

# Furniture and people

## A photo journey from market to forest

Herry Purnomo, Melati and Rika Harini Irawati





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The authors

Herry Purnomo, Melati and Rika Harini Irawati

# Foreword

This illustrated guide describes the different aspects of the furniture industry in Jepara affected by our furniture value chain project. The project aims to improve small-scale furniture enterprises that rely on mahogany and teak timber in Jepara by enhancing the structure and function of the furniture industry. Improved governance and efficiency can position small-scale producers in a greater role within the value chain, help their furniture enterprises thrive and enhance their income levels. The goals of the project are in line with UNDP's millennium development goals (MDGs) on poverty alleviation, global partnerships and environmental sustainability.

This guide tells the story of the furniture industry through photographs. Working backwards through the value chain, we start from the furniture buyers' markets, trace furniture back to furniture producers, then to timber trading and the forests where the timber comes from.

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Chapter 1  
Introduction





# 1. Introduction

The use of teak in furniture making has long been a part of Javanese culture. Centuries of historical records dating back to the seventh century BCE describe the abundance of teak forests in Central Java and the formation of skilled carpentry groups who used its timber for the Kalingga, Majapahit, Demak and Mataram kingdoms. The Javanese consider teak and items made from teak a valuable part of their culture, a species apart from other types of wood. Local carvers and furniture makers absorbed the influences of Chinese, Indian, Arabic and European designers, producing to this day

intricate designs and highly sought after furniture. The seventeenth century port city of Jepara, once a bustling centre of maritime commerce, remains today a major centre of furniture production in Central Java.

The Indonesian furniture industry faces challenges as it struggles to secure its place in competitive global markets. Business relations between furniture producers and their buyers are usually unbalanced; buyers set the price and producers cannot negotiate a better deal. These unfair relations are part of the legacy from Javanese court practices. Patron–client relationships among members of the Javanese royal household and their subservient carpenters have defined that imbalance since the seventh century when Queen Shima instructed her skilled workers to create specific furniture and art designs for her palace with no compensation. In 1700, Queen Kalinyamat encouraged her woodworkers to produce high quality furniture for international trade, as did the Indonesian heroine, Kartini in 1800, who helped promote their work to Europeans with whom she corresponded. Patrons supported woodworkers by instructing product designs, opening access to markets, and ensuring steady orders. Their role was often considered as ‘godly’, highly honoured and never questioned. These patron–client relationships are still present in modern day relationships between buyers and Indonesian furniture producers, which we will discuss later on.

The Furniture Value Chain project is currently assessing opportunities for improving the added value of Indonesian furniture products which, in turn, will improve the livelihoods of millions of people involved in the industry, despite the current gloom in the furniture industry. Indonesians can build on their comparative advantages to mark their specific strengths on the international and domestic market.

‘Furniture value chain’ describes the series of activities required to bring a product or service from conception or design, through different phases of production, to delivery to final consumers

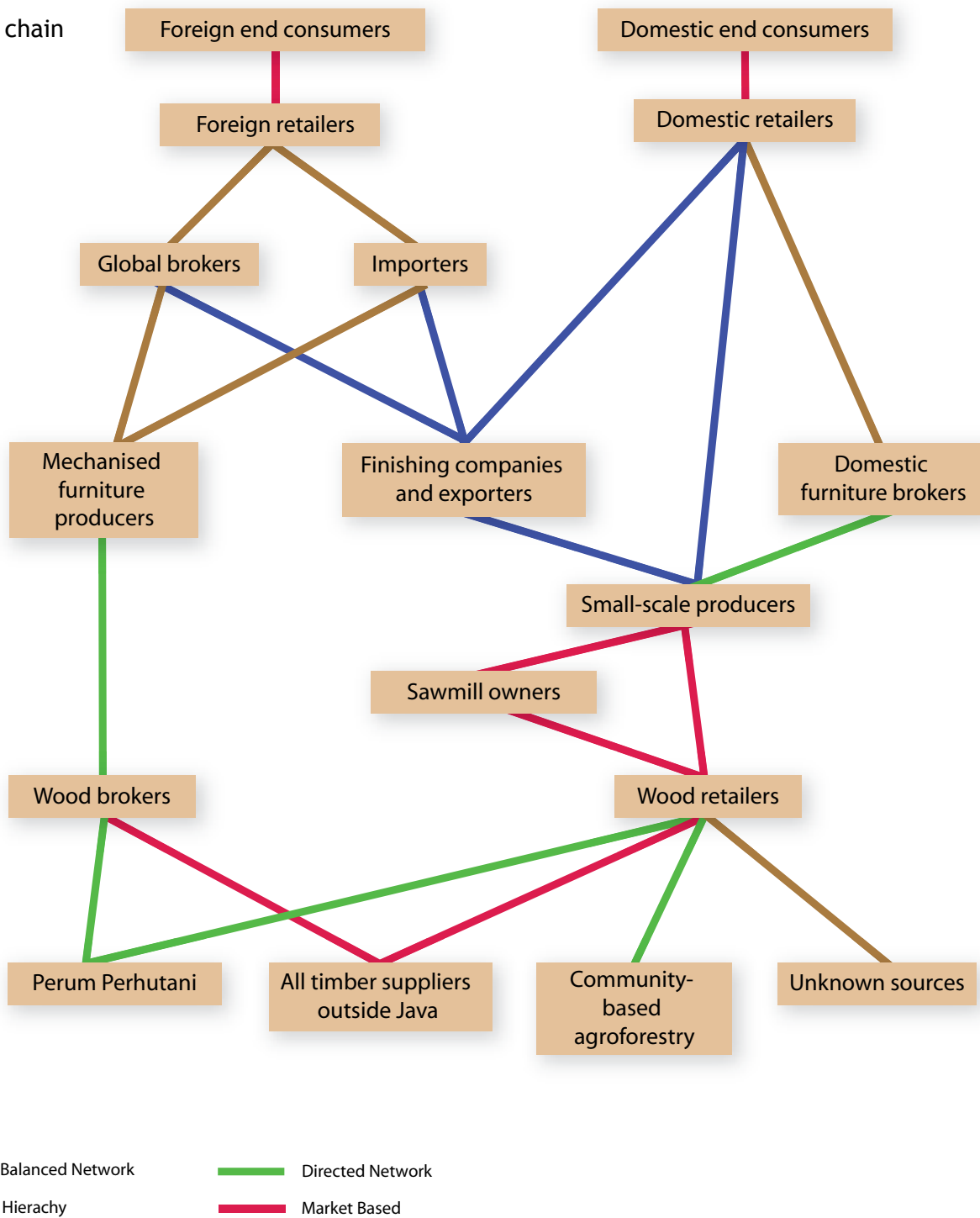
and disposal after use. The value chain applies a systemic lense on a particular product. This bigger picture helps explain at what points in the chain value is added, and helps analyse where those participating in it can boost their income. Good value chain governance ensures that interactions between enterprises and firms along the value chain are efficient and effective. Power asymmetries among various actors is central to value chain governance.

