ländern und das Projekt soll anderen Länder Südostasiens ein Anreiz sein, dem Beispiel zu folgen.

Die Förderung von FSC-zertifizierten Rattan-Produkten durch Möbel-Importeure und -Händler in den USA und in Europa sowie die Nachfrage der Verbraucher nach zertifiziertem Rattan tragen zudem bei, die Versorgung der schwindenden Rattan-Pflanzen zu sichern und die wertvollen Tropenwälder zu erhalten.

1 Introduction

Rattan is a climbing plant from the palm family found in forests throughout Asia and Africa, with more than 600 species and 13 genera identified. Used for a variety of purposes, including food, shelter, and furniture production, it is a valuable Non-Timber Forest Product whose economic and socio-cultural importance at a global level is being increasingly recognized.

Southeast Asia, together with neighbouring China, is one of the fastest-growing economic regions in the world. This rapid expansion is driving demand for natural resources at a level that far outstrips efforts to ensure sustainability. The rural poor are often most heavily impacted by the continued degradation of the natural resource base on which they rely. There is an urgent need to develop models of sustainable production that can support continued growth while benefiting rural communities.

Concerned by reports of declining rattan resources, WWF has been piloting new initiatives focusing on rattan sustainability and traceability since 2009, in partnership with national institutions, local communities, and the private sector and with co-funding from the European Union (EU), DEG (with public funds of the German Federal Ministry for Economic Cooperation and Development), and international retailer IKEA. Within this context, WWF commissioned this assessment of the global rattan supply chain, including an analysis of key players and with focus on Asia as well as Europe and North America. An analysis of trade data, a literature review, and interviews with actors were carried out by the authors to create the first global rattan trade analysis. The objective is to map the global rattan trade flow, identify the key markets, and outline major trends. This is important background information for the WWF Sustainable Rattan Program currently being implemented in Cambodia, Lao PDR, and Viet Nam, which addresses the entire supply chain — from more sustainable forestry practices and cleaner production to responsible trade.

This approach is in line with the strategy of the International Network for Bamboo and Rattan (INBAR; www.inbar.int), an intergovernmental organization with the objective of finding ways of using bamboo and rattan to alleviate poverty and protect the environment. As the International Commodity Body of the Common Fund for Commodities (CFC) for bamboo and rattan, INBAR promotes responsible and effective supply chain development throughout the world. The network links stakeholders at all levels from producers to consumers, including global trading systems, and is widely recognized as the premiere source of expertise in

bamboo and rattan¹.

2 Methodology

The rattan trade analysis is based on publicly available trade data provided by the United Nations Commodity Trade Statistics Database (UN Comtrade; <http://comtrade.un.org/db/>). This comprehensive database provides annual data on international trade reported by the exporting country as well as by the importing country, by quantity (kg) and value (US\$).

UN Comtrade combines goods traded into product groups according to classification schemes such as the *Standard International Trade Classification (SITC)* and the *Harmonized Commodity Description and Coding Systems (HS)*. The *HS Nomenclature 2007 Edition* provides the most detailed classification for rattan products, specifying the following six categories:

- Code 140120: *Rattan used primarily for plaiting*
- Code 460122: *Mats, matting and screens, of rattan plaiting materials, flat-woven or bound together in parallel*
- Code 460193: *Plaits and similar products, of rattan plaiting materials, whether or not assembled into strips; plaiting materials, plaits and similar products of rattan, flat-woven or bound together in parallel (excl. mats, matting and screens; wallcoverings of heading 4814; parts of footwear or headgear)*
- Code 460212: *Basketwork, wickerwork and other articles, made directly to shape from rattan plaiting materials or made up from goods of rattan plaiting materials of heading 4601, and articles of loofah (excl. wallcoverings of heading 4814; twine, cord and rope; footwear and headgear and parts thereof; vehicles and vehicle superstructures; goods of chapter 94, e.g. furniture, lighting fixtures)*
- Code 940151: *Seats of bamboo or rattan*
- Code 940381: *Furniture of bamboo or rattan (excl. seats and medical, surgical, dental or veterinary furniture)*

The data analysis presented in this report follows these categories, but groups rattan plaits and mats together as well as rattan and bamboo seats and rattan and bamboo furniture together.

2.1 Shortcomings in UN trade data

While UN Comtrade is the most comprehensive database with regards to international trade, it nevertheless has several shortcomings. These are discussed in more detail below.

Incomplete export data

Trade data at a global level is incomplete as several countries do not report their foreign trade data to the UN. This is particularly relevant to global rattan trade, with some of the key rattan producing and export countries not reporting trade data in recent years:

- The most recent foreign trade data reported by **Lao PDR** are for 1974
- The most recent foreign trade data reported by **Myanmar** are for 1992 and 2001, and do not specify rattan exports
- The most recent foreign trade data reported by **Cambodia** are for 2004 and 2008, with rattan exports included in 2004 data only
- At the time of publishing, **Viet Nam** had reported trade data for 2008, but not for 2009.

Furthermore, **Indonesia** does not use the *HS Nomenclature 2007 Edition* to report trade data, but instead the *1996 Edition*, which does not detail whether products are made of rattan or other vegetable material. Therefore, rattan-specific export data for mats, plaits, basketwork, and furniture reported by Indonesia are not available.

These incomplete data mean that any analysis based on export data would underestimate global rattan trade and ignore key export countries. In order to overcome this, trade data reported by import countries were used to recalculate exports, by building a total of all reported imports. However it should be noted that even this approach cannot identify rattan trade between two countries if neither is reporting trade data to the UN.

Incomplete import data for 2009

In October 2010, when this analysis was carried out, 2009 trade data were not yet available for several rattan importing countries, including Spain, Poland, Hungary, Viet Nam, and Egypt.

Product	Spain		Poland		Egypt		Hungary		Slovakia		Viet Nam		Total	
	Weight	Value	Weight	Value	Weight	Value	Weight	Value	Weight	Value	Weight	Value	Weight	Value
Canes	0%	1%	0%	1%	5%	7%	0%	0%	0%	0%	0%	0%	5%	11%
Mats	28%	10%	3%	10%	0%	0%	0%	0%	0%	0%	1%	1%	32%	21%
Plaits	13%	8%	25%	54%	0%	0%	1%	1%	1%	1%	1%	1%	41%	64%
Basketwork	4%	5%	3%	4%	0%	0%	0%	0%	0%	1%	0%	0%	8%	9%
Seats	7%	7%	3%	3%	0%	0%	1%	1%	0%	0%	0%	0%	12%	12%
Other furniture	9%	11%	6%	6%	0%	0%	2%	2%	2%	1%	0%	0%	19%	20%
Total	6%	8%	3%	4%	1%	1%	1%	1%	1%	1%	0%	0%	12%	15%

Table 1: Relevance of countries that had not reported 2009 trade data in October 2010 and their percentage of global import of rattan products in 2008.

In 2008, imports by these countries accounted for 12 per cent by weight and 15 per cent by value of global imports of all rattan (Table 1). According to 2008 trade data, Spain and Poland are important import countries for rattan mats and plaits, while Egypt is a significant importer of rattan canes. In addition, the four European countries (Spain, Poland, Hungary, and Slovakia) were responsible for up to 20 per cent of global imports of rattan furniture. Thus, at the time of analysis, 2009 trade data could not be used to accurately calculate world trade and exports of rattan products. For this reason, this assessment is based on 2008 figures, the most recent complete figures available.

Incorrect data

We have identified a number of apparently incorrectly reported trade figures from some countries. In addition, we believe that some of the estimated figures for quantity provided by UN Comtrade — which are calculated from value using the median unit value of all rattan cane trade flows world wide after the elimination of outliersⁱⁱ — are incorrect for some countries. Specific cases are discussed in more detail in sections 3 and 4.

No rattan-specific trade data for mats, plaits, basketwork, and furniture prior to 2007

The *Harmonized Commodity Description and Coding Systems (HS)* has only included rattan-specific product categories since 2007. Earlier editions did not divide the categories of mats, plaits, and basketwork according to the kind of vegetable material they are made of and even *HS Nomenclature 2007 Edition* does not differentiate between bamboo and rattan seats or furniture. The only rattan-specific category in earlier *HS* editions (1992, 1996 and 2002) is *Rattan used primarily for plaiting*. This means that prior to 2007, historical trends can only be inferred for *Rattan used primarily for plaiting*.

Incomplete rattan-specific trade data for mats, plaits, basketwork, and furniture since 2007

Trade data on rattan-specific product categories (mats, plaits, and basketwork as well as seats and other furniture) since 2007 are not available by quantity, only by value, for some countries — including key import countries like the US. Such imports account for 16–29 per cent of world imports of the respective product category by value. Thus, 2008 world trade and export quantities of these rattan products cannot be compared to figures for 2007.

3 World trade in rattan

3.1 Rattan canes

The product category *Rattan used primarily for plaiting* (Code 140120; hereafter referred to as “rattan canes”) includes raw and semi-processed rattan canes of any quality, no matter whether dried, straightened, split, assorted, or not, as long as the rattan canes are not assembled into, e.g., mats, plaits, or basketwork.

3.1.1 Global trade

Import data for rattan canes seem to be complete in regard to quantity and values for the years 2000 to 2008, except for those countries listed in section 2 which did not report their trade data. This is therefore the only rattan-specific product category for which adequate trade data exist to infer a historical trend.

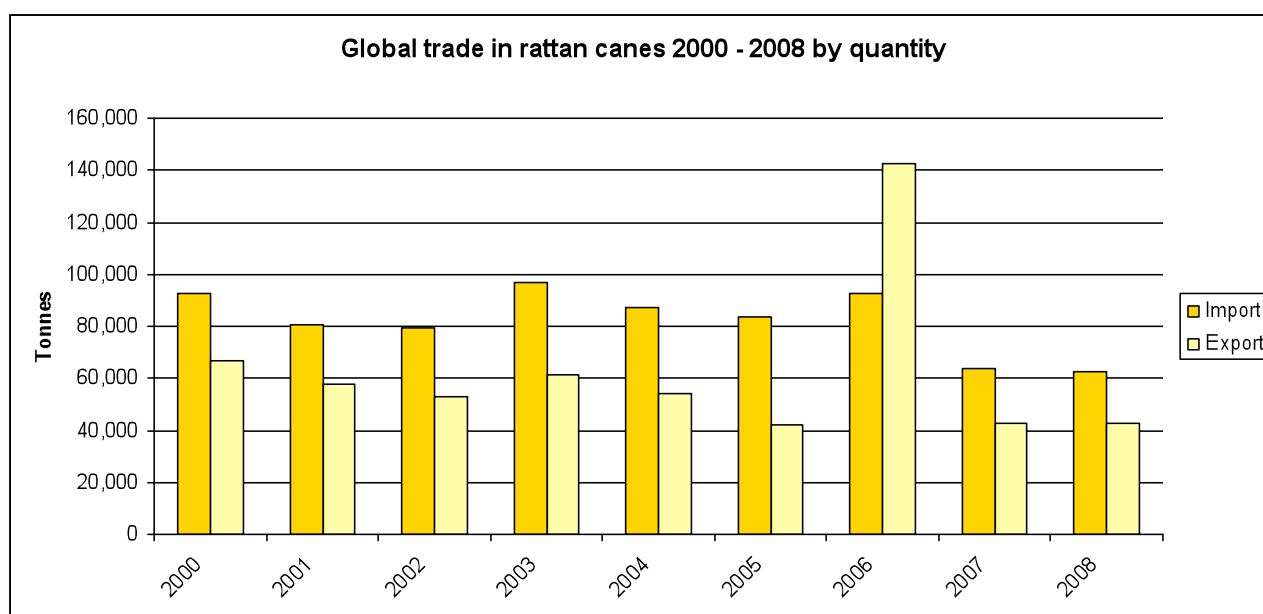


Figure 1: Global trade in rattan canes by quantity between 2000 and 2008 (Source: UN Comtrade)

According to data reported by import countries, global imports in rattan canes have significantly decreased in recent years, from an average of 87,500 tonnes annually between 2000 and 2006 to 64,000 tonnes in 2007 and 62,000 tonnes in 2008 (Figure 1). The import value also decreased, from US\$71.3 million in 2000 to US\$59.6 million in 2008 (Figure 2).

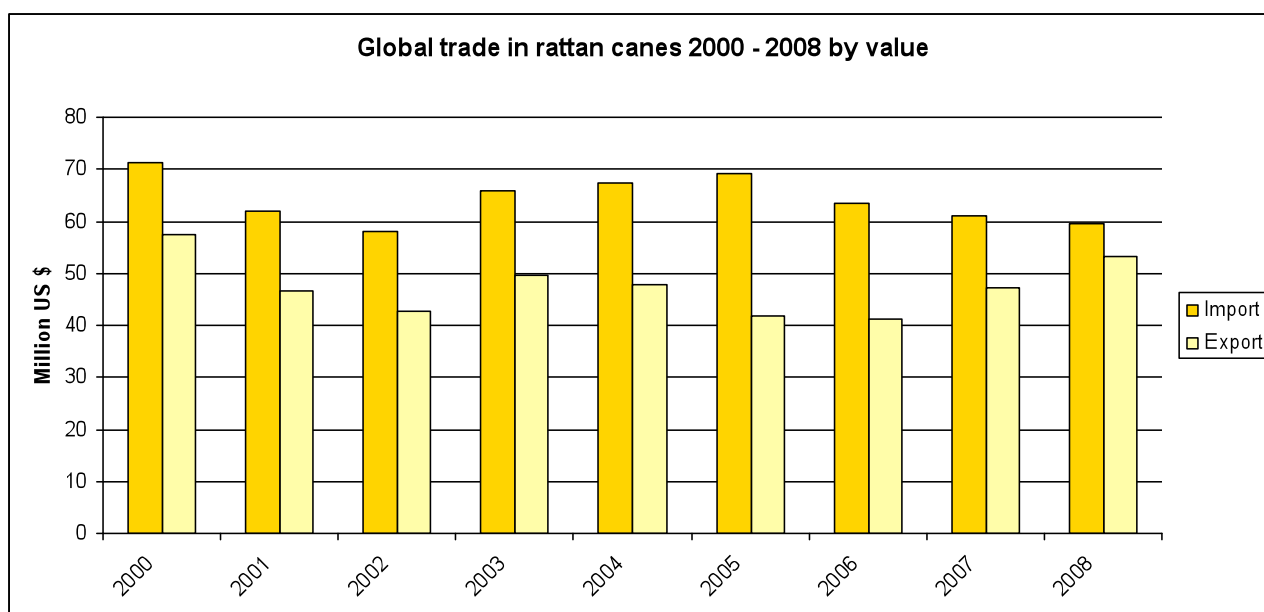


Figure 2: Global trade in rattan canes by value between 2000 and 2008 (Source: UN Comtrade)

Although trade data for 2009 were incomplete at the time of analysis (section 2.1), available import data indicate a further significant decrease in 2009. For example, imports by the largest importer of rattan canes, China, declined by 19 per cent in 2009 compared to 2008. This decline may be a result of the global economic crisis, competition from other natural fibres and synthetic rattan, and/or shrinking rattan resources. However, long-term trade data indicate that overall rattan demand may be cyclic and may increase again in the next years.

Comparison of import and export data shows huge discrepancies, with quantities and values reported by import countries exceeding those reported by export countries in every year between 2000 and 2008 (with the exception of 2006 quantity figures, as discussed below; Figure 1 and Figure 2). In 2005, for example, the reported import quantity was almost twice the reported export quantity. These deviations in UN figures are due to two reasons. Firstly, the total of reported exports does not include exports from countries which did not report trade data to the UN in recent years, including relevant export countries like Myanmar, Lao PDR, and Cambodia. Secondly, some key export countries, such as Indonesia and China, seem to underreport the quantity and value of rattan canes exported. Trade data reported by importing countries should therefore be seen as the more reliable data pool.

UN trade data show a peak in export quantity (Figure 1), but not in export value (Figure 2), in 2006. However, this peak is most likely the result of an incorrect data entry for Malaysia, which reported exports of 106,000 tonnes of rattan canes in 2006. This is 100 times more than the year before and the year after; however, the value of the 2006 export is within the magnitude of export values in the years before and after. In addition, 105,000 tonnes of this quantity are reported as being exported to Singapore, but Singapore reported an import of just 2,048 tonnes of rattan canes from Malaysia in 2006.

3.1.2 Key export countries

Indonesia was the dominating rattan cane export country in 2008 (Figure 3 and Figure 4), exporting 37,500 tonnes — 60 per cent of global exports — with a value of US\$34 million (an average price of US\$915 per tonne).

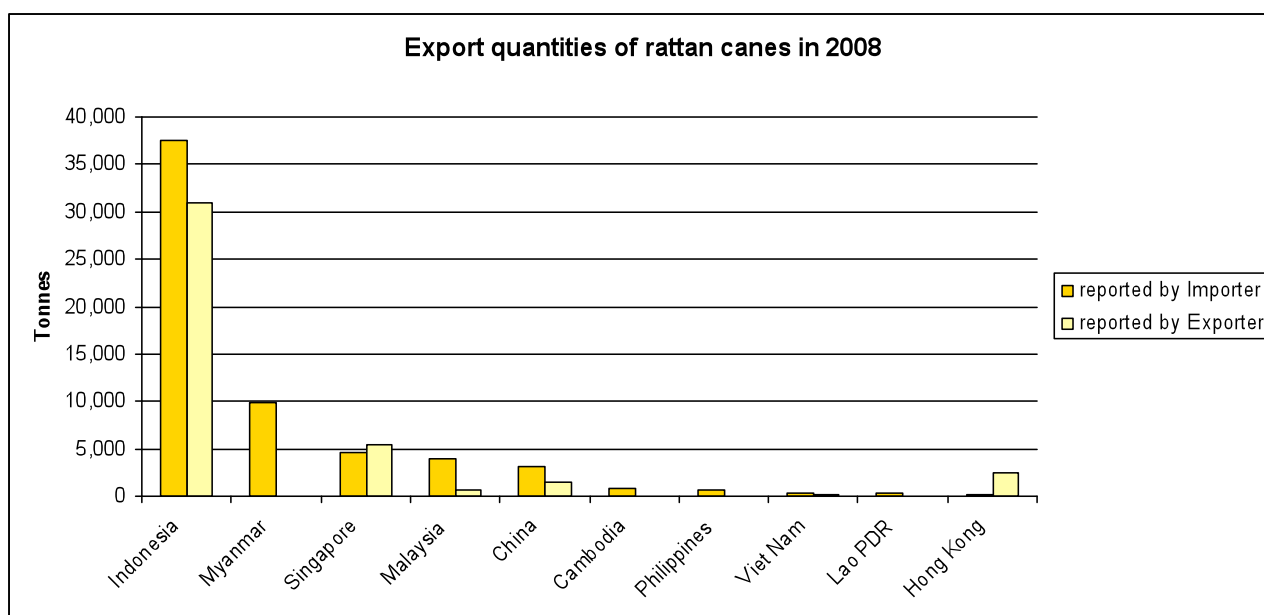


Figure 3: Top ten export countries of rattan canes by quantity in 2008 (Source: UN Comtrade)

According to trade data reported by importing countries, **Myanmar** was the second-largest export country. In 2008 the country exported almost 10,000 tonnes — accounting for 16 per cent of global exports — with a value of US\$2.8 million. It should be noted that since Myanmar does not report trade data to the UN, any analysis based on export trade data would not identify Myanmar as an important export country.

The same applies for **Cambodia** and **Lao PDR**, which according to trade data reported by importing countries were two of the ten most important countries with regards to rattan cane export by quantity in 2008. With an average value of US\$150–300 per tonne, the price of rattan canes exported by Myanmar, as well as by Lao PDR and Cambodia, was low compared to other export countries. This indicates that these three countries may export predominantly raw unprocessed rattan canes. Due to the low price per tonne, Lao PDR and Cambodia were not among the ten most important rattan cane exporting countries with regards to export value.

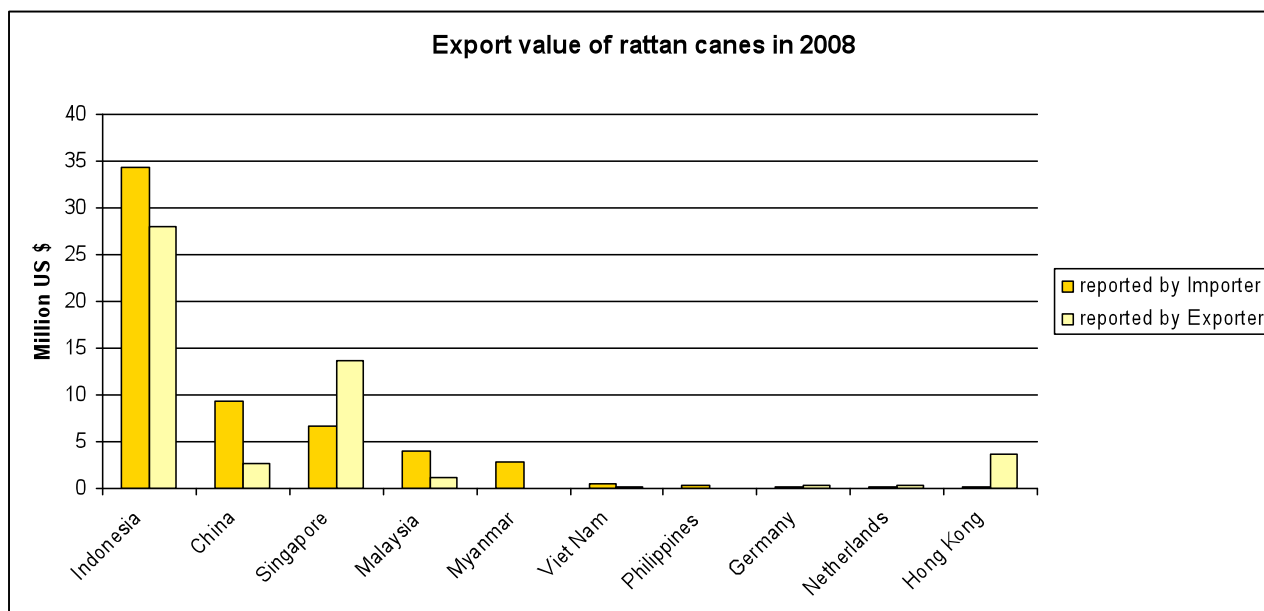


Figure 4: Top ten export countries of rattan canes by value in 2008 (Source: UN Comtrade)

While **Singapore**, **China**, and **Hong Kong** were among the top ten export countries, these countries imported more rattan canes than they exported and therefore should be considered as **transit countries**. China reported significantly smaller rattan cane exports than countries importing from China. In contrast, Hong Kong reported significantly larger exports than importing countries. This suggests that some rattan imports from Hong Kong were recorded as imports from China in the figures of importing countries.

Malaysia exported 3,929 tonnes of rattan canes in 2008, but imported almost the same quantity, 3,470 tonnes (note, however, that these figures may not be correct; see section 4.2). The export value was more than US\$4 million while the import value was only US\$458,000. In contrast, the **Philippines** and **Viet Nam** exported significantly more rattan canes than they imported.

According to import data reported by Pakistan, Afghanistan exported 782 tonnes of rattan canes in 2008. This quantity would make Afghanistan one of the major export countries in global rattan trade, ranking higher than the Philippines, Viet Nam, and Lao PDR. However, it is disputable whether these data are reliable, as rattan imports from Afghanistan are reported only by Pakistan and not any other country. Afghanistan did not report any export of rattan in 2008 or in the last decade. Furthermore, rattan does not grow in Afghanistan and the country does not import any rattan. This raises the question of where the exported rattan originated from. Since trade data from Pakistan also have other discrepancies (see section 3.1.3), it can be assumed that these import data are wrongly reported. For these reasons, Afghanistan cannot be classified as a major export country and is not included in Figure 3. However, this example shows that, apart from the top five export countries, export quantities of rattan canes are so small that just one single incorrect figure can push a country into the top ten of rattan exporting nations.

3.1.3 Key import countries

China dominated global rattan cane imports in 2008, importing 36,700 tonnes — representing 59 per cent of the quantity traded globally — worth more than US\$25 million. The import quantity exceeded the export quantity (3,075 tonnes in 2008) by twelvefold. In addition **Hong Kong**, a special administrative region of China, imported almost 2,500 tonnes with a value of more than US\$2.7 million. Overall, imports to China including Hong Kong accounted for 63 per cent of the quantity of rattan canes traded globally.

Singapore imported 5,226 tonnes of rattan canes in 2008, with a value of US\$9.8 million, accounting for 8 per cent of the quantity and 16 per cent of the value of rattan canes traded globally. Singapore exported almost the same amount as it imported. Similarly, in 2008 **Malaysia** imported almost 3,500 tonnes worth US\$458,000 and exported 3,900 tonnes (however, as mentioned above, these figures may not be correct; see section 4.2). In contrast, **Thailand** imported 3,600 tonnes with a value of US\$2.3 million, but exported only 100 tonnes.

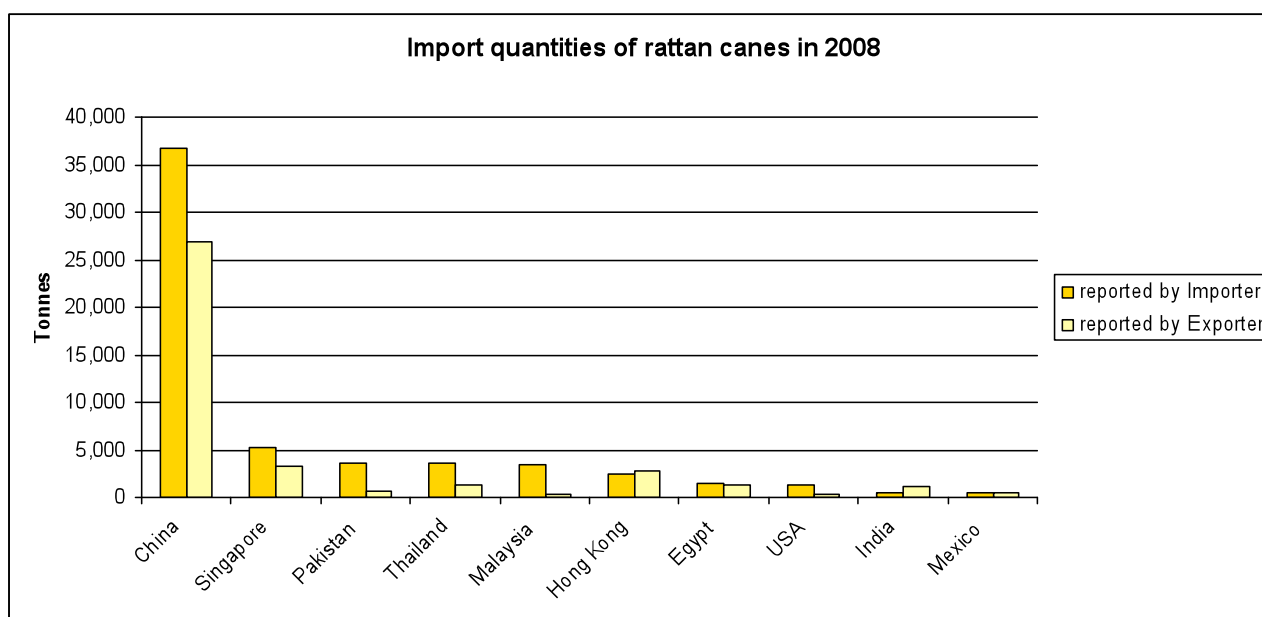


Figure 5: Top ten import countries of rattan canes by quantity in 2008 (Source: UN Comtrade)

The **US** was the third-largest import country for rattan canes with respect to value, with imports worth US\$3.1 million in 2008. It should be noted that as the US does not report import quantities, these figures in UN Comtrade were estimated by the UN using a median unit value for 2008 of about US\$2,500 per tonne.

Germany and **France** were among the top ten major import countries by value, but not by quantity, due to a high average price of more than US\$5,000 and US\$6,000 per tonne, respectively.

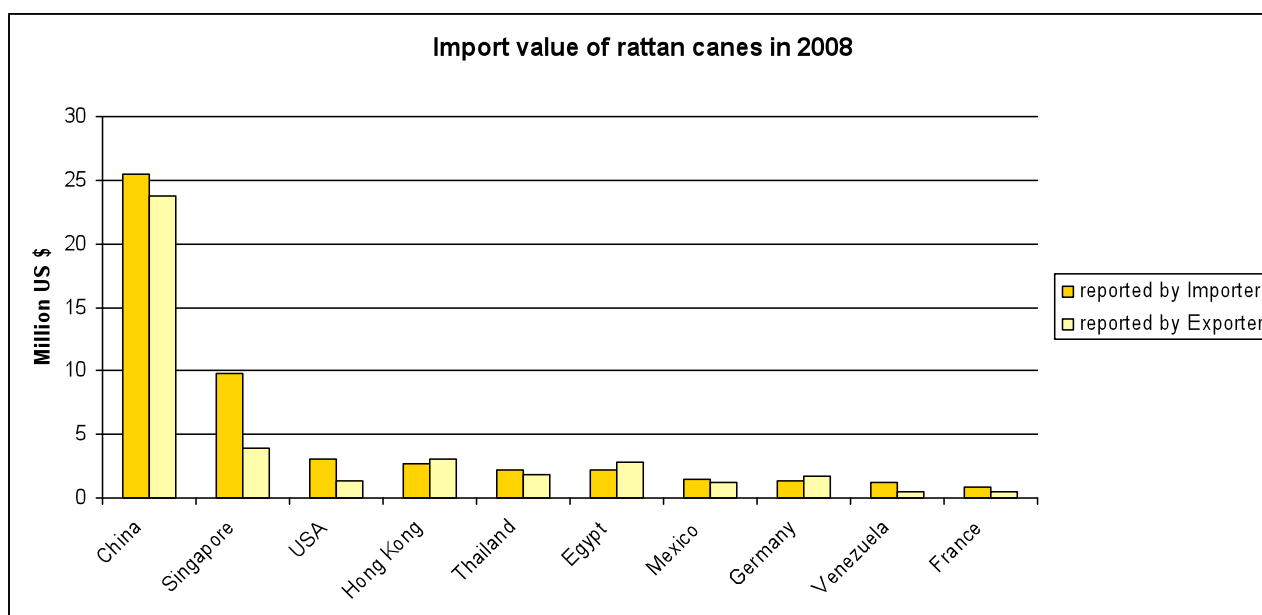


Figure 6: Top ten import countries of rattan canes by value in 2008 (Source: UN Comtrade)

In contrast, **India** and **Pakistan** imported low-priced rattan canes. This put both countries among the top ten import countries by quantity, but not by value. However, it is questionable whether trade data for rattan imports by Pakistan are reliable. Pakistan reported total imports of 3,676 tonnes of rattan canes in 2008 with a value of less than US\$540,000, which translates to an average price of just US\$150 per tonne. According to Pakistan's reporting, 1,689 tonnes were imported from Malaysia; however, Malaysia reported an export of just 20 tonnes to Pakistan. As mentioned in section 3.1.2, Pakistan also reported an import of 782 tonnes from Afghanistan, which appears to be incorrect. Thus it can be assumed that Pakistan's actual imports of rattan canes may be less than reported; however trade data reported by export countries nevertheless indicate that Pakistan was still one of the top ten import countries by quantity, between the US and India.

3.2 Rattan mats and plaits

Specific trade data for mats, plaits, and basketwork made of rattan are only available from 2007. Trade data from previous years aggregate rattan and other vegetable materials into the product groups "*Mats, matting & screens of veg. mats.*", "*Plaits & sim. prods. of veg. mats., whether or not assembled into strips*" and "*Basketwork, wickerwork & oth. arts., made directly to shape from veg. mats.*".

As outlined in section 2, the *HS Nomenclature 2007 Edition* divides rattan mats and plaits into two product groups, both of which include finished goods ready for use by the final consumer as well as semi-finished products that are further processed to basketwork or furniture. However, it is questionable whether reporting countries always differentiate exactly between mats and plaits. In addition, globally traded quantities of rattan mats and plaits are very low compared to other rattan products. Both product groups are therefore analysed together in this report.

According to reported import data, 3,925 tonnes of rattan mats and plaits were traded globally in 2008 with a value of US\$14.7 million. Mats represented two-thirds of the total quantity.

3.2.1 Key export countries

The top ten export countries accounted for 95 per cent, and the top three countries for 80 per cent, of the global export quantity of rattan mats and plaits in 2008 (Figure 7).

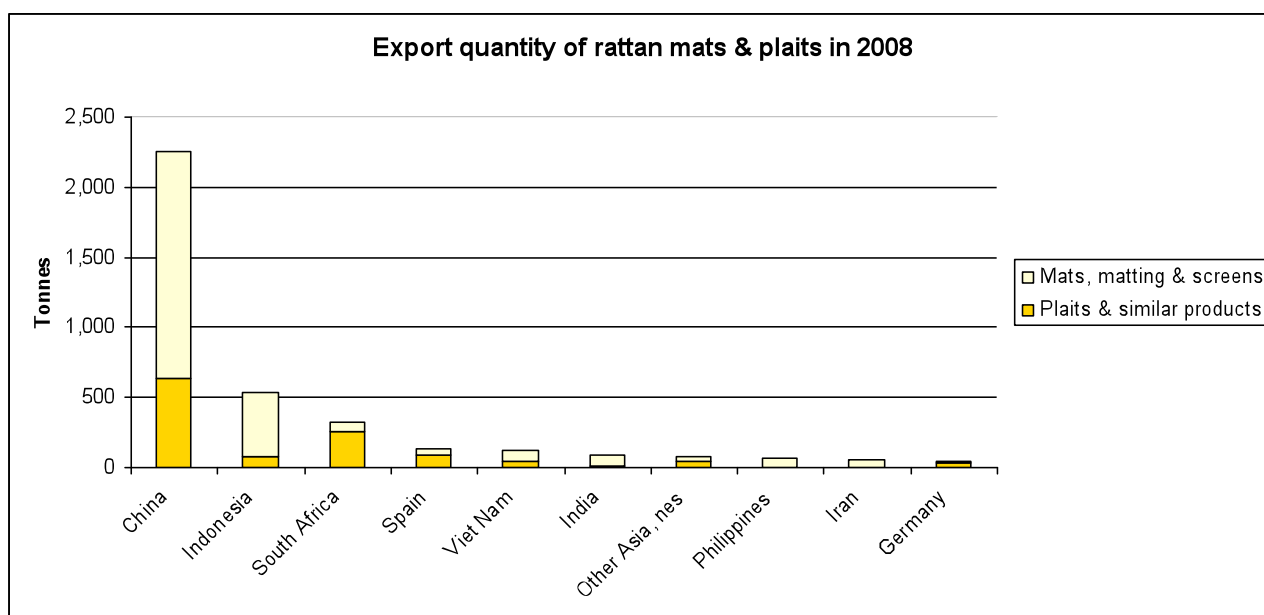


Figure 7: Top ten export countries of rattan mats and plaits by quantity in 2008 (Source: UN Comtrade)

China was the by far the largest export country, exporting 2,259 tonnes — 58 per cent of rattan mats and plaits traded globally — with a value of US\$7.8 million (Figure 8). **Indonesia** was the next largest, exporting 536 tonnes worth US\$3.4 million, followed by **South Africa** which exported 325 tonnes with a value of US\$656,000. Exports from the remaining top ten countries ranged from 129 tonnes (Spain) to 44 tonnes (Germany) in 2008.

It should be noted that 2 per cent of the global trade in rattan mats and plaits — 79 tonnes with a value of US\$300,000 — were exported by unspecified Asian countries.

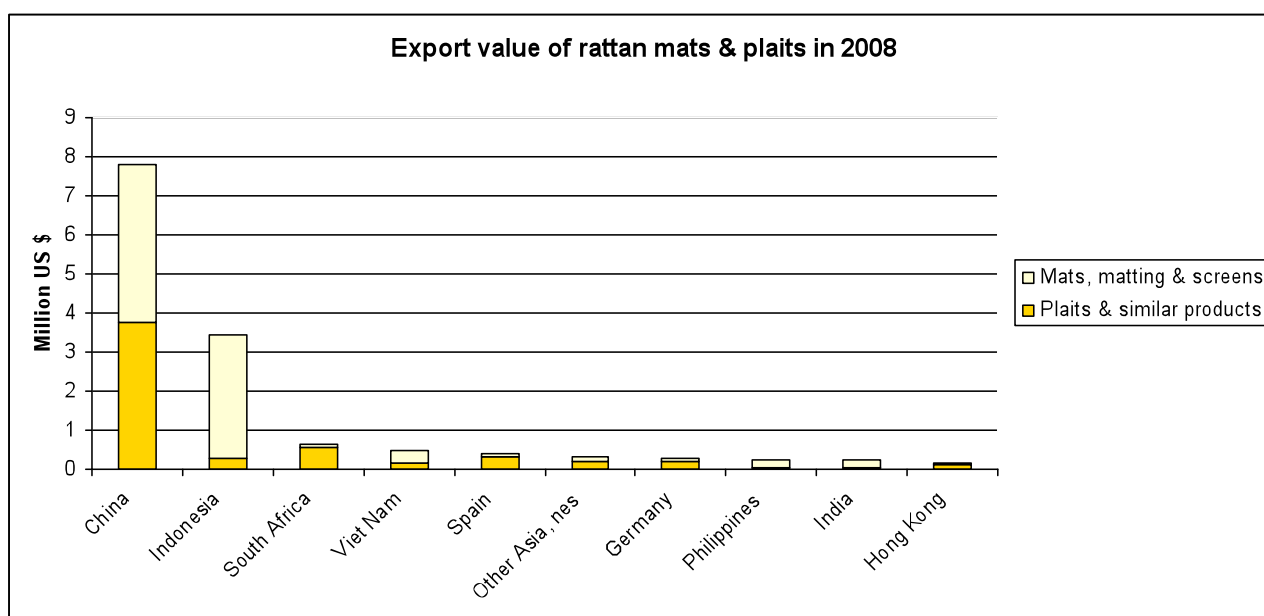


Figure 8: Top ten export countries of rattan mats and plaits by value in 2008 (Source: UN Comtrade)

3.2.2 Key import countries

The top ten import countries accounted for 74 per cent of rattan mats and plaits imported globally in 2008; however, no country had a dominating position (Figure 9 and Figure 10). The **US** was the leading import country by quantity, importing 480 tonnes — 12 per cent of global imports — with a value of US\$1.8 million. In contrast, **Japan** imported a lower quantity, 415 tonnes, but with a much higher value, US\$3.1 million.

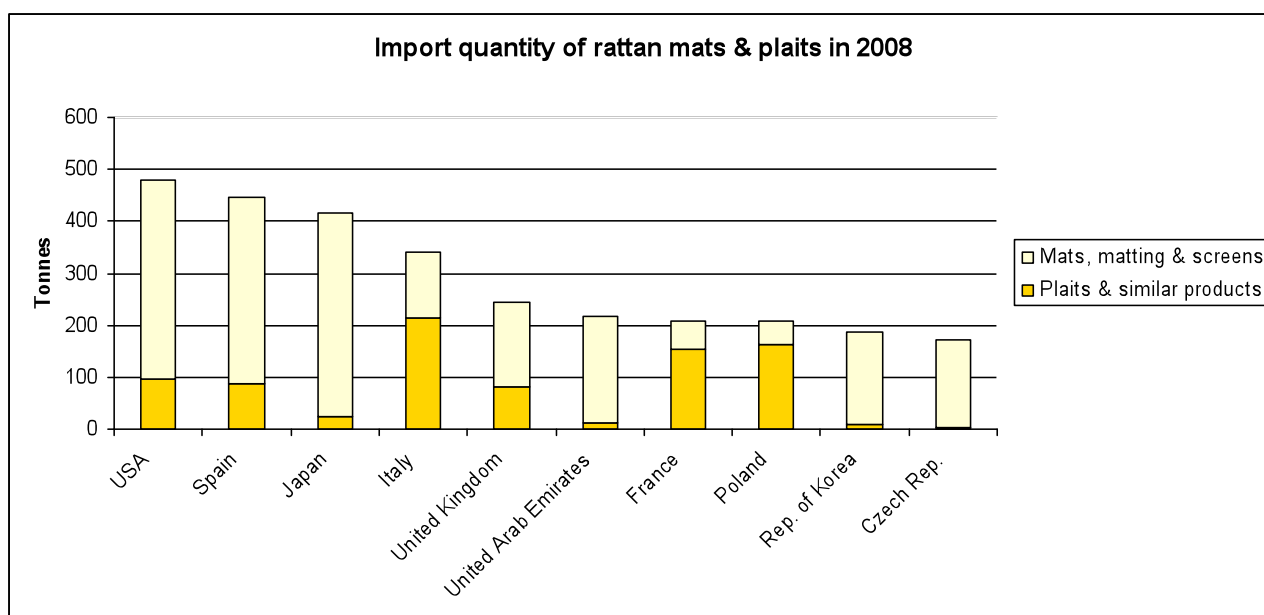


Figure 9: Top ten import countries of rattan mats and plaits by quantity in 2008 (Source: UN Comtrade)

The top ten import countries included six EU member states. Overall, the 27 EU countries imported 1,959 tonnes of rattan mats and plaits with a value of US\$6.6 million in 2008. Internal trade between EU member states accounted for 11 per cent of this quantity. Almost all EU member states among the top ten import countries imported rattan mats and plaits from outside the EU. Only France imported most of its total import from other EU countries (76 per cent), particularly Spain, UK, Germany, and the Netherlands.

