

Strength in numbers: Java's furniture makers go green and increase incomes

About 120,000 small-scale producers earn a living by making furniture from local hardwoods in Jepara district of central Java, Indonesia. But many of them face serious constraints that threaten their livelihoods, such as short supplies of high-quality teak and mahogany, poor cash flow, and lack of access to markets. To address these challenges, the Center for International Forestry Research (CIFOR) helped to form a producers' association, strengthen production practices and improve market access for these small businessmen and women. By forming a collective and receiving training, association members have increased their output, sales and timber use efficiency, and gained access to overseas markets for 'green' certified furniture. As a result, poverty rates have declined, natural resource management and gender equity have improved, and carbon storage has increased.

Key highlights and results

- Small-scale producers operate 98% of furniture workshops in the Jepara district of central Java.
- Together, about 120,000 workers in the furniture industry generate US\$800 million from both domestic and international markets, accounting for 27% of Jepara's economy.
- Members of the producers' association earn 20% more income than non-members.
- Women's incomes, access to credit, skills, status and voice in the industry have improved.
- A 10-15% increase in timber-use efficiency has advanced environmental stewardship.
- The planting of 1,000 fast-growing teak trees has become a model for increasing the sustainable sourcing of materials and carbon storage and contributing to climate change mitigation.
- Through the project, a binding district regulation to support small-scale producers and green certification was issued by the district parliament. In five years, 30% of small-scale producers are projected to obtain certification, and 60% in 10 years, enhancing access to US and European markets.

Java's furniture makers go green and increase incomes

Teak carving and furniture-making is central to the history and culture of Jepara, a coastal district on the Indonesian island of Java. As early as the 7th century, a local monarch extended the district's carving reputation across the Malay Archipelago by using Jepara-made designs in her ships and palaces. Nowadays, the importance of the industry is in the numbers: 11,981 business units employing 120,000 workers that generate US\$110 million yearly from exports and 27% of the district's annual economy.

Despite the size and significance of the industry, a number of challenges have been affecting producers. Unsustainable logging and dwindling teak and mahogany supplies are a serious threat. The 2008 global financial crisis also significantly disrupted demand for the district's famous hand-carved furniture. Small-scale producers, who represent 98% of furniture workshops, were worst hit. With limited bargaining power in an unstable market, they were able to extract little profit from the business, which instead ended up in the hands of large finishing and exporting companies. The impact of these challenges has been pervasive, affecting not just the industry's small-scale producers, but also the livelihoods of hundreds of thousands of workers along the value chain who earn between US\$1-3 per day. Women, who are paid less, are particularly vulnerable.



Teak carving and furniture-making generate US\$110 million annually, 27% of Jepara's economy
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To tackle these challenges, the Center for International Forestry Research (CIFOR), which leads the CGIAR Research Program on Forests, Trees and Agroforestry, launched the Furniture Value Chain (FVC) project, which sought to improve value chain efficiency and enhance incomes of small-scale Javanese furniture producers. At the start of the project, experts conducted a value chain analysis in conjunction with extensive participatory action research to better understand the furniture value chain and help community members identify problems, analyze information and collaboratively develop solutions to the challenges they faced. This information guided project development and plans for the industry's progress and sustainability and led to the establishment of a furniture producers association. Since its launch in 2008, the FVC project has helped furniture makers respond to international markets and increase their competitiveness in terms of price and quality, reducing rural poverty, and improving sustainable natural resource management and gender equity.

Greater representation through a collective voice

Following the initial value chain analysis, CIFOR facilitated the establishment of the Jepara Small-Scale Furniture Producers Association (APKJ) to provide production and marketing training and improve cohesion among the producers. The association provided a forum where producers could interact, increase their influence in the industry and set future targets for their businesses. The project encouraged members to integrate more fully within the furniture production value chain by working together with furniture brokers or wood finishing companies, collaborating with wood traders and tree growers, or even to start growing their own teak, to secure future supplies of raw materials.

The producers association members learned how to run their businesses more effectively, allowing them to strengthen their bargaining positions, negotiate better prices and connect to wider markets. Members also received financial management training, applied for credit, and 50% have received a business loan. Research published in 2014 indicates that members

“By joining an association, individual craftspeople discovered they were able to work more effectively with government and the private sector. They gained improved access to markets and bank credit, enhanced design skills and boosted furniture quality. The incomes of association members were 20% higher than the incomes of non-members”

Herry Purnomo, Head of CIFOR's FVC Project

“In the past, it has been the culture of people in Jepara to work as individuals. Now, we’re being encouraged to cooperate with one another, and that is the only way we will be able to get a larger share of the market profits and improve our bargaining power”

Ahmad Zainudin, small-scale furniture producer

of the producers’ association have improved their market access; 81% experienced an increase in the number of buyers, compared to only 40% of non-members. Members have also seen their production, profit and incomes rise: 78% had increased sales in 2012, compared with only 44% of non-member producers.

Members have also established trust and support from government. For example, the local government recognized APKJ as the representative for small-scale producers, facilitating the association’s involvement in policy and decision-making processes. To guide the industry’s future development, members collaborated with the Jepara Local Government Planning Agency to produce a strategic plan,

A Roadmap for the Furniture Industry: 2013-2023. Formulated through multi-stakeholder processes, the Jepara parliament issued the roadmap as a binding district regulation in August 2014, billing it as “strengthening and supporting furniture and carving industries.” Members have influenced the passing of other laws as well, including the enactment of occupational health and safety guidelines to protect workers in Jepara’s furniture industry.