There are four types of value chain governance.

- The market governs whenever there are many customers and many suppliers and repeat transactions are possible. In market governance information flow is limited and no technical assistance is available.
- In a balanced network suppliers have various customers; information flows freely in both directions, and both sides can and do solve problems through negotiation.
- A directed network is indicated by a main customer who buys at least 50% of a supplier's output; the customer defines the product and provides technical assistance, and information is unbalanced
- A hierarchy governs whenever there is vertical integration; supplier enterprises are owned by the buyers so they have very limited decision-making authority.

The Jepara furniture value chain connects producers from Jepara District with furniture retailers abroad (Figure 1). The governance type between finishing companies and small-scale producers is a hierarchy. The global buyers are subsidiaries of the overseas retailers. Few finishing companies develop their own designs. They are protective of their designs and try to prevent others from imitating them for mass production. For their part, the exporters are driven by the foreign importers and global brokers, who are in a directed network system with international retailers.

Figure 1.  
Jepara value chain governance



The small-scale producers are in a directed network relationship with domestic brokers. The brokers are the main customers of the small-scale producers and take more than 50% of their products. The brokers can easily shift from one producer to another. Governance by a directed network is also dominant between exporters and small-scale producers. In some situations, the relationship has become a hierarchy when exporters have exercised more control over small-scale producers. Few small-scale producers have their own showrooms. Mechanised furniture producers have a better position in the value chain. They are in a balanced network relationship with their buyers, the global brokers and importers.

Chapter 2

# Foreign and domestic markets





Prospective buyers  
survey furniture  
products

## 2. Foreign and domestic markets

Wood furniture is the most important export commodity produced in Jepara. Annual exports are valued at about USD 100 million. There are 510 wood furniture export companies in Jepara that export to 99 destination countries. The primary export destination countries are Australia, France, the United Kingdom, Hong Kong, Saudi Arabia, Spain, and the United States. Exporting companies identified eco-certification, bureaucratic burdens, legal requirements, raw material supply, capital and marketing as challenges for improving their competitive advantage.





A crowd at a furniture exhibition



Furniture fair promotional banners

The local furniture market covers an extensive list of showrooms, promotion centres and exhibitions. Both local and international buyers browse through these different channels, looking for the best quality products. They buy as both retailers and wholesalers. Most international buyers are global wholesalers or retailers, but local buyers run the gamut from end consumers themselves or to export brokers.

International buyers negotiating prices at a furniture fair





Buyers survey furniture products at an exhibition





Purchases wheeled off to a buyers car

A buyer shopping for wooden furniture products



A giant chair stands before a furniture promotion centre in Jakarta



Sales promotion men on duty at an upmarket furniture showroom in Jakarta



A furniture promotion centre in Jakarta dedicated to small-scale producers



An upmarket furniture showroom in Jakarta



Furniture products on display at a gallery in Jakarta





Packed furniture ready for export in Jakarta







A furniture store in Jakarta



Indoor furniture on sale in Jepara



A typical road in Jepara



A sidestreet  
showroom in Jepara



Sofas with wooden carving  
on sale in a Jepara store



K. 098

**FURNISHINGS IN SOLID TEAK**

The wood used to produce this item of furniture is naturally impregnated with the resin oil that the teak tree has in abundance. This substance confers on the wood an extraordinary resistance to the elements and allows it to develop various silvery grey hues with passing time, the shade depending on the humidity of where the item is kept. Any irregularities in the colour of the product at the time of opening packaging are to be considered quite normal, given the different portions of wood used to make different sizes of parts: exposure to light will even out the colour relatively quickly.

We recommend you clean the furniture with mild soap and water. The use of teak oil will contribute to softening the fibre in case of excessive dryness in the wood, in which case we recommend rubbing the oil energetically all over the surface of the furniture using a white cotton cloth. Wait for the oil to dry completely before using the furniture again. If you prefer to recover the wood's original colour, use very fine sandpaper and thus remove the oxidised layer, to uncover the original teak colour beneath.