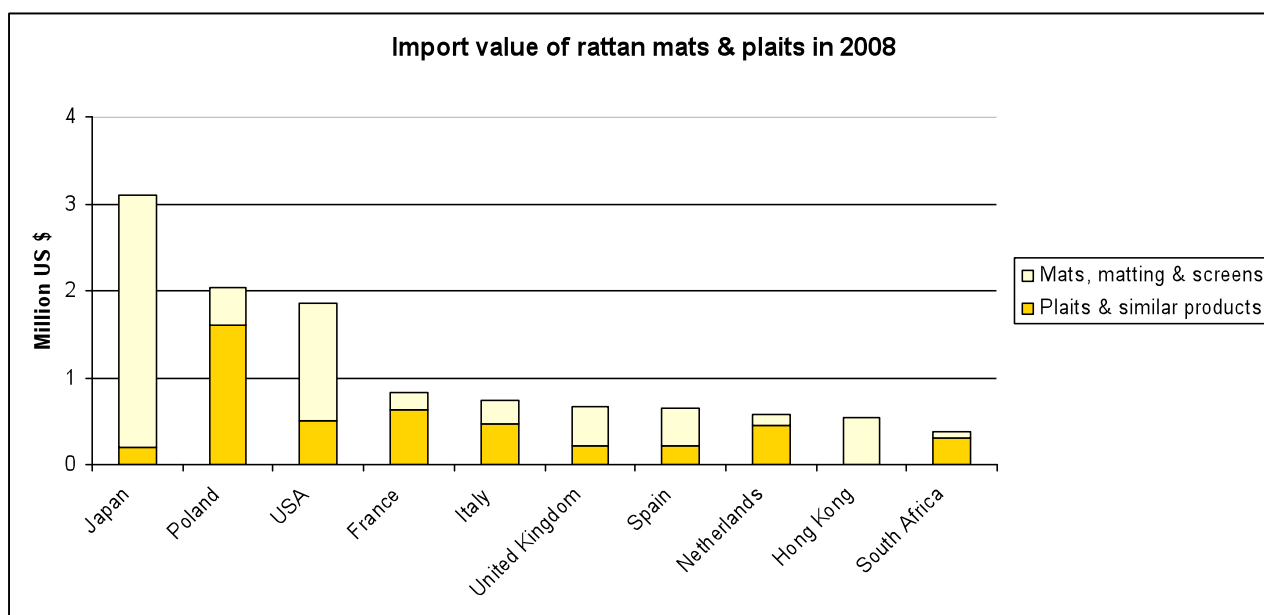


Figure 10: Top ten import countries of rattan mats and plaits by value in 2008 (Source: UN Comtrade)

3.3 Basketwork

Global trade in rattan basketwork and wickerwork amounted to 35,000 tonnes in 2008 with a value of more than US\$170 million.

3.3.1 Key export countries

Nearly all (98 per cent) of rattan basketwork traded globally in 2008 was exported by the top ten countries (Figure 11). **China** accounted for 45 per cent of such exports, exporting 15,800 tonnes with a value of US\$75.5 million. **Indonesia** accounted for 29 per cent of global exports, exporting almost 10,000 tonnes with a value of US\$42.2 million. **Viet Nam** exported 4,265 tonnes — 12 per cent of global exports — with a value of US\$23.1 million. The **Philippines** exported 1,873 tonnes — 5 per cent of global exports — with a value of

US\$9.8 million. **Myanmar** (400 tonnes with a value of US\$2.5 million) and **Thailand** (281 tonnes with a value of US\$1.6 million) accounted for 1 per cent of global exports each.

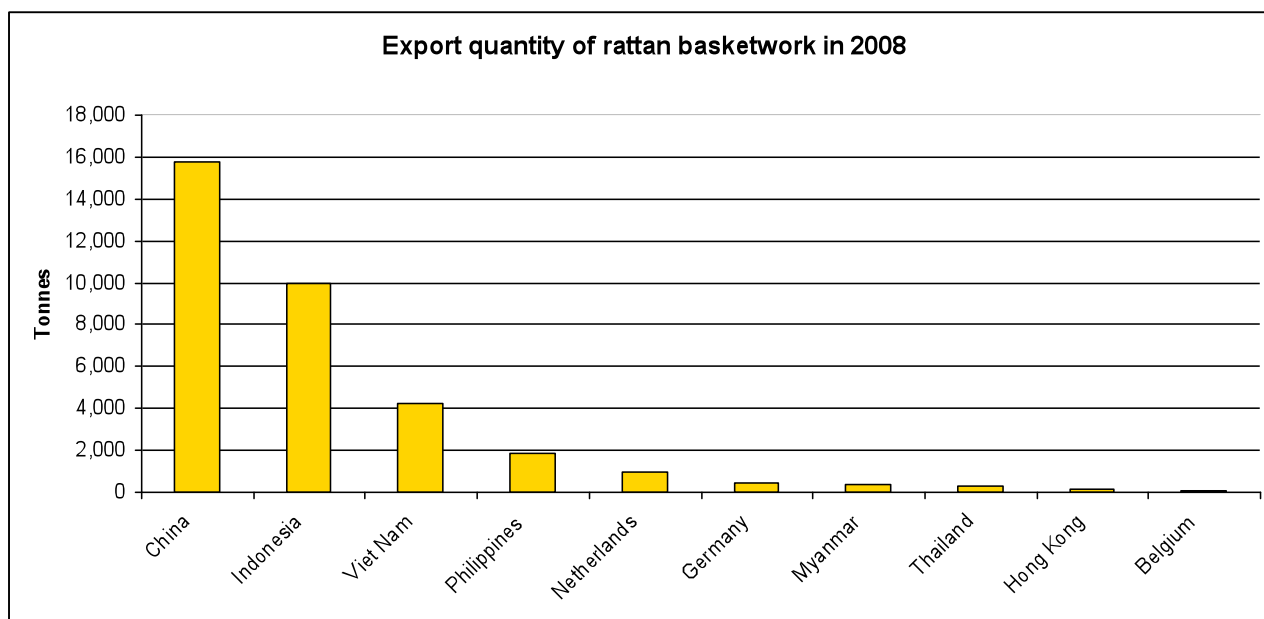


Figure 11: Top ten export countries of rattan basketwork by quantity in 2008 (Source: UN Comtrade)

The **Netherlands**, **Germany**, and **Belgium** also exported substantial quantities of rattan basketwork in 2008. However, since import quantities by these countries exceeded export figures, these European countries can be considered as transit countries.

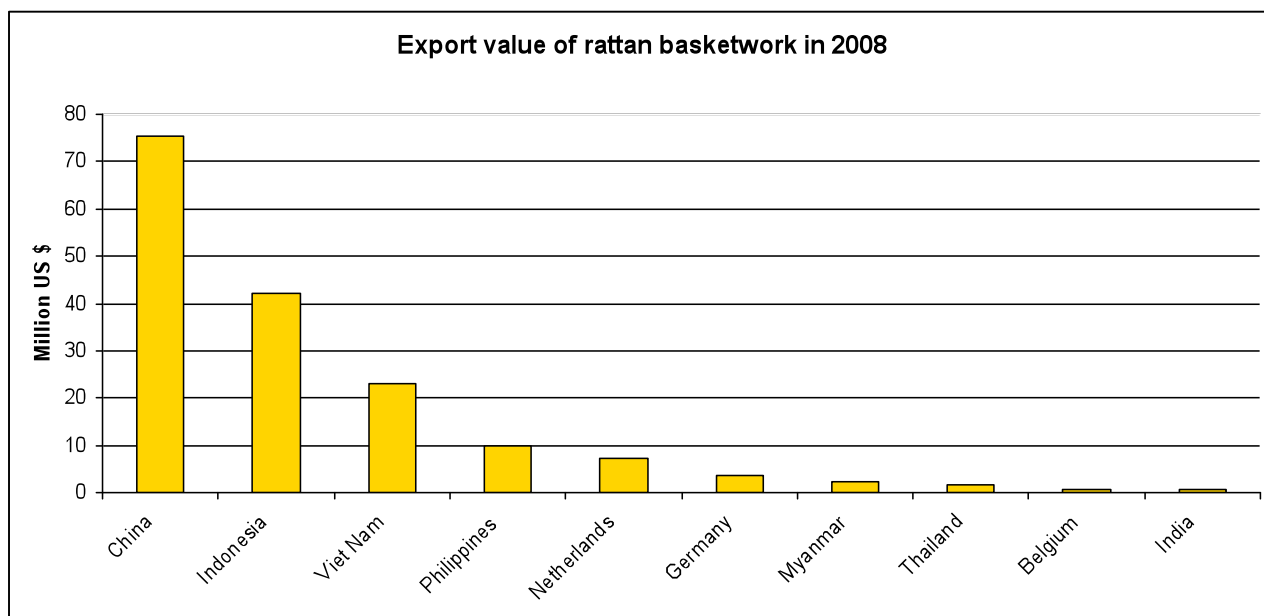


Figure 12: Top ten export countries of rattan basketwork by value in 2008 (Source: UN Comtrade)

3.3.2 Key import countries

The **US** was the largest importing country in 2008, importing 8,600 tonnes of rattan basketwork with a value of almost US\$52 million. However, the **27 EU** countries together imported a total of 17,130 tonnes with a value of US\$82.7 million. Internal trade accounted for 10 per cent of the quantity and 15 per cent of the value of these imports. Thus, the EU imported 15,438 tonnes from countries outside the EU worth US\$70.3 million, making the EU by far the largest market for rattan basketwork with imports almost twice as large as the **US**. **Germany** accounted for one-third of external EU imports (from countries outside the EU), the **UK** for 20 per cent, and **France** and the **Netherlands** for 10 per cent each.

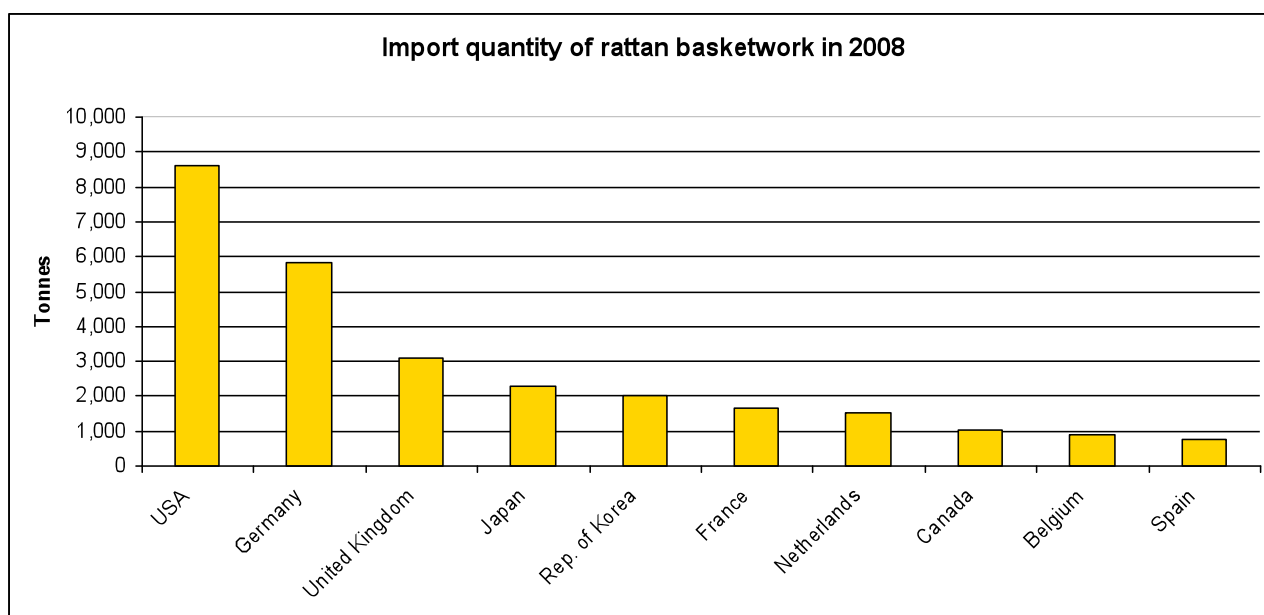


Figure 13: Top ten import countries of rattan basketwork by quantity in 2008 (Source: UN Comtrade)

The major import countries for rattan basketwork in the Asian region were **Japan** and **South Korea**, which accounted for 7 per cent and 6 per cent, respectively, of global imports by quantity in 2008. However, Japan seems to import high-value basketwork, while South Korea imports low-value basketwork. In 2008, Japan imported 2,280 tonnes with a value of almost US\$18 million, which translates to an average price of nearly US\$8,000 per tonne. In contrast, South Korea imported almost the same quantity, 2,027 tonnes, but with a value of just US\$6 million, which translates to an average price of US\$3,000 per tonne.

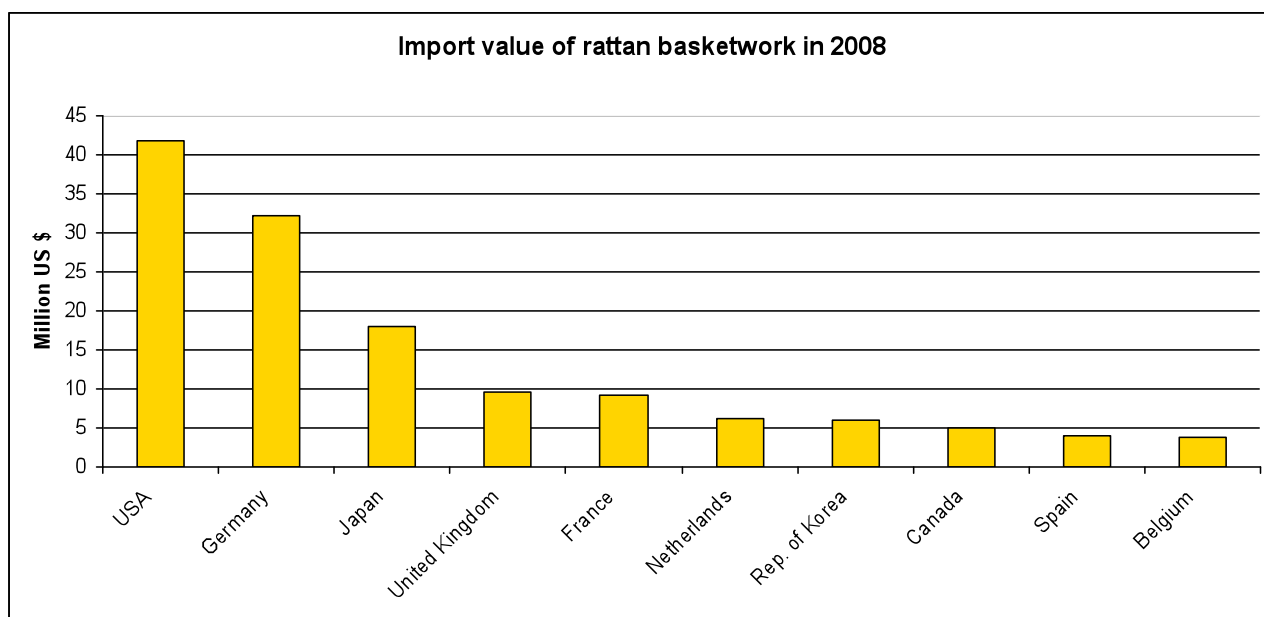


Figure 14: Top ten import countries of rattan basketwork by value in 2008 (Source: UN Comtrade)

3.4 Furniture (including seats)

UN Comtrade provides specific trade data for seats and other furniture made of rattan or bamboo from 2007. However, it should be kept in mind that this trade data does not specify furniture exclusively made of rattan, but also includes also bamboo furniture. Trade data from previous years do even not specify between rattan/bamboo and other materials like cane and osier, but aggregate all these materials as a single product group (*"Furniture of materials other than metal/wood/plastics"* and *"Seats of cane/osier/bamboo/similar materials"*).

In 2008, world imports of rattan and bamboo furniture amounted to 127,500 tonnes with a value of US\$593 million. Rattan and bamboo seats represented 43 per cent of this, with other furniture accounting for the remaining 57 per cent.

3.4.1 Key export countries

Indonesia dominated global exports of rattan and bamboo furniture, accounting for 44 per cent of global exports in 2008, exporting 55,613 tonnes with a value of almost US\$250 million. **China** was the next-largest exporting country, exporting 33,183 tonnes — 26 per cent of global exports — with a value of US\$142 million. Other important Asian export countries for rattan and bamboo furniture were **Viet Nam** and the **Philippines**, accounting for 10 per cent and 6 per cent, respectively, of the global export quantity.

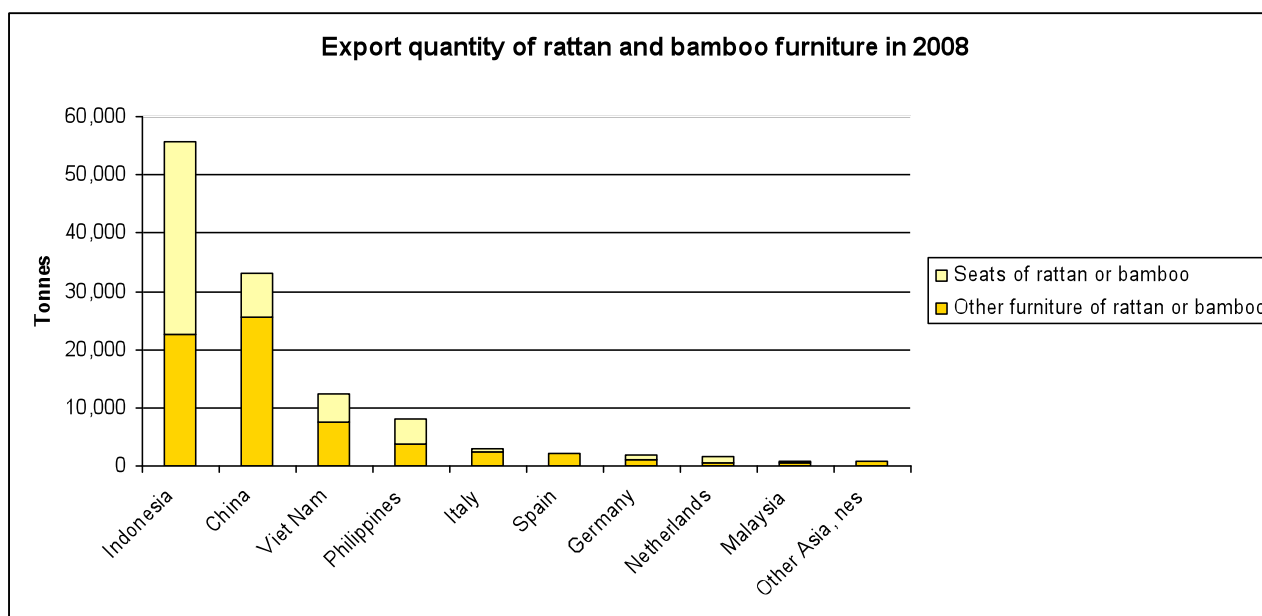


Figure 15: Top ten export countries of rattan and bamboo furniture by quantity in 2008 (Source: UN Comtrade)

The European countries **Spain**, **Germany**, the **Netherlands**, and **France** also exported substantial quantities of rattan and bamboo furniture in 2008. However, since import quantities by far exceeded export quantities, these countries can be considered as transit countries. **Italy** was the only European country among the top ten export nations that exported more rattan and bamboo furniture than it imported.

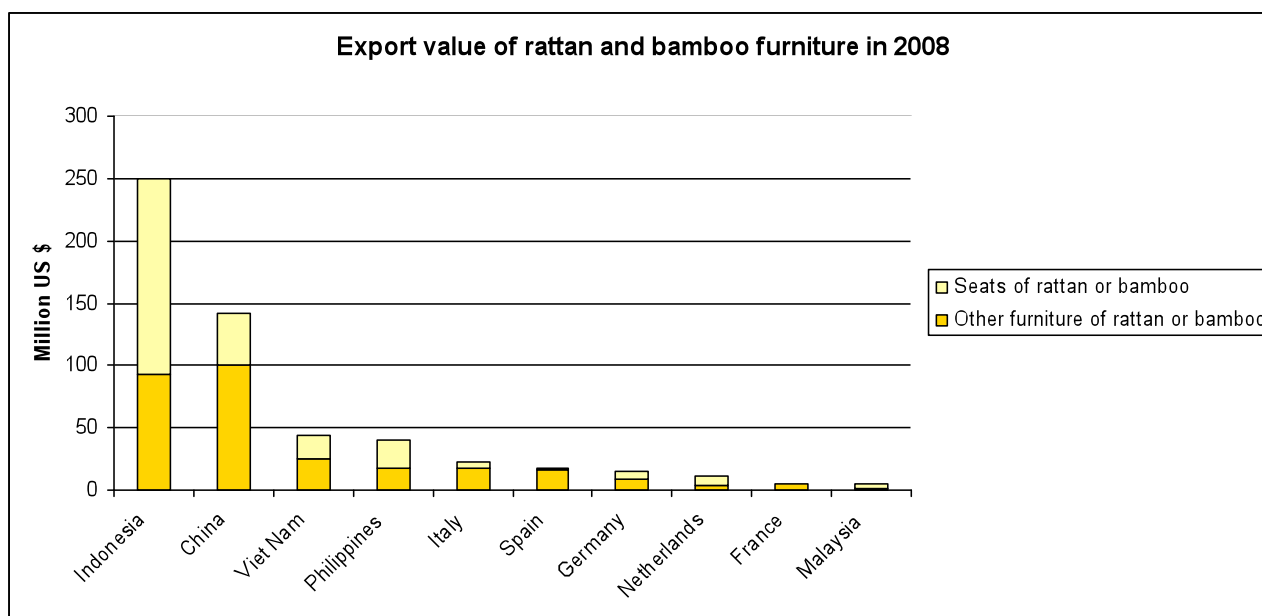


Figure 16: Top ten export countries of rattan and bamboo furniture by value in 2008 (Source: UN Comtrade)

3.4.2 Key import countries

The **US** was the leading import country for rattan and bamboo furniture in 2008, importing 26,122 tonnes — 20 per cent of global imports — with a value of US\$120 million.

However, the 27 **EU** countries accounted for 55 per cent of global imports, importing more than 70,000 tonnes with a value of US\$331 million. Internal trade accounted for 15 per cent of these imports by quantity and 23 per cent by value. Thus, 60,000 tonnes of rattan and bamboo furniture with a value of US\$254 million were imported from countries outside the EU. **Germany** accounted for 23 per cent of these external imports, **France** for 15 per cent, the **UK** for 11 per cent, and **Spain** for 10 per cent.

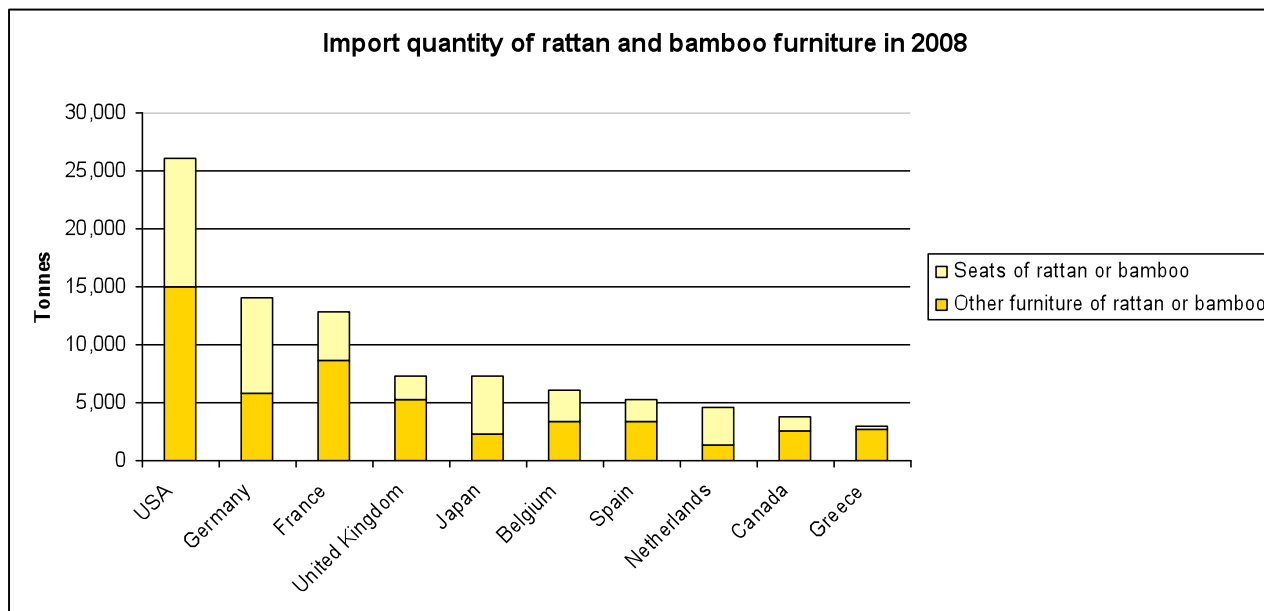


Figure 17: Top ten import countries of rattan and bamboo furniture by quantity in 2008 (Source: UN Comtrade)

Other major import countries were **Japan** (7,253 tonnes with a value of US\$28.7 million), **Canada** (3,723 tonnes with a value of US\$16.8 million), and **Russia** (2,603 tonnes with a value of US\$14.4 million).

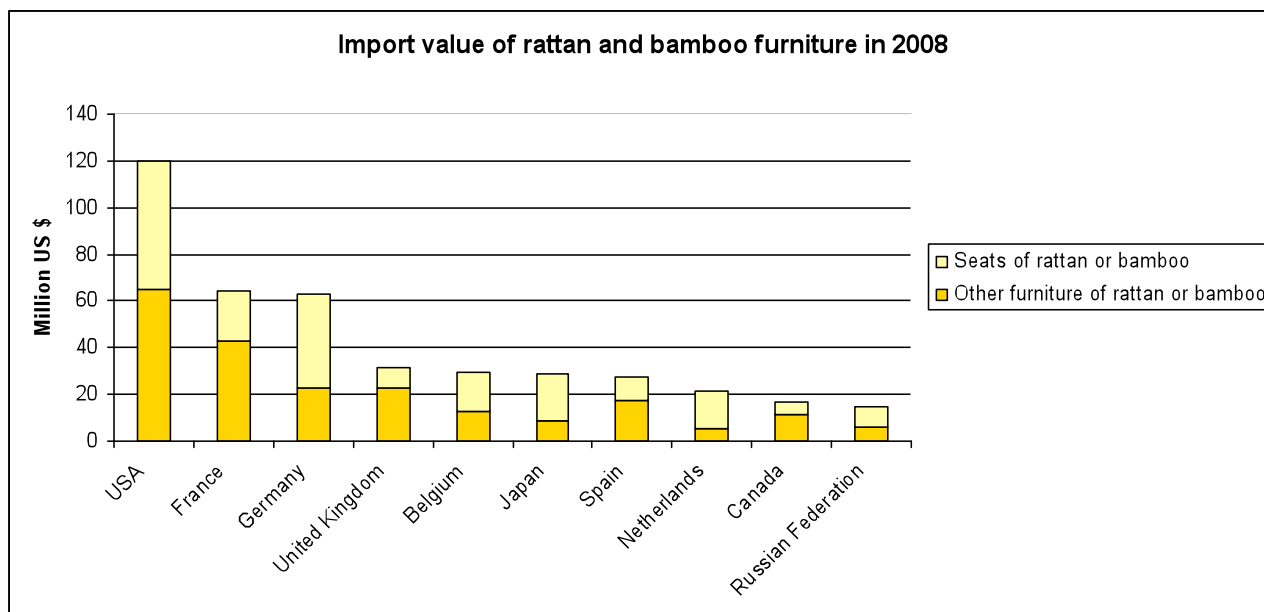


Figure 18: Top ten import countries of rattan and bamboo furniture by value in 2008 (Source: UN Comtrade)

4 Key countries in the global rattan trade

4.1 Indonesia

4.1.1 Overview

Indonesia is the key country of origin for rattan, supplying about 80 per cent of the rattan on the global marketⁱⁱⁱ. Rattan contributes to 6.5 per cent of the revenue coming from Indonesia's entire forest product industriesⁱⁱⁱ and about US\$300 million to the national foreign exchange. The country's rattan industry therefore plays a significant role in the national economy — and also for local communities, particularly in forest areas. In addition to cash income, rattan also provides various subsistence benefits for local people, such as materials for housing and household utensils, medicines, and food.

More than 1 million people are currently involved in rattan-based activities such as harvesting, cultivating, processing, trading, and marketing, and a further 4–5 million people are involved in the wider rattan-based industry, e.g., rattan furniture production. At a national level, data on the rattan industry cover only medium and large companies. According to this data, about 72 companies produce primary rattan products and around 25 companies produce semi-finished products, while 240 furniture companies and 56 matting companies produce finished rattan products. However, these figures do not include the formal and informal home industry. There are around 3,100 home industries in South Kalimantan alone, around 850 in Cirebon, and about 250 in Central Sulawesi. The products of these home industries are destined for the national as well as international marketsⁱⁱⁱ.

National rattan resources and management

Indonesia has the largest national complement of rattan species, with 246 different species described^{iv}. However, only 46 of these are traded commercially, most with small diameters less than 18 mm. The most commercially important rattan species are Segi (*Calamus caecius*; small diameter), Manau (*C. manan*; large diameter), and Semambu (*C. scipionum*; large diameter). Rattan with a large diameter is usually used for furniture frames, while small diameter rattan is used for plaitingⁱⁱⁱ.

About 90 per cent of Indonesian rattan is harvested from natural forests located in Sumatra, Kalimantan, and Sulawesi, while 10 per cent comes from rattan cultivation. In 1996, the total rattan-producing area in Indonesia was estimated at 9.37 million ha, with the majority, 4.2 million ha, located in East Kalimantanⁱⁱⁱ. In 2004 the Central of Statistics and Inventory under the Ministry of Forestry claimed that the total area of natural forests in Indonesia that produced rattan was approximately 1,489,900 ha^v. It is not clear, however, whether the 2004 figure reflects loss of forests with rattan since 1996 or whether this figure was calculated using a different method. Reports by the International Tropical Timber Organization (ITTO) and the Indonesian Ministry of Forestry published in 2007 mention the 2004 figure, but still refer to the 1996 figure of 9.37 million ha. This suggests that the 1996 figure may be more reliable, even if it is quite old.

Rattan resources in Indonesia are seriously threatened by extinction, particularly the commercial species, due to forest destruction and overexploitation^v. High-quality rattan canes continue to be harvested illegally even in well-policed and controlled areas, as it is tremendously difficult to control rattan harvesting. There is evidence that even licensed harvesting is carried out without considering sustainability. Much of the legally harvestable rattan in some regions has been exhausted. Even in national parks, rattan populations are collected either legally (by forest-dwelling people who may have customary rights to collect) or illegallyⁱⁱⁱ.

An inventory of rattan standing stock^v published in 2007 found that the actual amount of rattan harvested from commercial species by far exceeds the annual allowable cut (AAC), which is calculated on the basis of 1996 figure of 9.37 million ha of rattan-producing forest area. For example in 2002, the actual amount of exported finished products processed from commercial rattan species exceeded the AAC for small diameter rattan canes by almost 4 times and the AAC for large diameter rattan canes by 2.5 times. Furthermore, these data do not include rattan canes harvested for local uses. The report concluded that if this situation continues, rattan resources might be soon exhausted^v.

At present, export of raw rattan is regulated by Decree No.36. Entering into force on 11 October 2009 and issued by the Ministry of Trade, the decree aims to ensure domestic supply of rattan at affordable prices for the domestic furniture and handicraft industry by protecting and maintaining the sustainability of rattan production and cultivation^{vi}. The decree forbids all export of raw rattan, even rattan from plantations and a few rattan species which were previously allowed to be exported. It does allow the export of washed and sulphurized rattan as well as semi-processed rattan (i.e., rattan that has been processed further to become soft polished rattan, "heart" of rattan, and rattan skin), but the rattan exporter must have ETR (Rattan Registered Exporter) status, verified by an independent surveyor and approved by Indonesia's Directorate

General Foreign Trade at the Ministry of Trade. ETR holders must be domiciled in the rattan production area/region and need to report their export activities to the Ministry of Trade.

However, since the first ban on export of raw rattan was imposed in 1979, followed by another ban on export of semi-processed rattan in 1988 to encourage domestic downstream processing^{vii}, Indonesian policy for regulating the rattan trade has been inconsistent due to the competing interests of APRI (Indonesian Rattan Entrepreneurs Association) and ASMINDO (Indonesian Furniture Association). While APRI campaigns to lift the export ban, ASMINDO promotes an export ban. Thus export regulations have changed several times since 1979. For example, in 1992 the export ban was replaced with an export tax on raw rattan and semi-finished products of US\$15 per kg; in 1998 the export of semi-processed rattan was banned again; in 2004 the export of raw rattan was also banned again; and in 2005 export of cultivated rattan as well as Segra (*C. caesius*) and Irit (*C. trachycoleus*) species was allowed, but regulated by an export quota. As a result of the inconsistency in trade policy, illegal exports to international markets increased, but neither natural rattan resources nor the local rattan industry were effectively protected^{viii}.

The 2005 Ministry of Trade regulation on rattan export terms and conditions allows a maximum of 25,000 tonnes per year for exports of raw rattan, a maximum of 16,000 tonnes per year for exports of semi-finished rattan produced from Segra and Irit plants, and a maximum of 36,000 tonnes per year for exports of semi-finished rattan produced from other species^{ix}. According to Ramadhani Achdiawan from the Centre for International Forestry Research (CIFOR), finished rattan from Indonesia usually passes through Singapore and Malaysia on the way to markets in Europe, Japan, and North America while raw and semi-finished rattan goes to China and Viet Nam.

4.1.2 Export of rattan canes

According to trade data reported by importing countries, between 2000 and 2008 exports of rattan canes from Indonesia ranged from a minimum of 33,610 tonnes in 2004 to a maximum of 59,333 tonnes in 2006 (Figure 19), while the export value ranged from US\$25 million in 2001 to US\$37 million in 2006 (Figure 20). However, huge discrepancies exist between figures reported by import countries and those reported by Indonesia. For example in 2000, 2005, and 2006, almost three times as much rattan cane was recorded as imported from Indonesia than documented in Indonesian export records. On average, 40 per cent of the rattan canes imported between 2000 and 2008 were not recorded by Indonesia as exports. The only year in which import and export data correspond is 2004.

Discrepancies also exist prior to 2000. In 1993, a working paper by the UN Food and Agriculture Organization (FAO) noticed underreporting in Indonesia's export figures since 1988 when the export ban on semi-processed rattan came into force. The FAO concluded that in spite of the ban on raw and semi-processed rattan, unrecorded exports were still occurring, with such exports reflected in the records of importing countries^{vii}.

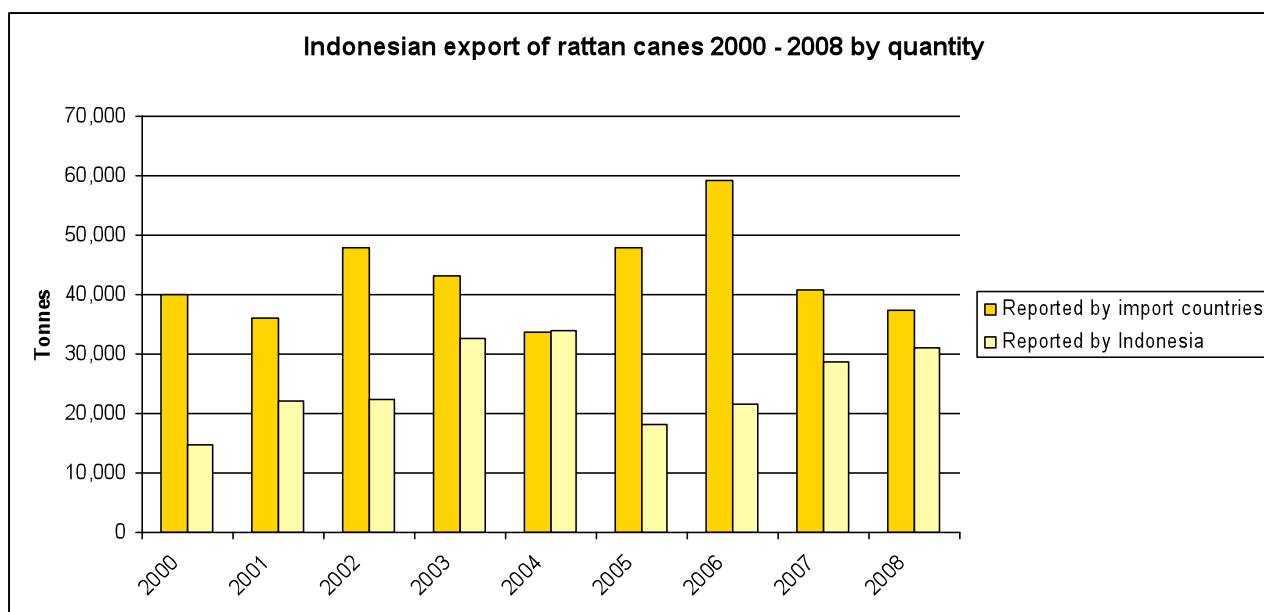


Figure 19: Indonesian export of rattan canes by quantity between 2000 and 2008 (Source: UN Comtrade)

Between 2000 and 2009, destination countries with the highest discrepancy between their import records and Indonesian export records were China, Malaysia, Singapore, and Thailand. China imported an average

of 13,500 tonnes of rattan canes per year which were not recorded as exports by Indonesia, corresponding to 48 per cent of China's imports from Indonesia. Malaysia imported an average 2,700 tonnes of rattan canes per year, while Indonesia recorded an export of just 225 tonnes. This means that in the last decade, Malaysia imported 12 times more rattan canes from Indonesia than documented in Indonesian export records. The unrecorded export quantity represents 92 per cent of Malaysian imports from Indonesia. In addition, 43 per cent of Singapore's imports, an average 1,500 tonnes per year, as well as 50 per cent of Thailand's imports, 500 tonnes per year, were not recorded as exports by Indonesia. Due to these discrepancies, the remainder of this section is based on data from import countries.

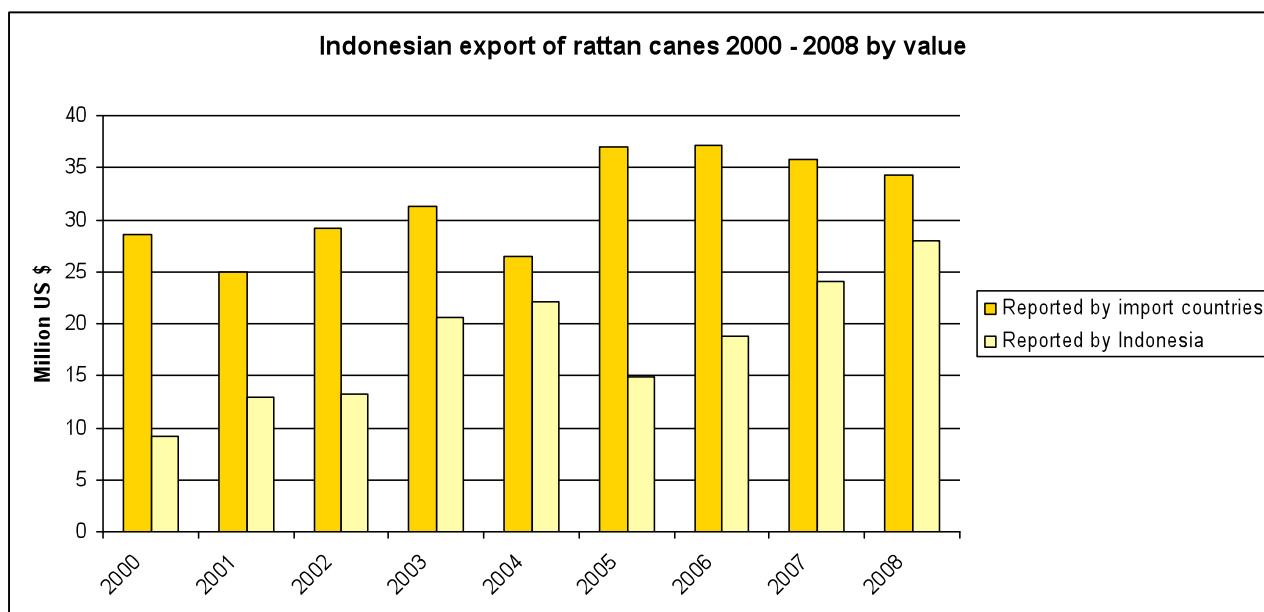


Figure 20: Indonesian export of rattan canes by value between 2000 and 2008 (Source: UN Comtrade)

China is the primary destination country for rattan canes from Indonesia, importing 27,000 tonnes — almost three-quarters of Indonesia's exports by quantity — with a value of US\$22 million in 2008 (Figure 21 and Figure 22). A further 2,000 tonnes with a value of US\$1.5 million were imported via **Hong Kong**. Overall, this translates to an average price of approximately US\$800 per tonne.

Singapore imported 3,237 tonnes of rattan canes from Indonesia with a value of US\$6.2 million. Compared to China, the average price per tonne (US\$1,900) was much higher, which may indicate a higher quality of rattan canes.

Malaysia imported 2,050 tonnes of rattan canes from Indonesia in 2008, with a value of US\$221,000. The average price of Malaysian imports was very low, just US\$100 per tonne. This low price may indicate that the value was not enhanced by further processing and that Malaysian imports predominantly consist of raw rattan. However, as the quality of trade data reported by Malaysia is poor (see section 4.2), the low price may also be the result of wrong reporting.

Unlike previous years, import quantities reported by **Thailand** in 2008 are almost consistent with Indonesian export records. Thailand imported 944 tonnes of rattan canes from Indonesia in 2008 with a value of US\$1.5 million. This translates to an average price of US\$1,600 per tonne.

These four countries account for 94 per cent of the global import of rattan canes from Indonesia by quantity, with export quantities to other countries being negligible (Figure 21). Pakistan reported an import of 902 tonnes of rattan canes in 2008, while Indonesia recorded an export of just 13 tonnes. However, as mentioned in section 3.1.3, it is questionable whether Pakistan's trade records are more reliable than those of Indonesia.

The 27 **EU** countries together imported 184 tonnes of rattan canes, a quantity between that of India and South Africa. However, the value of these imports was US\$870,000, making the EU the fifth-largest importer after Hong Kong. These imports seem to comprise high-quality rattan canes, as their average price was US\$4,700 per tonne.

Imports of rattan canes from Indonesia to the **US** (26 tonnes) and **Japan** (45 tonnes) were marginal.