Reducing the gender gap

Women play a key role in Jepara’s furniture industry, holding jobs at all points along the furniture value chain. They work as foresters, timber wholesalers, sawmill operators, finishing specialists, domestic retailers and global brokers but are often paid less than men. They also have less control over resources, decision-making power and input on product development, leaving them particularly vulnerable to changes in supply and demand and other disruptions in the market. Furthermore, given women’s low social status, policymakers often overlook their particular needs.

To address these issues, CIFOR researchers analyzed the preferences and disadvantages of women in the industry, and designed and built strategies into the project to meet women’s particular needs and generate greater benefits for them. For example, since social norms discourage women from leaving the home in the evening or attending predominantly male meetings, the project held women-only trainings during the day to facilitate their involvement.

“After I participated in training on design and marketing conducted by the FVC project, my business is growing. I usually sell my products in Jepara and the surroundings; now I have expanded my business to outer islands such as Sulawesi and Bali.”

Khoisiyah, female furniture business owner



Training has enabled women in the furniture industry to gain greater access to capital and to expand their businesses

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Through the producers association, CIFOR and the Indonesian Female Entrepreneurs Association provided business training to 90 women and helped them gain greater access to capital to expand their businesses. They also were trained in various woodworking and finishing skills, which resulted in improvement of the ‘gender balance’ and a rise in women’s incomes. Many of the women used the extra money earned to improve their families’ education and nutrition.

Green furniture for market expansion

The value chain analysis conducted by CIFOR experts also revealed the need to address unsustainable logging practices and the demand for more teak and mahogany supplies. The project augmented the supply of sustainably harvested teak available to small-scale furniture producers through the planting of 1,000 fast-growing teak trees, which will be ready to harvest in five years. If each producer plants his or her own trees, it would meet at least 30% of his or her wood demand. The initiative has encouraged others in Jepara to also plant fast-growing varieties to increase timber supply and meet increasing demand. High timber prices are a major constraint for small-scale producers. Increasing the supply of timber will reduce prices and make their businesses more viable. Association members also received training on more efficient use of materials along the value chain – in product design, finishing and marketing – which subsequently resulted in a 10%-15% increase in timber-use efficiency.

The project also facilitated market diversification and sustainable natural resource management by facilitating 'green' certification. The Sistem Verifikasi Legalitas Kayu (SLVK) or timber legality assurance system license, which proves that furniture makers have used legally harvested timber, is a certification system required for the export of Indonesian wood products into European, US and Australian markets. High costs associated with the scheme make it unaffordable for small-scale furniture makers. The project responded to this challenge by facilitating collective action to apply for the license through the producers association. As a result, ten members have been able to access high-value markets in Europe and the US. These members have received attention from other producers, business associations and the government, becoming role models for other small-scale furniture makers to 'green' their businesses. The project also identified an opportunity to tap into local markets through more sustainable products. According to market research, a sizeable proportion of Indonesian consumers (16 %) would be willing to pay nearly 20% more for 'green' certified furniture.



Improving the supply of timber reduced prices and increased local businesses' timber-use efficiency by 10-15%
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New directions

An evaluation of the FVC project by the Australian Centre for International Agricultural Research (ACIAR) found that it had significant impact on its participants and their communities, including economic benefits such as networking, business training, production efficiencies and market diversification. The evaluation also confirmed that the project had increased the status and role of women in the furniture industry and transformed furniture businesses in Jepara in terms of output, income and employment.



Hand-carved Arabic script — a testament to the skill of artisanal wood carvers in Jepara
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Additionally, CIFOR conducted knowledge-sharing through a national symposium on forest ecosystem service value chains, in which Indonesian policy-makers and key actors in the furniture trade participated, and APKJ members have shared their knowledge and experiences at various fora at the invitation of the Indonesian Presidential Working Unit for Monitoring and Control of Development, Ministry of Forestry, Ministry of Trade, and the Ministry of Industry, as well as the United Kingdom's Department for International Development (DFID) and the German Federal Ministry for Economic Cooperation and Development (BMZ). CIFOR has also presented its findings and lessons learned at numerous international conferences and workshops, including those hosted by the International Union of Forest Research Organizations, Chatham House, and the Food and Agriculture Organization of the United Nations.

Lessons from the value chain analysis and FVC project have been used to inform and guide other initiatives locally and globally, including a project led by CGIAR's World Agroforestry Centre to improve the economic incomes of smallholders who grow teak, and another CIFOR initiative that is studying policy and regulatory options to better recognize and integrate the domestic timber sector in Cameroon, the Democratic Republic



Women play a key role in the furniture industry, working as foresters, timber wholesalers, sawmill operators, finishing specialists, domestic retailers and global brokers
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of Congo, Ecuador, and Gabon, as well as Indonesia. Other lessons involve strengthening local institutions, value chain analysis, group-based timber certification, and bottom-up approaches to developing district regulations, which have been replicated and applied in other wood furniture industry centers in Vietnam, and in Pasuruan, East Java, Indonesia.

As part of the CGIAR Research Program on Forests, Trees and Agroforestry, CIFOR has already begun conducting preliminary research on carbon stored in furniture. Wooden furniture that is conserved for long periods can act as a carbon sink, thereby contributing to climate change mitigation. Additional opportunities are emerging to improve the welfare and livelihoods of small-scale producers around the world.

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Additional information and resources

- Center for International Forestry Research website: www.cifor.org
- The project website: <http://www.cifor.org/furniture>
- CGIAR Research Program on Forests, Trees and Agroforestry website: www.foreststreesagroforestry.org
- Survival of Jepara Furniture, video: <http://bit.ly/19CtmxD>
- Green Furniture, video: <http://bit.ly/1ALa98Q>

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