A product tag explaining how to care for wooden furniture



A side street furniture store in Jakarta



Product enquiries at a furniture showroom in Jepara



Striking a deal in Jepara



Outdoor furniture on display at a store in Jepara



A stack of packed chairs ready for export in Jakarta



A typical showroom in Jepara



Local buyers shop around  
for furniture in Jepara



Eyeing some wooden goods in Jepara



Foreign buyers scrutinising goods on display at a Jepara showroom



Buyers browsing through a showroom in Jepara



Foreign buyers scouting for potential goods in Jepara





Buyers look around in a furniture shop in Jepara



A buyer watches the shop owner packaging goods in Jepara



Finalising transactions in Jepara



Wrapping goods at a Jepara showroom



Shopping for wooden furniture in Jepara



A furniture set being loaded for delivery in Jakarta

Chapter 3  
Loading  
and shipping





A fully-loaded truck

### 3. Loading and shipping

Furniture is shipped to local and foreign markets using different transportation channels. Trucks move furniture straight from the producers to local showrooms and promotion centres throughout Indonesia. Delivery to foreign markets requires a more complex chain of transportation. Pickup trucks collect products from producers and deliver them to a nearby container, arranged by an exporting company. Once the container is loaded, it is sent to the harbour for shipment. Upon arrival at the harbour, containers are stored to await document clearance from the customs office, then uploaded to container ships. It can take a couple of days or several weeks for a fully-loaded container of furniture to arrive at its overseas destination.



Goods ready for shipment



Loading furniture onto a truck



Loading a container



Tying down furniture to ensure safe shipment



Loading a truck





Loading a container



A fully-loaded truck transports furniture to local markets



Transporting goods to containers

Shutting the container



Making a tight fit



Loading a container



A fully-loaded container leaves for the harbour



Forwarding companies line up at the customs office to complete their export documents