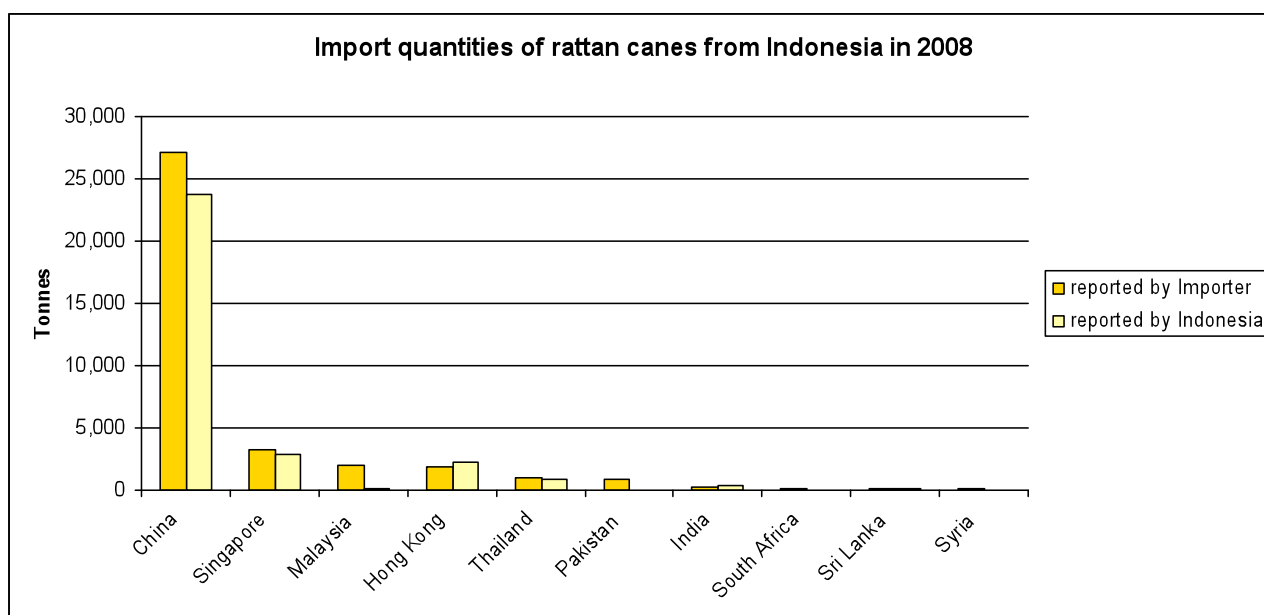


Figure 21: Top ten import countries of rattan canes from Indonesia by quantity in 2008 (Source: UN Comtrade)

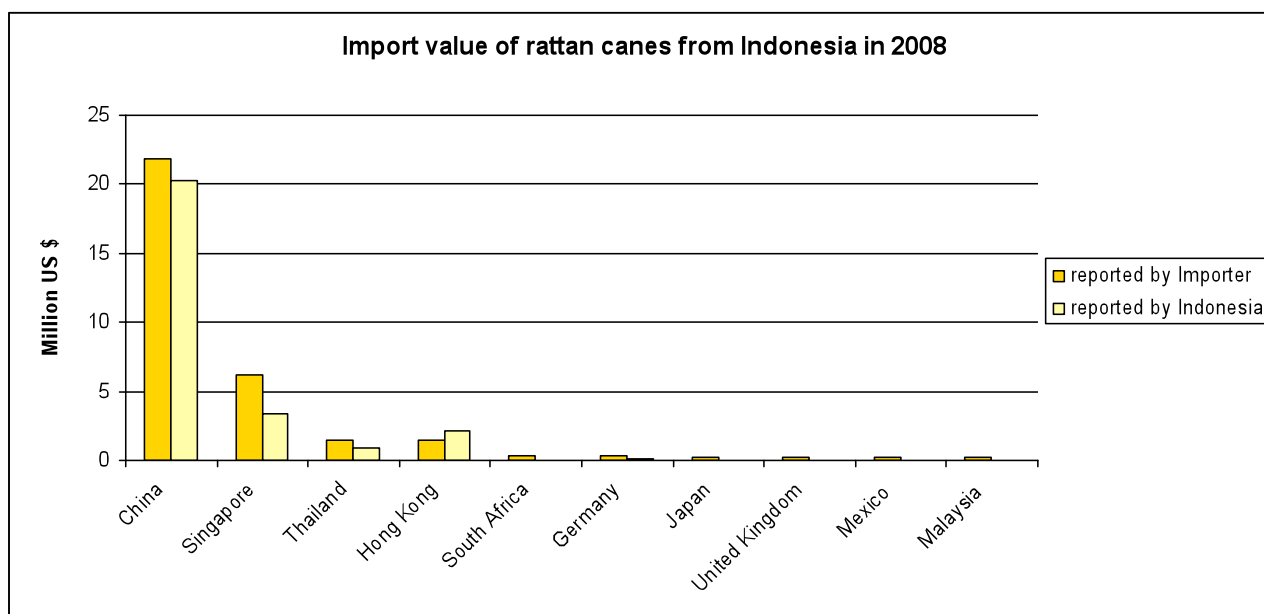


Figure 22: Top ten import countries of rattan canes from Indonesia by value in 2008 (Source: UN Comtrade)

4.1.3 Export of rattan mats, plaits, and basketwork

According to trade data reported by importing countries, Indonesia exported 10,500 tonnes of rattan mats, plaits, and basketwork in 2008 with a value of US\$45.6 million. Compared to rattan canes, exports of rattan mats, plaits, and basketwork were much lower in terms of quantity but higher in terms of value. The 2008 export figures comprise 9,958 tonnes of basketwork, 453 tonnes of mats, and 83 tonnes of plaits.

Most countries predominantly imported basketwork from Indonesia (Figure 23). Only Japan imported a substantial quantity of rattan mats, 388 tonnes, which accounted for 86 per cent of Indonesia's total export of rattan mats.

In contrast to rattan canes, imports of basketwork, mats, and plaits from Indonesia in 2008 were dominated by European and North American countries as well as South Korea and Japan (Figure 23 and Figure 24). The 27 EU countries together accounted for 50 per cent of such imports (5,165 tonnes with a value of US\$22 million). The largest import country was **Germany**, which imported 2,125 tonnes of basketwork with a value of US\$9.1 million, corresponding to 20 per cent of the total Indonesian export by quantity as well as by value. Other top ten European import countries were the EU member states the **Netherlands** (868 tonnes), the **UK** (491 tonnes), **Belgium** (488 tonnes), and **France** (412 tonnes), as well as the non-EU country **Switzerland**

(273 tonnes). Two further EU countries rank right behind Switzerland: **Italy** at position 11 with 198 tonnes and Spain at position 12 with 172 tonnes.

About 20 per cent of rattan mats, plaits, and basketwork exported by Indonesia in 2008 was destined for the North American market. Most of this, 1,636 tonnes with a value of US\$7.9 million, went to the **US** with the remaining 318 tonnes imported by **Canada**.

Key countries in the Asian market were **South Korea**, which imported 1,659 tonnes, and **Japan**, which imported 815 tonnes. Together these two countries accounted for 24 per cent of Indonesian exports of rattan mats, plaits, and basketwork. However, Japan imported higher value rattan mats and plaits as well as basketwork: both segments had an average price of more than US\$7,000 per tonne in Japan, compared to US\$2,666 per tonne in South Korea. Therefore South Korea was only in fourth position in terms of import value, although it was the second-most largest import country in terms of quantity.

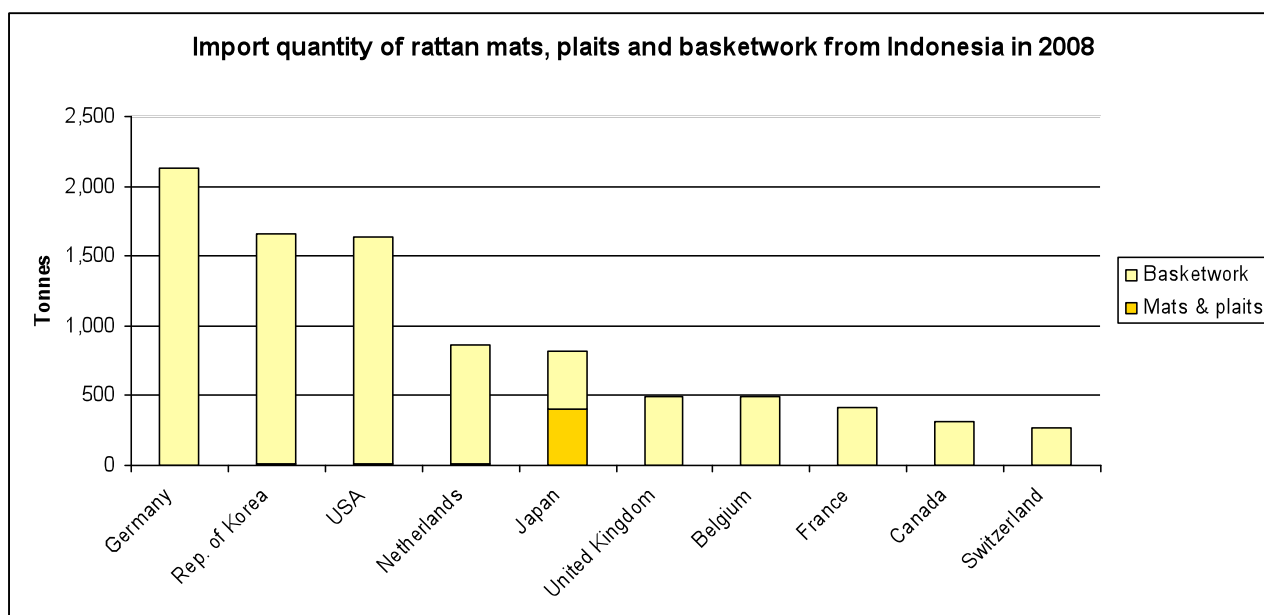


Figure 23: Top ten import countries of rattan mats, plaits, and basketwork from Indonesia by quantity in 2008 (Source: UN Comtrade)

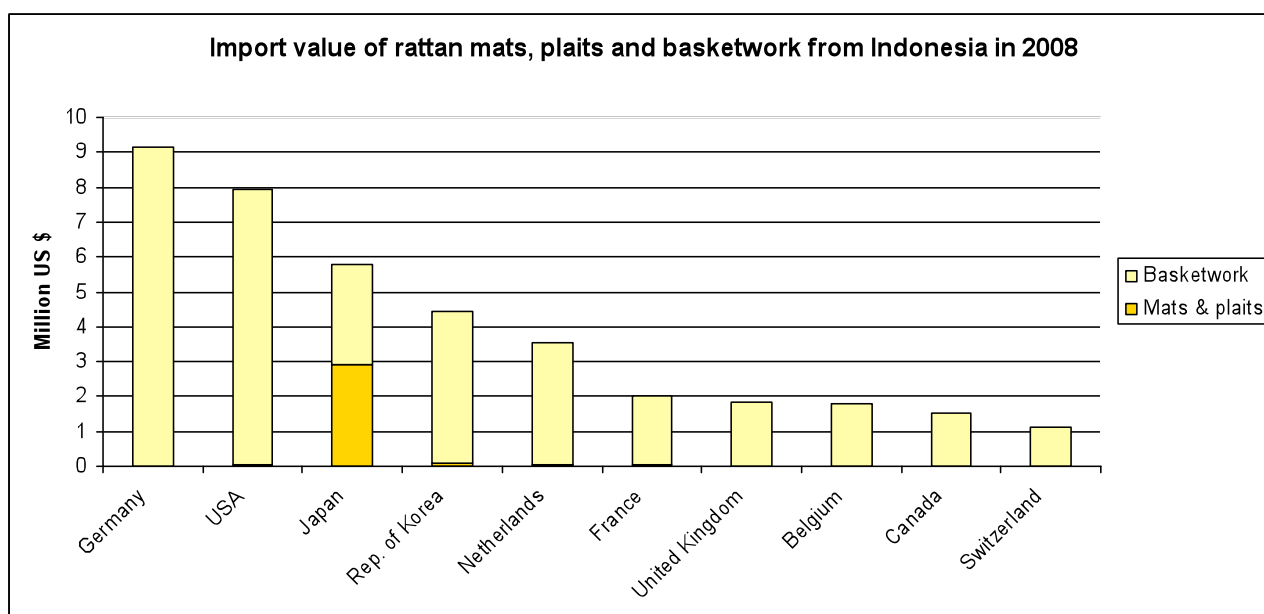


Figure 24: Top ten import countries of rattan mats, plaits, and basketwork from Indonesia by value in 2008 (Source: UN Comtrade)

4.1.4 Export of rattan furniture

According to trade data reported by importing countries, Indonesia exported 55,613 tonnes of rattan and bamboo furniture in 2008, with a value of US\$250 million. This means that in terms of export value, furniture is by far the most important product in Indonesian rattan export. However, it should be kept in mind that these figures include furniture made of bamboo (see section 2).

The **EU** was the most important market, importing 34,264 tonnes of rattan and bamboo furniture from Indonesia with a value of US\$154 million, representing 62 per cent of the country's total rattan and bamboo furniture exports by both quantity and value. By quantity, eight of the top ten import countries of rattan and bamboo furniture from Indonesia were EU member states (Figure 25). The leading import country was **Germany**, which imported 8,193 tonnes with a value of US\$35.7 million (Figure 26), followed by **France** (4,263 tonnes), the **Netherlands** (3,512 tonnes), the **UK** (3,276 tonnes), **Spain** (3,197 tonnes), **Belgium** (2,185 tonnes), **Poland** (2,086 tonnes), and **Greece** (1,517 tonnes).

The **US** imported 6,638 tonnes of rattan and bamboo furniture from Indonesia in 2008 with a value of US\$31.2 million, representing around 12 per cent Indonesia's rattan and bamboo furniture exports by both quantity and value. **Japan** imported 6,165 tonnes with a value of US\$24 million, representing 11 per cent of Indonesia's rattan and bamboo furniture exports by quantity.

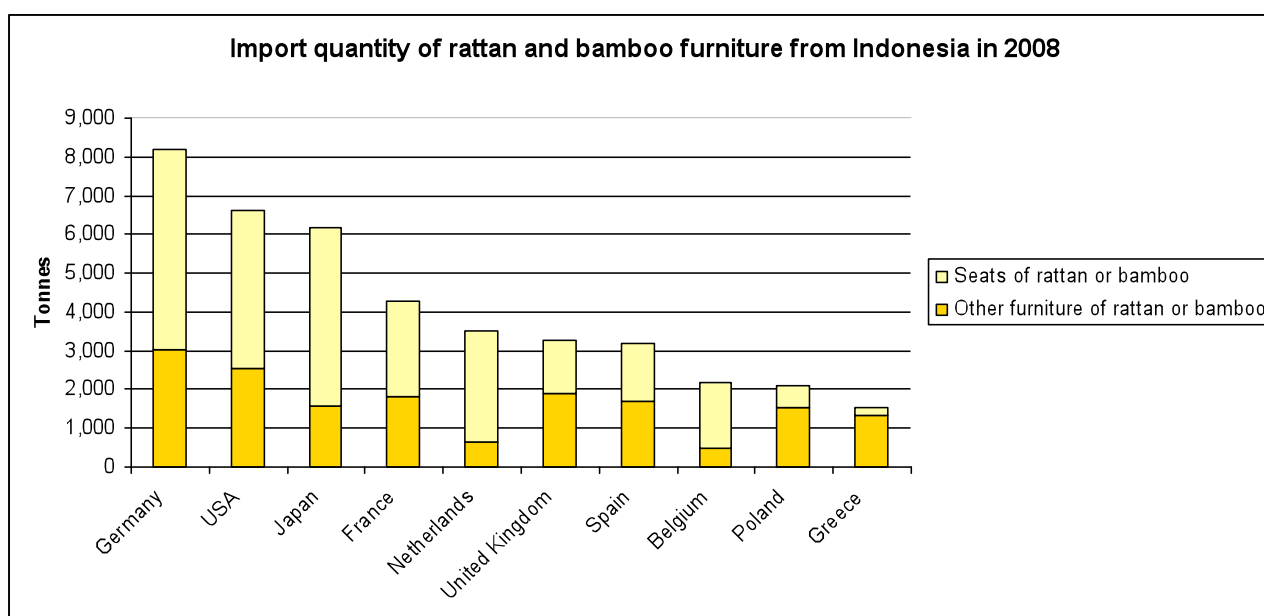


Figure 25: Top ten import countries of rattan and bamboo furniture from Indonesia by quantity in 2008 (Source: UN Comtrade)

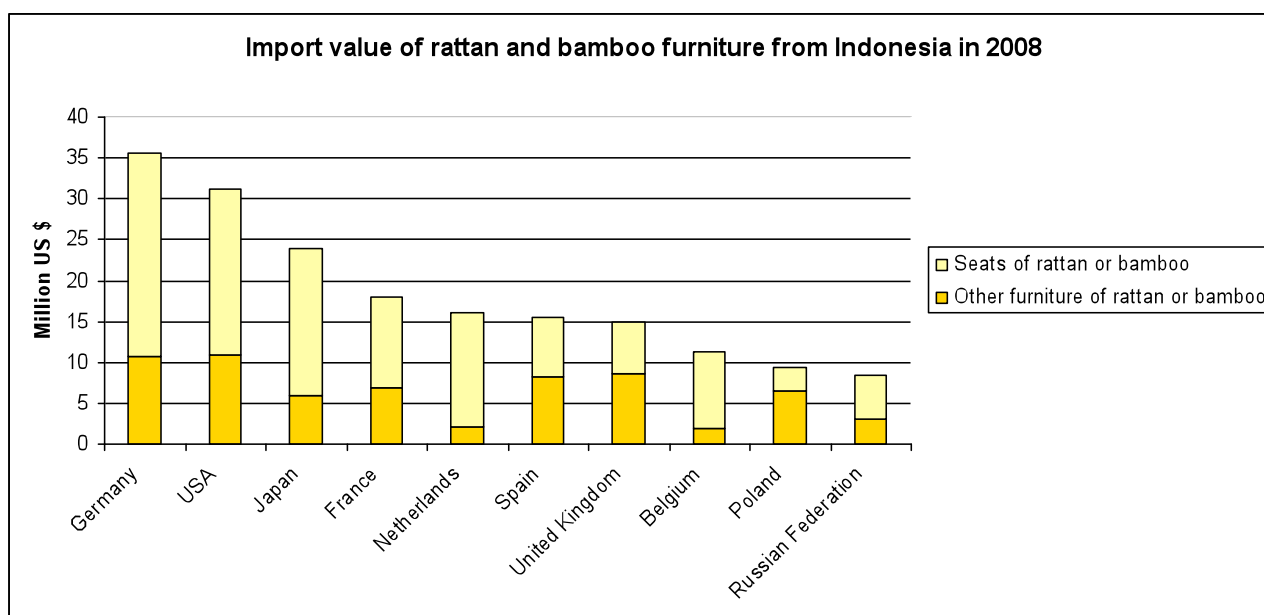


Figure 26: Top ten import countries of rattan and bamboo furniture from Indonesia by value in 2008 (Source: UN Comtrade)

4.2 Malaysia

Malaysia was among the top ten import and export countries for rattan canes in 2008, importing and exporting about the same quantities, and one of the top ten export countries for rattan and bamboo furniture. Overall, Malaysia's export of rattan products as reported by importing countries had a total value of almost US\$9 million in 2008. Furniture and canes contributed to 55 per cent and 45 per cent of the total value, respectively, while rattan canes accounted for 81 per cent of the total quantity. Export of rattan basketwork from Malaysia was negligible.

However, Malaysia's foreign trade in rattan products is difficult to accurately assess, as discussed in more detail below.

4.2.1 Import of rattan canes

Some of the trade data for Malaysia provided by UN Comtrade appear to be incorrect, particularly with regard to quantities. Trade data from 2006 are especially unreliable. Malaysia reported a total import of 21,600 tonnes of rattan canes in this year, 25 times as much as in the following year. A comparison of quantities with value gives an average price of US\$14 per tonne for rattan canes imported from Indonesia and just US\$1 for those imported from Hong Kong. These values are obviously much too low, and indicate that imports from Indonesia and Hong Kong were wrongly reported in 2006. As discussed in section 3.1.1, there is also an apparent problem with Malaysia's reported export to Singapore in 2006.

There is also a problem with trade data for 2008, where Malaysia reported an import of 1,025 tonnes of rattan canes from Singapore with an average price of US\$24 per tonne, while Singapore reported an export of just 98 tonnes to Malaysia. This suggests the actual rattan quantity imported by Malaysia in 2008 was probably almost 1,000 tonnes smaller than the reported quantity. Accordingly, instead of 3,500 tonnes, Malaysia probably imported a total of around 2,500 tonnes of rattan canes in 2008, with 2,050 tonnes imported from Indonesia, 370 tonnes from the Philippines, and 28 tonnes from China.

The figures on Malaysian import quantities provided by UN Comtrade for 2004 and 2005 are also problematic. Since Malaysia reported the value, but not the quantity, of its imports to the UN in these years, the UN estimated the quantity based on a median unit value for 2004 and 2005 of US\$2,190 per tonne. However, this value is likely to be much too high for Malaysian imports, given that in 2007, where Malaysian trade data seems to be reliable, the average price of Malaysian imports was US\$650 per tonne. Recalculating import quantities for the years 2004 to 2006 with this price indicates that Malaysia would have been importing around 1,000 tonnes annually in this period, significantly more than the UN Comtrade figures suggest.

Thus, we believe that for the Malaysian import quantities of rattan canes shown in Figure 27, only the figure for 2007 seems to be reliable for the period 2004 to 2008.

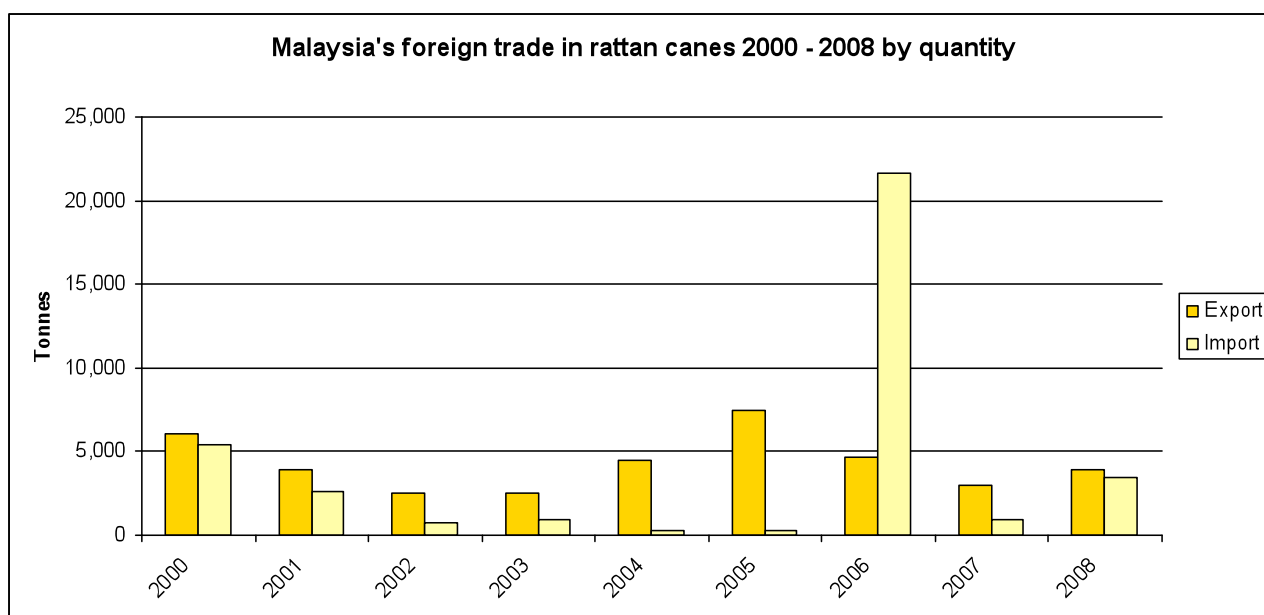


Figure 27: Malaysia's foreign trade in rattan canes by quantity between 2000 and 2008 (Source: UN Comtrade)

Figures on import value reported by Malaysia are more reliable than figures on quantities. The import value of rattan canes declined from 2000 to 2002 and then remained relatively constant between 2002 and 2008, ranging between a low of US\$442,000 in 2008 and a high of US\$753,000 in 2006 (Figure 28).

UN trade data show that from 2000 to 2008, the quantity of rattan canes reported by Malaysia as imports from Indonesia by far exceeded the quantities reported by Indonesia as exports to Malaysia. This might be an indicator of unofficial trade between the two countries, but could also be due to the poor quality of trade data reported by Malaysia.

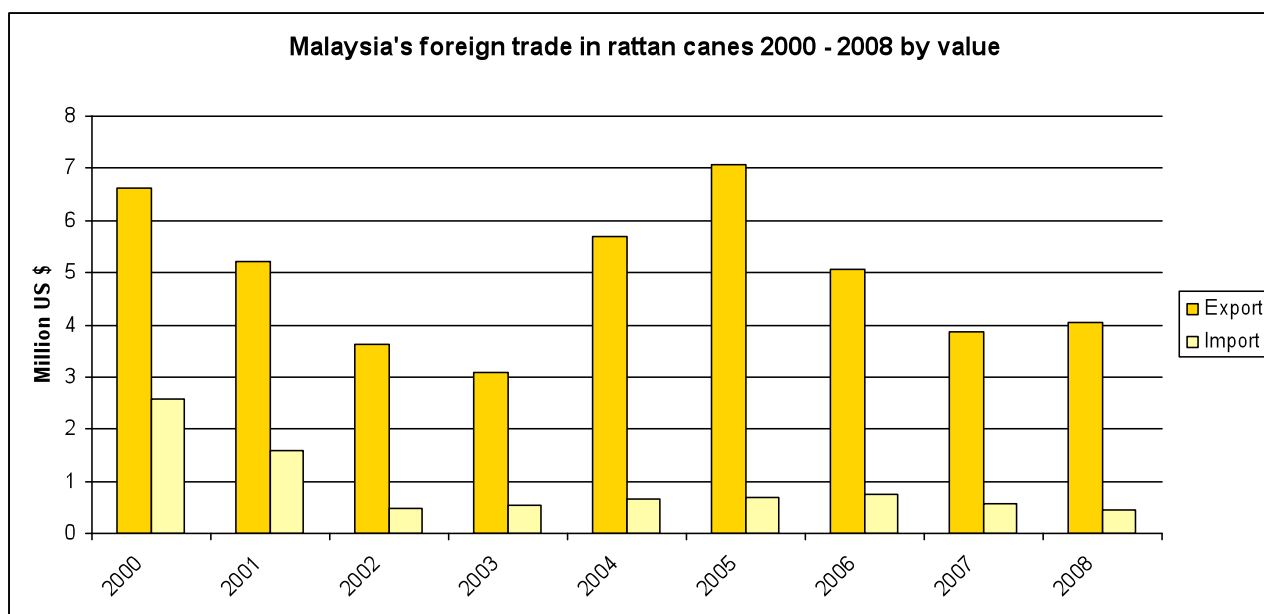


Figure 28: Malaysia's foreign trade in rattan canes by value between 2000 and 2008 (Source: UN Comtrade)

4.2.2 Export of rattan canes

As for imports, trade data for Malaysia's export of rattan canes are also quite inconsistent in 2008. Malaysia reported exports of 719 tonnes of rattan canes with a value of US\$1.2 million, while importing countries reported almost 4,000 tonnes as coming from Malaysia with a value of US\$4 million. Singapore and Pakistan reported imports of 1,700 tonnes of rattan canes each from Malaysia, whereas Malaysia reported an export of 305 tonnes to Singapore and only 20 tonnes to Pakistan (Figure 29). In contrast, figures for China do not show such extreme discrepancies. Despite the poor-quality trade data, Singapore and China can nevertheless be identified as key markets for rattan canes from Malaysia. It remains unclear whether

Pakistan is also a major importer of Malaysian rattan canes, as trade data reported by Pakistan are also not very reliable (see section 3.1.3).

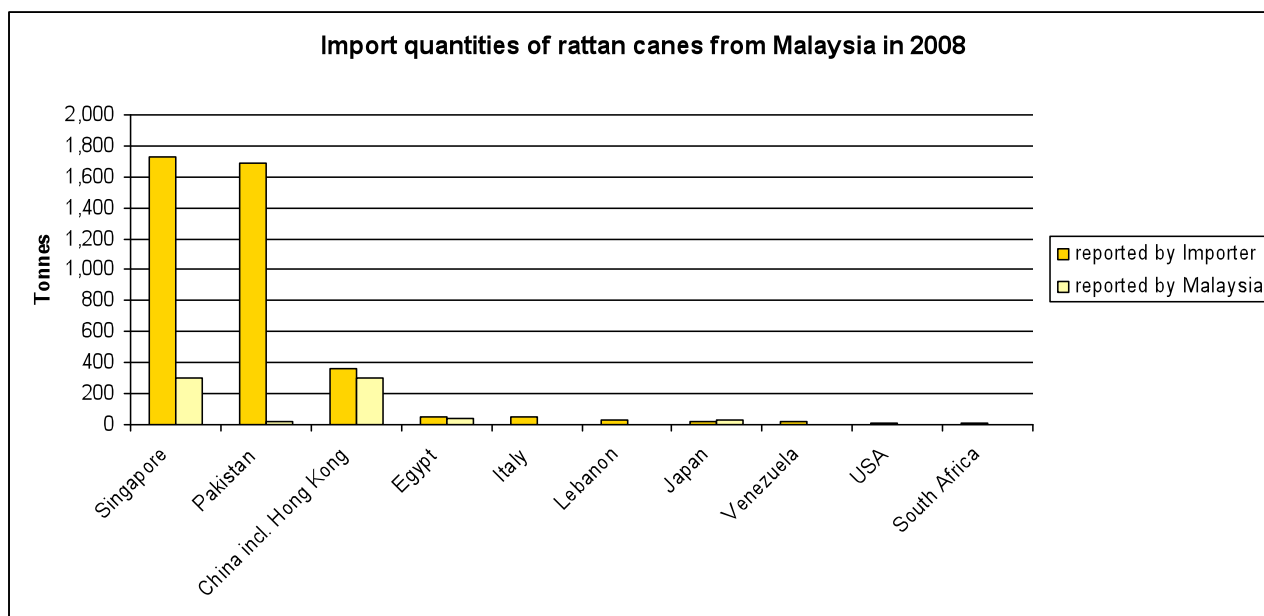


Figure 29: Top ten import countries of rattan canes from Malaysia by quantity in 2008 (Source: UN Comtrade)

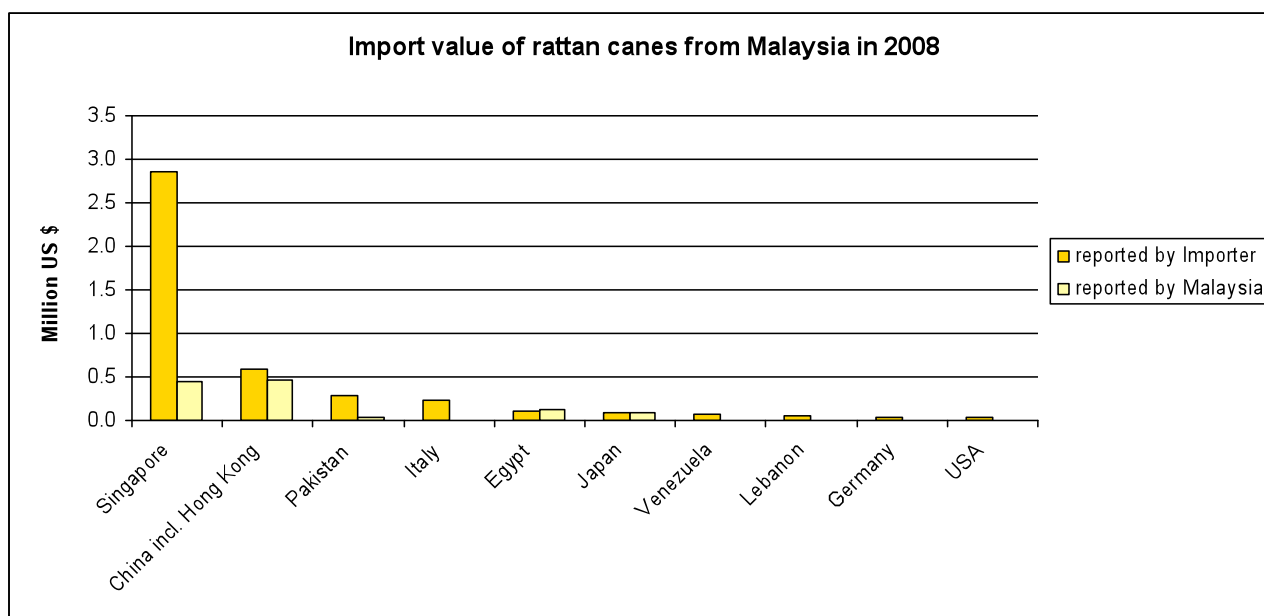


Figure 30: Top ten import countries of rattan canes from Malaysia by value in 2008 (Source: UN Comtrade)

4.2.3 Export of rattan furniture

Global imports of rattan and bamboo furniture from Malaysia totalled 940 tonnes in 2008, with a value of US\$4.9 million. The two largest markets were the **EU** (43 per cent by quantity and 48 per cent by value) and the **US** (one-third of the furniture imported from Malaysia).

Malaysia did not report its exports in 2008 according to the *HS Nomenclature Edition 2007*, which specifies furniture made of bamboo and rattan. Therefore it is not possible to compare the data reported by importing countries with data reported by Malaysia in order to determine whether similar discrepancies exist for bamboo and rattan furniture as for rattan canes.

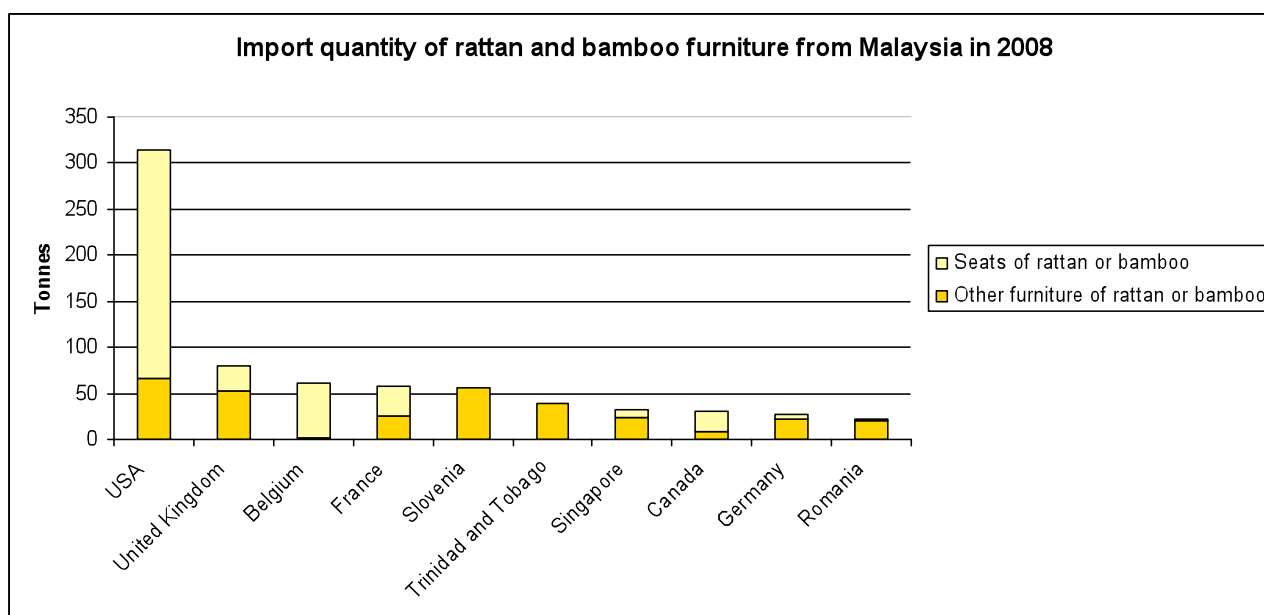


Figure 31: Top ten import countries of rattan and bamboo furniture from Malaysia by quantity in 2008 (Source: UN Comtrade)

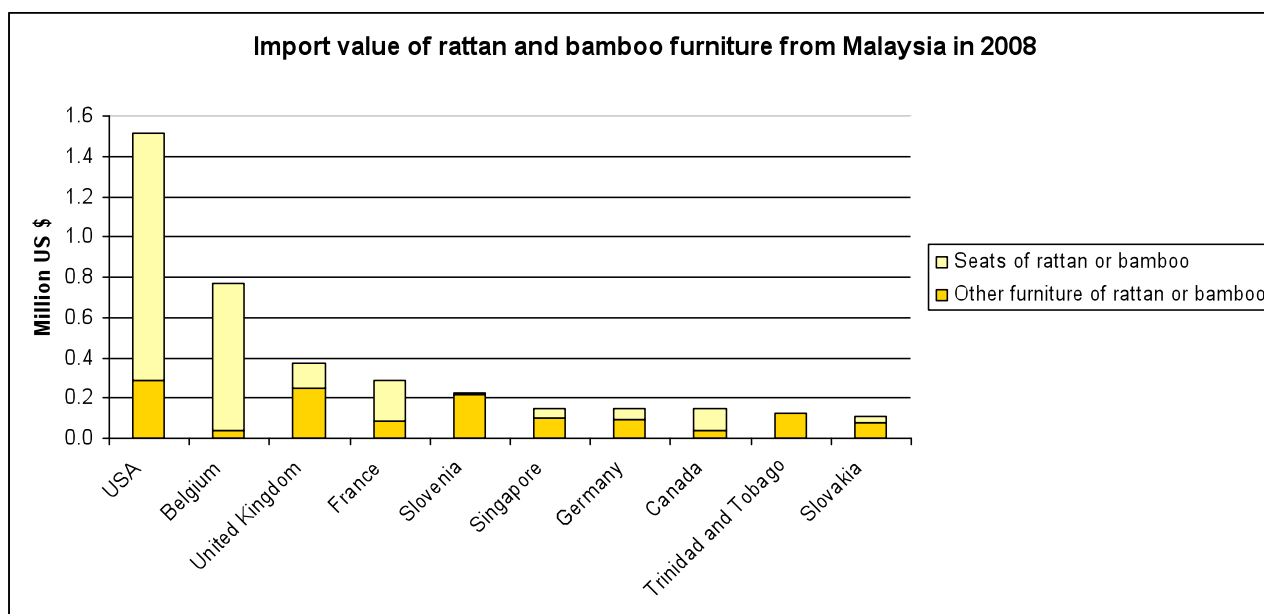


Figure 32: Top ten import countries of rattan and bamboo furniture from Malaysia by value in 2008 (Source: UN Comtrade)

4.3 Singapore

Singapore is the third-most important export country and the second-most important import country for rattan canes. Export of rattan basketwork and furniture is negligible. However, Singapore's trade data as provided by UN Comtrade is sometimes quite confusing, as discussed in more detail below.

4.3.1 Import of rattan canes

In recent years Singapore has reported significantly higher exports than the import countries, by both quantity (Figure 33) and value (Figure 34). The country did not report any import of rattan canes from Indonesia until 2002, although Indonesia reported an annual export of around 1,000 tonnes to Singapore between 2000 and 2002. Singapore began to report imports from Indonesia in 2003, resulting in a doubling of reported import quantities of rattan canes in this year compared to 2002 (Figure 33).

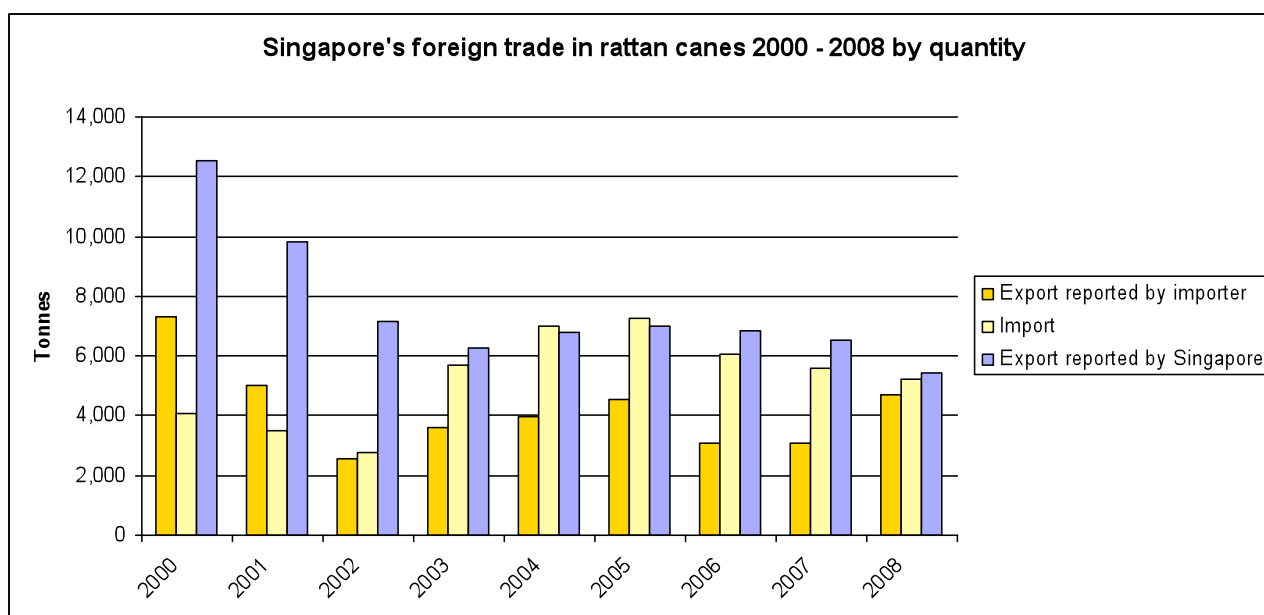


Figure 33: Singapore's foreign trade in rattan canes by quantity between 2000 and 2008 (Source: UN Comtrade)

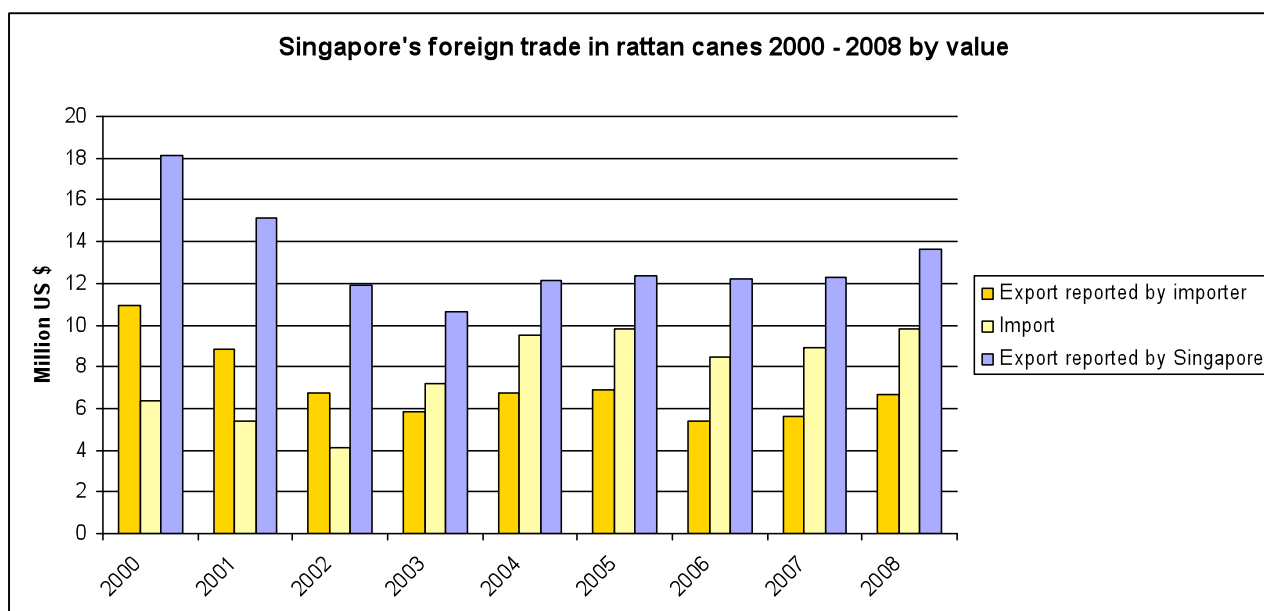


Figure 34: Singapore's foreign trade in rattan canes by value between 2000 and 2008 (Source: UN Comtrade)

The two main countries from which Singapore imports rattan canes are **Indonesia** and **Malaysia**, with around 60 per cent imported from Indonesia and 33 per cent from Malaysia between 2003 and 2008. In 2008 Singapore imported 3,237 tonnes from Indonesia with a value of US\$6.2 million and 1,725 tonnes from Malaysia with a value of US\$2.9 million.

