

Empowering Smallholder Plantations for a Sustainable Future

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BACKGROUND

Smallholder plantations are increasingly important in tropical timber supply, rural livelihoods, and landscape restoration. Yet the key question is no longer only how to plant more trees, but how to help smallholders produce better-quality, legal, and marketable timber under sustainable management systems.

The future of sustainable tropical timber depends in part on empowered smallholder



WHY SMALLHOLDERS MATTER

Smallholders and communities are major actors in plantation establishment and management in many tropical countries.

Their plantations support household income, local investment, and rural employment

Their aggregate contribution can be nationally significant when enabling conditions are in place

Smallholders and the Jepara Furniture Value Chain

- Why smallholder teak matters far beyond the farm -

Smallholder-grown teak supplies up to 80% of the logs used by small and medium furniture producers

SMEs account for over 90% of Indonesia's furniture industry, and in Jepara 98% of workshops are small-scale businesses

In Jepara, the furniture sector supports about 120,000 workers, operates through nearly 12,000 business units, and contributes about 27% of the district economy

Yet teak growers capture only about 6.5% of value added, showing why empowerment, market access, and stronger value chains are essential





Jepara shows that empowering smallholder teak growers is not only a farm issue – it is central to sustaining jobs, industry, and local economic development

Smallholder Forestry in Vietnam

Acacia & Eucalypt Plantations:
Scale, Production, and Livelihoods

Source: [FAO](#), [Forest Trends](#), [World Bank](#)



Plantation Scale and Smallholder Coverage

4.7M ha

**Total planted
forest area (2023)**

~32% of Vietnam's
14.9M ha total forest

1.3M ha

**Acacia plantations
under smallholders**

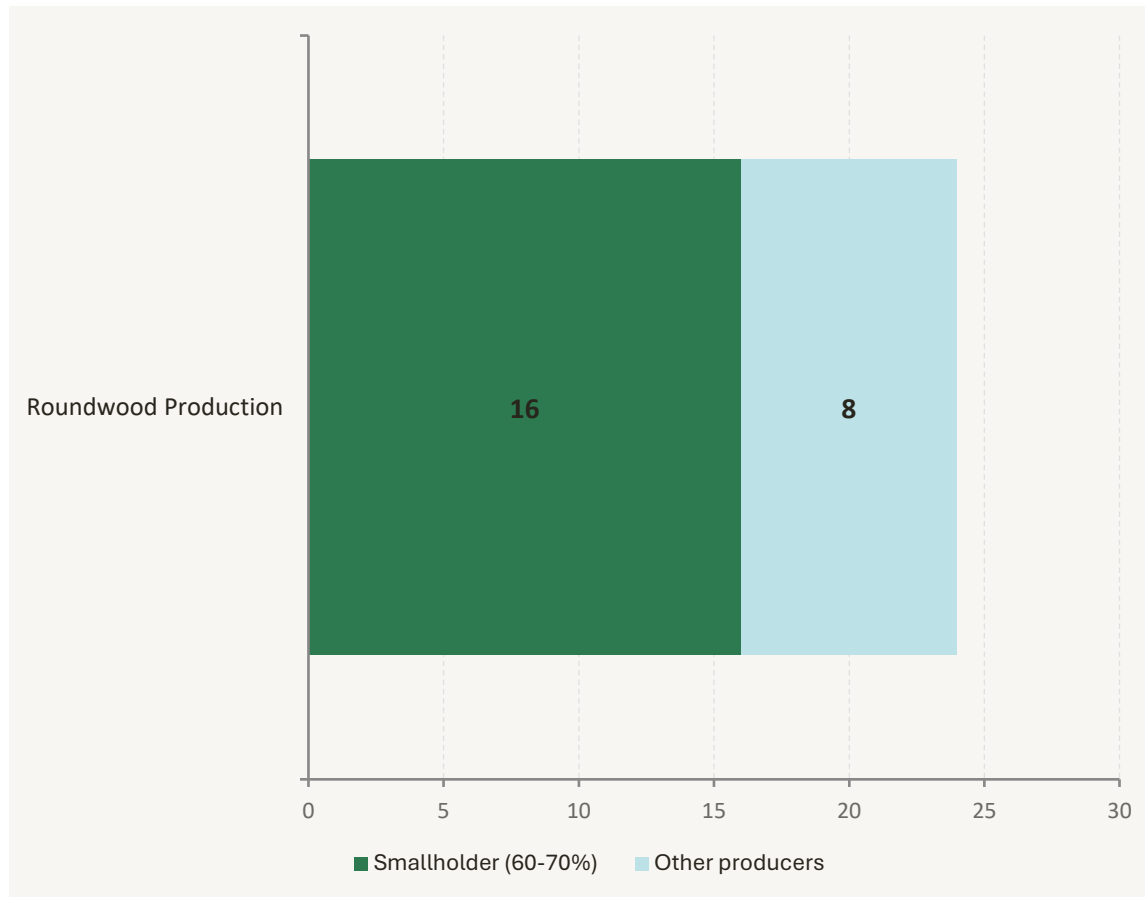
50–70% of all acacia
area is smallholder-managed