Customs officers recheck export documents before processing



Trucks deliver furniture products to export warehouses



Furniture products are stocked in warehouses ready for export



Heavy machines transport furniture goods from warehouses into export containers

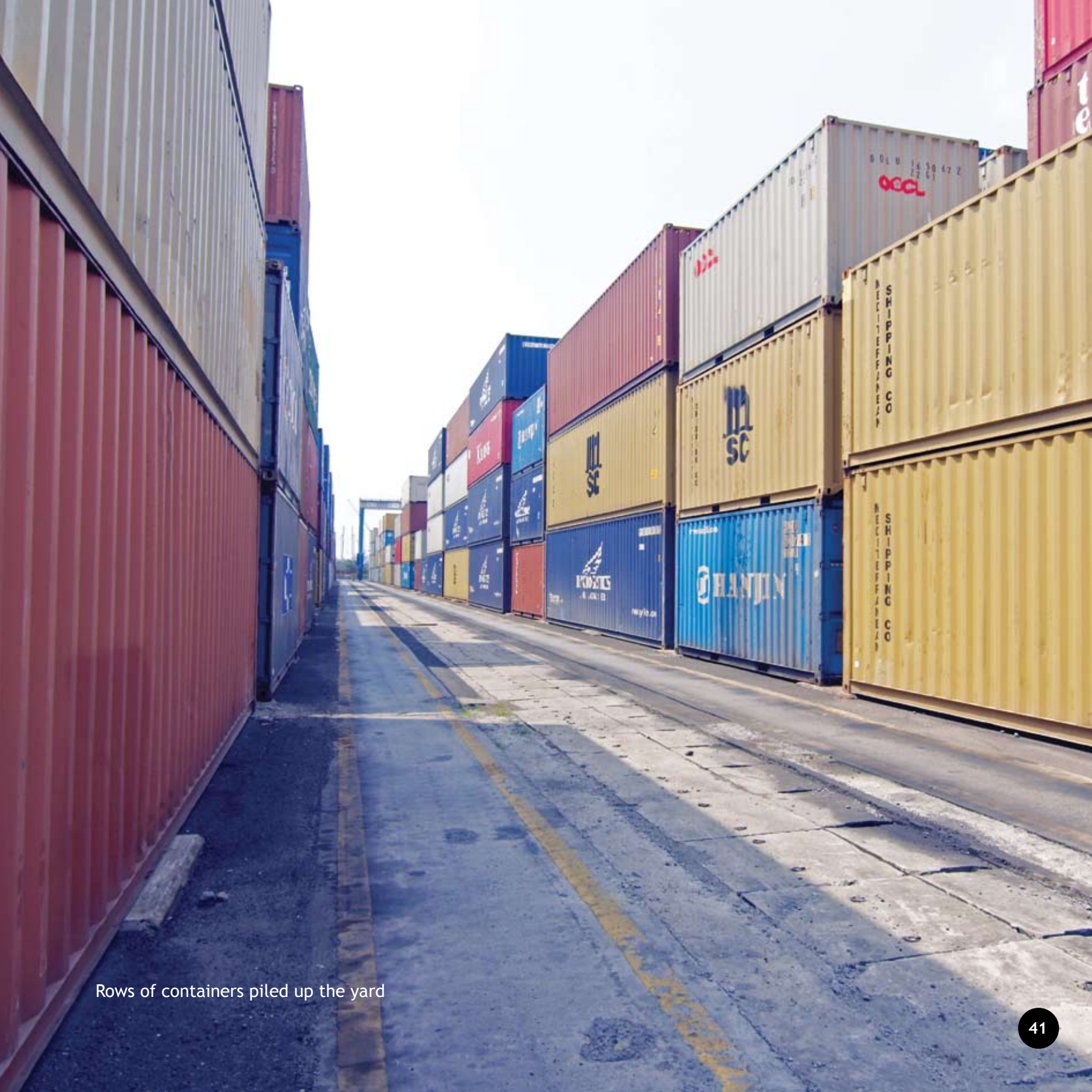


Export goods loaded into containers using heavy machinery



Export containers half opened for loading





Rows of containers piled up the yard

Container parking lot





Loading containers onto trucks



Trucks deliver containers ready for loading



Trucks line up for loading





Giant cranes transport containers onto shipping vessels



Assisted by human hands,  
cranes unload shipping vessels  
from abroad



Quay container cranes stand by the harbour  
ready to load shipping vessels

Tug boats sail past the quay, ready to assist giant shipping vessels out to sea



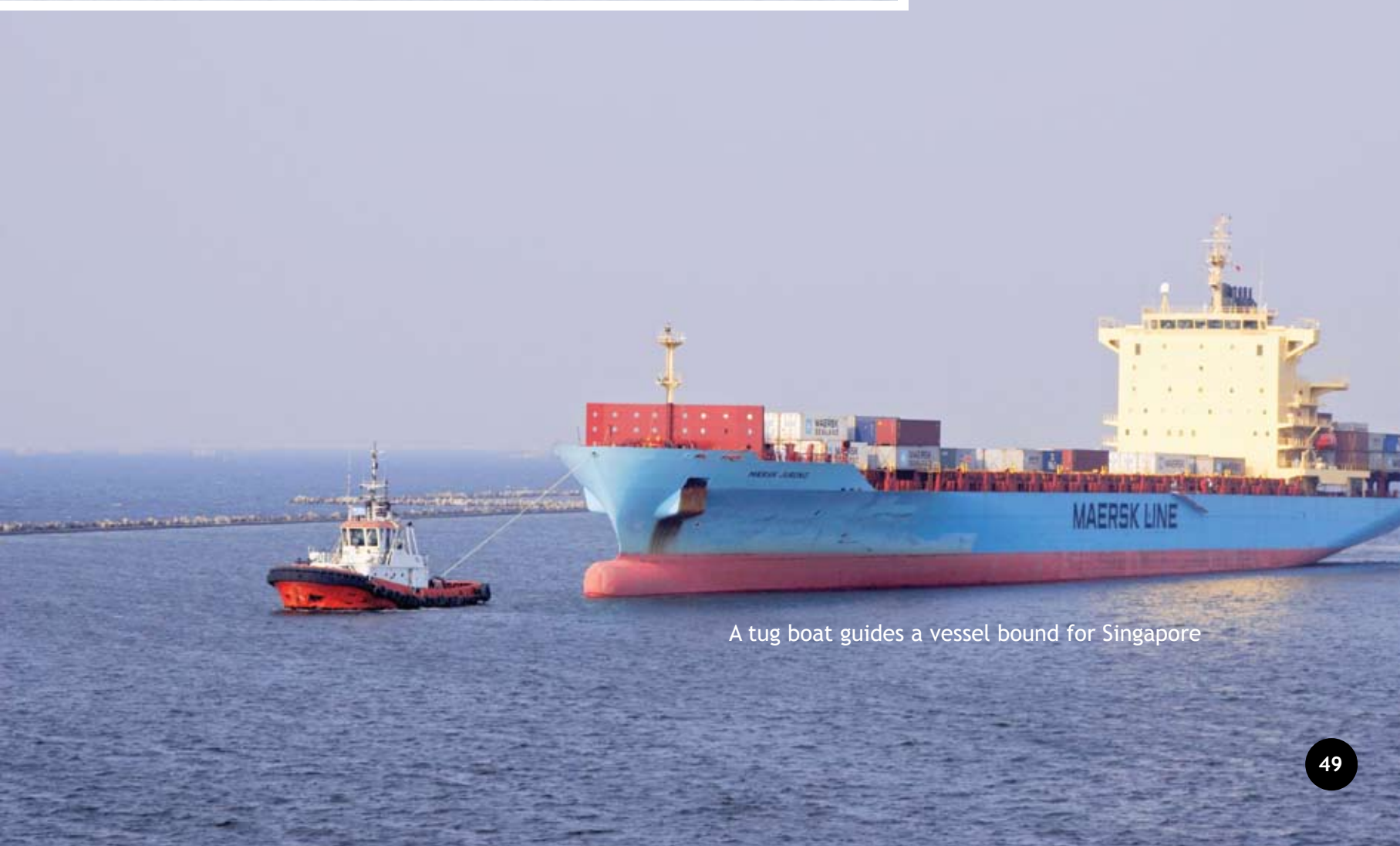
Tug boats prepare to guide a shipping vessel



A second boat sits by the rear of the sailing vessel



Completing its task, a tug  
boat leaves the ship to sail



A tug boat guides a vessel bound for Singapore



A tug boat guides a ship off to sail



A ship bound for Hong Kong finally sets out to sea



Chapter 4

# Exporters and big companies





Taking cut wood by bike

## 4. Exporters and big companies

Exporters and large-scale companies generally obtain unfinished furniture from small-scale producers. They specify the products they will buy from these producers. Those specifications come from their buyers abroad. If the unfinished furniture fails to meet these specifications, the producers must fix the products before the exporters will accept them. These rules are set by the buyers, and they set the price. A producer can rarely negotiate on price unless they already have an established, long-term relationship with the buyer.