4.3.2 Export of rattan canes

In 2008 **Malaysia** reported imports of 1,025 tonnes of rattan canes from Singapore, with a value of just US\$24,600. This translates to an average price of US\$24 per tonne, which is too low and indicates that the import quantity was wrongly reported. In contrast, Singapore reported exports of 98 tonnes to Malaysia, with a value of US\$232,000. In previous years Malaysia reported imports of between 1.2 tonnes (in 2007) and 90 tonnes (in 2001). As a result of the wrongly reported 1,025 tonnes by importing country Malaysia, the discrepancy between the total export quantity reported by Singapore and the export quantity reported by importing countries in 2008 is not as big as in previous years (Figure 33).

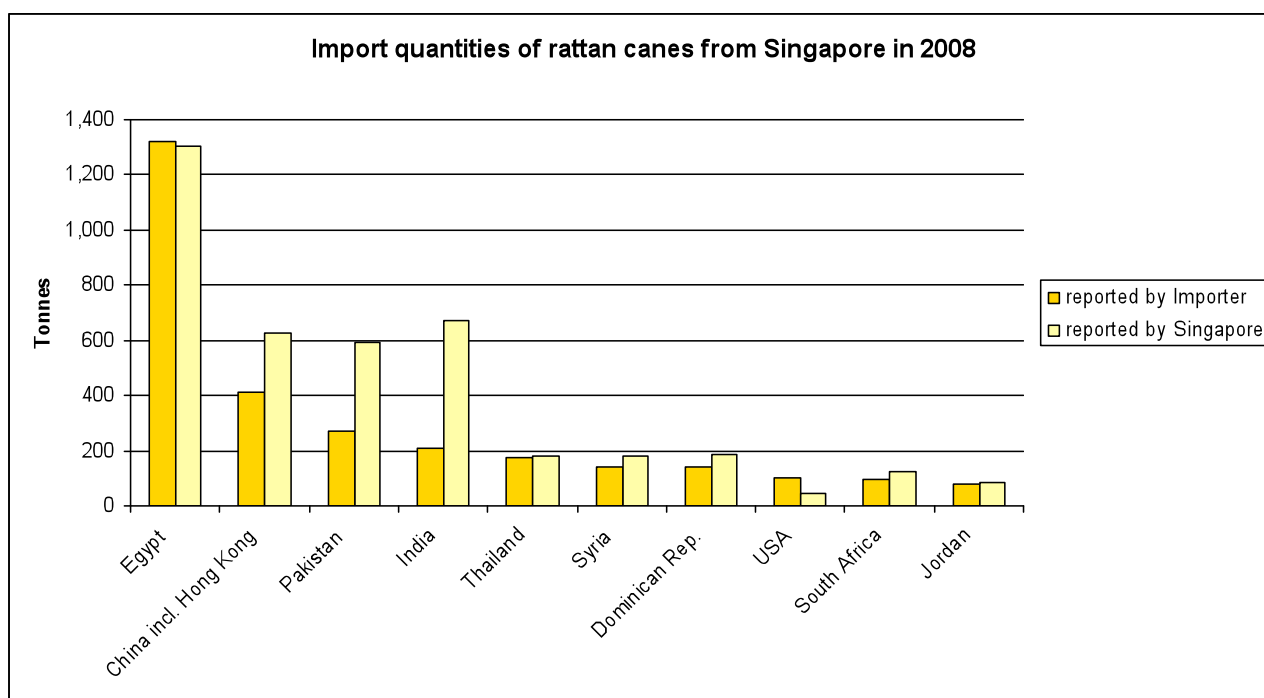


Figure 35: Top ten import countries of rattan canes from Singapore by quantity in 2008 (Source: UN Comtrade)

Singapore supplies rattan canes mainly to developing countries. The key market in recent years is **Egypt**, which in 2008 imported 1,300 tonnes of rattan canes from Singapore (Figure 35). The value of these imports was US\$2 million as reported by Egypt, and US\$2.7 million as reported by Singapore. This discrepancy is surprising since the value reported by the importer usually includes transport costs, taxes, and customs duty and is therefore higher than the value reported by the exporter.

In terms of quantity, the most important markets after Egypt were **China**, **Pakistan**, and **India**. However, discrepancies between quantities reported by these three importing countries and the quantities reported by Singapore are considerable. For example, Singapore reported over three times more rattan canes exported to India than India reported as imports from Singapore (Figure 35).

The **US** accounted for just 2 per cent by quantity of rattan canes exported from Singapore in 2008, and the **EU** for 7 per cent. However, the average price per tonne of rattan canes exported to developing countries, particularly to Pakistan and India, was much lower than average price of exports to Europe. Thus the EU accounted for 18 per cent of the value of rattan canes imported globally from Singapore. In terms of value, **Germany** was the third-most important import country (Figure 36).

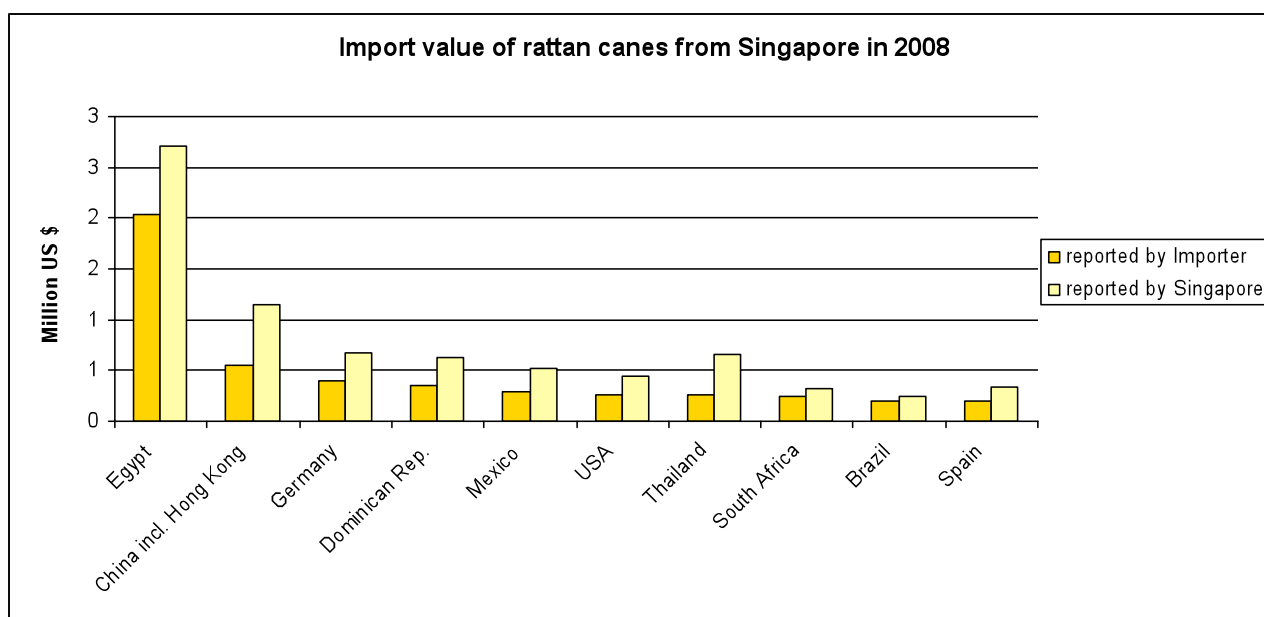


Figure 36: Top ten import countries of rattan canes from Singapore by value in 2008 (Source: UN Comtrade)

4.4 Myanmar

4.4.1 Overview

While foreign exchange earnings from rattan were only 5 per cent of Myanmar's total timber exports in 2003, rattan plays an important role in the country's village economy. For example, one agrarian village of about 2,700 households has evolved into a major centre for rattan production. One exporting company pours in as much as US\$2,300 per month to households in this village as piecework payment for rattan baskets, trays, and other handicrafts. With five firms farming out job-orders in the village, total monetary resources flowing into this village translate to no less than US\$11,000 per month^x.

By quantity, 95 per cent of rattan products imported from Myanmar in 2008 were rattan canes, almost 10,000 tonnes. However, on average these have a low price of just US\$290 per tonne. Thus, rattan canes account for only 46 per cent of rattan imports from Myanmar by value. In contrast, basketwork contributed to 41 per cent, and furniture to 13 per cent, of the value of rattan imports from Myanmar, although these products account just for 4 per cent and 1 per cent of the quantity, respectively.

One of the main suppliers of hand-made Myanmar rattan products for Asian and European customers is Three Red Stars Co., Ltd^{xi}. Another company, Rattan Island, is a joint partnership between a European wholesaler and Burmese partners^{xii}.

National rattan resources and management

Although Myanmar exports thousands of tonnes of rattan cane each year, the last systematic assessment of rattans in the country was undertaken over 100 years ago. A study on the rattan trade in northern Myanmar found that the current pattern of rattan exploitation is largely uncontrolled and will eventually lead to resource depletion unless some form of management is implemented^{xiii}.

Recognizing that revitalised bamboo and rattan traditions can become a catalyst for social and economic growth for local communities, The Common Fund for Commodities, together with INBAR and ITTO, started a project in 2005 to open up the path to an improved and sustainable future for small producers. The objectives of the project are to develop and introduce rehabilitation and certification systems for rattan resources, provide design improvement for rattan products in order to meet medium- and high-quality standards of developed western markets, and ensure dissemination of the technology through training and networking, with particular stress on integrating women into dissemination activities^{xiv}.

4.4.2 Export of rattan canes

From 2000 to 2008, Myanmar's annual export of rattan canes ranged between 9,225 tonnes and 13,402 tonnes (Figure 37), with a value of US\$2 million and US\$2.9 million, respectively (Figure 38). The two largest importers of rattan canes from Myanmar in 2008 were **China** and **Thailand**, with export quantities to other countries being marginal (Figure 37). China accounted for 88 per cent of the export quantity and 97 per cent

of the export value, while Thailand accounted for 12 per cent of the export quantity and 3 per cent of the export value. The average price of rattan canes exported to Thailand was very low (US\$64 per tonne in 2008) compared to exports to China (US\$317 in 2008).

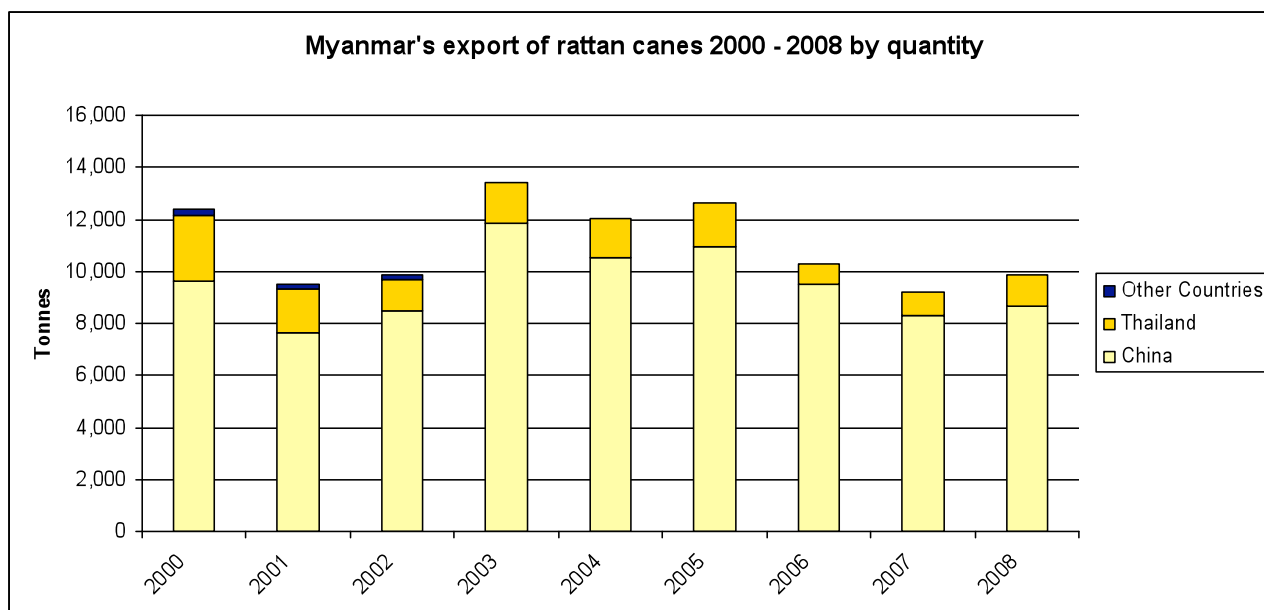


Figure 37: Myanmar's export of rattan canes by quantity between 2000 and 2008 (Source: UN Comtrade)

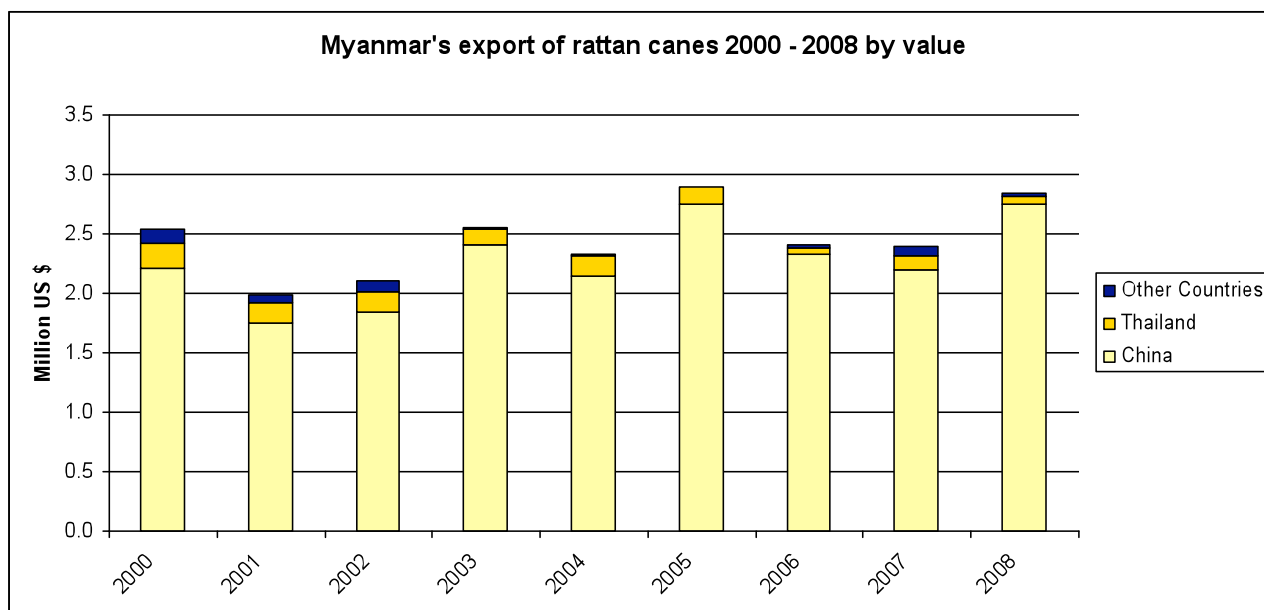


Figure 38: Myanmar's export of rattan canes by value between 2000 and 2008 (Source: UN Comtrade)

4.4.3 Export of rattan mats, plaits, and basketwork

Myanmar exported just 404 tonnes of rattan mats, plaits, and basketwork in 2008. However, the value of this export, US\$2.5 million, was almost equal to that of rattan canes. In contrast to rattan canes, many more countries import mats, plaits, and particularly basketwork from Myanmar. Neighbouring country **Thailand** was the leading importer by quantity (Figure 39), but only second by value (Figure 40). Overall, the 27 EU countries accounted for almost half (47 per cent) of Myanmar's export by quantity and 60 per cent by value.

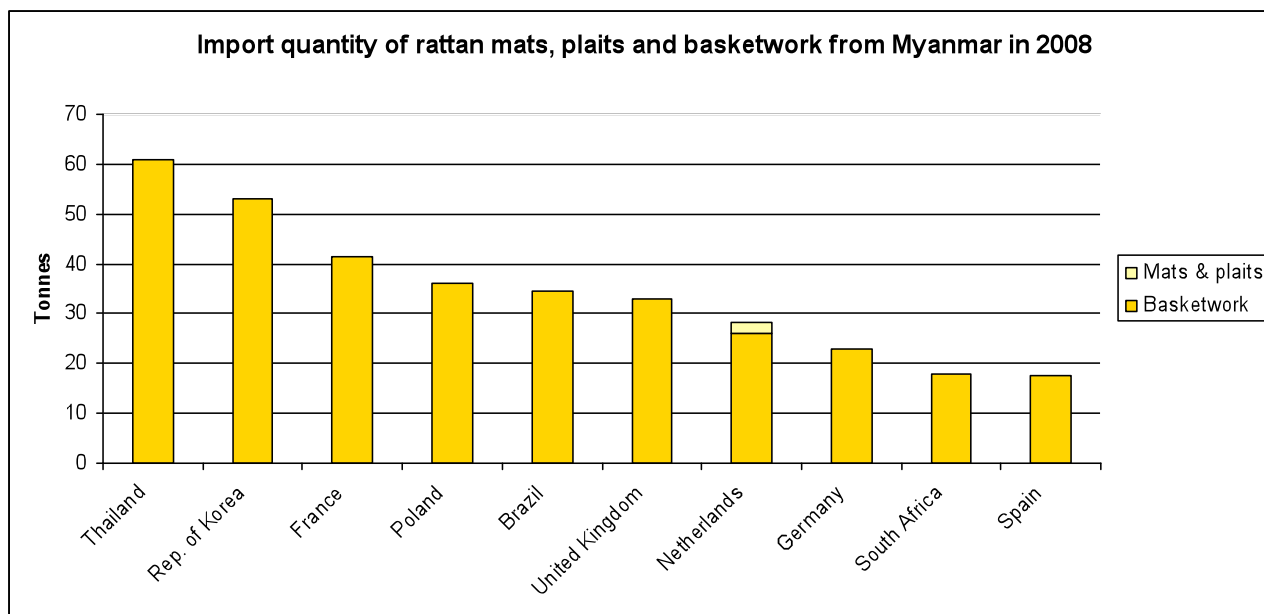


Figure 39: Top ten import countries of rattan mats, plaits, and basketwork from Myanmar by quantity in 2008
(Source: UN Comtrade)

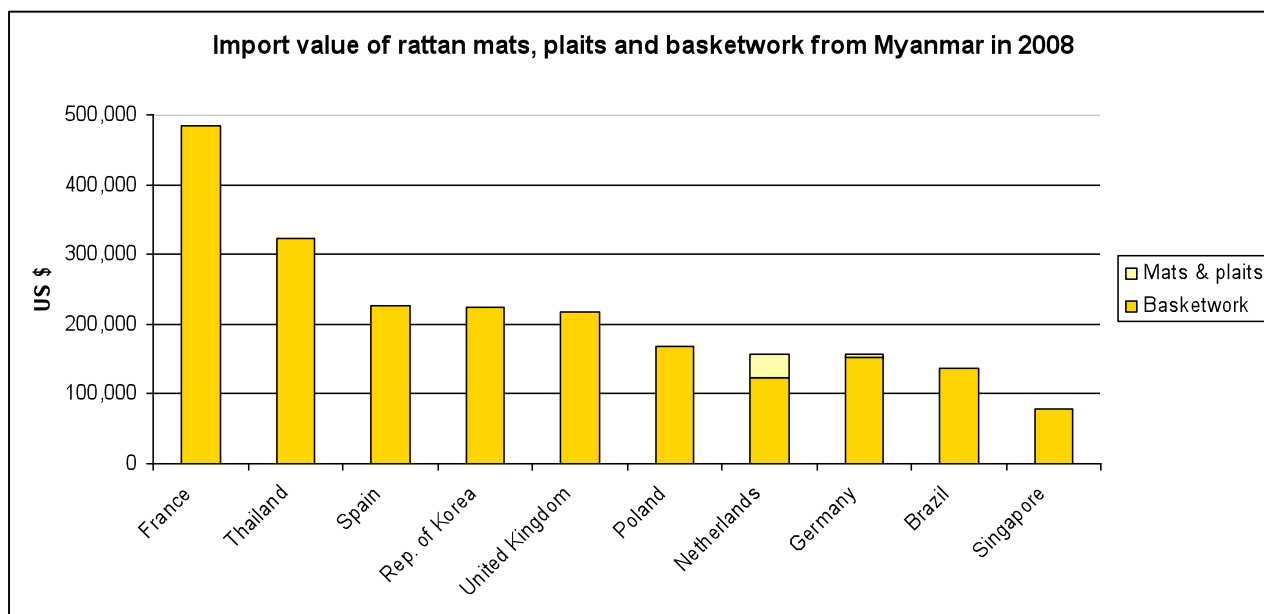


Figure 40: Top ten import countries of rattan mats, plaits, and basketwork from Myanmar by value in 2008
(Source: UN Comtrade)

4.4.4 Export of rattan furniture

Myanmar exported 155 tonnes of rattan and bamboo furniture in 2008, with a value of US\$800,000. The **EU** was the key market, accounting for 64 per cent of the export by quantity and 68 per cent by value. While the **Netherlands** was the leading import country by quantity, followed by **South Africa** and the **UK**, **Germany** led the top ten import countries by value as it imported higher-priced furniture.

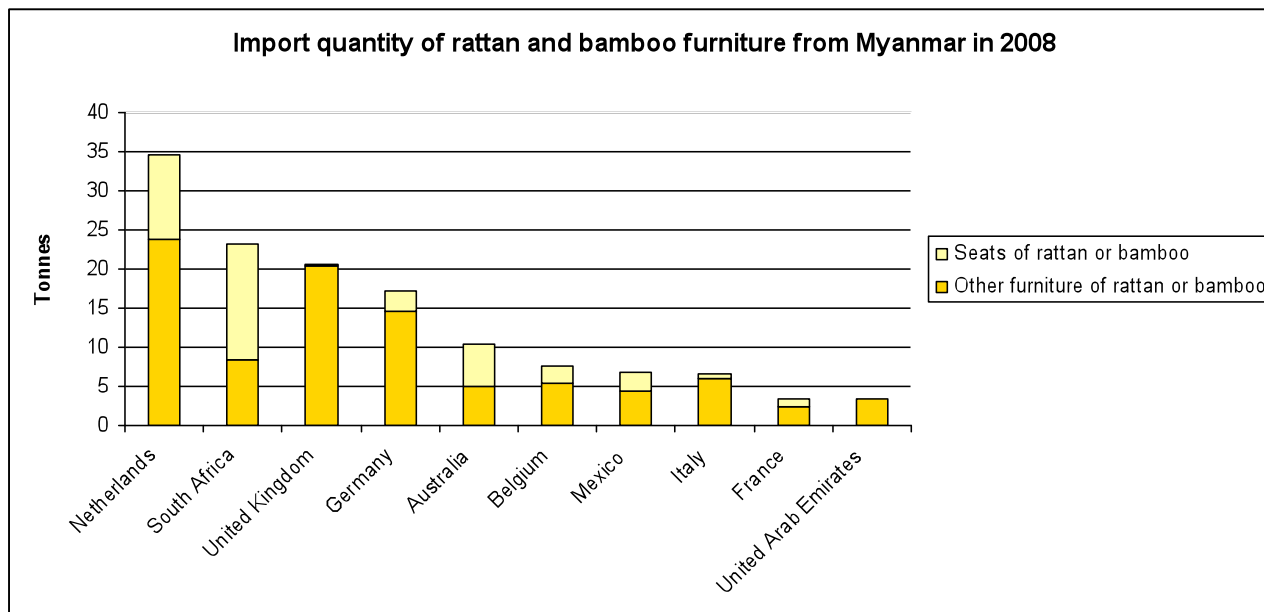


Figure 41: Top ten import countries of rattan and bamboo furniture from Myanmar by quantity in 2008 (Source: UN Comtrade)

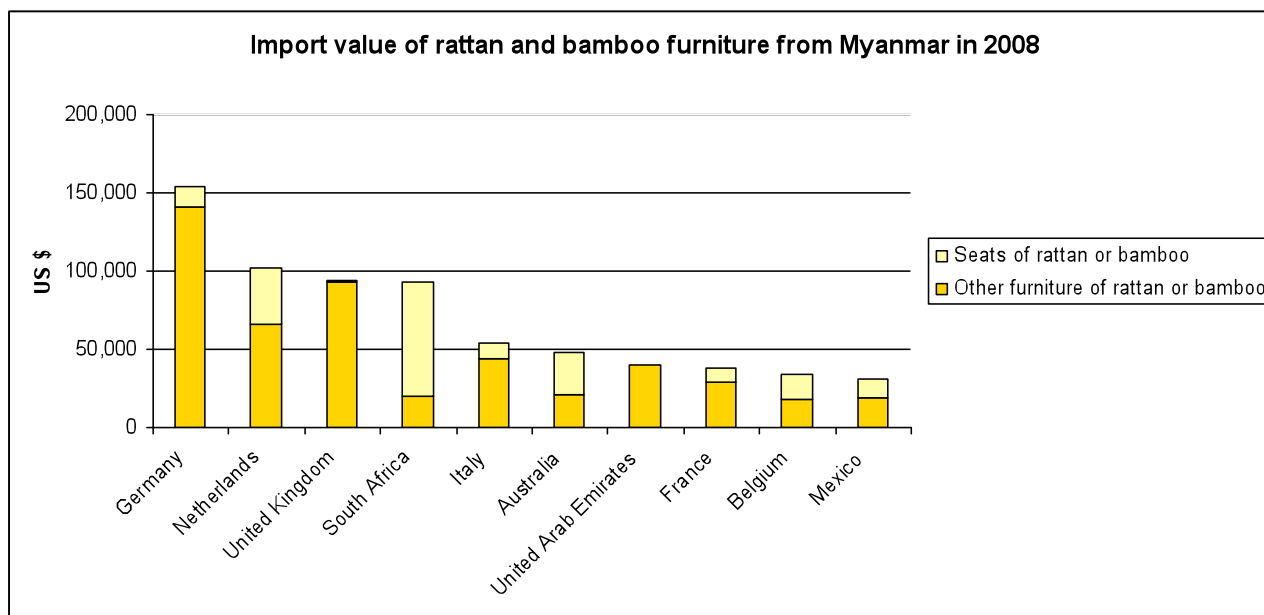


Figure 42: Top ten import countries of rattan and bamboo furniture from Myanmar by value in 2008 (Source: UN Comtrade)

4.5 China (with Hong Kong)

4.5.1 Overview

Rattan resources are rich in China, with 25 species occurring naturally in the country. The rattan industry employs 150,000 people^{xv}.

UN Comtrade provides separate trade records for China and Hong Kong. However, as the special administrative region of Hong Kong is part of China, the two separate UN trade data sets are assessed together in this section. In addition, UN trade records provided for Hong Kong are contradictory, with exports reported by Hong Kong being much higher than imports from Hong Kong reported by importing countries. For example, between 2000 and 2008 Hong Kong reported an average export of 10,000 tonnes of rattan canes per year, while importing countries reported just 1,000 tonnes per year. This discrepancy is mainly due to the fact that Hong Kong reports exports to China, but China does not report imports from Hong Kong. In addition, other import countries sometimes may not differentiate between China and Hong Kong and so report imports from Hong Kong as imports from China.

These discrepancies can be avoided if both data sets are merged by attributing Hong Kong's foreign trade to China. It should be noted that the figures presented in this section are figures for foreign trade, and thus do not include data on internal trade between China and Hong Kong.

Global imports of rattan products from China including Hong Kong had a value of US\$233 million in 2008. Furniture accounted for 61 per cent of the value and rattan mats, plaits, and basketwork for 35 per cent. Chinese imports of rattan products were worth US\$29 million, with rattan canes accounting for 95 per cent of the import value.

4.5.2 Import of rattan canes

Even though China is the fifth-largest exporter of rattan canes in terms of quantity (Figure 3) and the second-largest in terms of value (Figure 4), the country's imports of rattan canes by far exceed exports in terms of both quantity (Figure 43) and value (Figure 44) — and indeed China is the dominating import country in the global trade of rattan canes. However, in recent years imports have decreased from a maximum of 75,000 tonnes in 2003 to 39,000 tonnes in 2008. In addition, imports via Hong Kong became less important: in 2000 China imported 25 per cent of its rattan canes via Hong Kong, but just 6 per cent in 2008 (Figure 45).

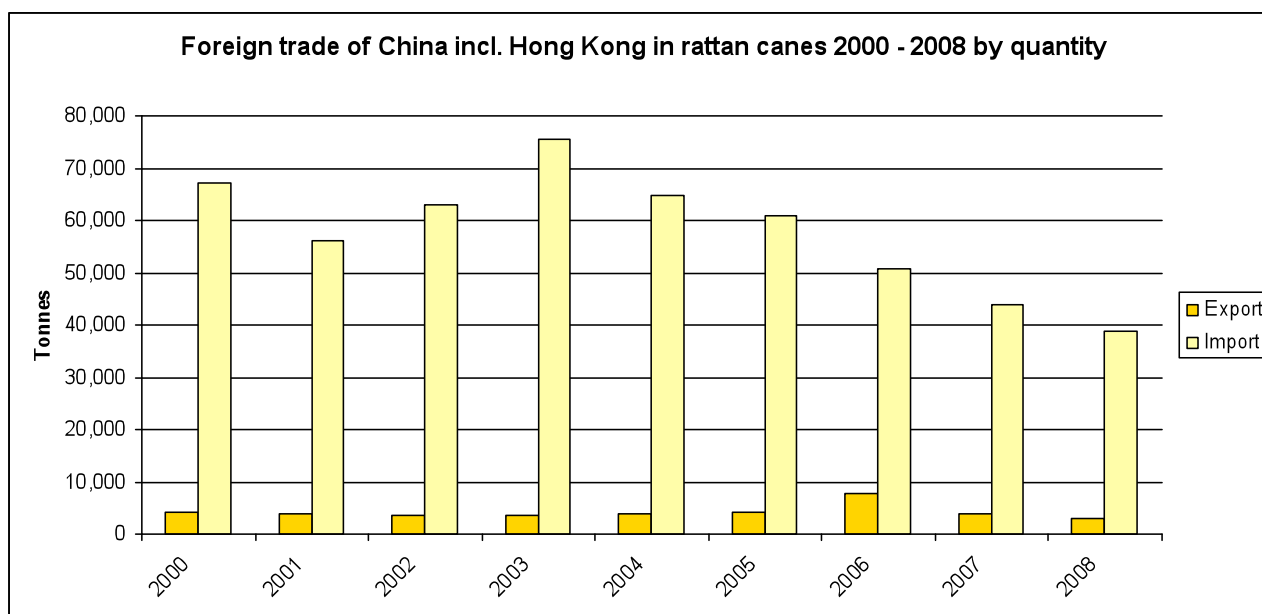


Figure 43: China's foreign trade in rattan canes by quantity between 2000 and 2008 (incl. Hong Kong) (Source: UN Comtrade)

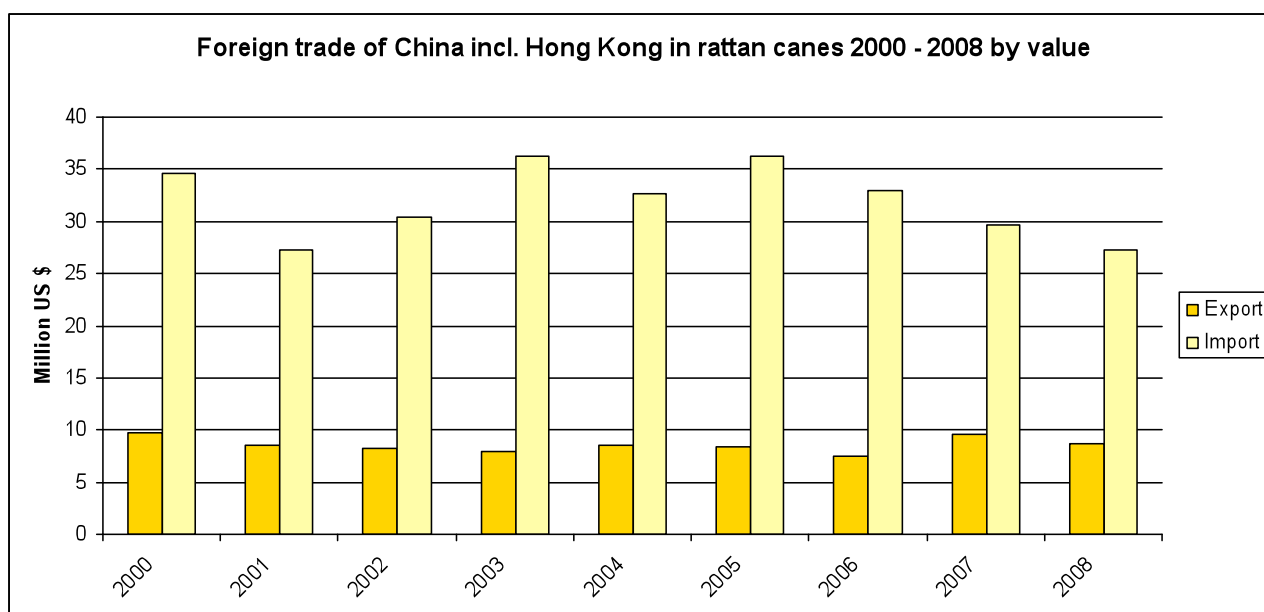


Figure 44: China's foreign trade in rattan canes by value between 2000 and 2008 (incl. Hong Kong) (Source: UN Comtrade)

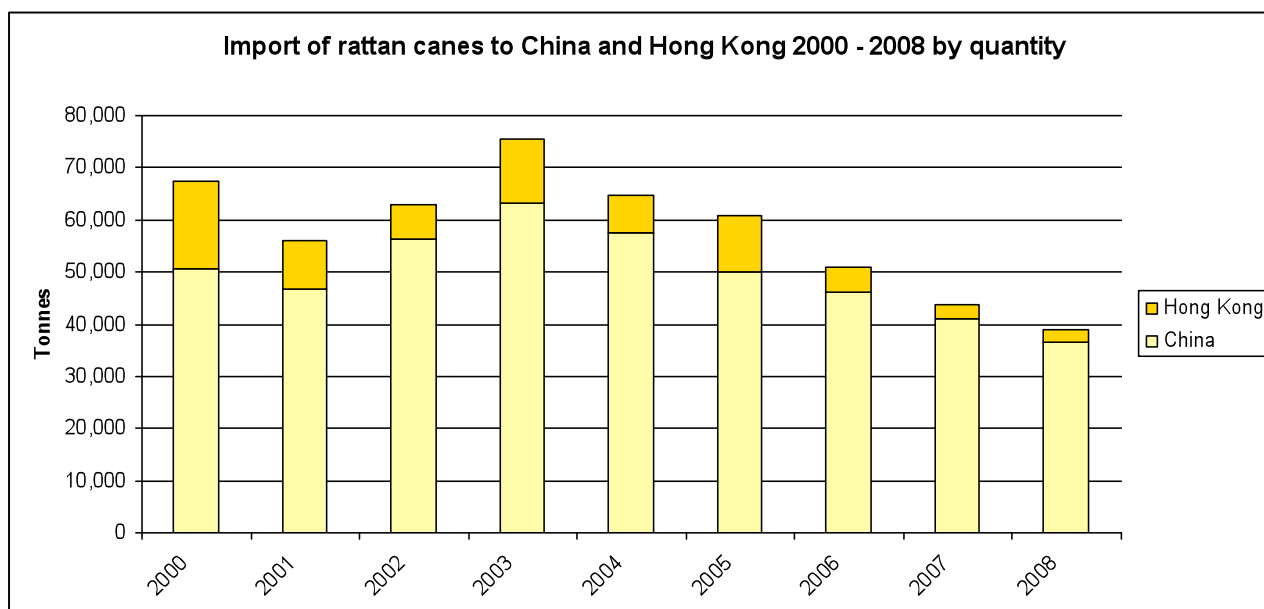


Figure 45: Import of rattan canes to China and Hong Kong by quantity between 2000 and 2008 (Source: UN Comtrade)

Between 2000 and 2008, China sourced rattan canes from three key countries: **Indonesia**, **Viet Nam**, and **Myanmar**. However, over this period a significant change occurred in the relative importance of these three suppliers. Viet Nam was the second-most important country from which China imported rattan canes until 2004; however imports from Viet Nam dropped sharply in 2005 and since 2006 the country has played a negligible role in supplying China with rattan canes.

In 2008, China imported 75 per cent of its rattan canes from Indonesia and 22 per cent from Myanmar. In terms of value, Indonesia accounted for 85 per cent and Myanmar for just 10 per cent, as rattan canes from Myanmar have a low average price of US\$300 per tonne compared to an average price of US\$800 per tonne for rattan canes from Indonesia.

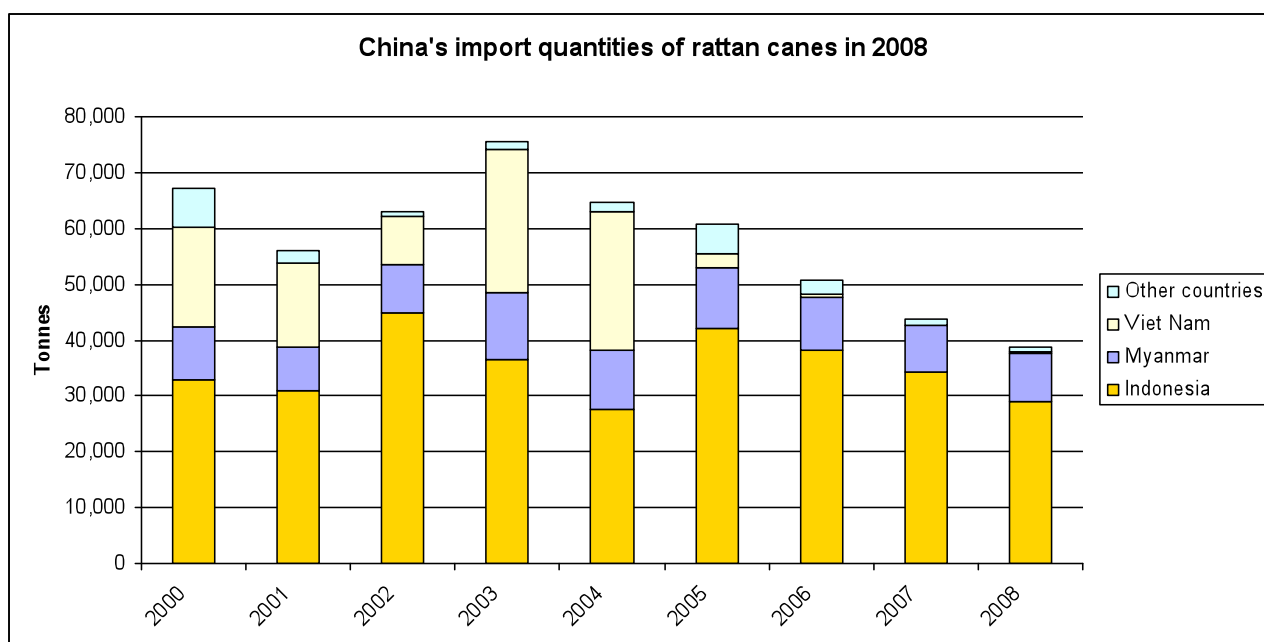


Figure 46: China's import of rattan canes by quantity between 2000 and 2008 (incl. Hong Kong) (Source: UN Comtrade)

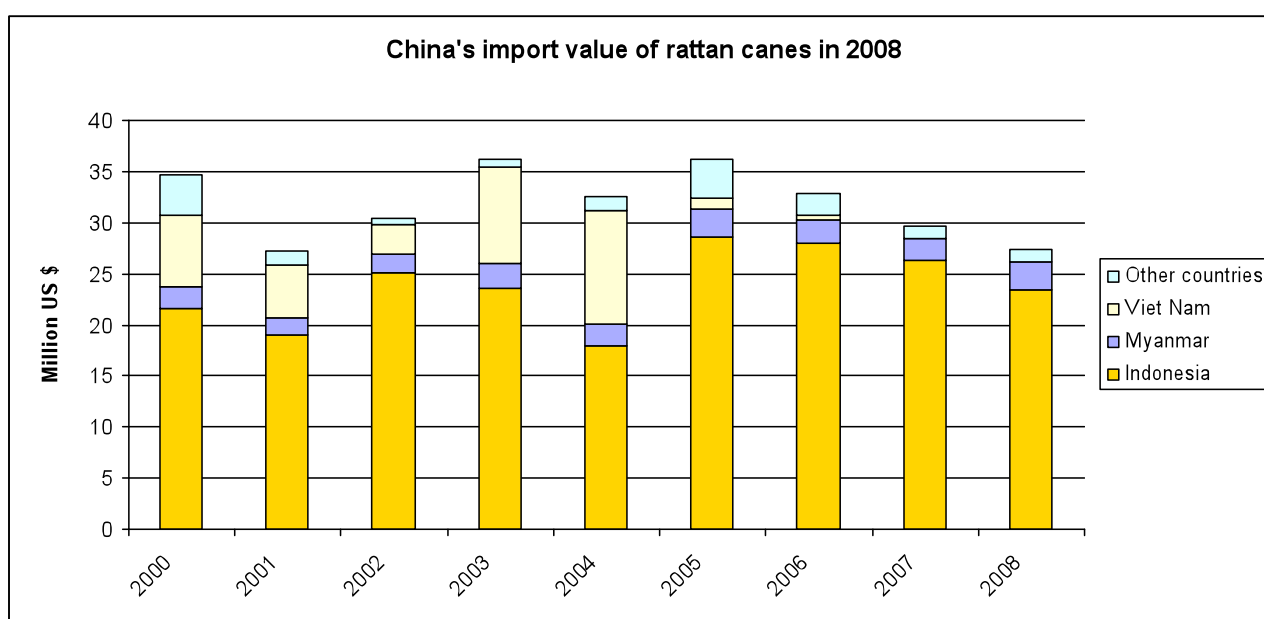


Figure 47: China's import of rattan canes by value between 2000 and 2008 (incl. Hong Kong) (Source: UN Comtrade)

4.5.3 Export of rattan canes

In 2008, China exported 2,900 tonnes of rattan canes with a value of US\$8.6 million to several countries. The **US** accounted for 35 per cent and **Mexico** for 10 per cent of the export quantity. The **EU** accounted for 18 per cent of the export quantity and 25 per cent of the value. It can be seen that China exported high-priced rattan canes with an average value of US\$3,000 per tonne, but imported low-priced canes with an average value of US\$700 per tonne in 2008.