500K+

**Smallholder
households**

Forestland allocated to
~1.4 million households

Roundwood Production and Market Value



Key Production Facts

- 24 million m³ roundwood equivalent (RWE) produced annually from plantations
- Smallholders supply 16 million m³ (60–70% of total)
- Vietnam's forestry exports targeted at \$14 billion (2021)
- Wood chips, furniture, and pellets are the primary export products
- Short rotations (4–7 years) for pulpwood; 7–10 years for saw timber

Livelihoods, Policy, and Challenges



WWF staff inspect FSC-certified acacia timber, Thua Thien Hue province

Livelihood Impact

- 43,000+ poor and near-poor households received microfinance and support through World Bank's Forest Sector Development Project
- Land use certificates issued to 35,000 households (66,000 ha), enabling access to low-interest loans
- FSC-certified timber fetches 20–30% price premium over non-certified

Key Challenges

- Short rotations degrade soil; monoculture limits biodiversity
- Low per-hectare returns (~\$58/month for 1 ha over 5 years)
- Only a small share of acacia area holds FSC certification

Smallholders play a major role in teak supply

□ They supply land, trees, and marketable timber at a scale important for both industry and rural economies:

- ❖ 20% of global teak estate managed by smallholder system
- ❖ 1.5 millions smallholders in Java, managing 440,000 ha of teak-dominated agroforestry
- ❖ 1.5–2.2 million m³/year industrial teak demand vs 477,000 m³ supplied by Perhutani in 2008



Smallholders help close a major timber supply gap

Major constraints for smallholder

Poor planting materials reduce survival, growth, and future timber quality

Inadequate silviculture limits stem form, wood quality, and stand performance

Limited finance pushes farmers toward premature harvesting

Weak marketing and value chains reduce smallholder returns



From planting trees to producing quality timber

1

Start with quality seeds, seedlings, and improved planting stock

2

Apply good silviculture: spacing, pruning, thinning, and longer rotation management

3

Strengthen legality, traceability, processing, and access to premium markets

Quality timber is the result of a series of factors, not a single intervention

What empowerment really means

Secure access to land and rights to manage, harvest, transport, and market wood

Access to extension, technical assistance, market information, and finance

Stronger farmer organizations and partnerships that reduce transaction costs

Supportive policies and reliable markets that build confidence to invest

Smallholder plantations in the forest landscape

- Support sustainable timber supply
- Contribute to climate and restoration goals
- Diversify rural livelihoods and local assets

Smallholder plantations should be seen as part of the wider production forest landscape, not as isolated farm plots. With the right support, they can contribute to sustainable wood supply, reduce pressure on natural forests, support restoration, and strengthen local resilience

What different stakeholders must do

Government

- Improve tenure clarity, incentives, legality systems, and extension support

Research and technical agencies

- Strengthen genetics, planting materials, silviculture, and demonstration plots

Private sector

- Build fair sourcing models, processing linkages, and long-term partnerships

Farmer groups and communities

- Strengthen collective action, learning, and market engagement

Gunungkidul, empowerment for livelihood resilience and agroforestry value

In Gunungkidul, smallholder teak systems are a low-input strategy for rural development that helps diversify production, reduce risk, support food security, and generate income

About 40% of household income comes from agriculture and timber products in these teak agroforestry systems, showing that teak is already an important livelihood asset

Teak often functions as a household “savings account,” providing cash for school fees, emergencies, weddings, and other major needs

Training in timber legality verification and valuation techniques can open better market access and improve economic returns for farmers

Konawe Selatan empowerment for legality, certification, organization, and price premiums

Communities in Konawe Selatan organized teak management through a cooperative - KHJL, a smallholder group model linked to legal markets

The group overcame barriers in harvesting, transport, and timber licensing that had previously limited market access

KHJL achieved FSC certification and national timber legality verification, improving credibility and compliance

Members reportedly received teak prices up to 100% higher than previous trader prices

The Outcomes of Empowerment

- Better survival, growth, and wood quality through improved planting material and silviculture
 - Longer rotations and higher-value timber through better financing and reduced pressure for premature harvesting
 - Better incomes and stronger livelihoods through improved market access and stronger value chains
 - Improved legality, compliance, and market confidence through training and support on timber verification and regulations
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Opportunities Ahead

Growing Demand

The widening gap between state supply and industrial demand creates a structural opportunity for smallholders to become strategic suppliers of quality teak.

Climate Resilience

Teak agroforestry systems contribute to carbon sequestration, soil rehabilitation, and landscape-level biodiversity — aligning with national and global climate commitments.

Value Chain Integration

Linking Gunungkidul and East Java smallholders directly to the Jepara furniture industry and export markets can significantly improve returns.

Technology Transfer

Combining improved genetics with silvicultural best practices and non-destructive wood assessment can transform smallholder productivity within a single rotation.



CONCLUSION

Empowering smallholder plantations is about creating the conditions that allow smallholders to produce higher-quality timber, comply with legality requirements, and participate more fairly in value chains. When that happens, smallholder plantations can contribute to timber supply, rural livelihoods, landscape restoration, and broader sustainability goals

THANK YOU