Other large-scale companies cooperate with fully integrated and mechanised furniture production enterprises. These producers have their own log yards and maintain timber stocks for at



A sawmill at a big company

Operating a sawmill



Ensuring measurements before making components



Stacking wood panels in order







Wooden waste becomes fuel for kiln dry furnaces



A female worker operates a wood cutting machine



Smoothing a piece of furniture



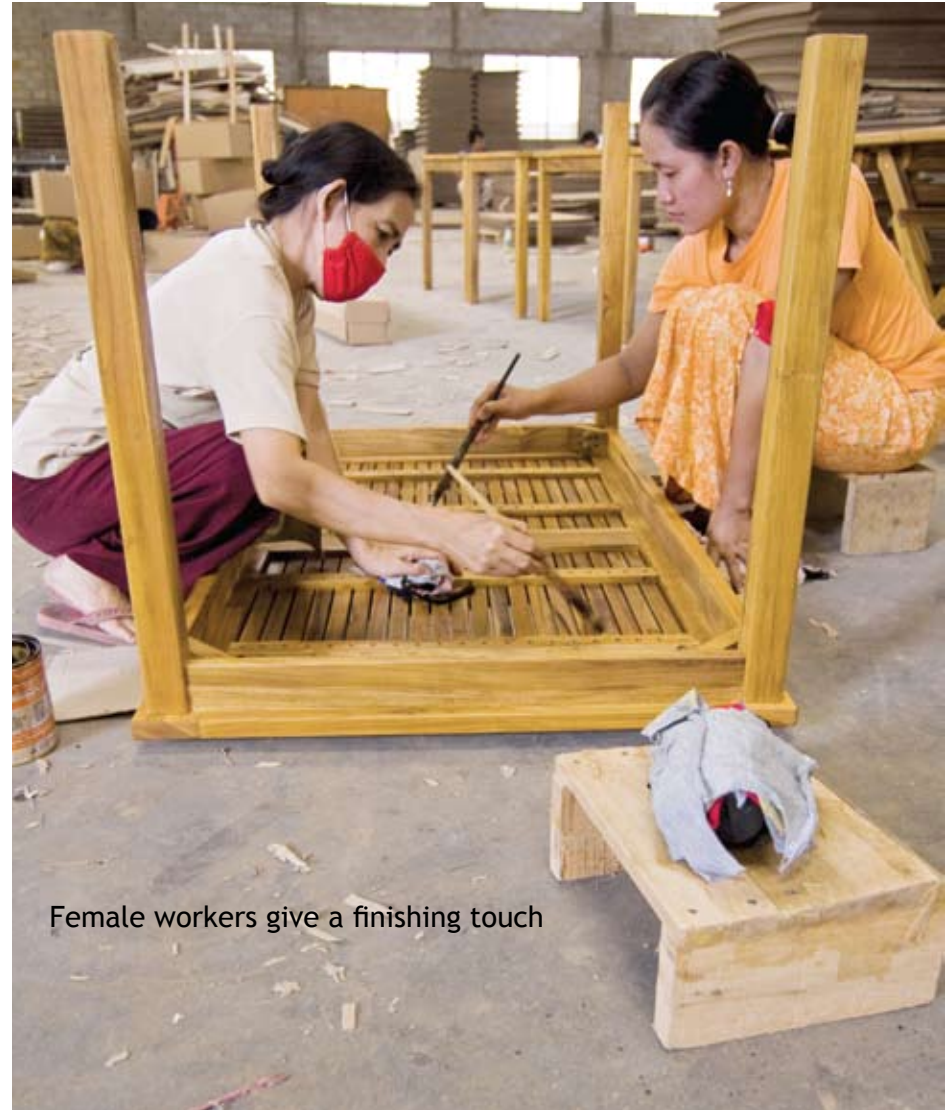
Sanding a chair

least one year's worth of production. Increases in timber prices would not immediately affect their costs for source wood.

These companies employ hundreds of specialised workers who work in specific phases of production. Fewer women operate machinery; those who have generally been with the company long term. Women predominate in the lower-skilled finishing and packaging sections. They do the sanding and polishing, but unlike their counterparts in the smaller companies who finish by hand, these employees use sanding machines. Then they sand manually where the machines cannot reach.



Workers polish furniture products at a big company



Female workers give a finishing touch

A woman sands a piece of furniture at a big company





Furniture products ready for polishing







Workers at a big company assemble furniture components



Loading packaged goods  
into a container



Packaged  
products ready  
for export



Chapter 5

# Small-scale producers and their associations





Sawing wood to make furniture components

## 5. Small-scale producers and their associations

Small-scale furniture producers are the main actors in furniture production in Jepara. They choose the timber stock, make components, assemble them and supply the furniture ready for finishing to large-scale companies and exporters. They search for orders, and may be forced to take orders at prices insufficient to cover their production costs. Competition among small-scale producers is

fierce. Some buyers take advantage of this situation and push down producers' profit margins.

Men usually do the heavy work of making components and assembling the furniture. Women do the lighter jobs in finishing such as sanding the raw furniture products as they are deemed tidier and more patient. Men are generally paid more than women.

The approximately 15 000 small-scale furniture producers in Jepara needed an association capable of improving their decision-making authority within the range of governance systems and serve as a forum through which they could share their problems. The Small-scale Furniture Producers Association in Jepara APKJ was established in December 2008. The group aims to improve small-scale furniture producers' capacity to function independently and be competitive in the global market, to empower the members of APKJ to advance the prosperity of the Jepara furniture industry. The association plans to improve small-scale furniture producers' skills for a better bargaining position, to create fair market prices and to facilitate access to credit. APKJ also plans to address the main challenges furniture producers face in marketing, raw materials, access to capital and human resources.