4.5.4 Export of rattan mats, plaits, and basketwork

In 2008, global imports of rattan mats, plaits, and basketwork from China (including Hong Kong) totalled 18,000 tonnes with a value of US \$83 million. Just 1 per cent was imported via Hong Kong. The **US** was the leading import country, accounting for one-quarter of imports from China. However, the **EU** market in total accounted for half of global imports from China. **Japan** accounted for 7 per cent by quantity and 12 per cent by value, as the country imported higher-priced goods.

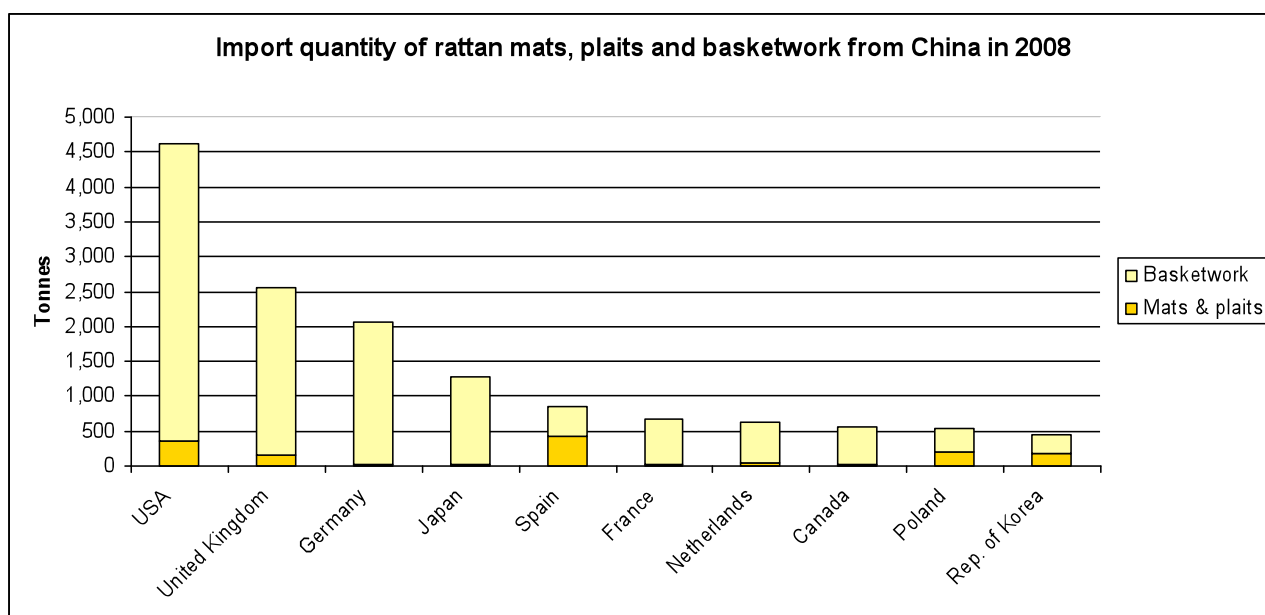


Figure 48: Top ten import countries of rattan mats, plaits, and basketwork from China (incl. Hong Kong) by quantity in 2008 (Source: UN Comtrade)

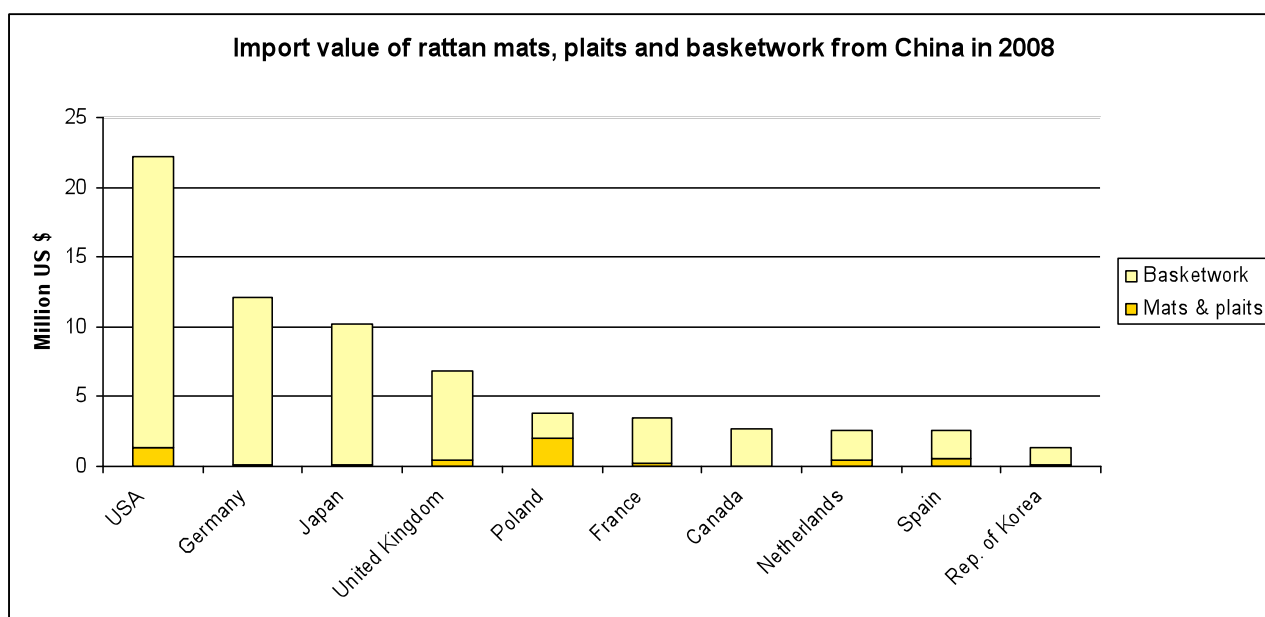


Figure 49: Top ten import countries of rattan mats, plaits, and basketwork from China by value in 2008 (incl. Hong Kong) (Source: UN Comtrade)

4.5.5 Export of rattan furniture

In 2008, global imports of rattan and bamboo furniture from China totalled 32,700 tonnes with a value of US\$142 million. Just 2 per cent was imported via Hong Kong. Key markets were North America and the EU: the **US** accounted for one-third of rattan and bamboo furniture exported by China, **Canada** for 7 per cent, and the **EU** for 39 per cent. Leading import countries in the EU were the **UK**, **France**, and **Germany**. **Switzerland** was within the top ten import countries by value, as Swiss imports had a high average price (US\$7,000 per tonne) compared to those of EU countries (US\$4,000–4,500).

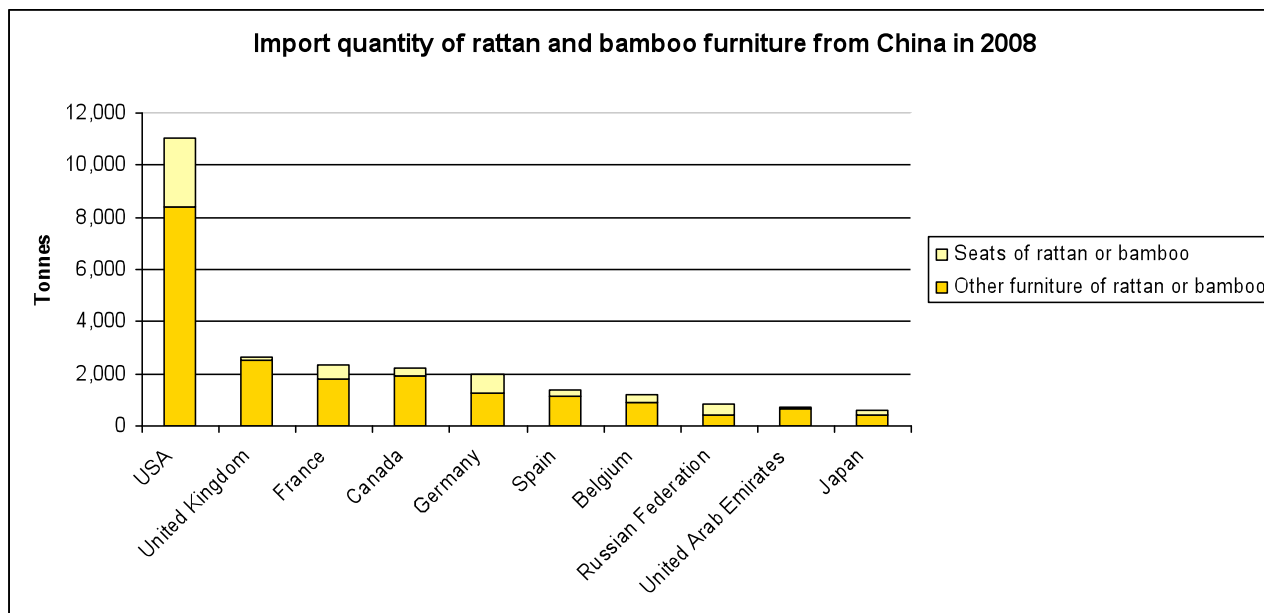


Figure 50: Top ten import countries of rattan and bamboo furniture from China by quantity in 2008 (incl. Hong Kong)
(Source: UN Comtrade)

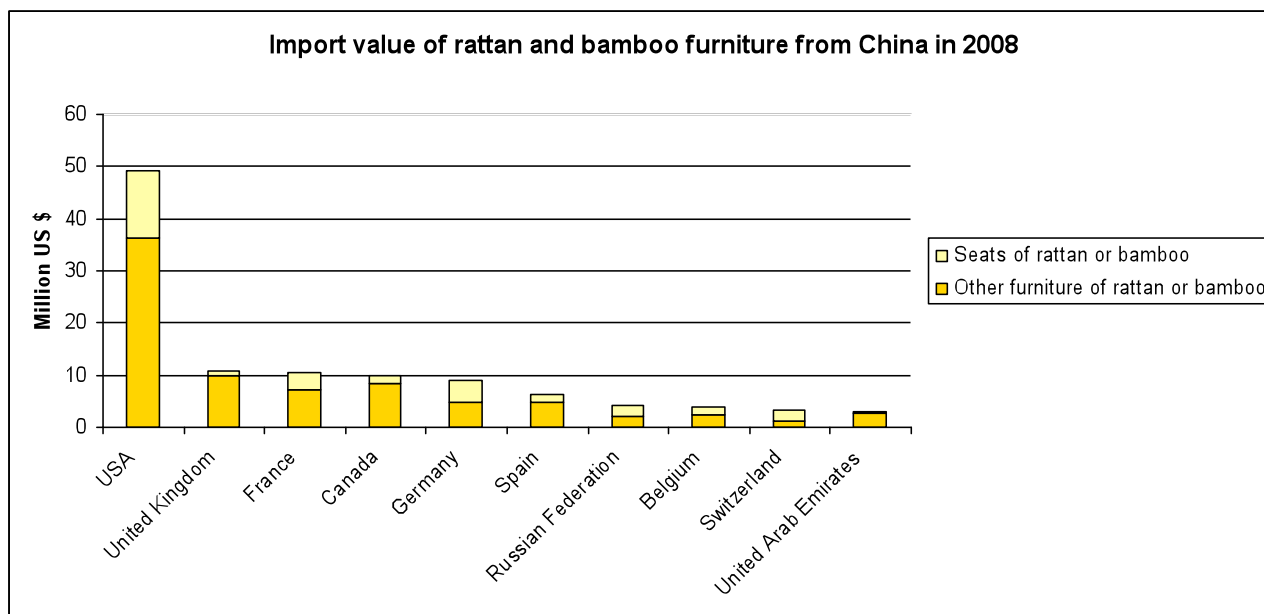


Figure 51: Top ten import countries of rattan and bamboo furniture from China by value in 2008 (incl. Hong Kong)
(Source: UN Comtrade)

4.6 Lao PDR

4.6.1 Overview

Lao PDR estimates the contribution of rattan to total GDP at 1 per cent^x. However, according to trade data reported to the UN by importing countries, imports of all rattan products from Lao PDR were valued at just US\$75,000 in 2008. Rattan canes accounted for the lion's share of rattan products imported from Lao PDR in 2008. Nevertheless, with a value of US\$16,000 the 8 tonnes of rattan basketwork imported from Lao PDR in 2008 contributed to 21 per cent of the total value of rattan products imported from the country. China accounted for 82 per cent of the basketwork export by quantity and Thailand for 17 per cent. While just 1 per cent of the export quantity went to Switzerland, this quantity (75 kg) contributed to 24 per cent of the value of Lao basketwork exports. The total amount of rattan furniture exported was negligible in 2008: only Thailand imported 19 kg of furniture with a value of US\$58.

National rattan resources and management

Lao PDR's forests, which cover 41 per cent of the country, feature high rattan diversity: more than 35 species have been identified, which are present all over the country. According to a 2008 report by Wheatley and Peters for the Netherlands Development Organization (SNV)^{xvi}, there is a lack of knowledge about rattan resources in Lao forests as no survey has been carried out by either the District Agricultural and Forestry Office (DAFO) or the Provincial Agricultural and Forestry Office (PAFO).

The decline of Lao PDR's export of rattan canes (see below) may indicate that the country's economically viable rattan resources are becoming exhausted. Rattan close to villages has been extensively and unsustainably harvested for local home uses such as home construction, baskets, and tools, and rattan shoots have been harvested for the local market to the point of exhaustion. Rattan now mainly exists in forest far from any villages, which makes rattan harvesting difficult and expensive^{xvi}.

As summarized in the 2008 report mentioned above, the central government sets a harvesting quota for each province, based on the suggestions from PAFO; however this quota is not set by the amount of rattan available under the aspect of sustainability, as this is not known. In addition, the quota does not specify the amount allowed for each variety of rattan. Instead, the quota is set by demand and is thus a very flexible concept because permits can easily be obtained when there is demand. This means that there is in fact no real limit on how much can be harvested. This quota system is not designed for commercial purposes because so far there has been little commercial application of rattan in Lao PDR. A rattan production factory was once established in Savannakhet, but soon closed down due to lack of a market.

As these quotas are not for commercial purposes, they are given to Lao companies for free. However, these companies do not harvest the rattan, but sell their quota to Vietnamese companies for 1 baht/cane¹. The Lao companies have no capital investment in the quota transaction, and do not undertake any follow-up or monitoring responsibility. The only investment they make is the time and effort it takes to apply for the free quota and sell it on.

Once the quota has been obtained, the following documents and expenses must be submitted before the final permit is obtained and the company may begin harvesting rattan. Each of these items is to be sent to a separate institute that is related to the function of the item.

- Quota
- Tax forms
- Forest development fees
- Export permit
- Passport
- State of origin certificate, which will later be certified by DAFO before the rattan can be exported out of the country.

The general quota is set for the province, then PAFO specifies districts, depending on their guess of where rattan resources are distributed, since specific information on natural rattan distribution is not available. Once a quota has been issued there is not much follow-up on the exact location where the rattan is harvested. Neither PAFO nor DAFO, or the Lao company, keeps track of the origin of the harvested rattan. DAFO

¹ 1 Baht = US\$0.033

generally does not know about the quota granted for its district until the harvesting company comes to them with a permit. At that point, DAFO contacts PAFO to verify the permit and grant the company its permit as well^{xvi}.

However, due to WWF pilot interventions, government institutions will change the system of quota allocation to one based on inventory of available rattan resources. Villagers will be able to request quotas and to make contracts directly with traders. These changes will be included in national policy in 2011.

4.6.2 Export of rattan canes

Lao PDR exports rattan canes exclusively to three countries: **Viet Nam, Thailand, and China**. According to official figures, exports have declined dramatically in recent years, from US\$872,000 in 2005 to less than US\$60,000 in 2008 (Figure 52). However, it is impossible to determine the exact quantities of rattan canes exported. As mentioned in section 2.1, Lao PDR does not report trade data to the UN. In addition, Viet Nam reports the import value, but not the quantity. Annual figures for Viet Nam's import by quantity provided by UN Comtrade were estimated by the UN using the median unit value for the relevant year, which was around US\$2,200 per tonne for the years 2000 to 2008. However, Thailand's imports of rattan canes from Lao PDR had an average value of just US\$200 per tonne in this time period, while Chinese imports from Lao PDR had an average value of US\$240 per tonne. Assuming that Viet Nam most probably paid a similar price, we estimate that Viet Nam imported more than 10 times as much rattan cane from Lao PDR than the quantity provided by UN Comtrade. As Viet Nam is the main import country, at least until 2007, the underestimation of Viet Nam's import quantities by the UN has significant implications for Lao PDR's total export quantities of rattan canes. For example, in 2005 Lao PDR probably exported about 5,000 tonnes of rattan canes in total, rather than the 1,026 tonnes reported by UN Comtrade. In addition, it seems that Viet Nam did not report its imports of rattan canes for the year 2000 to the UN. This might explain the low export value of rattan canes from Lao PDR in 2000 according to UN trade data (Figure 52).

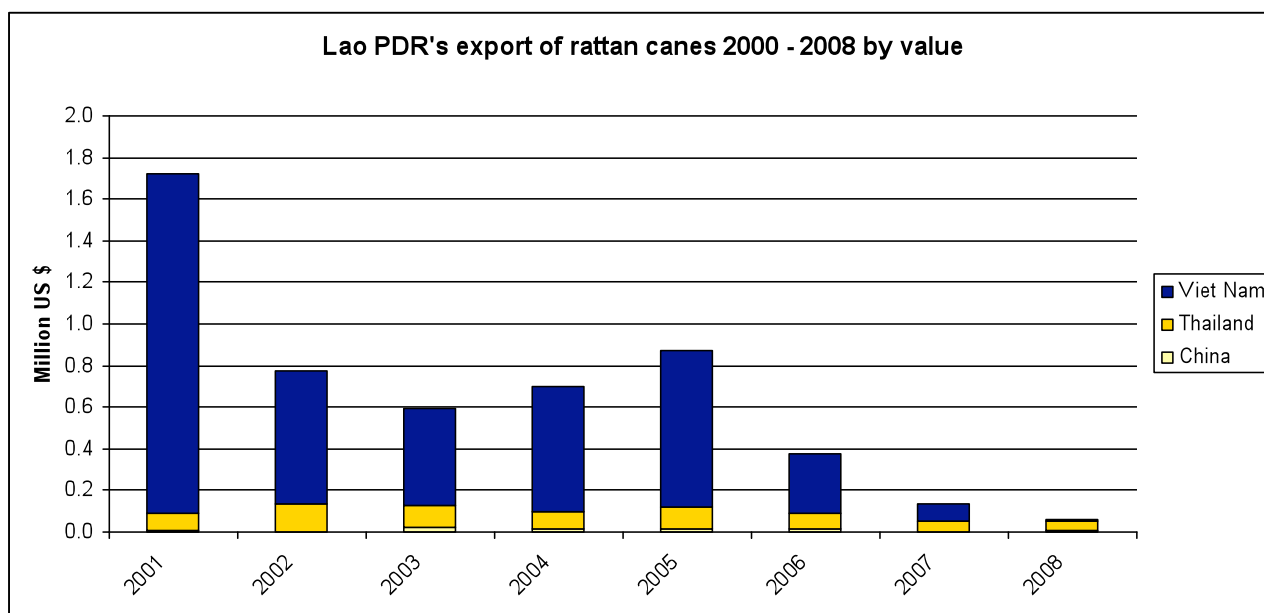


Figure 52: Lao PDR export of rattan canes by value between 2000 and 2008 (Source: UN Comtrade)

Viet Nam's import of rattan canes from Lao PDR has continuously declined in recent years, from US\$750,000 in 2005 to US\$83,000 in 2007 and just US\$4,000 in 2008. Thailand and China's imports also declined also in this period, but not by as much. Thus in 2008 Thailand was the main market, accounting for 80 per cent of Lao PDR's export of rattan canes. However, if unofficial trade with neighbouring countries is taking place, official trade data would not reflect this.

4.7 Viet Nam

4.7.1 Overview

Global imports of rattan products from Viet Nam had a total value of US\$68.6 million in 2008. Furniture accounted for 65 per cent of the value and basketwork for 34 per cent. However, the import value includes transport costs as well as custom duties and is therefore higher than the export value. In 2008 the export value of rattan products was US\$33.1 million, a decrease of 17.9 per cent compared to 2007^{xvii}.

In the North Central Coast area alone, the rattan industry — which includes harvesting wild rattans and processing rattans — provides jobs for about 4,000 people and creates a total value of US\$1.6 million per year^{xviii}. It is estimated that in the whole of Viet Nam, about 5,000 villagers manufacture rattan and bamboo handicrafts for export. Income received from weaving rattan is 75 per cent higher than income received from farming^x.

Most rattan harvesters are ethnic minority peoples living near forests, who form the first people in the value chain. Collectors are usually small businessmen in villages/communes who sell rattan canes to process agents and commercial companies in the province or the area. These companies usually have separate process workshops, have contracts to supply materials to companies producing handicrafts, and are usually located in trade villages or big cities.

National rattan resources and management

Thirty rattan species can be found in Viet Nam in a total of 381,936 ha of rattan forests, which are particularly located in the Central Coast area. Of these, 10 rattan species, located in the North Central Coast, have high economic value and are used for handicraft products. The national harvestable rattan resource is estimated at 36,510 tonnes, with two species in most demand: *C. tetradactylus* and *Daemonorops jenkinsiana*. However, the actual required consumption to meet demand is estimated at 70,000 tonnes per year. This means that over 33,000 tonnes per year are being imported from other countries^{xviii}.

Viet Nam planned to double the rattan production area to 740,000 ha by 2010. However, in recent years rattan plantations have not considerably expanded, while wild rattan has been increasingly exploited. Therefore, it can be estimated that the country's current total rattan yield is not as high as in 2005 — while demand for rattan has been increasing at an average rate of 8–12 per cent per year^{xviii}.

Although rattan makes great socio-economic and cultural contributions to the life of poor people, not much attention is paid to sustainable management. Uncontrolled harvesting is one cause of rattan exhaustion. Prior to the 1970s, large diameter (>30 mm) rattan was abundant in the forest but is now restricted to the steepest slopes and remotest areas. In 2003 it was reported that most large diameter rattan used for furniture making in Viet Nam is imported from Lao PDR^{xix}. However, since 2005 at least, official imports from Lao PDR have decreased sharply (see section 4.6); it is not clear whether unofficial imports have also decreased. Rattan resources are also declining as the area and quality of natural forest is reduced, which affects rattan's growing environment. The exploitation of wild rattan resources will face increasing difficulties as rattan canes increasingly only remain in remote forest areas^{xviii}.

Although several projects — such as the development of small and medium-sized enterprises (SMEs) and conservation of Non-Timber Forest Products — have included rattan as one component, as yet there has been little attempt to develop, coordinate, promote, or regulate the development of the sub-sector as a whole. Rattan policies have not been developed at national or provincial level except for those relevant to the Non-Timber Forest Products sector as a whole^{xx}. Since 2009 WWF, together with national partners and government and with funding support from the EU and IKEA, has been implementing a pilot project to improve the rattan resource management system as well as the entire supply chain. The project has now been incorporated in the new Viet Nam Rattan and Bamboo Resource Master Plan.

4.7.2 Import of rattan canes

As mentioned above, Viet Nam has to import an estimated 33,000 tonnes of rattan canes to meet the demand of its industry^{xviii}. However, it is impossible to determine the actual quantity of officially imported rattan canes, as Viet Nam reports the value, but not the quantity, of its imports to the UN. Such figures are estimated by the UN, but without considering regional rattan trade specifics, which leads to incorrect figures on quantity — a fact that is often ignored, e.g., in the cited report on rattan mapping^{xviii}. As mentioned previously, the figures for quantity provided by UN Comtrade are estimated from a global median unit value for the relevant year, which is around US\$2,200 per tonne for the years 2000 to 2008. However, this is ten times higher than the average price of similar trade flows in the region, such as Thailand's rattan imports

from Lao PDR and Cambodia, and so probably much too high for Vietnamese rattan imports. This means that UN trade data most likely underestimate the quantity of rattan canes officially imported by Viet Nam.

UN Comtrade gives import quantities between 14 and 930 tonnes for the years 2000 to 2008. However, calculating the quantity using a more likely value of US\$200 per tonne indicates that official imports of rattan canes amounted to a maximum of 10,000 tonnes in 2001 and to just 180 tonnes in 2008. This means that even taking into account the shortcomings of UN trade data, 20,000–30,000 tonnes of rattan canes seem to be imported unofficially to meet the demand of Viet Nam's rattan industry.

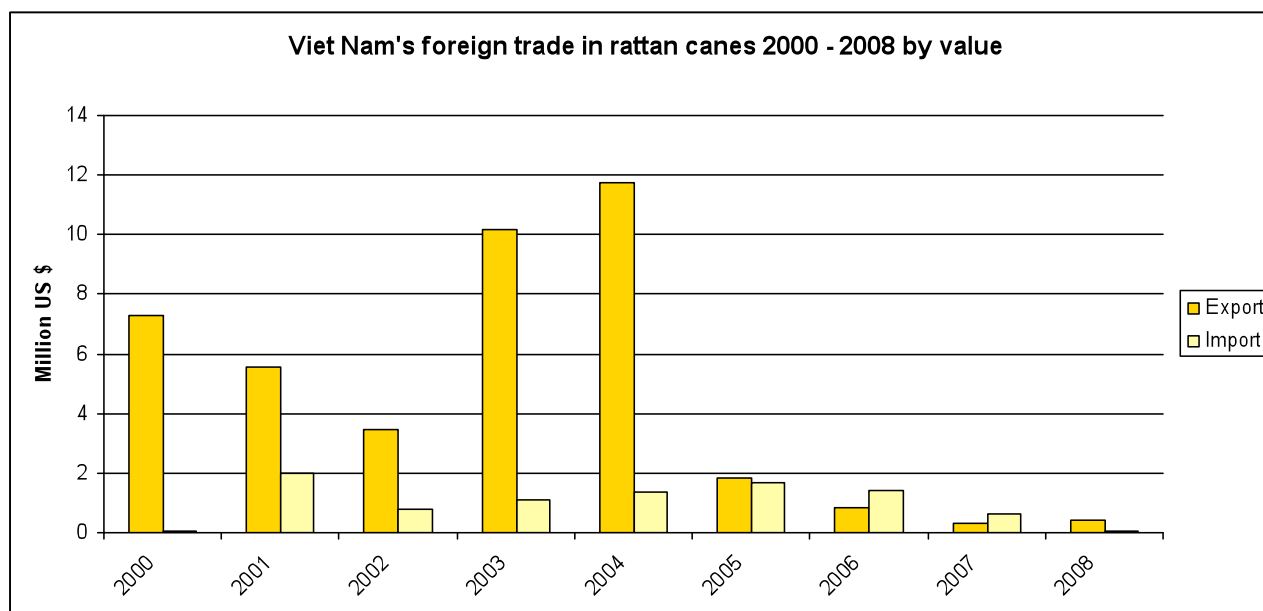


Figure 53: Viet Nam's foreign trade in rattan canes by value between 2000 and 2008 (Source: UN Comtrade)

According to UN trade data, imports of rattan canes dropped from US\$2.9 million in 2006 and US\$1.3 million in 2007 to just US\$70,000 in 2008 (Figure 53). By value, 88 per cent of imports in 2008 came from **Indonesia** and 12 per cent from **Lao PDR**. In former years, rattan canes were imported from other countries including **Cambodia** and the **Philippines**.

4.7.3 Export of rattan canes

Between 2000 and 2004, Viet Nam was the second-most important exporter of rattan canes behind Indonesia, and exports of rattan canes exceeded official imports by far (Figure 53). These exports went almost exclusively to **China**, which imported around 25,000 tonnes annually from Viet Nam in 2003 and 2004 (Figure 54). However exports to China have fallen sharply in more recent years, declining by 90 per cent in 2005 to 2,350 tonnes, by a further 90 per cent in 2006 to 280 tonnes, and to 60 tonnes in 2007. Thus since 2005, Viet Nam has played only a minor role as an exporter of rattan canes. The declining exports of rattan canes are due to natural stocks being severely depleted^{xxi} as well as most of the rattan now being processed by Viet Nam's growing industry.

In terms of quantity, China was still the leading importer of rattan canes from Viet Nam in 2008, followed by **Singapore** and **Hong Kong** (Table 2). However, France and Turkey are the leading import countries in terms of value.

Importer	Tonnes	Value
China	86	\$69,096
Singapore	65	\$67,545
Hong Kong	60	\$53,334
Thailand	38	\$21,872
Turkey	36	\$84,620
France	5	\$110,512
Mauritius	5	\$10,891
Russia	3	\$3,159
Canada	1	\$1,500
Total	300	\$422,529

Table 2: Import of rattan canes from Viet Nam in 2008 (Source: UN Comtrade)

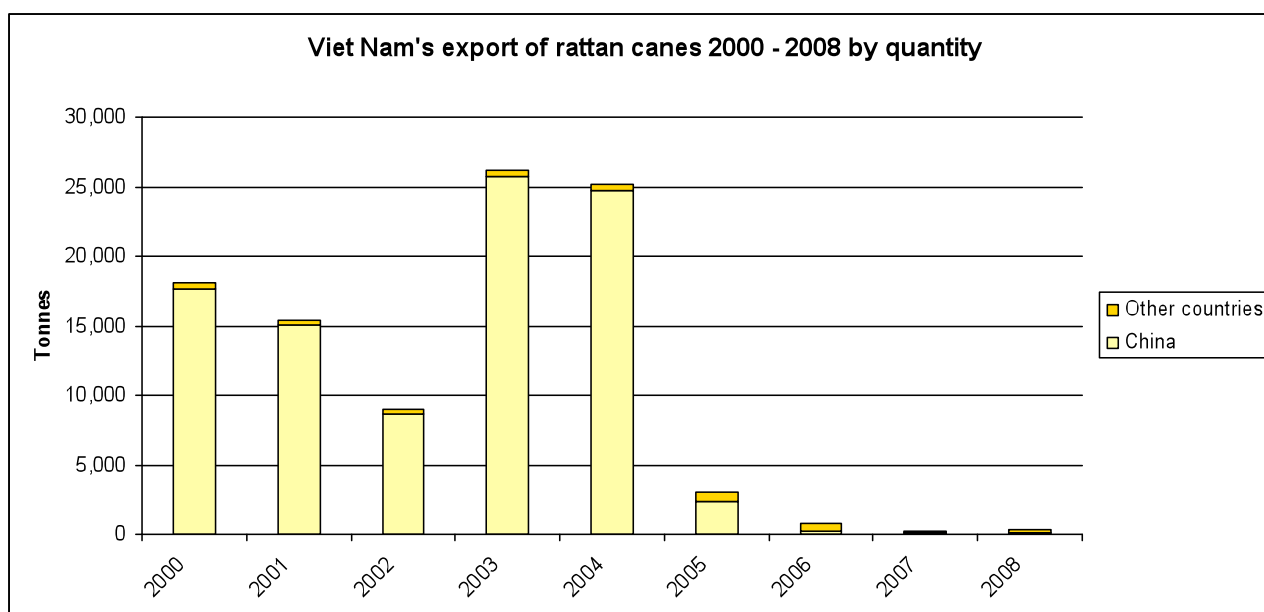


Figure 54: Viet Nam's export of rattan canes by quantity between 2000 and 2008 (Source: UN Comtrade)

4.7.4 Export of rattan mats, plaits, and basketwork

Viet Nam exported 4,390 tonnes of rattan mats, plaits, and basketwork in 2008 with a value of US\$23.7 million. Around half of this was imported by **EU** countries, particularly **Germany**, **France**, and **Sweden**. Viet Nam was the third-most important supplier of rattan mats, plaits, and basketwork for the EU. A further 19 per cent of the export quantity went to the **US** and 12 per cent to **Japan**.

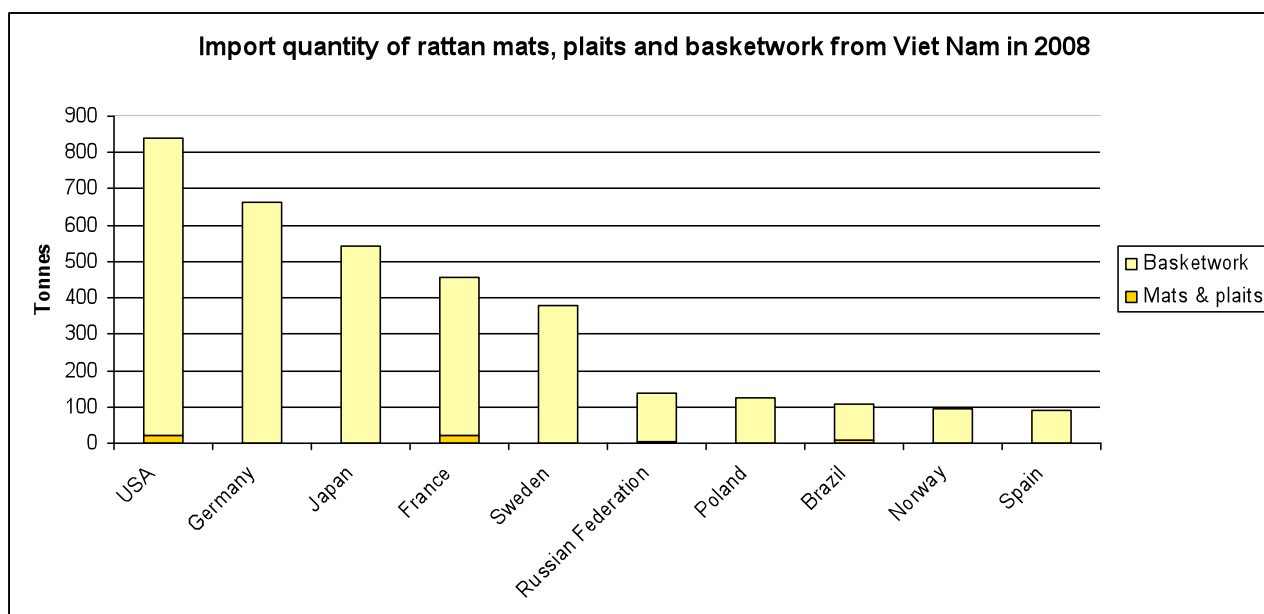


Figure 55: Top ten import countries of rattan mats, plaits, and basketwork from Viet Nam by quantity in 2008 (Source: UN Comtrade)

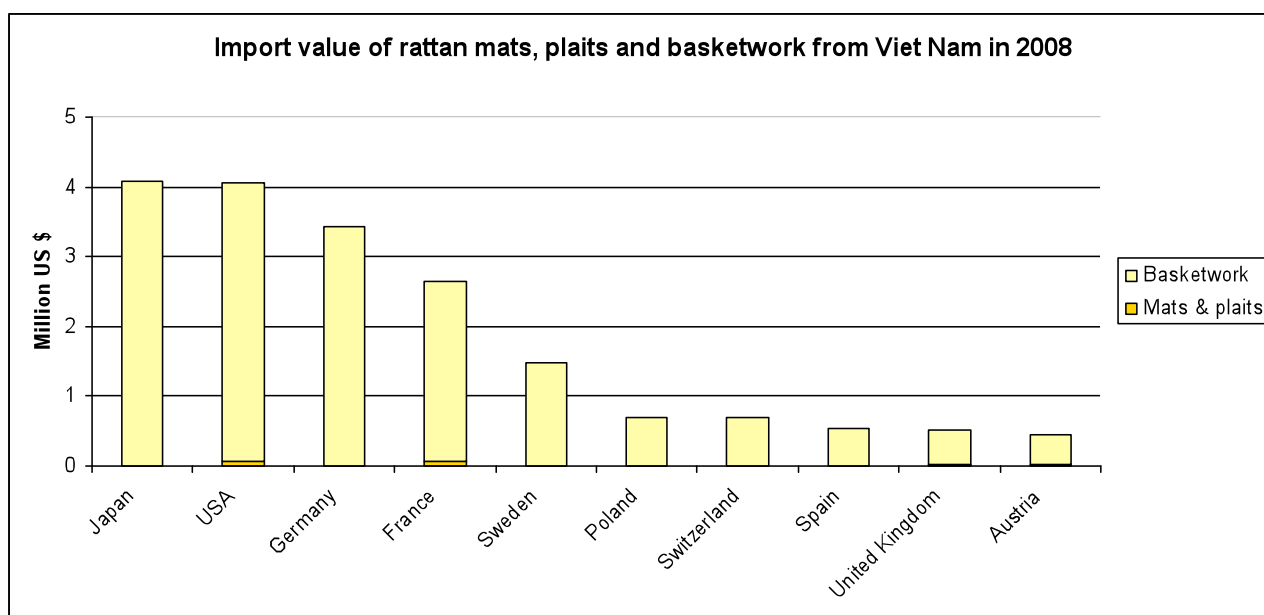


Figure 56: Top ten import countries of rattan mats, plaits and basketwork from Viet Nam by value in 2008 (Source: UN Comtrade)

4.7.5 Export of rattan furniture

Viet Nam exported 12,465 tonnes of rattan and bamboo furniture in 2008, with a value of US\$44.5 million. The **EU** was the key market for this furniture, importing 80 per cent by quantity and 75 per cent by value. Eight of the top ten import countries were EU member states, with **Germany** and **France** being the leading importers. Viet Nam was the third-most important supplier of rattan furniture for the EU. Other important markets for rattan and bamboo furniture from Viet Nam were the **US** (9 per cent of the export quantity) and **Japan** (2 per cent).