Smoothing furniture components





Smoothing furniture components





Tracing carving patterns





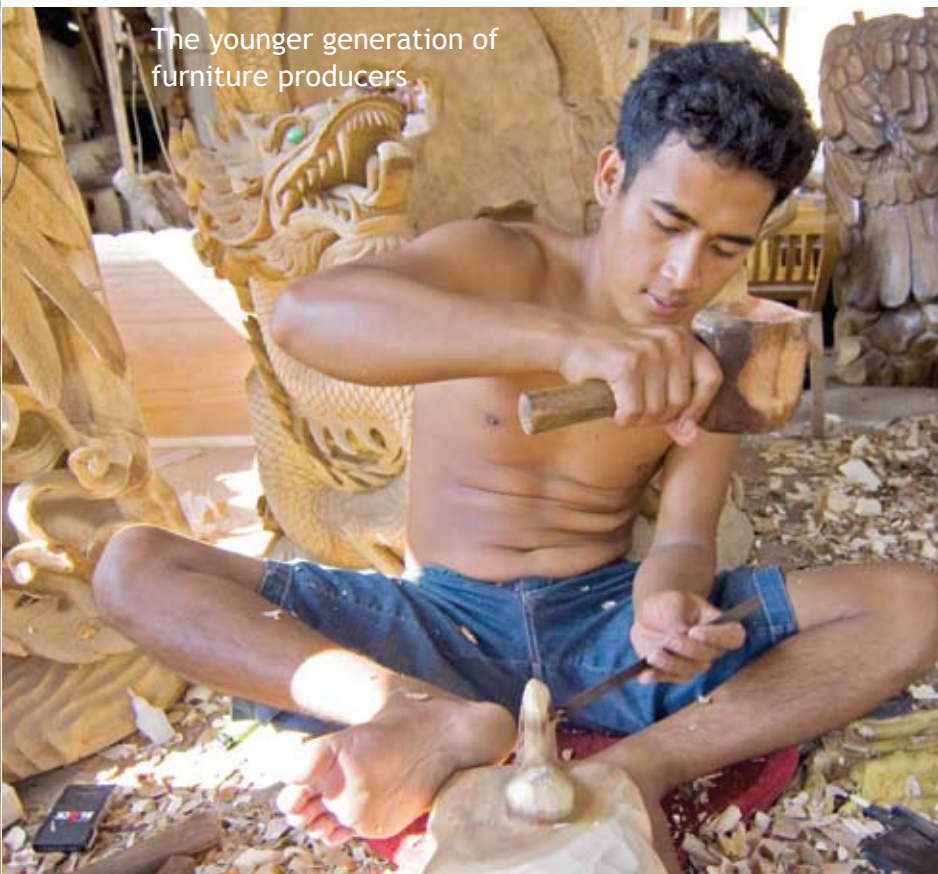




A man carves a piece of wood for embellishing furniture



Woman sand unfinished furniture products



The younger generation of furniture producers



Polishing unfinished furniture

Women sand unfinished products for export







Female wood carvers



A woman sands unfinished furniture products



Members of the Jepara Small-scale Furniture Producers Association





...N KECIL JEPARA ( APKJ )  
**SI & MUSDA I**  
Mebel Bersertifikasi  
...ng, Jepara 09 JUNI 2009





Jejara small-scale furniture producers gather at a meeting



Jejara small-scale furniture producers discuss plans to form an association



APKJ board members discuss plans to participate in a furniture exhibition



Small-scale furniture producers enjoy refreshments during a meeting break





The APKJ chairman shares his thoughts on exhibition plans



## Akot Nurputro

Teak garden  
table producer



Round table



Small table



## Asrofi

Indoor teak  
furniture producer



Bedside table



## H. Darwin

Outdoor teak and indoor oak furniture producer



Dining cabinet



Folding table



## Margono

Indoor teak furniture producer



Porch chairs



Betawi style chair



## Zumaroh

Indoor teak furniture  
producer



Mirror frame



Round  
mirror  
frame



Table clock



Wall mirror case



## Mohamad Hatta

Teak chair producer

Curved chair



Bottom holed chair



## Sugiyanto

Indoor mahogany furniture producer



Working table





## Nurhamid

Indoor and outdoor teak furniture producer



Dressing table



Rocking horse



## Ahmad Sholikin

Natural form furniture and craft producer



Crab chairs



Fish chair



Rose petal chair



Chapter 6

# Timber trading and sawmills





Stacks of logs at the log yard

## 6. Timber trading and sawmills

Log traders obtain logs from community forests, the state-owned timber company Perhutani and unknown sources. Compared to 10 years ago, log traders in 2009 have greater difficulties obtaining larger diameter logs. This finding indicates a potentially alarming situation on timber availability.



A log yard where log traders and buyers meet



A log trader measures the diameter of a log to determine its quality and selling price



A woman takes note for uploaded logs



Logs at the log yard

Another finding on timber constraints is the increasing price for logs. Industry observers estimate that these price increases are caused by timber scarcity as well as external factors including higher fuel prices.

Small-scale producers tend to buy logs from log traders located near their workshops to minimise transportation costs. They also tend to buy cheaper small-diameter teak and mahogany logs to keep their production costs down.

Average wood consumption decreased from 2005 to 2008, both in quantity and value. This is a natural consequence of the increase in timber prices, particularly as producers are not securing higher prices for their products. The decrease suggests that producers are becoming more efficient; making more money out of less wood, a promising trend for the teak and mahogany plantations.



Workers offload logs from a truck to a log yard

Logs in a log yard









Workers at a log yard



Stacks of logs at a log yard

Workers off-load from truck to logyard



Carrying a log





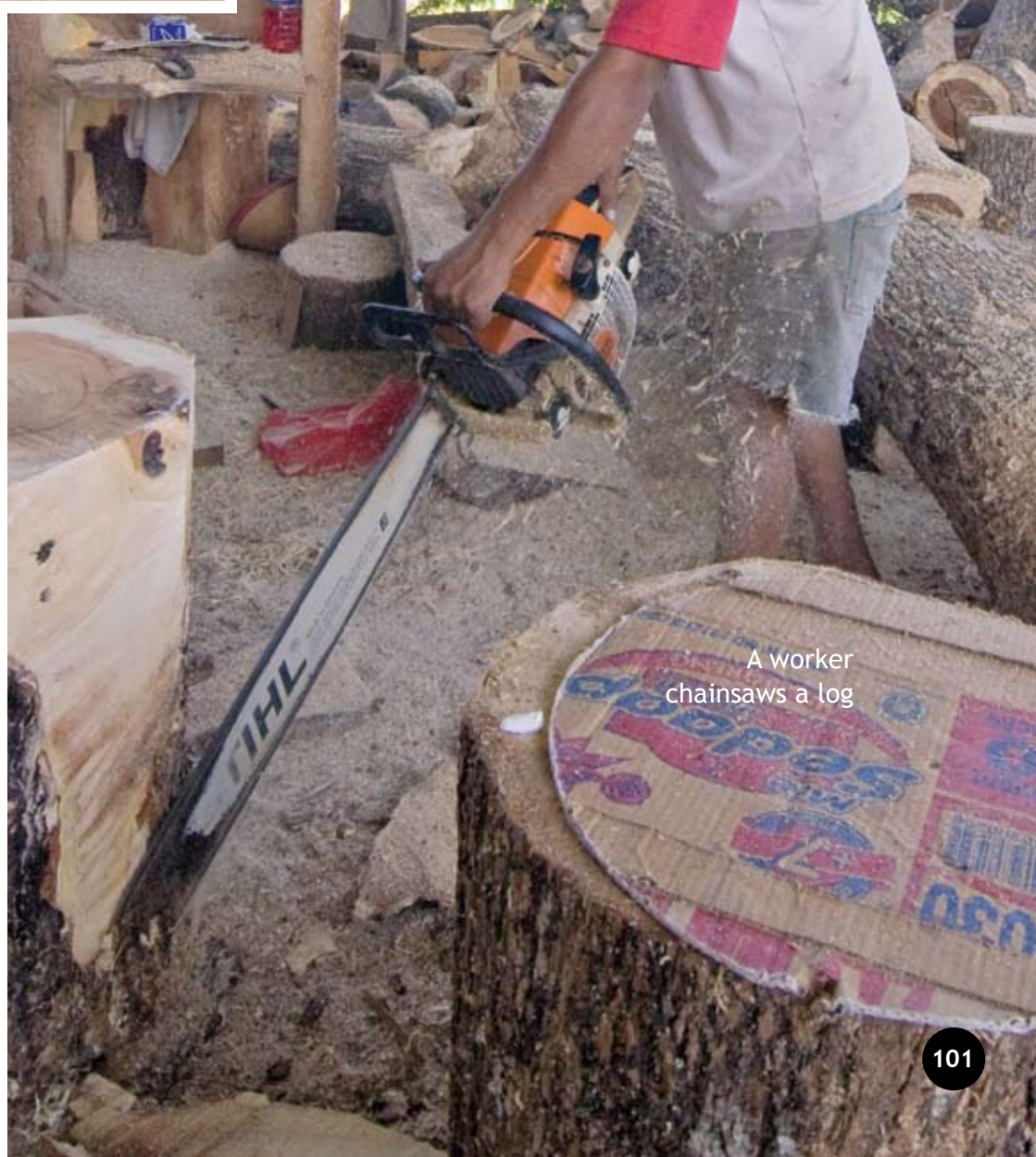
Workers upload logs at a log yard



A pickup truck carries sawn wood for furniture raw materials along a Jepara road



Workers saw logs using machinery



A worker chainsaws a log

A worker saw logs with a chainsaw



Workers saw logs mechanically with a bandsaw

A worker saws logs



Bandsaws process timber into wooden planks





Chapter 7  
Forests





Fast growing  
Perhutani teak

## 7. Forests

Teak and mahogany are the two most sought after hardwoods in international markets. Teak is the most in demand tropical hardwood due to its strength and aesthetic qualities. More than 90% of the world's teak grows in South and Southeast Asia in natural and plantation forests. Mahogany originated in natural forests in Latin America. Teak has been naturalised in Java, Indonesia, where it was introduced somewhere between 400 and 600 years ago along with mahogany. Javanese teak and mahogany plantations provide wood for many furniture manufacturers and producers in Indonesia and other parts of the world.

Under the canopy of a small-scale mahogany plantation



A rest shelter in a teak plantation

Fast growing Perhutani teak



Teak seedlings in a plantation





Small-scale teak plantation

Teak and mahogany timber harvested in Java comes either from state forests or community forests. Perhutani is the state-owned, major producer of teak and mahogany. Perhutani manages about 1 million hectares of teak plantations on state lands. Hundreds of thousands of smallholders also produce teak and mahogany on community land. Small-scale harvesting is on the rise. Industry observers predict that, in future, community and smallholder forests will produce more teak and mahogany timber than Perhutani does now. The current dearth of teak to supply the furniture industry threatens the viability of this industry in Jepara. Some industries are exploring the use of other woods, including sonokeling, acacia, mangium, mango, jackfruit and durian trees as well as coconut palm stems.