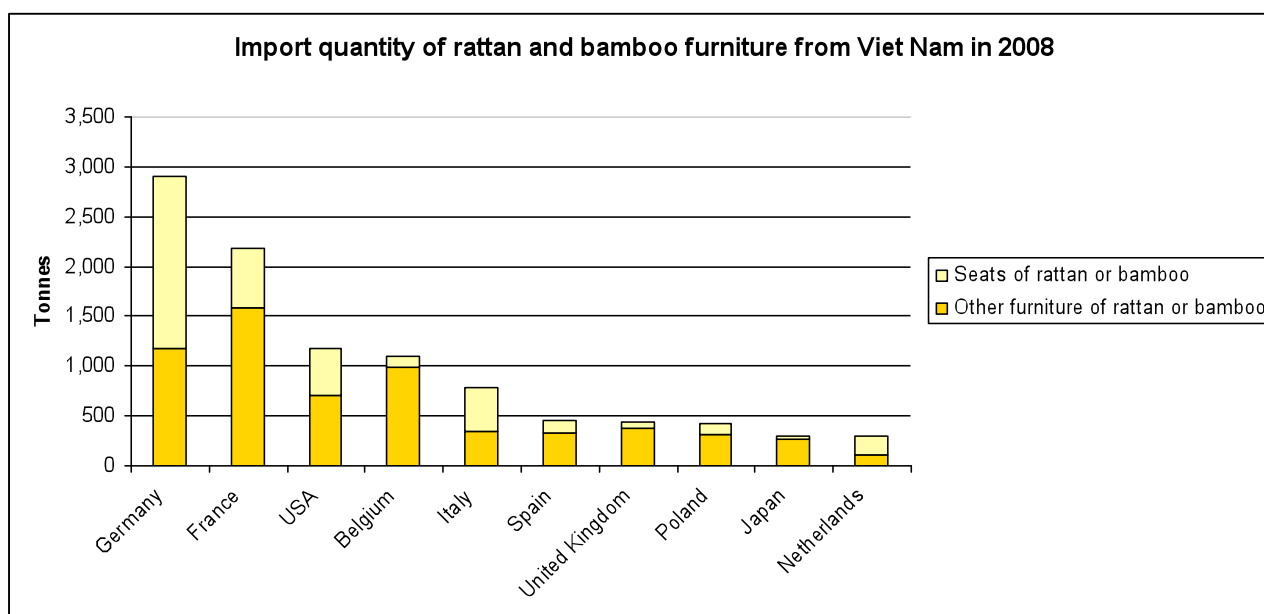


Figure 57: Top ten import countries of rattan furniture from Viet Nam by quantity in 2008 (Source: UN Comtrade)

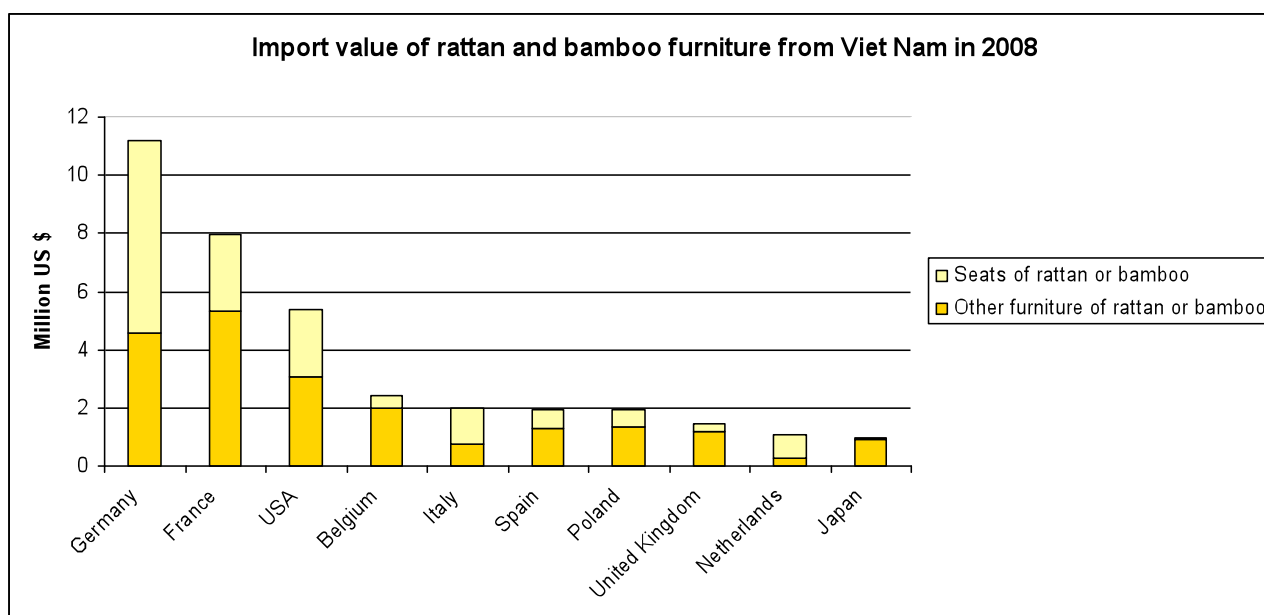


Figure 58: Top ten import countries of rattan furniture from Viet Nam by value in 2008 (Source: UN Comtrade)

4.8 Cambodia

4.8.1 Overview

Exports of rattan products from Cambodia are small compared to other Southeast Asian countries, with a value of US\$226,000 in 2008 as reported by importing countries. Cambodia has not reported figures on rattan export to the UN in recent years (see section 2.1). Rattan canes accounted for 95 per cent of export quantity in 2008, but only 56 per cent of the value. Furniture contributed to 34 per cent of the value of rattan products imported from Cambodia, with basketwork accounting for the remaining 10 per cent. Mats and plaits were not imported from Cambodia in 2008.

At present the Cambodian rattan industry cannot compete with other rattan/manufacturing countries on the international market^{xxii}. The total annual turnover of rattan furniture production in Cambodia is approximately US\$1 million, while that of rattan basketwork production is US\$500,000^{xxii}. However, this turnover is not reflected in the export figures reported by importing countries. The two main companies in Cambodia that export rattan and water hyacinth basketware to the European market are United Holdings (Meakara) and Basket of Cambodia^{xxii}.

National rattan resources and management

Cambodia has more than 21 rattan species, of which more than ten are used for commercial purposes. As for Lao PDR, rattan is considered to be an important non-timber forest resource that plays a role in poverty alleviation and income generation for local communities^{xxiii}.

In order to guide local communities towards sustainable rattan harvesting and production, WWF, together with national partners and funding support from the EU and IKEA, is currently implementing a project in Kampot, Preah Sihanouk, Koh Kong, Kampong Thom, and Siem Reap provinces^{xxii}. The Rattan Association of Cambodia (RAC) was established under the project in September 2009 with the participation of 11 small and medium Cambodian rattan enterprises and cooperation from the Artisan's Association of Cambodia (AAC). With an average annual turnover of approximately US\$690,000, RAC accounts for almost 70 per cent of the total annual turnover of rattan furniture production in Cambodia^{xxii}.

4.8.2 Export of rattan canes

According to trade data reported by importing countries, Cambodia exports rattan canes almost exclusively to **Thailand**. Rattan canes were also exported to **Viet Nam** in 2006 and 2007. In 2000, Cambodia exported a small quantity (18 tonnes) to **Hong Kong** (Figure 59). However, any unofficial trade would not be reflected in these figures.

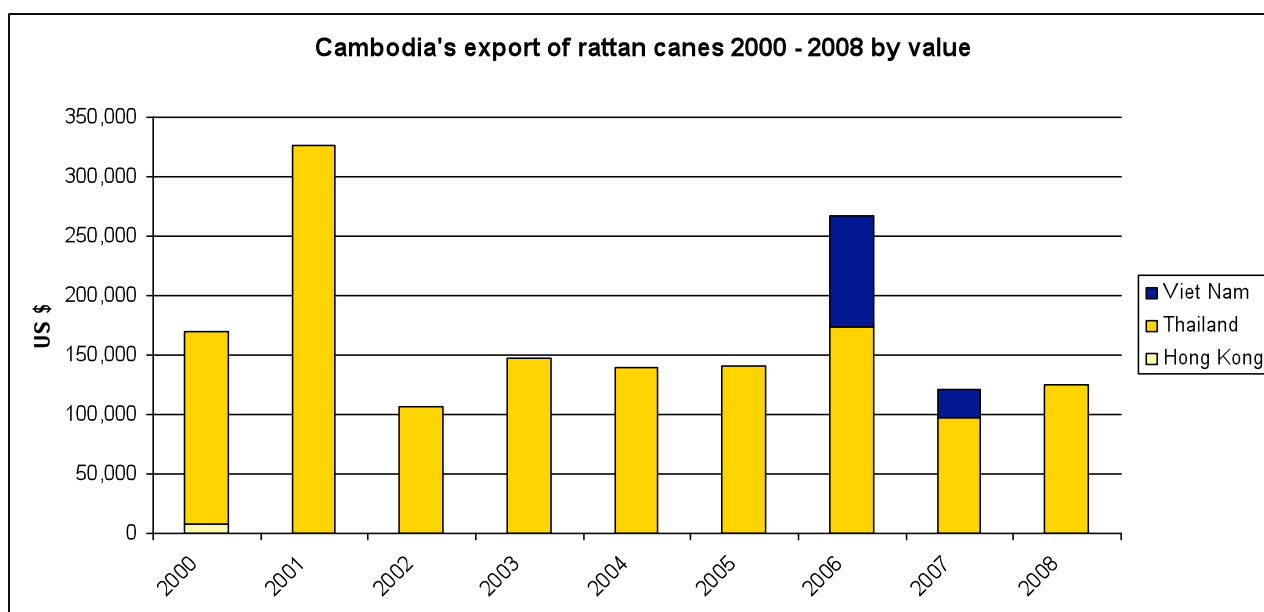


Figure 59: Cambodia's export of rattan canes by value between 2000 and 2008 (Source: UN Comtrade)

It should be remembered that the quantity figures for Viet Nam's import provided by UN Comtrade are not reliable, since Viet Nam reports only the import value. The quantity was estimated by the UN using a median unit value of US\$2,190 per tonne for 2006 and US\$2,189 per tonne for 2007. However, Thailand's imports of rattan canes from Cambodia in the same years had an average value of around US\$140 per tonne.

Assuming that Viet Nam paid about the same price as Thailand for Cambodian rattan canes and not 15 times as much, we estimate Viet Nam's import quantity from Cambodia at 643 tonnes in 2006 and 164 tonnes in 2007, more than 15 times more than the figures provided by UN Comtrade. This means that Cambodia's total export of rattan canes may have been about 1,950 tonnes in 2006 and 840 tonnes in 2007.

Given the unreliability of Viet Nam's quantity figures, Figure 60 shows only the quantity of rattan canes exported by Cambodia to Thailand between 2000 and 2008 (figures from Hong Kong are also reliable; however the quantity exported to Hong Kong was negligible (Figure 25)).

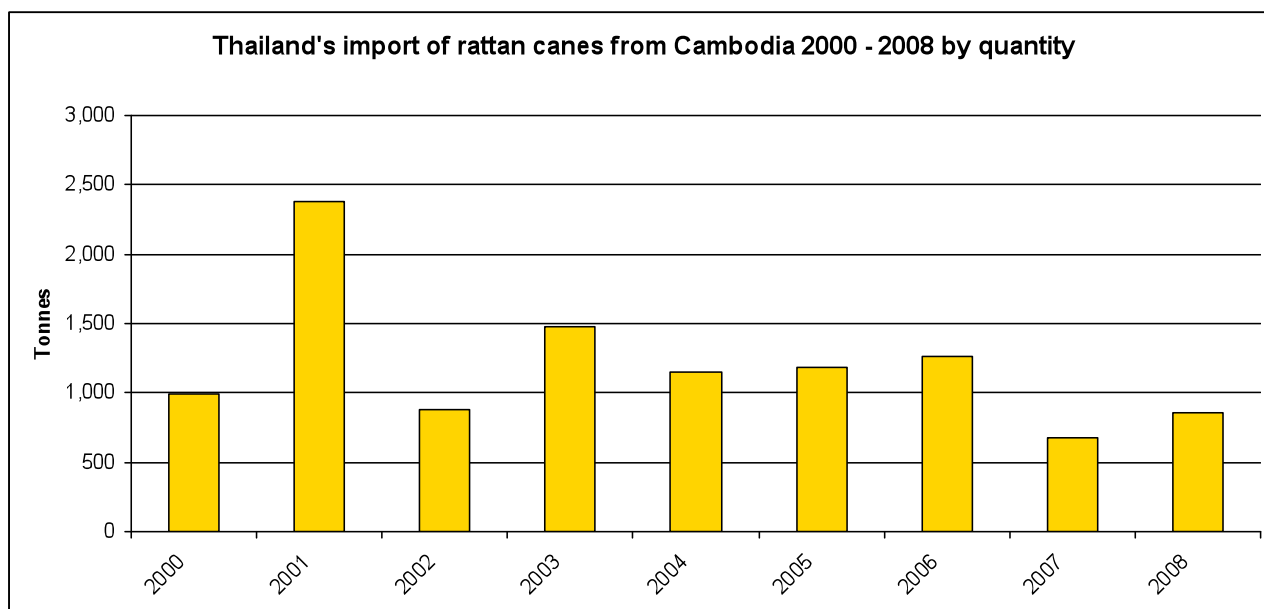


Figure 60: Thailand's import of rattan canes from Cambodia by quantity between 2000 and 2008 (Source: UN Comtrade)

4.8.3 Export of rattan basketware and furniture

In 2008 Cambodia exported a total of 33 tonnes of rattan and bamboo furniture with a value of US\$78,000. Most of this, 74 per cent, was imported by **Poland**, 20 per cent by **Switzerland**, 5 per cent by **France**, and 1 per cent by **Costa Rica**. Exports of rattan basketwork were also small, just 8 tonnes with a value of US\$23,000. Fifty-three per cent of the quantity was exported to **Thailand**, and 47 per cent to the **US**. However, exports to the US accounted for 77 per cent of the value. Overall, exports in 2008 contributed to less than 10 per cent of the total annual turnover of rattan furniture and basketwork production reported by other sources^{xxii}.

4.9 Thailand

4.9.1 Overview

Although it accounts for only about 0.1 per cent of the total forestry sector contribution^x, rattan nevertheless plays an important role in Thailand's national economy^{xxiv}. Imports of rattan products from Thailand were worth US\$4.8 million in 2008, with rattan mats, plaits, and basketwork accounting for 34 per cent of the value and furniture for 64 per cent. Exports of rattan canes are marginal: 100 tonnes in 2008, and only 1 tonne in 2007.

Production of rattan products, especially edible shoots, generates employment and subsistence income for local people, particularly those living in rural areas in the northern and north-eastern regions of the country^{xxiv}.

Rattan canes are also imported, mostly from Indonesia, Malaysia, Myanmar, and Lao PDR. The imported canes are usually transported to rattan raw material factories for sorting and grading. The sorted and graded canes are used to produce wickers and cores for sale to manufacturers for the production of furniture, handcrafts, and semi-finished products^{xxiv}.

Eighteen per cent of Thailand's 2,500 furniture manufacturers produce furniture made from rattan, plastic, and leather, 70 per cent produce wooden furniture, and 12 per cent produce metal furniture^{xxv}. It seems that rattan furniture and handicraft production is not a vital industry in Thailand due to a lack of skilful workers and artisans. Development of human resources in the industry is a major concern of and challenge to the development of the rattan sector in Thailand^{xxiv}.

This is reflected in trade data: Thailand's export of rattan basketwork and furniture amounted to less than 900 tonnes in 2008, while the country imported more than 3,600 tonnes of rattan canes and even 420 tonnes of rattan furniture. This indicates that most rattan is consumed by Thailand's national market and not used to produce export goods.

National rattan resources and management

The local supply of rattan for Thailand's furniture and handicraft industries is derived almost entirely from the wild. Excessive and wasteful harvesting, including from illegal sources, however, has resulted in supply shortages. Rattan has been classified as a protected non-wood forest product in Thailand since 1988 — even before a total logging ban was introduced in 1989. A permit system for the extraction of rattan from natural forests in quantities greater than 10 kilograms was also introduced, but in most parts of the country this regulation did not halt illegal harvesting activities^{xxvi}.

According to the ASEAN Rattan Project, Thailand established around 35,000 ha rattan plantations in 2004^{xxvii}. However, plantations for edible shoot production account for half of Thailand's rattan plantation area. In addition, management of rattan plantations for genetic conservation and seed production is popular in Thailand. This practice can be seen as a far-sighted measure adopted by the Government of Thailand to solve the problem of the declining rattan resource base^{xxiv}.

Compared with the area of rattan plantations for genetic conservation, seed production, and edible shoot production, the area of rattan plantations for cane production in Thailand is very small. This appears to be because the cane quality of most local species is poor, and the seeds of introduced, high-quality cane species are in short supply^{xxiv}.

4.9.2 Import of rattan canes

Between 2000 and 2009, Thailand's imports of rattan canes ranged between 3,150 and 6,100 tonnes (Figure 61). After a decline from 2005 until 2007, imports rose again in 2008 and 2009. In 2008 Thailand imported 3,622 tonnes of rattan canes with a value of US \$2.3 million. In contrast exports of rattan canes are marginal: 100 tonnes in 2008, and only 1 tonne in 2007.

The key countries from which Thailand has imported rattan canes in the last decade are **Myanmar, Indonesia, Cambodia, and Lao PDR**. In 2008, 33 per cent of the imported quantity came from Myanmar, 26 per cent from Indonesia, 24 per cent from Cambodia, and 7 per cent from Lao PDR (Figure 62). The average price per tonne varied hugely, from US\$64 for imports from Myanmar to US\$146 and US\$184 for imports from Cambodia and Lao PDR, respectively, to US\$1,450 and US\$1,600 for imports from Singapore and China, respectively. This makes Indonesia the leading country of origin with respect to import value, followed by Singapore and China (Figure 63).

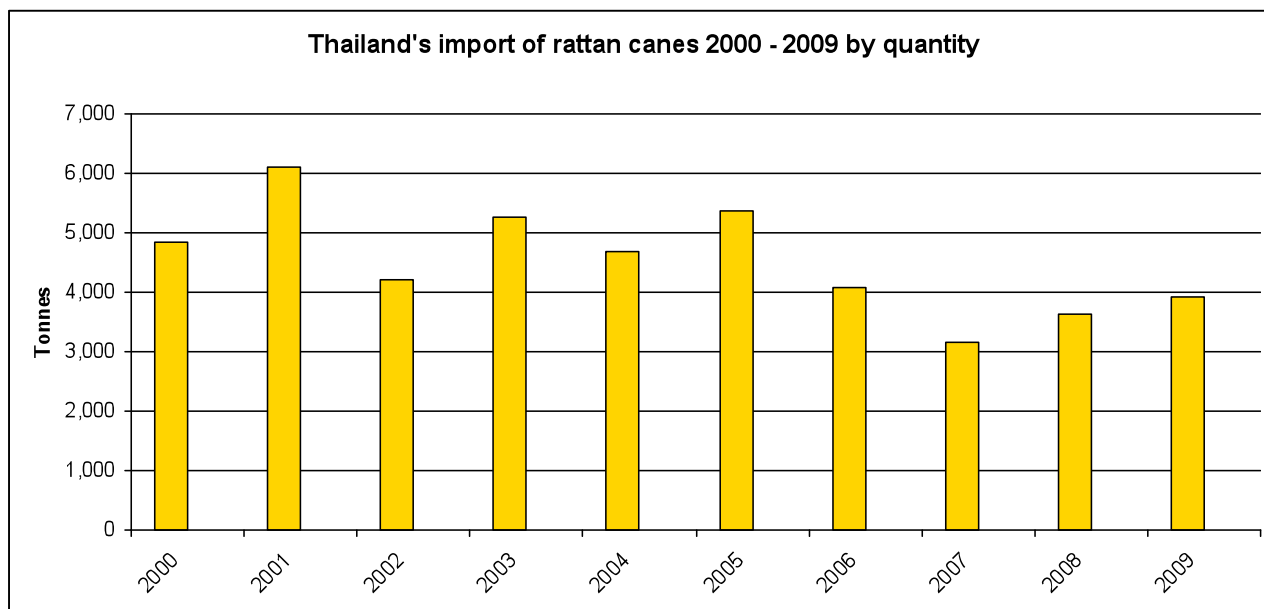


Figure 61: Thailand's import of rattan canes by quantity between 2000 and 2009 (Source: UN Comtrade)

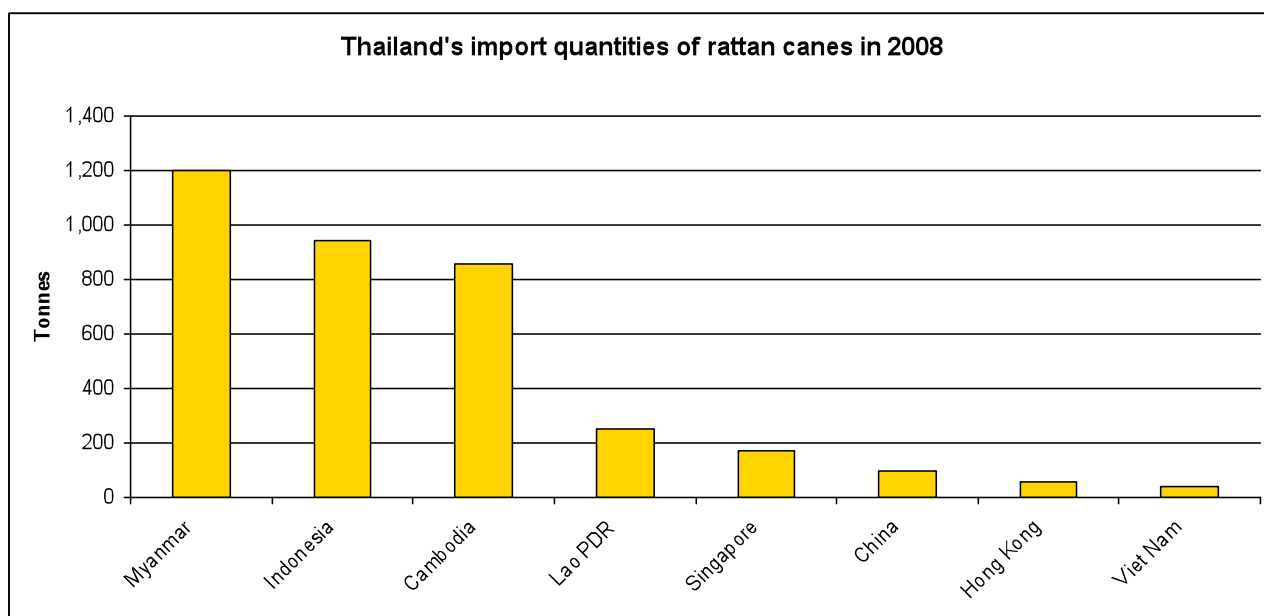


Figure 62: Countries of origin for Thailand's imports of rattan canes in 2008 by quantity (Source: UN Comtrade)

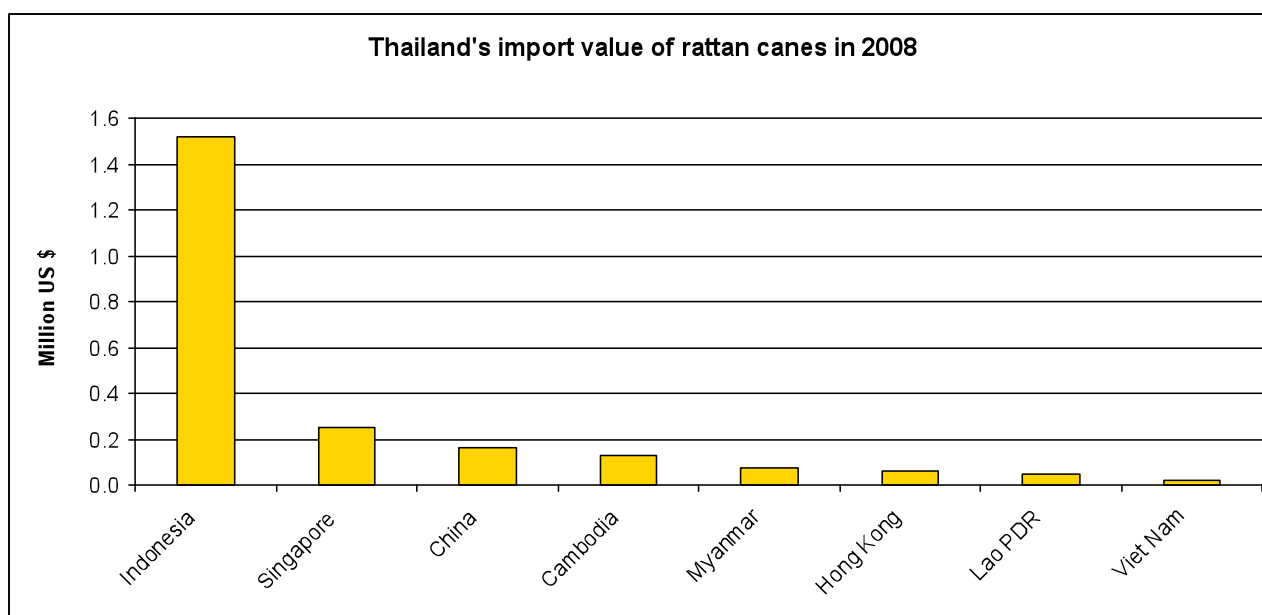


Figure 63: Countries of origin for Thailand's imports of rattan canes in 2008 by value (Source: UN Comtrade)

4.9.3 Export of rattan mats, plaits, and basketwork

Thailand exported 287 tonnes of rattan mats, plaits, and basketwork in 2008 with a value of US\$1.7 million. The **US** was the key market, particularly for basketwork, accounting for two-thirds of the export quantity (Figure 64). Although it accounted for just 5 per cent of the export quantity, **Brazil** was the second-most important import country. The **EU** countries together accounted for 10 per cent of the export. In terms of value, **Japan** and **Germany** were the most important markets behind the US (Figure 65).

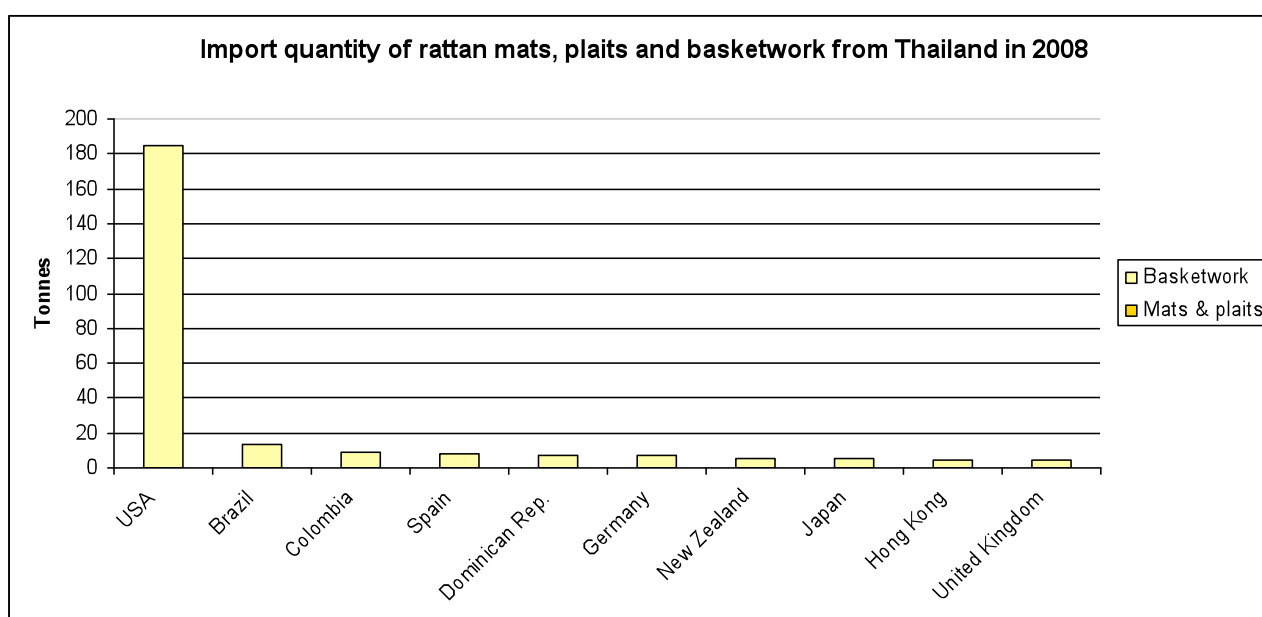


Figure 64: Top ten import countries of rattan mats, plaits and basketwork from Thailand by quantity in 2008 (Source: UN Comtrade)

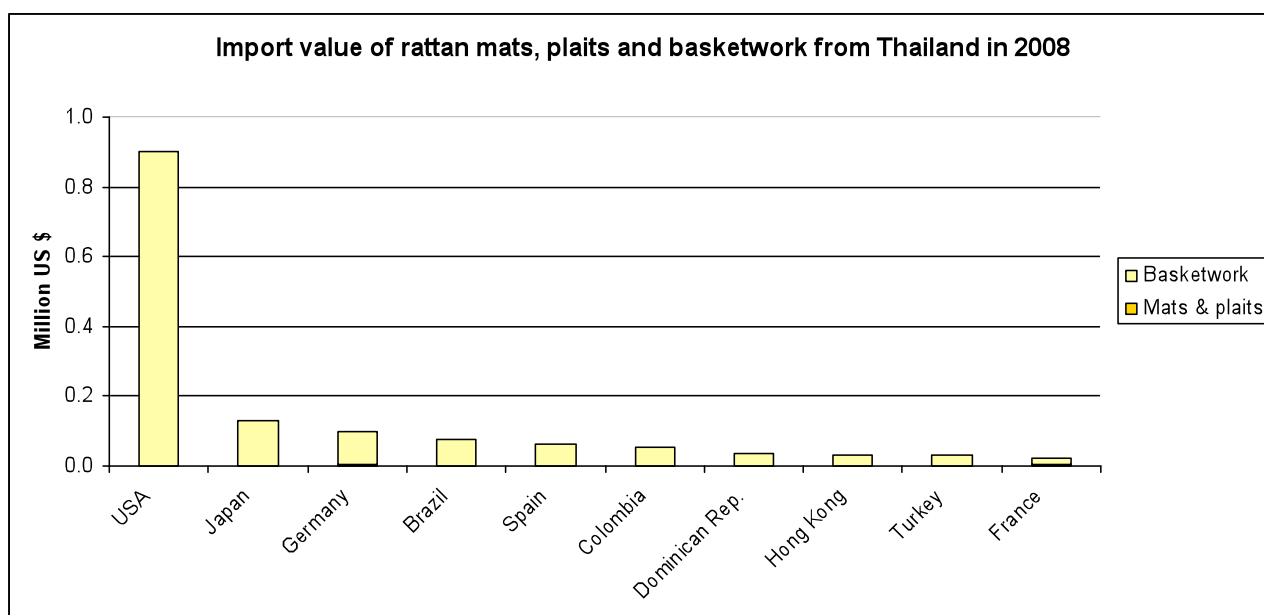


Figure 65: Top ten import countries of rattan mats, plaits and basketwork from Thailand by value in 2008
(Source: UN Comtrade)

4.9.4 Export and import of rattan furniture

About 600 tonnes of rattan furniture were globally imported from Thailand in 2008, with a value of US\$3 million. The **US** was the leading import country, accounting for 35 per cent of the export quantity (Figure 66). However, the **EU** countries in total accounted for 36 per cent of exports.

It should be mentioned that Fiji reported an import of 100 tonnes of rattan furniture from Thailand in 2008. However, we believe this figure is incorrect, as the import value is much too low. Thus this figure was substituted by the export quantity reported by Thailand, 1.6 tonnes.

Thailand also imported 420 tonnes of rattan furniture in 2008 with a value of US\$1.2 million. Most (71 per cent) of these imports came from **China**, with a further 12 per cent coming from **Indonesia**.

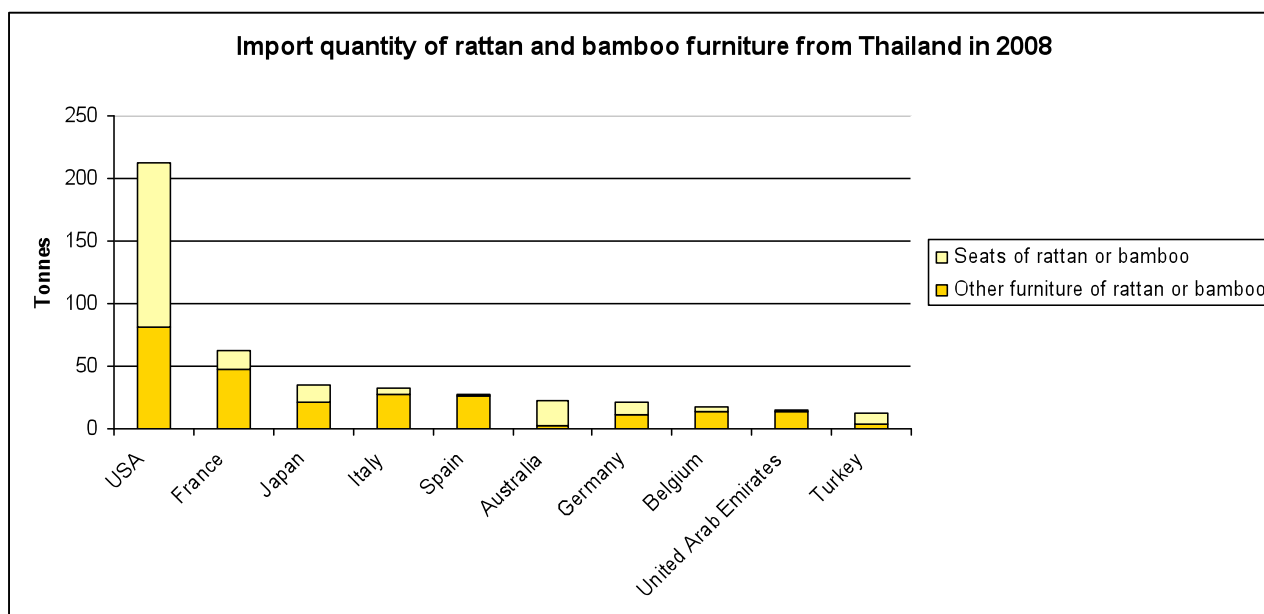


Figure 66: Top ten import countries of rattan furniture from Thailand by quantity in 2008 (Source: UN Comtrade)

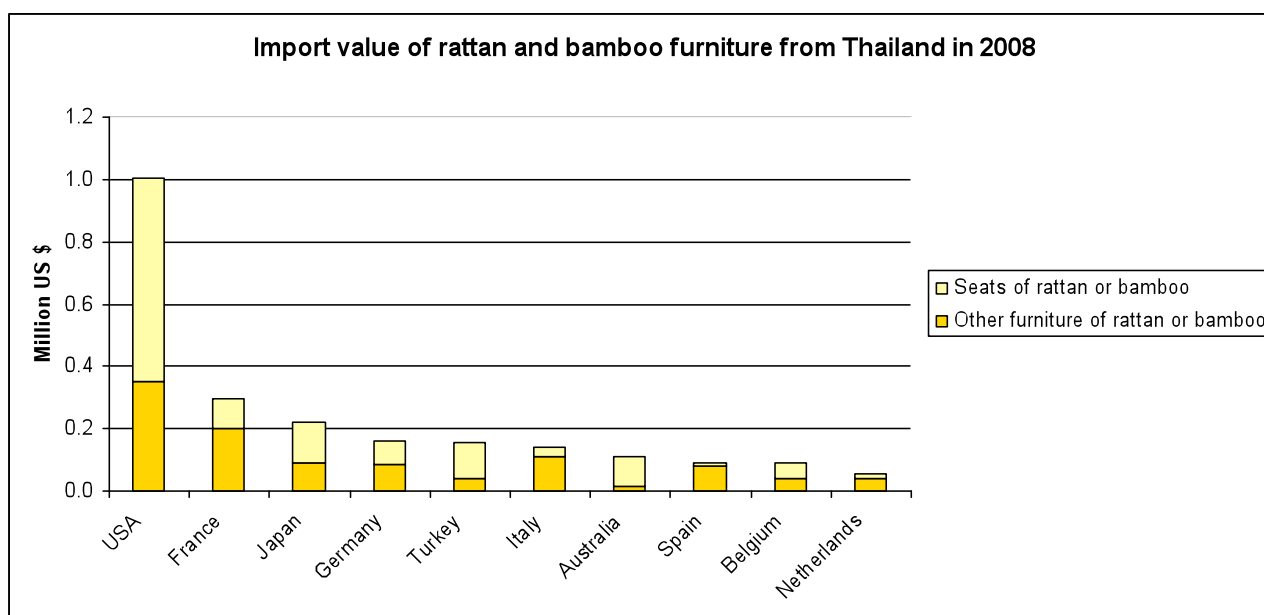


Figure 67: Top ten import countries of rattan furniture from Thailand by value in 2008 (Source: UN Comtrade)

4.10 Philippines

4.10.1 Overview

Rattan is one of the Philippines' most important Non-Timber Forest Products and grows throughout the country. Imports of rattan products from the Philippines were worth US\$50.6 million in 2008. Rattan furniture accounted for 64 per cent of the value, and mats, plaits, and basketwork for 20 per cent.

An estimated 80–90 per cent of raw rattan canes go into the production of exported furniture. The country is considered to be a trendsetter among furniture-producing countries in Asia, with Philippine rattan furniture being famous for its design and high quality. The key market is the US.

According to a 2006 USAID report^{xxviii}, close to 1 million Filipinos are employed in the rattan industry, including gatherers, permittees, traders, manufacturers, and exporters. The majority are small-scale producers and processors in rural areas. For most rattan gatherers in upland areas, rattan forms about 20 per cent of total household income. An estimated 500,000 weavers and artisans do subcontracted handicrafts and furniture jobs, contributing significantly to the generation of local jobs and employment^{xxviii}.

However, in the past decade the Philippines' rattan industry has been losing market share primarily due to:

- declining stocks of quality wild rattan
- poor quality control at harvesting and post-harvesting stages
- widespread corruption and distorted forest taxes, which discourage investment in improvements, and
- international market saturation from cheap rattan furniture produced by other Asian countries that have reduced rattan's appeal in more exclusive designer markets.

National rattan resources and management

The Philippines has 90 rattan species, of which one-third (representing 5 per cent of rattan species worldwide) are endemic to the country, that is, found only in the Philippines. However, according to the 2006 USAID report^{xxviii}, rattan habitat, abundance, variety of species, and quality of remaining rattan vines are all declining.

More than 90 per cent of rattan raw materials come from the wild or natural stands. Loss of forest habitat is the primary reason for declining regeneration of rattan resources and loss of quality species needed for high-end furniture production, as rattan needs large trees to climb. In the early 1900s, forest covered 21 million ha in the Philippines; by 2000, only 5.39 million hectares remained, of which only 800,000 hectares was old-growth forest where the greatest rattan biodiversity is found. Even where there is still forest cover, gatherers

believe that the loss of faunal biodiversity, such as birds and monkeys that eat rattan fruits, has affected the dispersion and germination of seeds, thus affecting rattan regeneration^{xxvii}.

Deforestation is mainly caused by commercial logging and inappropriate upland farming. Aside from the biophysical impacts of deforestation on rattan production, logging activities also result in illegal access into managed areas. In Samar, for example, the reopening of San Jose Logging Co. is expected to expose an estimated 50 per cent of rattan stocks in the area to outsiders through peripheral logging activities^{xxviii}.

Obtaining a definitive rattan inventory has proved difficult. The most authoritative nationwide inventory, a joint Philippine-German project, was conducted in 1987. Gatherers and manufacturers report decreasing rattan resources. Rattan gatherers now walk 3–5 days deep into the forest to reach rattan-cutting areas, compared with a decade ago when it took just hours, and smaller, lower quality canes are more common. Manufacturers also complain about the decreased local supply of quality canes, which is verified by forestry statistics on rattan cane production. By 2000 the decreased wild supply of rattan also resulted in a decrease in the number of cutting permits issued, from 370 in 2000 to only 41 in 2002, with corresponding decreases in legal allowable rattan cutting. However, current rattan supply management practices are not sustainable. Wild supplies require rehabilitation to meet industry demand, even at its current reduced level^{xxviii}.

All rattan harvesting requires a permit from the Department of Environment and Natural Resources (DENR), based on a computed annual allowable cut. Cutting without a permit is illegal although common. Permittees are also responsible for collecting information on the species, stock, and locations of rattan in the forest, as well as rattan replanting, although this is seldom enforced^{xxviii}.

In practice, violations of laws are still widespread with illegal cutting, recycling of permits, encroachment, and bogus awarding of permits^{xxviii}. These practices are referred to as “standard operating procedures” (SOP). The collection and payment of fees not mandated by legal rules may be difficult to abate as long as the amounts derived from doing these illegal activities are higher than the costs (e.g., sanctions from the government). Although DENR recognizes the problem and is committed to improvement, it is a slow process. If improvement happens, more benefits would be brought back to local people because the impacts of SOP costs are most severe on smaller actors and gatherers. Although not illegal, the different application and interpretation of forestry laws and policies can be just as costly as SOP payments for community groups attempting to manage their forest areas and rattan concessions. It is not uncommon for the various local DENR officials (referred to as Community Environment and Natural Resource Offices and Provincial Environment and Natural Resources Offices) to have different interpretations of how basic required documents should be completed. There is a lack of uniform training from the national level down to the local level on how to complete, submit, obtain signatures, and generally facilitate required legal paperwork. The result is that many groups are not in compliance and even those who make honest efforts to complete the requirements can be tied up for months and years by conflicting advice from numerous officials^{xxviii}.

From the perspective of the rattan furniture and handicraft industries, rattan supply has become more problematic, especially in terms of quality. To fill the domestic supply gap, the industry has been importing rattan canes (about 10 per cent of total canes used) and designing less rattan into furniture and handicraft pieces^{xxviii}.

Rattan plantations can offer a solution to supplement the decreasing supply in natural stands. Rattan plantations throughout the Philippines total 17,395 ha^{xxvii}, located mostly in Samar and Leyte provinces as well as Zamboanga and Basilan provinces. The results, however, are not encouraging, as even after 20 years the rattan seems to be not yet ideal for harvesting. Although some canes, depending on the species, may be harvested in these timeframes, based on the successful Indonesia experience, canes are best gathered after 30 years. It appears the Philippines needs to wait longer before it harvests from its plantations and then assess whether plantations can help solve the supply problem^{xxviii}.

4.10.2 Import and export of rattan canes

Between 2000 and 2004, the Philippines imported more rattan canes than it exported. However, according UN trade data, exports have exceeded imports since 2005. In 2008, 585 tonnes of rattan canes with a value of US\$360,000 were exported, of which 63 per cent went to **Malaysia** and 36 per cent to **China**, while 64 tonnes of rattan canes were imported with a value of US\$145,000, of which 54 tonnes came from **Singapore** and 10 tonnes came from **Hong Kong**. This contradicts the shortage in rattan supply described in the abovementioned USAID report.

4.10.3 Export of rattan mats, plaits, and basketwork

In 2008, 1,940 tonnes of rattan mats, plaits, and particularly basketwork with a value of US\$10 million were globally imported from the Philippines. The **US** was by far the leading import country, accounting for 84 per cent of the quantity (Figure 68). A further 4 per cent was imported by **Canada**. The **EU** accounted for only 6 per cent of the global import from the Philippines.

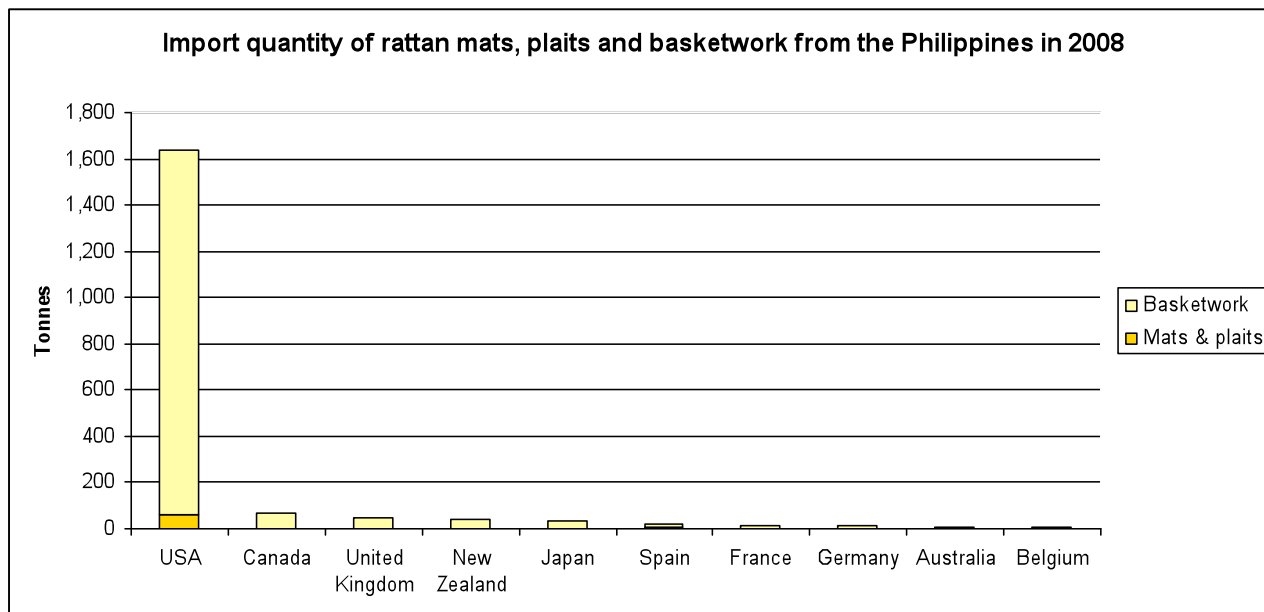


Figure 68: Top ten import countries of rattan mats, plaits, and basketwork from the Philippines by quantity in 2008
(Source: UN Comtrade)

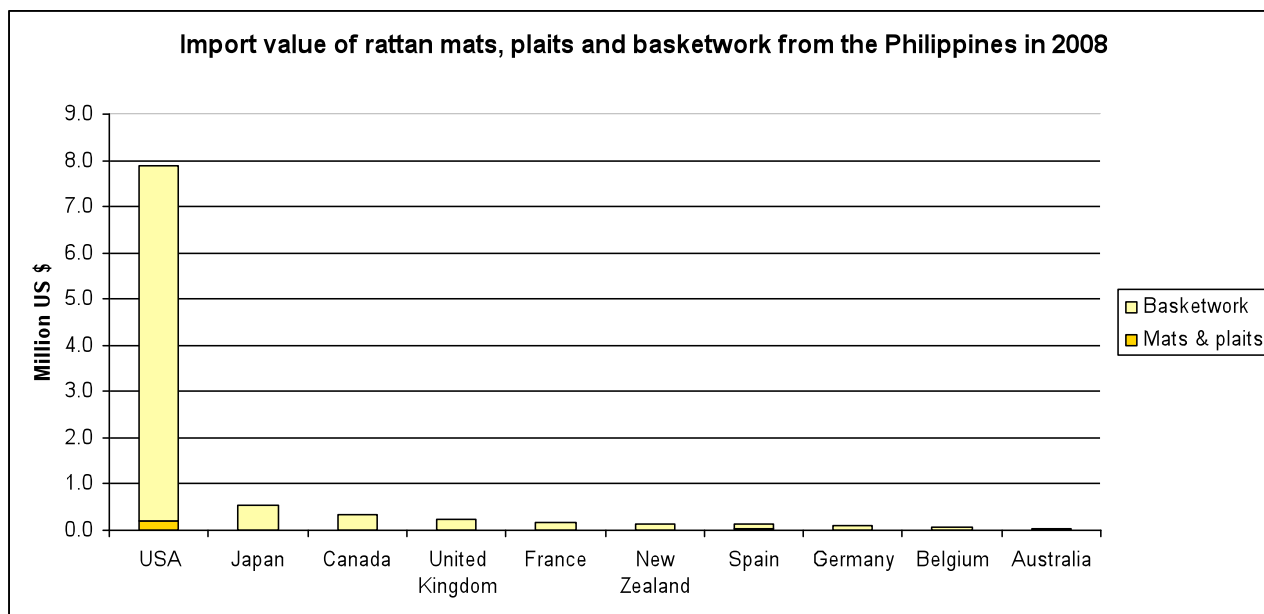


Figure 69: Top ten import countries of rattan mats, plaits, and basketwork from the Philippines by value in 2008
(Source: UN Comtrade)

4.10.4 Export of rattan furniture

Almost 8,000 tonnes of rattan and bamboo furniture with a value of US\$ 40.3 million were imported globally from the Philippines in 2008. The **US** was by far the leading import country, accounting for 76 per cent of the quantity (Figure 70) and 70 per cent of the value (Figure 71). The **EU** accounted for 11 per cent of the quantity and 14 per cent of the value.

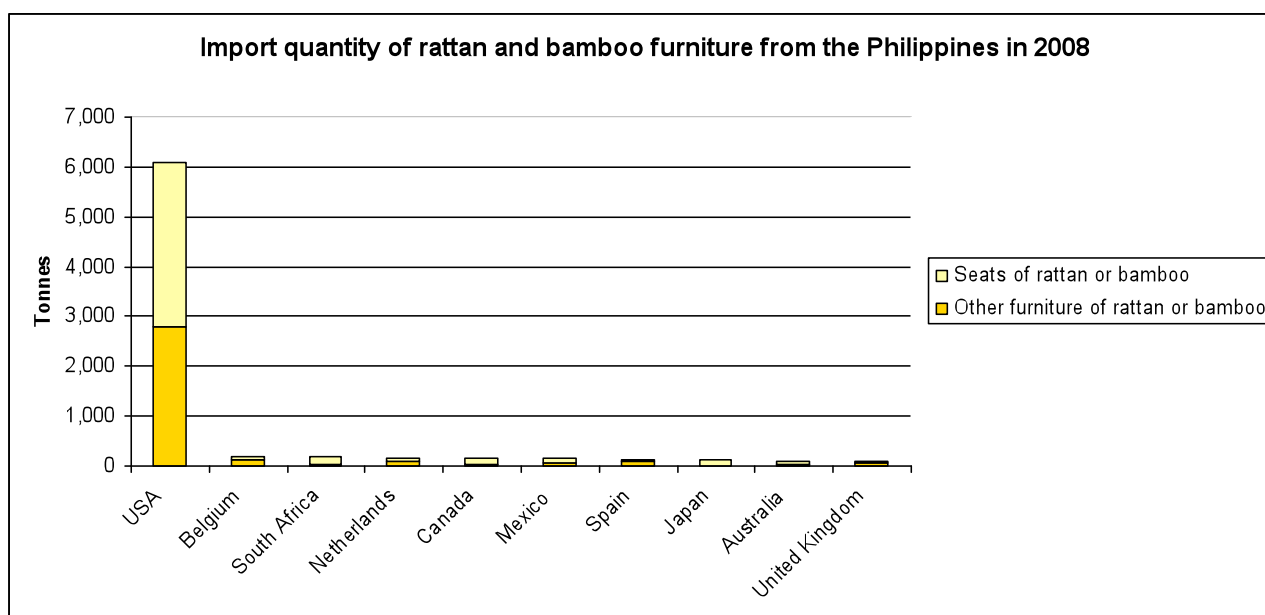


Figure 70: Top ten import countries of rattan furniture from the Philippines by quantity in 2008 (Source: UN Comtrade)

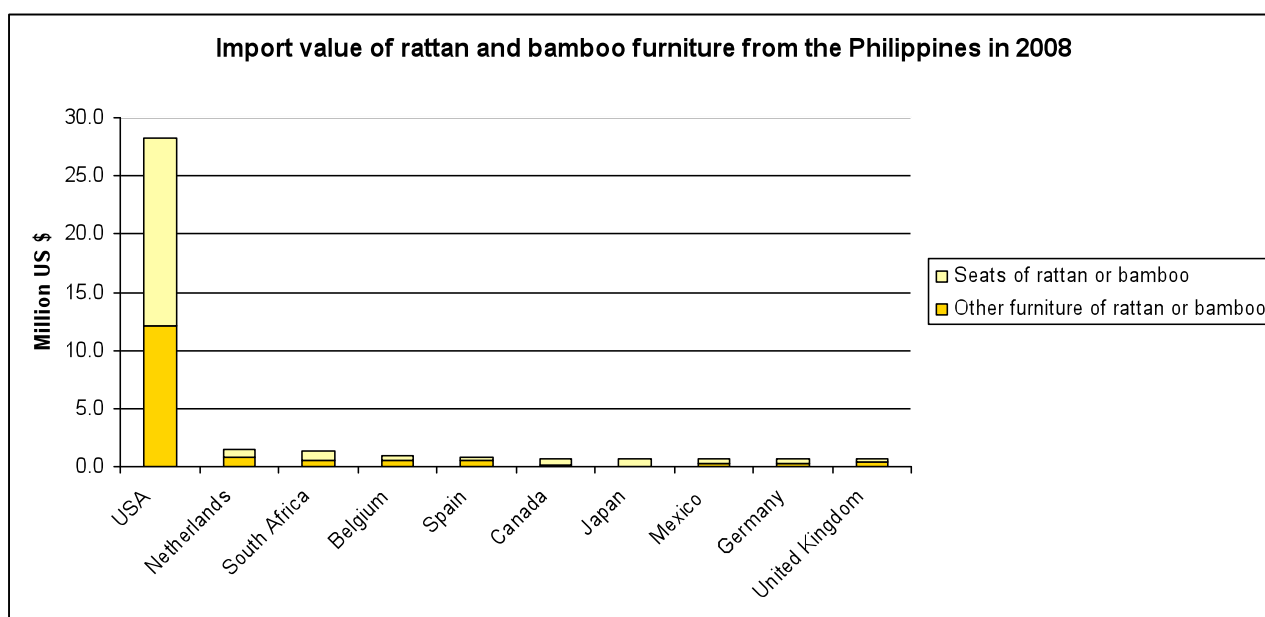


Figure 71: Top ten import countries of rattan furniture from the Philippines by value in 2008 (Source: UN Comtrade)

4.11 European Union

4.11.1 Import of rattan canes

In 2008, the EU imported 1,125 tonnes of rattan canes from countries outside the EU, with a value of US\$4.8 million. A further 96 tonnes with a value of US\$365,000 were traded internally between EU member states. The EU market has a similar importance in the global trade of rattan canes as the US market. In a global comparison, external EU imports (from countries outside the EU) ranked in eighth place in terms of quantity and in third place in terms of value. However, EU imports have continuously declined since 2000, with the quantity in 2008 being less than one-third of that in 2000 (Figure 72) and the import value in 2008 being half that of 2000 (Figure 73).

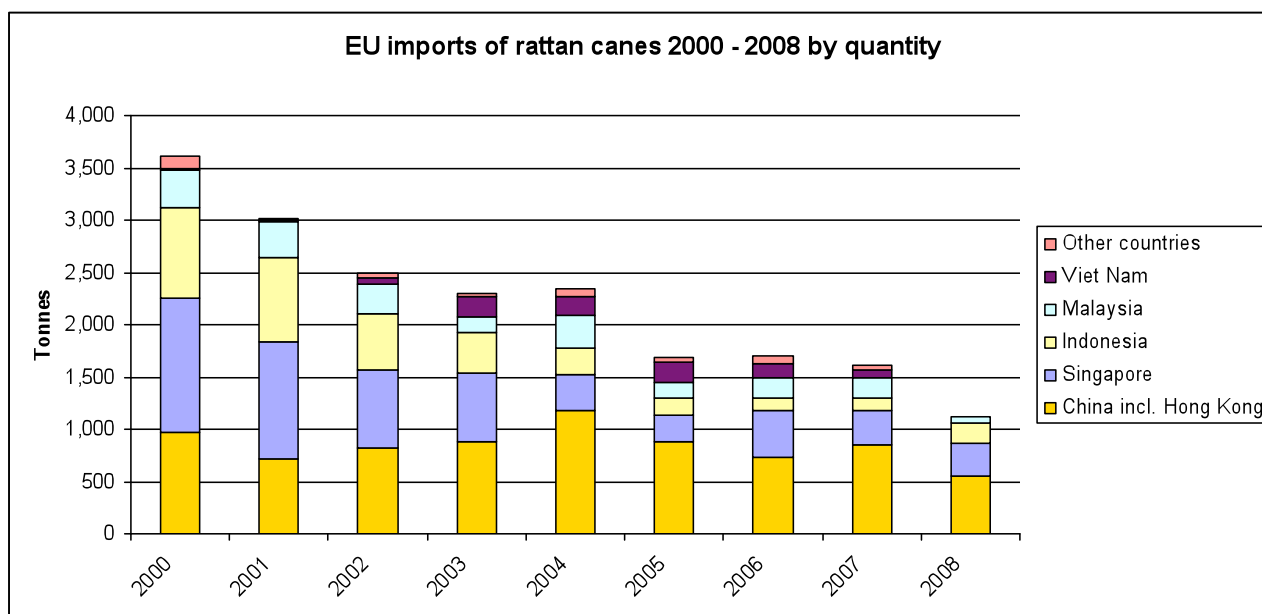


Figure 72: EU import of rattan canes by quantity between 2000 and 2008 (Source: UN Comtrade)

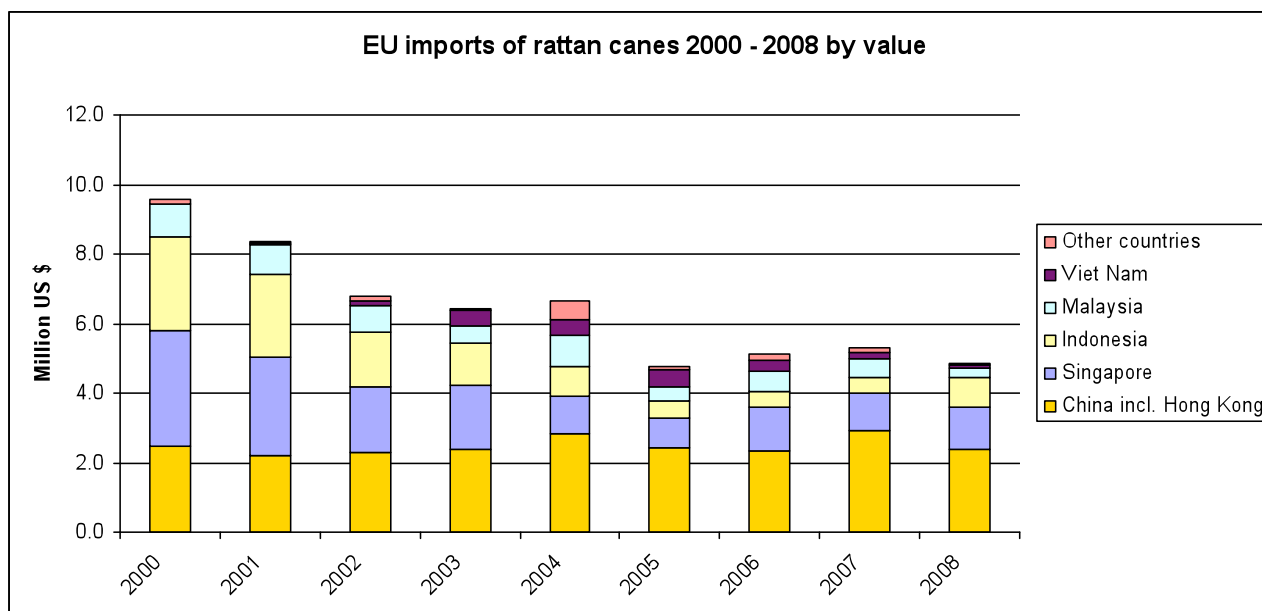


Figure 73: EU import of rattan canes by value between 2000 and 2008 (Source: UN Comtrade)

The EU predominantly imports rattan canes from **China**, **Singapore**, and **Indonesia**, followed by **Malaysia** and **Viet Nam**. However, the proportion of supplying countries changed between 2000 and 2008. In 2000, more than one-third of the external EU import came from Singapore, one-quarter from Indonesia, and a further quarter from China. In 2008, half the external EU import came from China, 29 per cent from Singapore, and just 16 per cent directly from Indonesia. As China and Singapore import their rattan canes

mainly from Indonesia, the rattan canes imported into the EU from these countries probably grew in Indonesia. Malaysia supplied around 10 per cent of imports in recent years, dropping to 5 per cent in 2008. The share of imports from Viet Nam reached a high of 12 per cent in 2005, and then declined — becoming almost nonexistent in 2008 (just 5 tonnes imported exclusively by France).

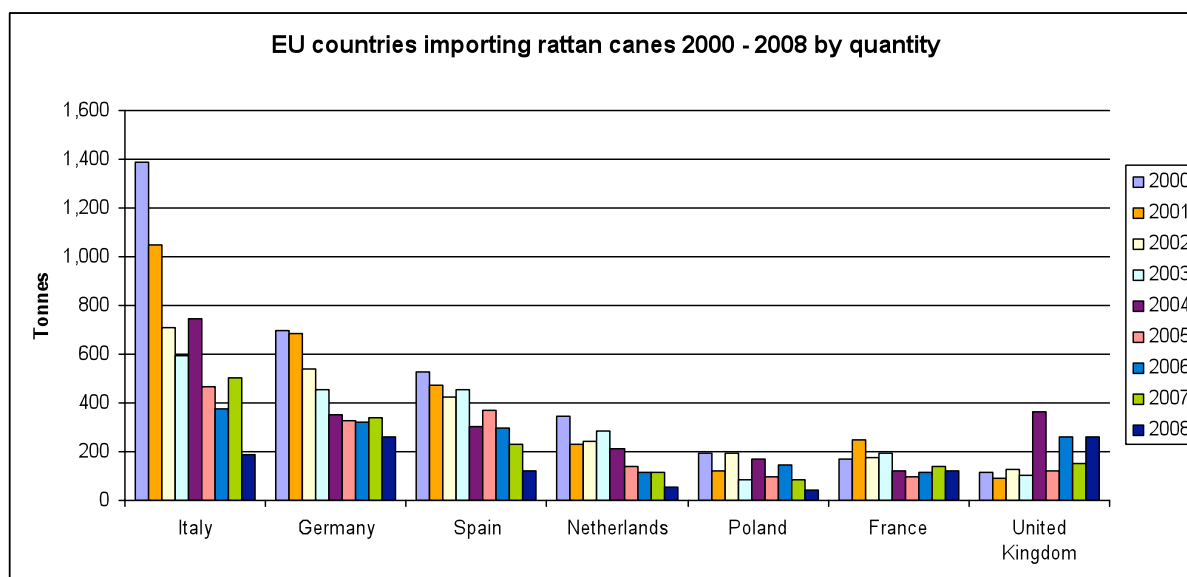


Figure 74: Top seven EU countries importing rattan canes from outside the EU by quantity between 2000 and 2008 (Source: UN Comtrade)

The seven most-important EU countries with respect to import of rattan canes are Italy, Germany, Spain, the Netherlands, Poland, France, and UK. Between 2000 and 2008, these seven countries together accounted for 94–98 per cent of the annual EU import of rattan canes from countries outside the EU. However, the importance of these countries changed in this period, with import quantities by the four biggest importers in 2000 declining dramatically in recent years (Figure 74). The UK is the only country in which imports increased from 2000 to 2008. Thus, the UK was the top EU import country by quantity in 2008, importing 263 tonnes of rattan canes, followed by Germany with 262 tonnes. Both countries accounted for 23 per cent each of external EU imports of rattan canes in 2008. However, in terms of value Germany was by far the leading import country in 2008

Importer	Tonnes	Value
United Kingdom	263	\$780,613
Germany	262	\$1,356,000
Italy	188	\$652,334
France	123	\$754,427
Spain	119	\$410,036
Netherlands	57	\$306,485
Poland	44	\$360,591
Belgium	36	\$81,398
Finland	19	\$55,950
Other EU countries*	14	\$88,023
Total EU	1,125	\$4,845,857

(Table 3). In contrast Italy, the leading import country in 2000, accounted for just 17 per cent of external EU imports in 2008. France and Spain accounted for 11 per cent each, the Netherlands for 5 per cent, and Poland for 4 per cent.

Table 3: EU import of rattan canes in 2008 (Source: UN Comtrade)

* Other EU countries include Slovakia, Czech Rep., Sweden, Ireland, Cyprus, Greece, Bulgaria, Austria, and Estonia

All of these top seven EU countries imported rattan canes from **China**, but to different extents (Figure 75). Poland imported exclusively from China, and the UK imported 73 per cent of its import quantity from China. In contrast, German imports were split almost equally between China (38 per cent), **Singapore** (31 per cent), and **Indonesia** (29 per cent), with the remaining 3 per cent imported from **Malaysia**.

Most of Malaysia's export to the EU went to Italy, with such imports accounting for 28 per cent of the Italian import. Italy also imported 38 per cent of its rattan canes from Singapore and 27 per cent from China. Spain imported predominantly from Singapore (57 per cent), with 22 per cent from China and 21 per cent from Indonesia.

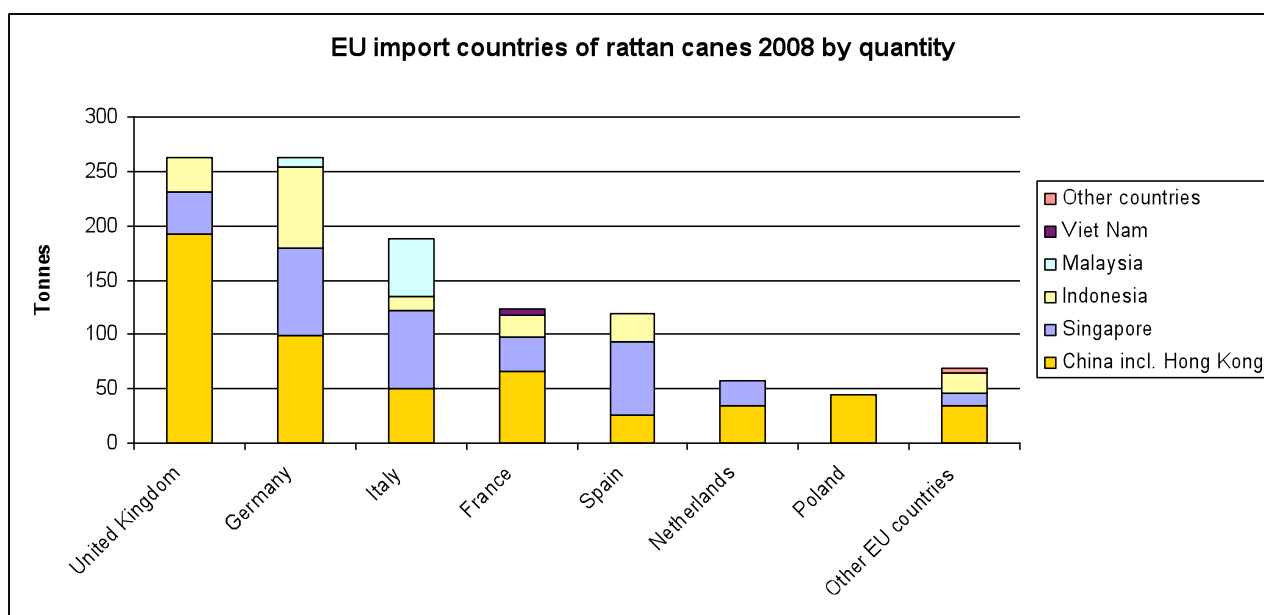


Figure 75: Top seven EU import countries of rattan canes in 2008 and their export countries by quantity (Source: UN Comtrade)

4.11.2 Import of rattan mats, plaits, and basketwork

The 27 EU countries imported 17,143 tonnes of rattan mats, plaits, and basketwork from countries outside the EU in 2008, with a value of US\$76 million. Rattan mats contributed to 6 per cent, plaits to 4 per cent, and basketwork to 90 per cent of this import quantity. In addition, 1,910 tonnes of rattan mats, plaits, and basketwork with a value of US\$13.3 million were traded internally between EU countries. This means that external imports (from countries outside the EU) accounted for 90 per cent of the EU's total import quantity and internal trade for 10 per cent. However, internal trade accounted for 15 per cent by value.

More than half (52 per cent) of external EU imports in 2008 came from **China**. Imports from **Indonesia** accounted for 30 per cent and imports from **Viet Nam** for further 12 per cent of the quantity (Figure 76).

Germany was the most important EU importer, accounting for 29 per cent of the external EU import quantity and 33 per cent of the value. Germany imports came mainly from Indonesia (43 per cent) and China (42 per cent), with 13 per cent coming from Viet Nam (Figure 80). In contrast, the UK — the second-most important EU importer — imported (78 per cent) from China and just 15 per cent from Indonesia, while the Netherlands and Belgium imported predominantly from Indonesia.

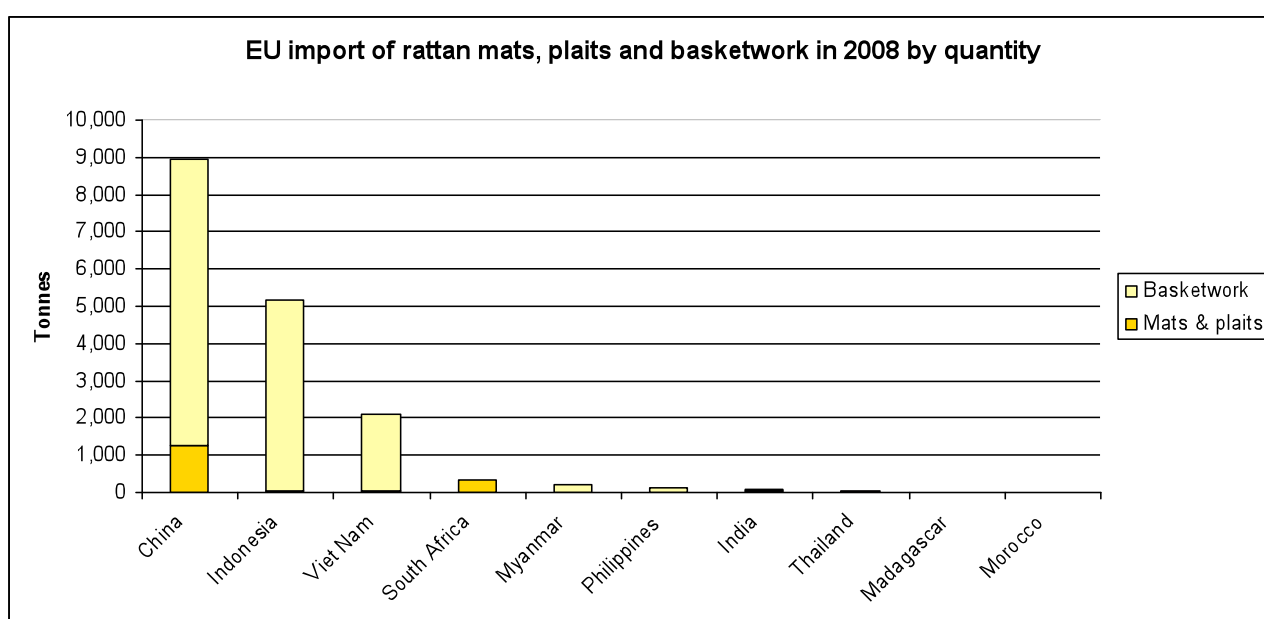


Figure 76: EU import of rattan mats, plaits, and basketwork from countries outside the EU in 2008 by quantity (Source: UN Comtrade)

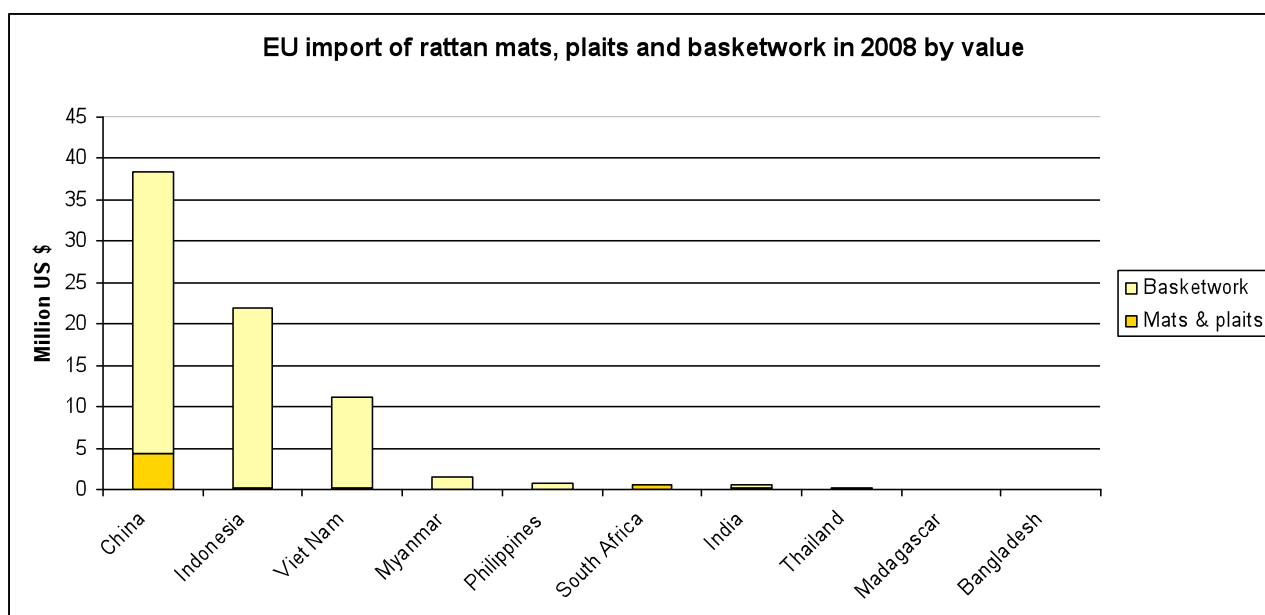


Figure 77: EU import of rattan mats, plaits, and basketwork from countries outside the EU in 2008 by value (Source: UN Comtrade)

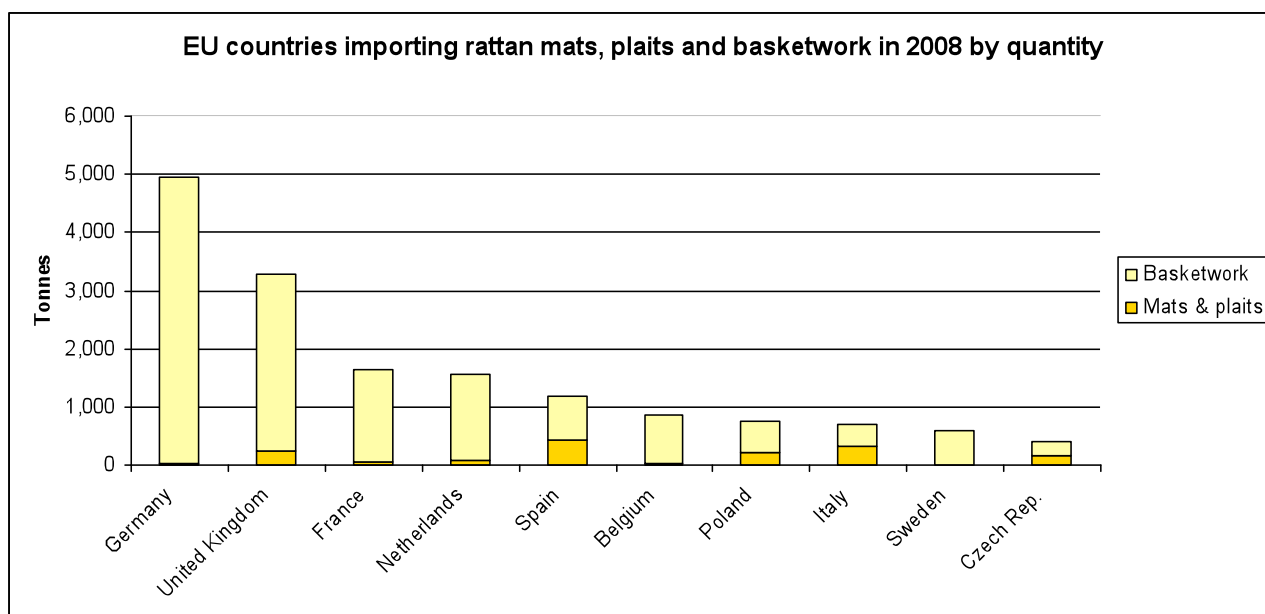


Figure 78: EU import countries of rattan mats, plaits, and basketwork from countries outside the EU in 2008 by quantity (Source: UN Comtrade)

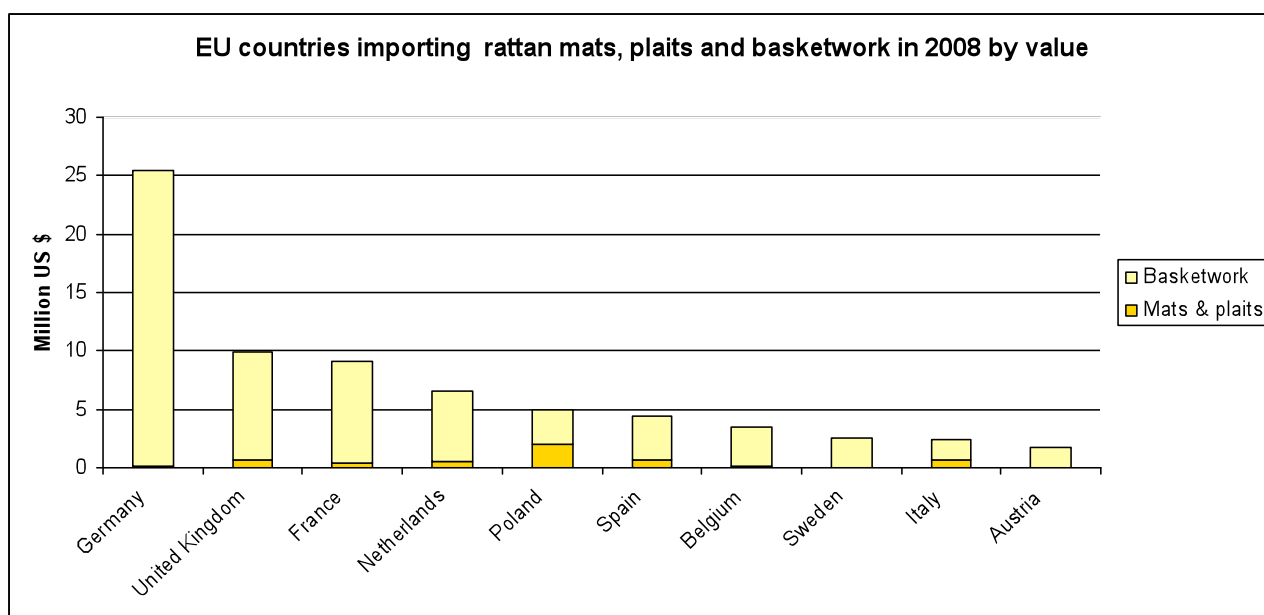


Figure 79: EU import countries of rattan mats, plaits, and basketwork from countries outside the EU in 2008 by value (Source: UN Comtrade)

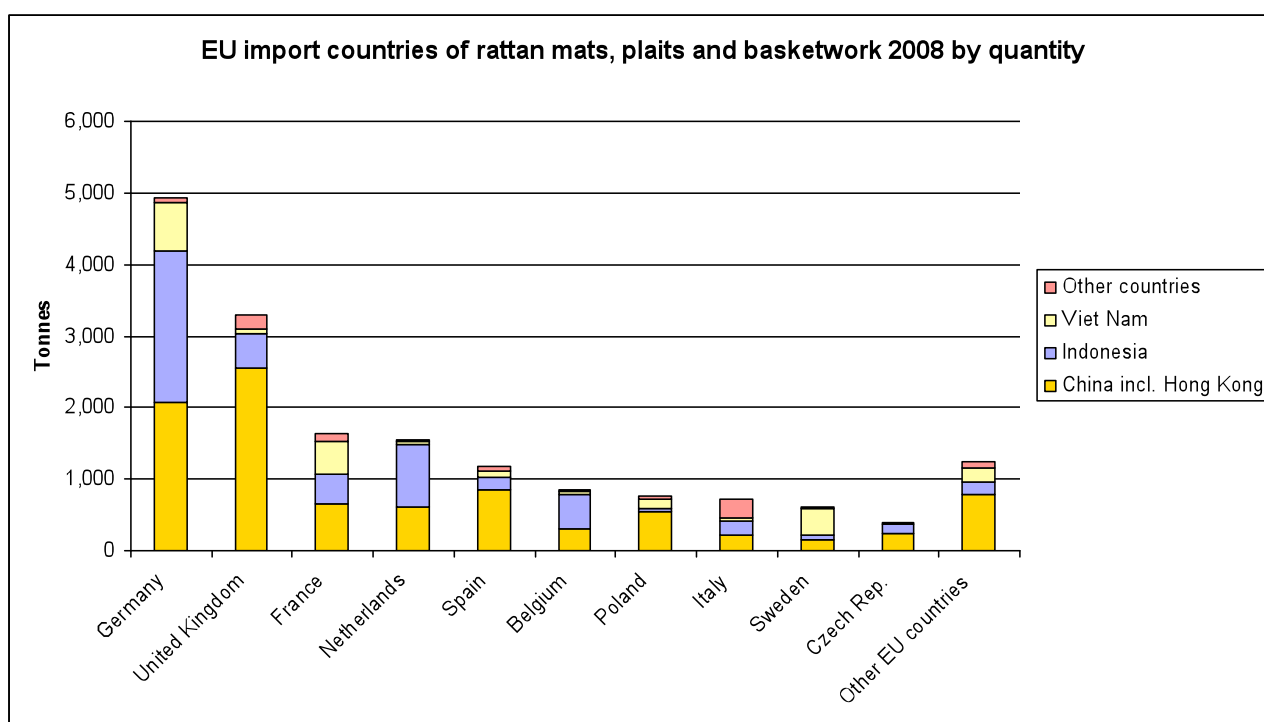


Figure 80: Top ten EU import countries of rattan mats, plaits, and basketwork in 2008 and their export countries by quantity (Source: UN Comtrade)

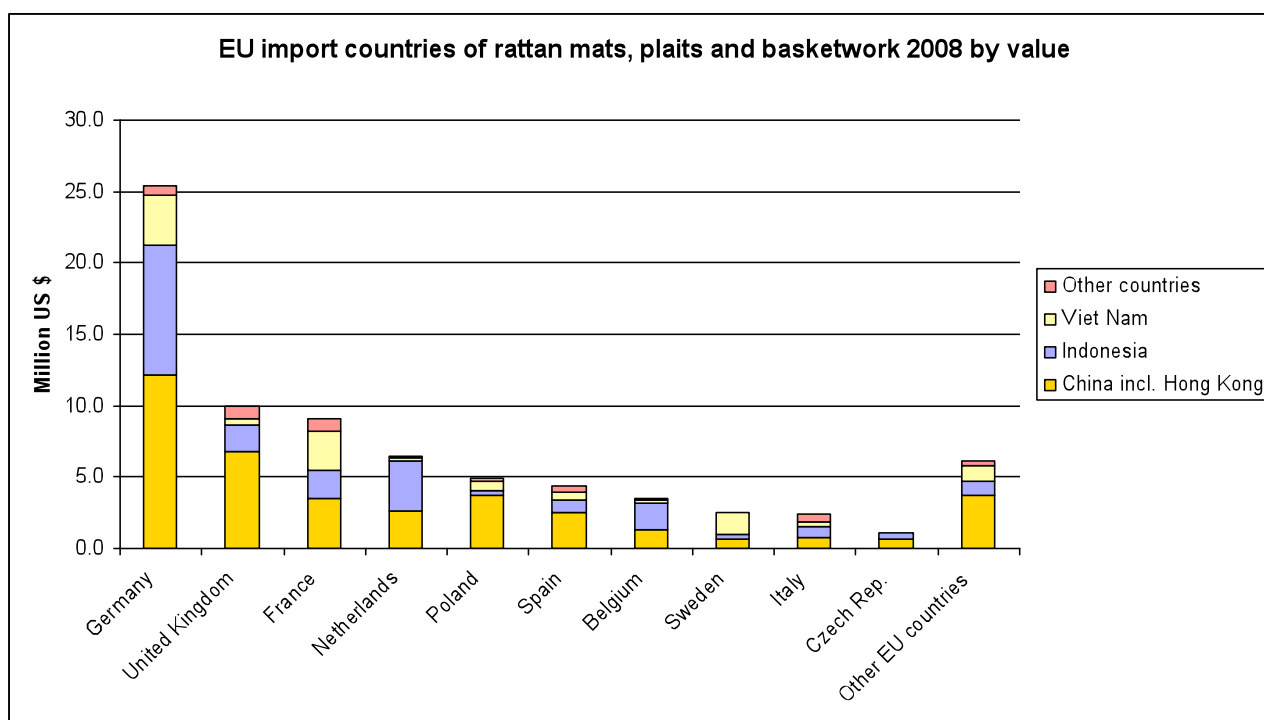


Figure 81: Top ten EU import countries of rattan mats, plaits, and basketwork in 2008 and their export countries by value (Source: UN Comtrade)

4.11.3 Import of rattan furniture

The EU imported 60,000 tonnes of rattan and bamboo furniture from countries outside the EU in 2008, with a value of US\$254 million. A further 10,400 tonnes with a value of US\$77 million were traded internally between EU member states. Thus, internal trade accounted for 15 per cent of the total quantity imported by EU countries, and 23 per cent of the total value. The average value per tonne of rattan furniture traded internally was 75 per cent higher than of furniture imported from outside the EU. However, the small share of internal trade means that most of the rattan furniture imported from outside the EU was sold to consumers in the importing EU country.