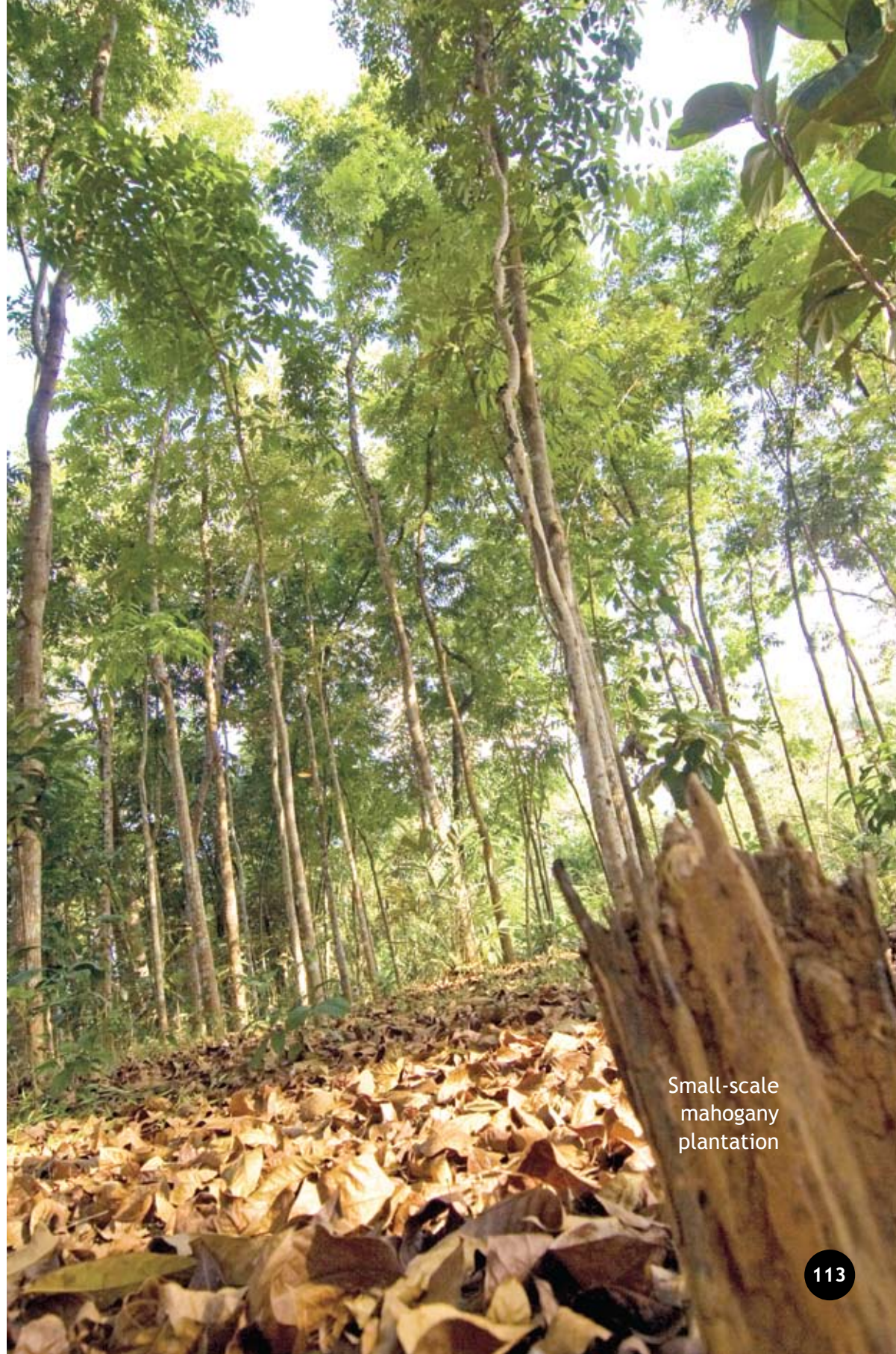
Small-scale teak  
plantation











Small-scale  
mahogany  
plantation





Small-scale sonokeling plantation



A woman harvests ground nuts amongst sonokeling trees

Chapter 8  
Key messages





1. Many people make a living through the small-scale furniture industry.
2. A furniture industry that is culturally rooted stands a better chance of survival.
3. Jepara is a world carving and learning centre with unique culture, history and unlimited potential for creativity.
4. Action research in which understanding and changing behaviour occur at the same time is needed to improve small-scale producers' place in the industry.
5. Good governance within the value chain will provide better bargaining power, market access and wood access for small-scale producers.

6. Government intervention is needed to improve small-scale producers.
7. Four promising scenarios could help improve the situation for small-scale producers:
  - Collaborating more closely to the source: Small-scale producers collaborate with wood traders and tree growers.
  - Moving up: Encourage small-scale producers to move up to the higher stages in the value chain. For example to function as furniture brokers, finishing companies or exporters.
  - Green products: Produce certified, eco-labeled or green furniture. This requires up and down coordination between various companies in the value chain.
  - Small-scale associations: Organise small enterprises locally and assist them in accessing financial institutions and markets.







This publication comes out of a 5-year project CIFOR is implementing up to 2013 called the ‘Mahogany and teak furniture: Action research to improve value chain efficiency and enhance livelihoods’ project. This project—funded by the Australian Centre for International Agricultural Research—is being implemented by CIFOR in partnership with the Jepara District Government, the Jepara Multistakeholder Forum, the Forestry Research and Development Agency of Indonesia’s Ministry of Forestry and the Faculty of Forestry at Bogor Agricultural University.

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