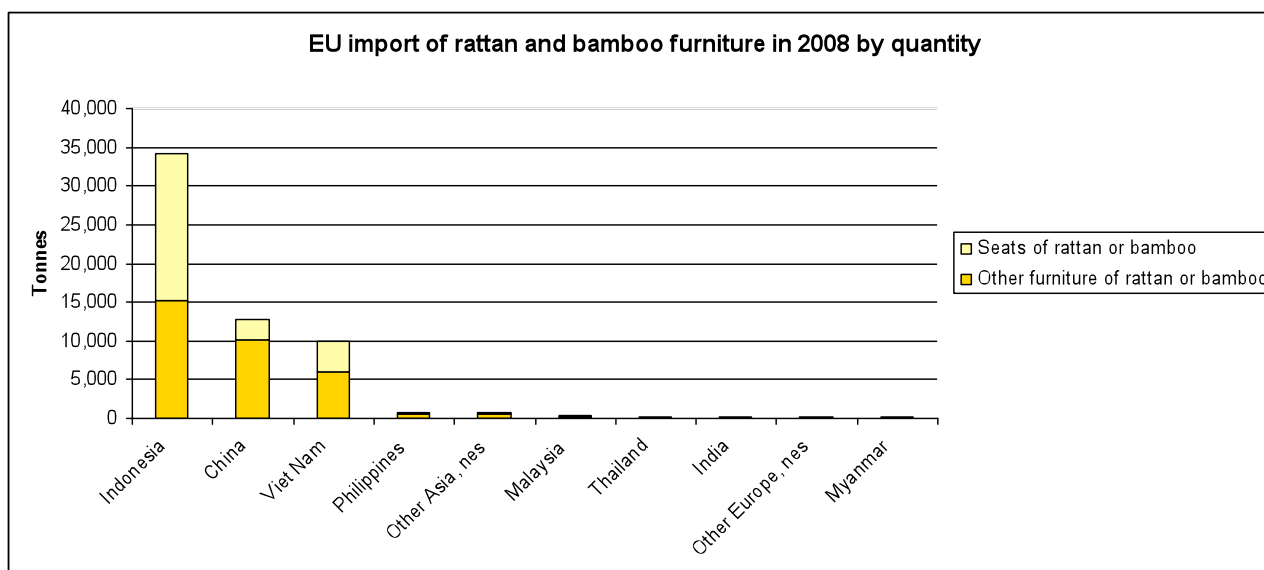


Figure 82: EU import of rattan and bamboo furniture from countries outside the EU in 2008 by quantity (Source: UN Comtrade)

EU countries imported rattan and bamboo furniture almost exclusively from three countries: **Indonesia**, **China**, and **Viet Nam** (Figure 82). Indonesia was the dominating supplier in 2008, accounting for 57 per cent by quantity and 60 per cent by value of the furniture imported by the EU. Imports from China accounted for 21 per cent and imports from Viet Nam for 17 per cent of the quantity. Although the EU is the leading importer of rattan and bamboo furniture from **Malaysia** (see section 4.2), **Thailand** (see section 4.9), and

Myanmar (see section 4.2), imports from these countries contributed to just 1 per cent or less of total external EU rattan and bamboo furniture imports.

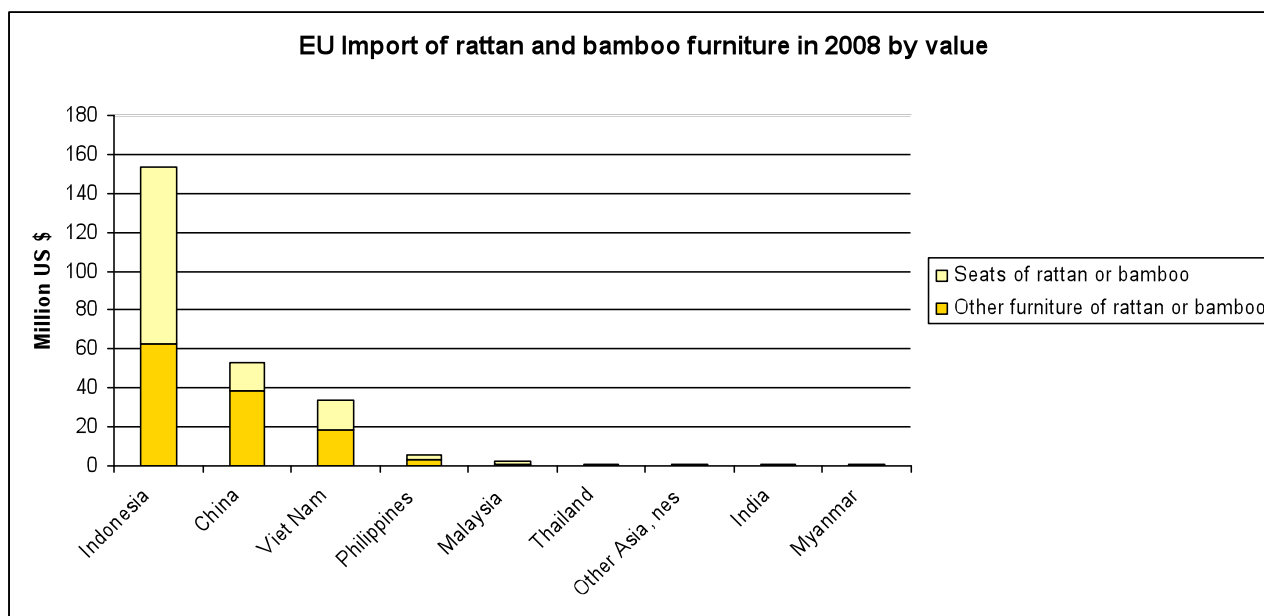


Figure 83: EU import of rattan and bamboo furniture from countries outside the EU in 2008 by value (Source: UN Comtrade)

Germany was the leading EU import country for rattan and bamboo furniture, accounting for 22 per cent of the total EU import. Sixty-one per cent of these imports came from Indonesia, 22 per cent from Viet Nam, and 15 per cent from China (Figure 84). Indonesia was the leading supplier of rattan and bamboo furniture for the entire top ten EU import countries. The Netherlands, for example, imported 81 per cent of such furniture from Indonesia. Viet Nam is an important supplier for France, contributing to 24 per cent the French import, as well as for Belgium (23 per cent) and Italy (30 per cent). The UK and France were the leading EU importers of rattan and bamboo furniture from China. Imports from China contributed to 40 per cent of the UK import of rattan furniture from outside the EU and one-quarter of French imports.

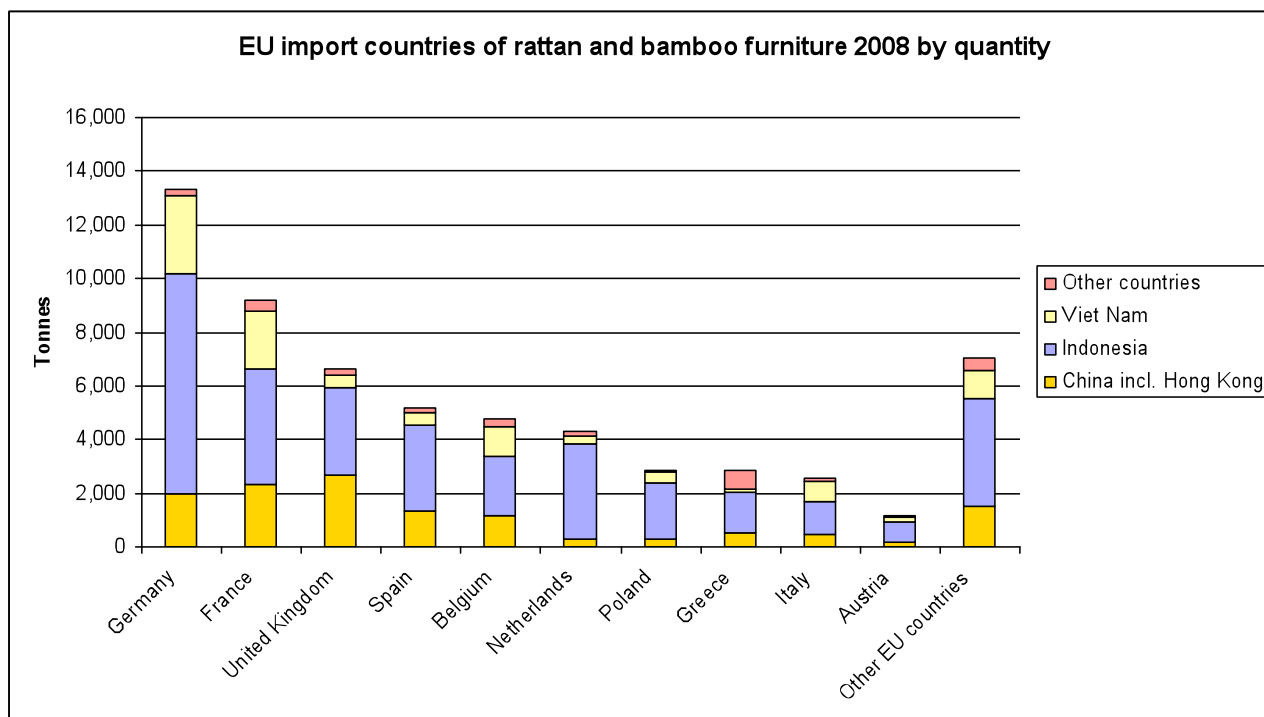


Figure 84: Top ten EU import countries of rattan and bamboo furniture in 2008 and their export countries by quantity (Source: UN Comtrade)

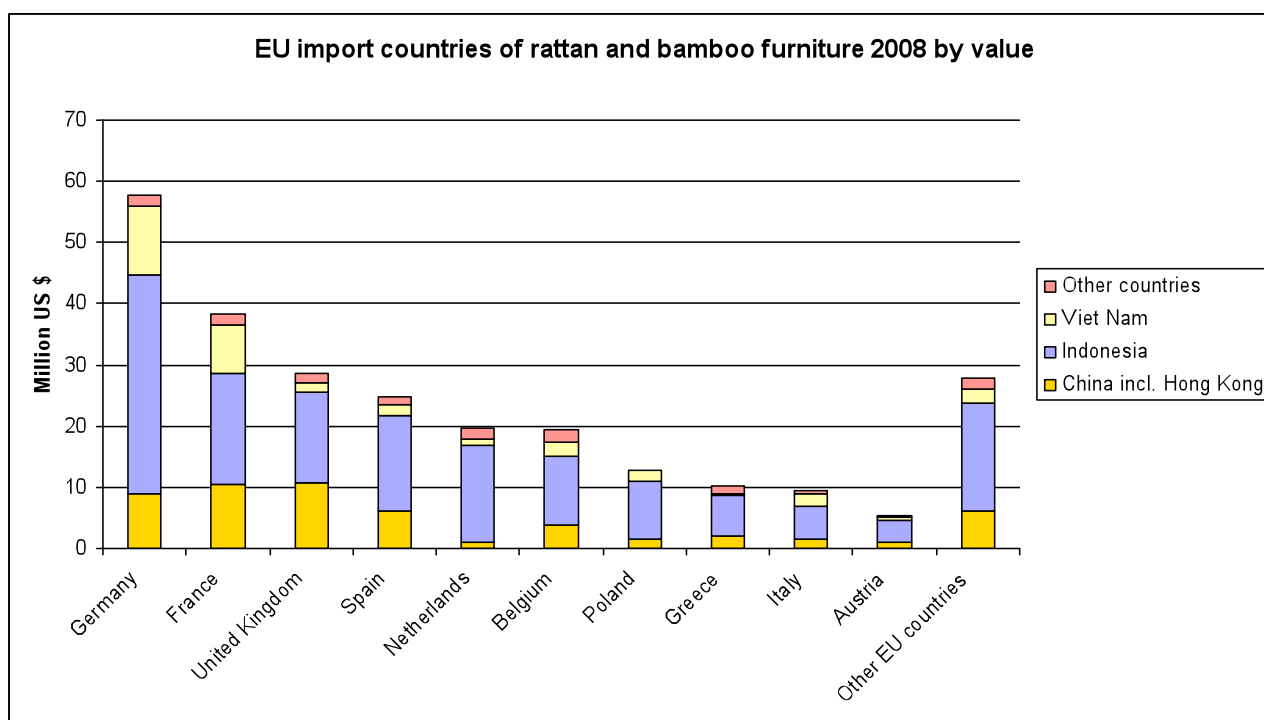


Figure 85: Top ten EU import countries of rattan and bamboo furniture in 2008 and their export countries by value
(Source: UN Comtrade)

4.12 US

4.12.1 Import of rattan canes

The US is the third-largest import country of rattan canes in terms of value. As the US reports only the value of rattan cane imports to the UN, and not the quantity, the import quantity of 1,272 tonnes for 2008 provided by UN Comtrade was estimated using a median unit value of US\$2,500 per tonne. Unlike estimates for Viet Nam (section 4.7.2), this median unit value may be more appropriate for US imports.

From 2000 to 2008, the US imported rattan canes with a value between US\$2.5–3.5 million annually, mostly from China (Figure 86). The value of these imports in 2008 was US\$3.1 million. **China** accounted for 84 per cent of these imports, followed by **Singapore** (8 per cent). Other countries accounted for just 7 per cent of imports, including **Indonesia** (2 per cent) and **Malaysia** (1 per cent) as well as the **UK**, the **Netherlands**, and **South Africa** (1 per cent each).

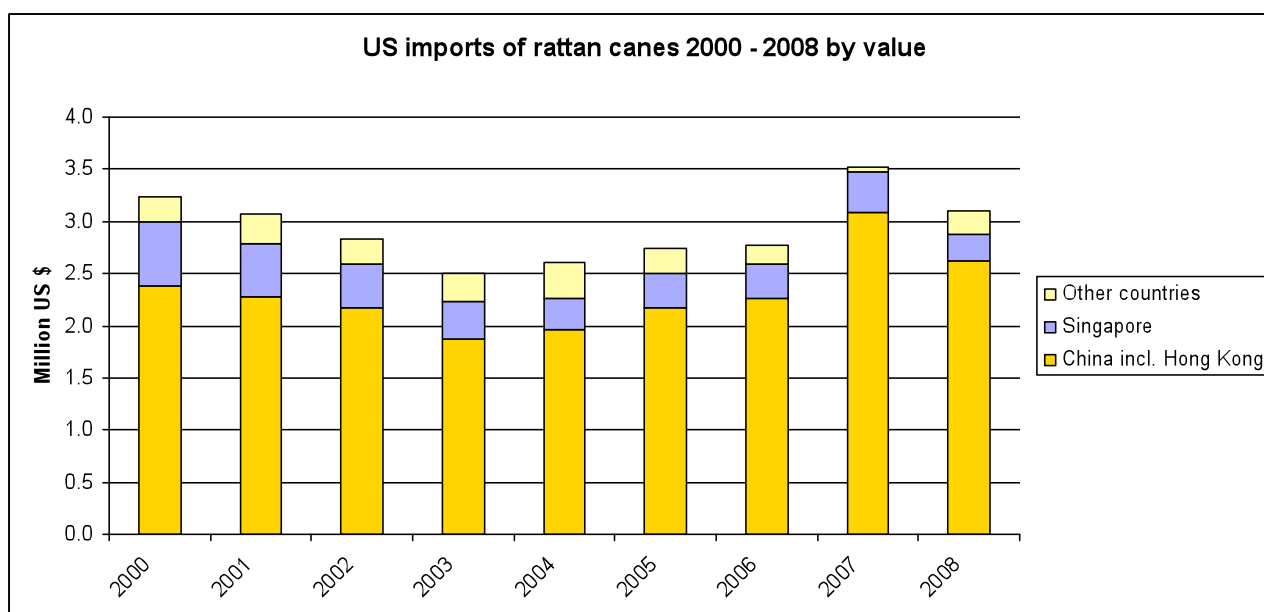


Figure 86: US import of rattan canes by value between 2000 and 2008 (Source: UN Comtrade)

4.12.2 Import of rattan mats, plaits, basketwork

The US is the main import country for rattan mats and plaits as well as basketwork. Such imports were worth a total of US\$44 million in 2008, from which the UN estimates a quantity of 9,079 tonnes. By value, half of these imports came from **China** (Figure 87), 18 per cent each from **Indonesia** and the **Philippines**, 9 per cent from **Viet Nam**, and 2 per cent from **Thailand**. Imports from other countries, such as **India**, **Italy**, and **Spain**, were small with values of less than US\$100,000.

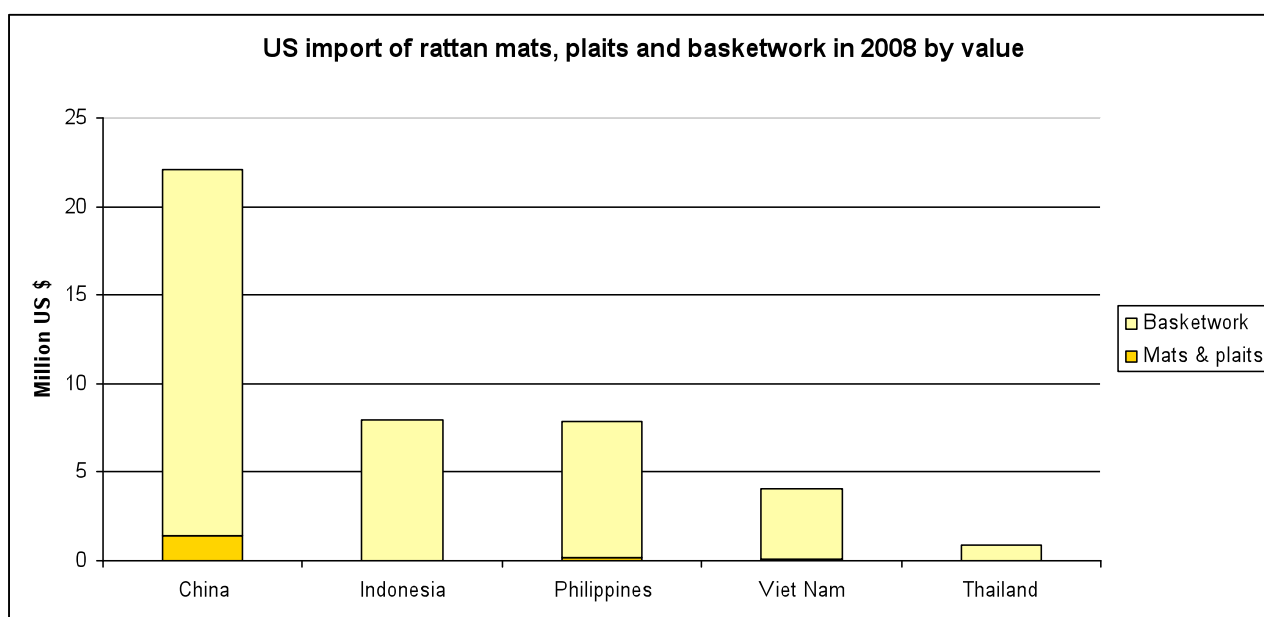


Figure 87: US import of rattan mats, plaits and basketwork by value in 2008 (Source: UN Comtrade)

4.12.3 Import of rattan furniture

The US was also the main importer of rattan and bamboo furniture. Such imports were worth US\$120 million in 2008, from which the UN estimates a quantity of 26,122 tonnes. By value, 41 per cent of rattan and bamboo furniture was imported from **China**, 26 per cent from **Indonesia**, 24 per cent from the **Philippines**. 5 per cent from **Viet Nam**, and 1 per cent each from **Malaysia**, **Spain**, **Thailand**, and **Italy**. However, it should be kept in mind that even though imports from Malaysia and Thailand are small, the US was the key market for rattan furniture exported by these countries.

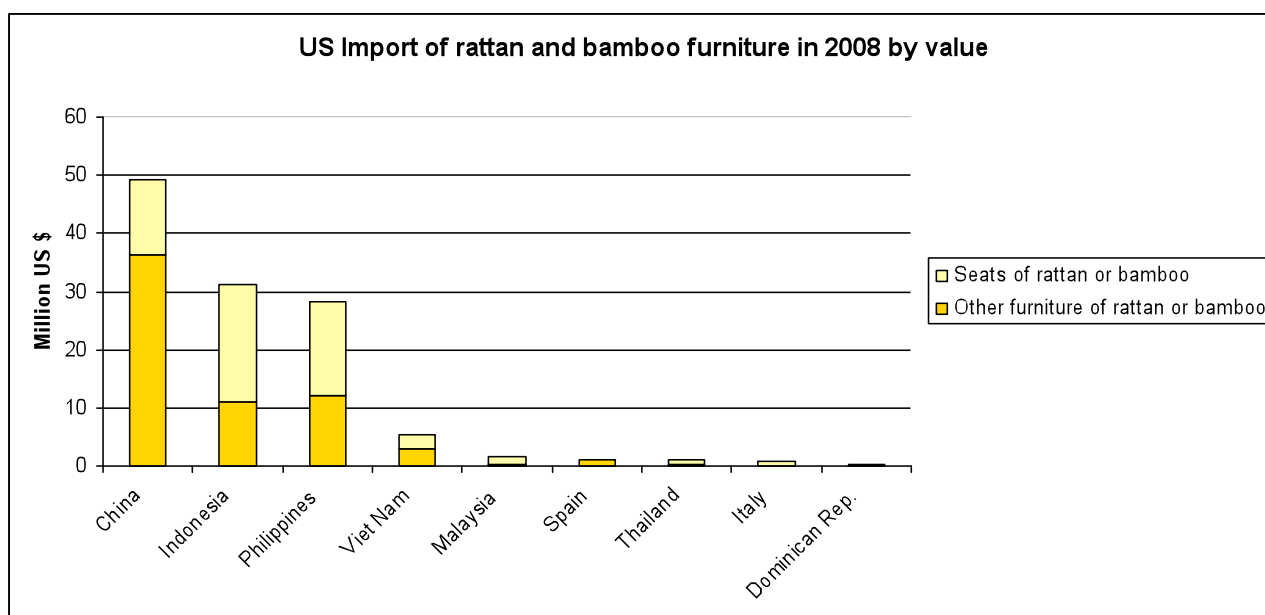


Figure 88: US import of rattan and bamboo furniture by value in 2008 (Source: UN Comtrade)

5 Trends and issues

5.1 *Impact of import country regulations on rattan trade*

5.1.1 US Lacey Act

The US Lacey Act (16 U.S.C. 3371 et seq.) dates back to 1900, but received extensive amendments in 1981. The Act's primary purpose is to fight trafficking in "illegal" fish, wildlife, or plants.

On 22 May 2008, the US Congress passed the Food, Conservation, and Energy Act of 2008, which included further amendments to the Lacey Act that broadened its protection to include a new range of plants and plant products (Section 8204, Prevention of Illegal Logging Practices). In a broad sense, the newly amended Lacey Act impacts the global rattan trade in two important areas:

- It provides resource protection under both US and foreign forest protection laws
 - Protects "any wild member of the plant kingdom, including roots, seeds, parts, and products thereof, and including trees from either natural or planted forest stands."
 - Prohibits import of illegally harvested raw materials **and** finished products (and their components) made from illegally harvested materials
- It increases the accountability (burden of proof) of importers/exporters.

These are discussed in more detail below.

Domestic and international resource protection

Although the Lacey Act is limited to US imports, its new amendments aimed at resource protection will clearly have a significant impact on the global rattan supply chain. A critical factor in the amended Act is the way it treats raw materials and finished products equally. Thus raw timber harvested in Indonesia requires the same import declaration information as a chair made in China from Indonesian wood (see "Importer accountability", below). Neither product would be allowed to enter the US if the wood has been harvested illegally in Indonesia (e.g., from a national park). In this way, the amended Lacey Act has an overarching ability to enhance forest protection initiatives both domestically and internationally.

What makes the Lacey Act unique in terms of environmental protection laws — and of particular interest to International Network for Environmental Compliance and Enforcement (INECE) participants in countries where illegally harvested timber is ultimately destined for the US — is that it can be triggered by violation of a non-US law or regulation designed to protect or gain government revenue from timber^{xxix}.

By denying import to even finished products made from illegally harvested plants, the Lacey Act is indirectly enforcing forest protection laws of trade partner countries. While Chain of Custody documentation is not required, a USAID source suggested that such documentation will become more important in order for importers to keep evidence of legality in their dealings: "While Lacey requires a simple declaration on species, origin, value, and volume, the threat of prosecution for importing 'illegal' wood products is putting pressure on importers to have much more certainty on the source of their products and their legality. This is prompting many to require documentation on legality and clear Chain of Custody."

This official argued that knowledge of the rattan value chain will become de facto necessary. For example, rattan that is harvested, processed, and woven into chair seats in Viet Nam could be exported to China and used in the previously mentioned chair made of Indonesian wood. If this final chair product is exported to the US, the Lacey Act declaration does not pay any attention to the export/import chain in Asia or the Chinese manufacturing. The essential details are where the raw materials were harvested for the rattan chair seat (Viet Nam) and the chair frame (Indonesia).

Importer accountability

As the Lacey Act amendments were slowly rolled into full enforcement by April 2010^{xxx}, importers geared up for dramatic changes in the way that they must operate. Although the Lacey Act strives to indirectly uphold foreign forest protection laws, the US government does not intend to provide any resources or information to importers regarding foreign protection laws. It is completely the responsibility of the importer to be aware of foreign laws related to their products before attempting to import them into the US^{xxxi}. As globalization has made it standard practice for products such as clothing or furniture to be made up of numerous plant

products from different countries, accounting for forest laws surrounding raw materials for buttons, fabrics, frames, handles, etc. will likely require significant extra work.

The Lacey Act amendments require a new Plant and Plant Product Declaration^{xxxii}, which has six pieces of information at its core:

- Article/component of article
- Plant scientific name (genus and species)
- Country of harvest
- Quantity of plant material
- Unit of measure
- Per cent recycled material

The Lacey Act declarations are meant to “piggy-back” on the US Customs Entry System and the US Customs and Border Protection - Department of Homeland Security will collect the declarations. Despite any overlap, the Lacey Act declarations are required no matter what other declaration frameworks have already been addressed by an importer. For instance, if an importer has already properly declared a shipment of CITES^{xxxiii} regulated material they still must provide complete Lacey Act declarations even if these are partially redundant.

While the Act requires a simple declaration on species, origin, value, and volume, the threat of prosecution for importing ‘illegal’ wood products is putting pressure on importers to have much more certainty on the source of their products and their legality. This is prompting many to require documentation on legality and clear Chain of Custody.

An importer need not be the one who violated the foreign law in order to be prosecuted; the plants or timber, and the products made from the illegal plants or timber, become “tainted” even if someone else commits the foreign law violation. However, to be prosecuted the importer must know, or in the exercise of due care should know, about the underlying violation.

Andrea Johnson, who directs forest campaigns for the US office of the Environmental Investigation Agency (EIA), a non-profit with bases in both London and Washington, DC, explained what the Lacey Act could mean:

“The Lacey Act supports the law enforcement efforts of trading partners by saying, in effect, ‘your laws matter to us, and we will fine or prosecute companies who profit in the US from knowingly breaking them.’

Before this law was passed, for example, a shipment of trees cut illegally from an Indonesian national park and exported without payment of any taxes would be entirely legal once it reached US shores. Now, the US can help Indonesia protect its natural resources as well earn its rightful public revenues, instead of allowing a few corrupt timber barons and officials to pocket the profits.

For the first time, importers will be required to declare the country of harvest and the species of plant contained in the products they import. This will help US agencies to focus on enforcement, as well as encourage importers to take due care and to assess the risk of illegal sourcing based on knowledge of the species and country of origin.

What the declaration is not: a requirement to provide third-party documents certifying the legality of each shipment. Lacey is fundamentally a fact-based law, not a document-based law. The US government does not require any specific document upon import. Of course, a company practicing optimal ‘due care’ will seek the most robust ways to ensure that its products are legal, and may opt for a third-party verification under a credible certification scheme, or a license under the FLEGT Voluntary Partnership Agreement currently being negotiated between Indonesia and the EU. This will be up to the internal risk-assessment procedures and procurement policies of each company, not a requirement of the US government^{xxxiv}.

5.1.2 FLEGT

In 2003 the European Commission adopted an Action Plan for “Forest Law Enforcement, Governance and Trade” (FLEGT) to address the problem of illegal logging and the trade in illegally logged timber. In line with the FLEGT action plan, in 2010 the European Parliament and European Council approved legislation which prohibits the sale of timber logged illegally under the rules of the country of origin. In addition, companies must use a system of due diligence to ascertain that the timber they sell in the EU was harvested legally^{xxxv}. There are also new EU Green Procurement Guidelines and EU member state government timber procurement policies that dictate buying decisions in at least 20 per cent of the EU market.

The regulation applies to almost all products made of wood including wooden furniture, but it does not apply to Non-Timber Forest Products such as rattan. Even, for example, a rattan chair with a wooden frame is not covered by the new legislation. Thus, FLEGT does not have any implications for rattan imports into the EU.

5.2 *Green trade in rattan*

Up until recently, the “green” market for finished furniture has been sparse and scattered. The Fair Trade movement and various green certifications have spotlighted sustainable market chains, and long-established Fair Trade pioneers such as Ten Thousand Villages have marketed a variety of developing country products including simple rattan furniture and handicrafts. However, a clear long-term market path of sustainable furniture products has not yet been established. Furthermore, outside of stricter eco-labelling certifications (e.g., Fairtrade International (FLO; www.fairtrade.net) and the World Fairtrade Organization (WFTO; www.wfto.com)), which often target agricultural products, “Fair Trade” has been used as a product buzzword with variable interpretations.

Recent efforts to strengthen this market in the US and Europe represent a promising push towards a more widely accepted green scheme in the furniture industry. The furniture industry is also being pushed along by international legal frameworks such as the recent amendments to the US Lacey Act, which as discussed in section 5.1.1 will have a dramatic impact on material sourcing and import for US companies.

To be able to consider the potential market chain development for sustainable rattan furniture, the remainder of this section documents a few examples of current green developments in the broader furniture market.

5.2.1 Sustainable Furnishing Council

The biggest furniture industry-initiated “green” advance in the US is the Sustainable Furnishing Council (SFC; www.sustainablefurnishings.org), a non-profit alliance formed in late 2006 in High Point, North Carolina, the hub of the US furniture industry. Its primary goal is “to promote sustainable practices among manufacturers, retailers, and consumers alike” under four basic principles: to raise awareness of the sustainability issue; to assist companies in adopting good practice; to serve as an information clearing house; and to create a symbol of assurance for consumers.

5.2.2 WWF Global Forest & Trade Network

A WWF-led partnership, the Global Forest & Trade Network (GFTN; www.panda.org/gftn) links more than 360 companies, communities, NGOs, and entrepreneurs in more than 30 countries around the world. The goal is to create a new market for environmentally responsible forest products.

GFTN participants are committed to increasing the availability of forest products from well managed forests, helping each other benefit and profit from sustainable forest management, and ending the purchase of forest products from illegal and controversial sources. Since 1991, market-driven demands from GFTN participants have increased the economic incentives for responsible forest management. This is helping to ensure that millions of hectares of forests are independently and credibly certified, a guarantee that the forests are well managed and that their products come from legal and sustainable timber harvests.

An internal survey among GFTN participants has shown that retailers are willing to buy Forest Stewardship Council (FSC)-certified rattan products. The problem at the moment is the lack of FSC-certified rattan products available on the market.

5.2.3 FSC certification

Numerous international certification schemes exist for forest products, of which FSC (www.fsc.org) certification is viewed as the most rigorous. FSC Chain of Custody follows certified material all the way from harvest to consumer, including all stages of trade, processing, production, and delivery.

Since the amended US Lacey Act requires detailed information regarding origin of harvest for forest products and product materials (see section 5.1.1), the FSC's stringent Chain of Custody certification will become an increasingly valuable part of the global furniture trade.

The first FSC certification of rattan forests is currently underway in Lao PDR, for 1,500 ha of natural semi-evergreen forest. The certification process is part of a project initiated by WWF in collaboration with the Lao Forestry Department to support local communities with the sustainable management of rattan forest. The first FSC-certified rattan products are expected to be sold in 2011 on the European market.

In addition WWF, in collaboration with the Lao National Chamber of Commerce and Industry and the Provincial and District Chamber of Commerce and Industry Offices, is working on market link aspects with local communities and rattan companies, and FSC Chain of Custody certification.

6 Conclusions

6.1 *State of rattan resources*

In all countries where relevant information is available, rattan resources are reported to be declining rapidly, particularly for commercially valuable species and species with large diameter. The primary reasons are forest loss, which means also loss of rattan habitat, and overexploitation due to unsustainable and often illegal harvesting^{iii, xxvi, xxv}. Although rattan production is generally seen as an instrument to create income for, and promote development in, rural communities, there has as yet been little attempt to develop a sustainable rattan sector and adequate rattan policies at national and provincial levels.

Although essential for determining sustainable annual allowable cuts, most countries do not have an inventory of rattan resources, not to mention an inventory specific for commercially valuable rattan species and diameters. Even where such inventories exist, they are either rough estimations, as in Indonesia, or out of date, as in Malaysia and the Philippines. In addition, illegal rattan harvesting is widespread as control is weak and difficult.

As wild rattan resources — and particularly those near villages — are exhausted, gatherers have to go far in the forest to find commercially valuable rattan, which leads to increased harvesting costs. Shrinking supply and higher harvesting costs will probably lead to increasing prices for rattan if demand continues. Higher prices at the community level will give incentive for communities to undertake enrichment planting as well as to improve their management of current rattan stocks by using the simple management techniques promoted within the WWF Sustainable Rattan Programme. In addition, WWF's rattan project tries to improve the supply chain, as an efficient supply chain provides incentives for traders and processors to invest even if the price is getting higher at the source.

6.2 *Main global rattan trade flows*

Although the quality of available trade data is weak, the main global rattan trade flows can be determined as follows:

Indonesia's export of rattan furniture and basketwork to the EU

Indonesia is the source of about 80 per cent of the rattan on the global market. The country dominates global exports in rattan canes, and is also the leading exporter of rattan furniture and the second-largest exporter of rattan mats, plaits, and basketwork.

The key market for Indonesian rattan is the EU, particularly Germany. The EU accounts for almost two-thirds of Indonesian rattan furniture exports and half of Indonesian basketwork exports. Indonesia is also the main supplier of rattan furniture to the EU, contributing to nearly two-thirds of EU imports. In 2008, imports of rattan furniture and basketwork from Indonesia to the EU had a value of US\$175 million. These imports weighed almost 40,000 tonnes, which means that about 50,000 tonnes² of rattan canes were used in Indonesia in 2008 to produce the rattan goods exported to the EU.

The US is the second-most important market for Indonesian rattan furniture and basketwork; however this market is much smaller than the EU market, with a value of less than US\$40 million in 2008.

China's import of rattan canes from Indonesia and Myanmar and export of rattan furniture and basketwork to the EU and North America

China is the largest importer of rattan canes, importing around 60 per cent of rattan canes traded globally. The quantity imported has decreased by almost the half since 2003. China sources rattan canes almost exclusively from Indonesia and Myanmar. In 2008, China accounted for almost three-quarters of Indonesia's export and around 90 per cent of Myanmar's export of rattan canes.

The imported rattan canes are used in China to produce basketwork and furniture for export, mainly to the EU and North America. China is the leading exporter of rattan mats, plaits, and basketwork and the second-largest exporter of rattan furniture. Half of China's basketwork export goes to the EU and one-quarter goes to the US, while around 40 per cent of China's rattan furniture exports go each to the EU and the North American market. Chinese rattan basketwork and furniture dominate the US market, accounting for half of basketwork and more than 40 per cent of rattan furniture imports. The EU also imports half its rattan basketwork from China; however for rattan furniture China is the number two supplier, far behind Indonesia.

² Applying a conversion factor of 0.8 as given by the Indonesian Ministry of Forestry

Approximately 50,000 tonnes² of rattan canes were used to produce rattan goods for Chinese export to North America and the EU. In total, China needed 64,000 tonnes² of rattan canes to produce its global export of mats, plaits, basketwork, and furniture in 2008. China imported only 39,000 tonnes of rattan canes in this year; the remaining 25,000 tonnes may have derived from rattan production in China as well as from stock disposal.

Viet Nam's export of rattan furniture and basketwork to the EU

Viet Nam is the third-largest supplier of rattan furniture and basketwork for the EU market. Eighty per cent of the rattan furniture and about half the basketwork exported by Viet Nam went to the EU in 2008, in particular to Germany and France, with an import value of US\$45 million. Approximately 15,000 tonnes² of rattan canes were needed to produce these goods. In total, Viet Nam needed approximately 21,000 tonnes² of rattan canes to produce its rattan exports in 2008.

Viet Nam imported rattan canes from Indonesia and Lao PDR in 2008. In 2006 and 2007 rattan canes were additionally imported from Cambodia and the Philippines. However, Viet Nam's foreign trade in rattan canes changed significantly between 2000 and 2008, on both the export and import side. Between 2000 and 2004, Viet Nam was the second-largest exporter of rattan canes behind Indonesia, but export fell drastically in 2005 and was marginal in 2008. The import value of rattan canes has also dropped sharply since 2005.

Unfortunately it is not possible to determine import quantities, as Viet Nam reports only import values to the UN. The calculated figures for quantities provided by UN Comtrade are clearly underestimated. In addition, some of Viet Nam's key suppliers of rattan canes, Lao PDR and Cambodia, do not report any trade data to the UN. This means that figures on import values reported by Viet Nam are the only reasonably reliable source for determining the official rattan trade from Lao PDR and Cambodia to Viet Nam. It is also impossible to determine whether the decline of official imports impacted on Viet Nam's export of rattan basketwork and furniture, as UN trade data does not specify furniture and basketwork made of rattan before 2007.

US import of rattan furniture and basketwork from the Philippines

The Philippines rank number four in global export of rattan basketwork and furniture. The US is by far the leading import country, accounting for 84 per cent of rattan basketwork and three-quarters of rattan furniture exported by the Philippines. The Philippines has almost the same market share as Indonesia as a supplier of rattan basketwork and furniture for the US market. One-fifth of the basketwork and one-quarter of rattan furniture imported by the US come from the Philippines.

The Philippines imports practically no rattan canes from other countries, just 54 tonnes in 2008. The export quantity, while small, exceeded the import quantity, indicating that the exported basketwork and furniture was produced from rattan harvested in the Philippines.

Export of rattan canes from Indonesia via Singapore and Malaysia to developing countries and emerging economies

Singapore is the second-largest import country for rattan canes behind China, and ranks third in the global export of rattan canes. As Singapore does not produce rattan, it can be assumed to be a transit country in the global rattan trade. Singapore supplies mainly developing countries and emerging economies with rattan canes, with the key market in recent years being Egypt. Other markets are China, India, Pakistan, and Thailand.

Singapore imports rattan canes from two key countries, Indonesia and Malaysia. However, according to official trade figures Malaysia also mainly imports rattan canes from Indonesia.

Trade data reported by the three countries are so contradictory that it is impossible to determine the exact trade volume of rattan cane between Indonesia, Malaysia, and Singapore. Indonesia's reported exports to Malaysia are less than one-tenth of the corresponding imports reported by Malaysia. In addition, figures reported by Malaysia appear to be incorrect for several years. Finally, Singapore reports export quantities and values which vastly exceed the corresponding trade figures reported by importing countries. However, in 2008 there were not such extreme discrepancies, so it can be assumed that about 5,000 tonnes of rattan canes were imported and exported by Singapore in this year.

Thailand's import of rattan canes from Cambodia, Myanmar, and Indonesia

Thailand is an important importer of rattan canes, particularly from Cambodia and Lao PDR. According to UN trade data, Cambodia exports rattan canes almost exclusively to Thailand. In addition Thailand is the second-largest market after China for rattan canes from Myanmar and the third-largest importer of rattan canes from Indonesia in terms of value. In 2008 Thailand imported more than 3,600 tonnes of rattan canes in total.

However, these rattan canes are not predominantly used to produce goods for export, but to cover domestic demand. Thailand's exports of rattan basketwork and furniture are low. Thailand even imported rattan furniture from China and Indonesia, corresponding to two-thirds of Thailand's export quantity.

6.3 *The influence of legal frameworks and credible certification on rattan trade*

As the US is a key market for rattan basketwork and furniture, the amended Lacey Act will have significant implications for the rattan industry by making it de facto necessary for importers to know the rattan value chain back to the point where the raw material was harvested. This might not only reduce illegal harvesting of commercially valuable rattan used to produce export goods but, since credible certification is an accepted instrument to prove legality, could also promote Chain of Custody certification of sustainably harvested rattan. However, while it may reduce illegal rattan harvesting, the Lacey Act does not address unsustainable harvesting if such harvesting is in line with the legislation of the country of origin. In addition, since the EU does not have similar regulation for rattan products, products made from illegally harvested rattan may now be directed to the EU instead of to the US.

Legal harvesting of rattan is clearly not sustainable in most countries. Since national data on the volume and growth rate of rattan resources are unknown due to missing inventories, the annual allowable cut is determined by the demand of the rattan industry — leading to overexploitation of commercially valuable rattan resources. However, there are movements towards a more sustainable rattan industry in the greater Mekong region. Initiated by WWF with co-funding from EU, IKEA, and DEG, innovative sustainable management practices including certification are being applied to more than 20,000 ha of rattan forests.

Credible forest certification is a recognized instrument for promoting sustainable management of forest resources on a voluntary basis. As rattan is a forest product, existing credible forest certification schemes such as the FSC are also applicable to sustainable rattan management. In addition, FSC has the advantage that it is already well known and accepted in the timber and furniture sector. The first FSC certification of rattan forests, initiated by WWF in cooperation with local communities, is underway in Lao PDR, and includes FSC Chain of Custody certification of the local rattan industry as well as Vietnamese companies.

Even though the volume of sustainably produced rattan is still small compared to the global rattan trade, this is an important first step to develop a sustainable rattan sector not just in Lao PDR, but also in other Southeast Asian countries. Developing a sustainable rattan industry with direct business relationships to big retailers in US and European markets, such as IKEA, is also a chance for countries like Lao PDR and Cambodia to generate more jobs, income, and foreign exchange revenues than through export of raw rattan.

Although certification is a voluntary instrument, the promotion of FSC-certified rattan products by furniture importers and traders in the USA and Europe, as well as consumers demanding certified rattan, are steps towards creating a more reliable supply in the face of dwindling rattan resources.

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100%
RECYCLED



Why we are here.

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

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