



Food and Agriculture  
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United Nations



Making sustainable **wood value chains**  
work for sustainable development:

# SW4SW and wood value chains' contributions to the SDGs

“Sustainable Wood for a Sustainable World” Regional dialogue  
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# Outline

1. Value chain approach
2. Contribution of wood value chains to the SDGs
3. Sustainability of wood value chains
4. Examples in Eastern Africa
5. Towards bioeconomy
6. Key takeaways




**“ *The Forest Sector is in a strong position to influence the global response to many of the challenges that the SDGs aim to solve.* ”**

(World Business Council for Sustainable Development)





# 1. Value Chain Approach



“ Sustainable value chain is profitable throughout all of its stages (economic sustainability), has broad-based benefits for society (social sustainability), and a positive or neutral impact on the natural environment (environmental sustainability).



# Value Chains or Supply Chains

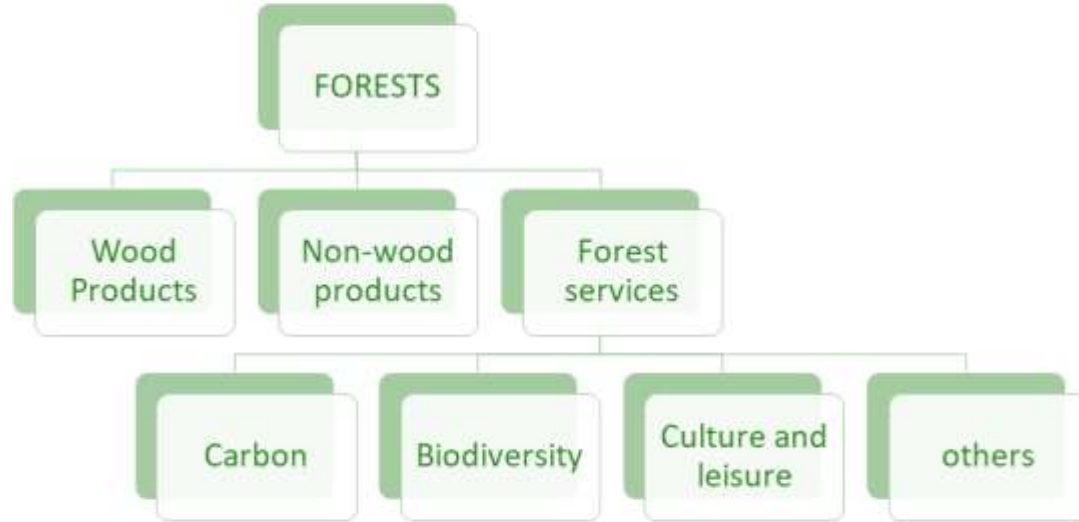
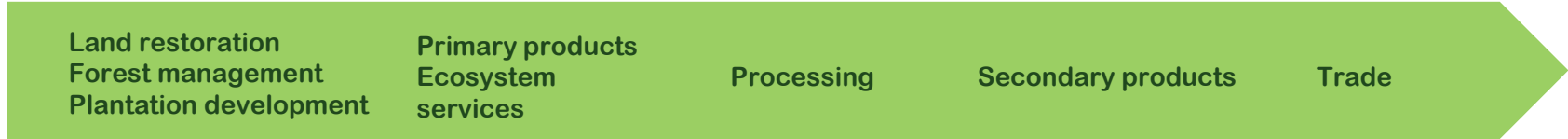
- Supply chain: Organization of the industrial flow to deliver a product to final customer (micro level)
- Value chain: Set of interrelated activities to add value.
  - Competitiveness
  - Relationships with stakeholders and the overall environment



# Why value chain approach to forestry?

- Centrality of **governance** on coordinating the dynamic systems
- Rehabilitates the **market dimension** of forestry and reconcile the different forest values
- Clarifies how **processes, flows and relationships** contribute to value generation, as well the transaction costs.
- Identifies how and at which stages **benefits are distributed** among the different stakeholders
- Requests **multidimensional performance measures**

# Basket of value chains



**Socioeconomic and environmental benefits**



## 2. Wood value chains contributions to the SDGs?



# What evidence tells us

The SW4SW initiative mobilizes governments, private sector for communities and civil society, for enhancing sustainable wood value chains

Sustainable wood value chains increases attractiveness of sustainable forest management and sustainable plantations, contributing to sustainable landscapes.

Wood products extend benefits from forests to climate change through substitution for more intense fossil fuel materials: from energy and construction to utensils, furniture, etc.

Wood suitability to cascading and circularity makes wood value chains a key component of the bioeconomy: roughly 100% of a tree is used for production of a range of products.

Wood products contribute to reduce waste, carbon emissions, and well-being. Peri-urban forests can provide leisure as well as be local source of wood.



Forestry generates more than double the amount of its direct contribution to value added, employment and labour income in other economic sectors.

2.4 million people rely on wood fuel for cooking and water sterilization

Sustainable forest management is a vehicle for women empowerment; high presence of women in wood value chains.

Wood energy contributes to access to energy and if sustainably sourced is a cleaner alternative to the planet

Formal forest sector (wood value chains) contributes with US\$ 1.3 billion to the whole economy. Small and medium sized forest enterprises are estimated to be 80-90% of the sector.

From advanced wood products to biorefineries, the forest industry offers sustainable solutions to new developmental challenges.

Wooden products lock in **carbon** throughout their lifetimes, helping to **combat climate change**.

#woodisgood #SWASW



No other **building material** has the **warmth, feel** and **smell** or is as **beautiful as wood**.

#woodisgood #SWASW



**One in five people** around the world live in **homes built of wood or bamboo**.

#woodisgood #SWASW



**Clothes made of wood cellulose** can help the environment by **replacing less sustainable materials**.

#woodisgood #SWASW



**Sustainable wood** means **better livelihoods, increased standing-forest value** and **less deforestation**.

#woodisgood #SWASW



Wood provides **natural insulation**, making homes and offices **built of wood** highly **energy efficient**.

#woodisgood #SWASW



# What can make wood value chains sustainable?

- Compliance with sustainable forest management of natural and planted forests;
- Respect to sustainable landscapes;
- Commitment to efficient production;
- Enabling regulation and finance;
- Compliance with international and national social and labour standards;
- Commitment to responsible consumption;
- Contribution to the bioeconomy.



### **3. Making wood value chains sustainable at national and jurisdictional level**

# Operationalizing sustainable value chains for the SDGs

## Value Chain Approach for sustainability assessment

- Assessing actors, flows, relationships, transaction costs
- Verifying SDG impact pathways
- Choosing priority value chains

## Cross-sectoral policy

- Multistakeholder cross-sectoral platforms
- Evidence-based
- Sustainability performance indicators
- Measures to deliver SDGs

## Forest Finance Information Hub

- Value generation opportunities and suitable types of finance
- Capacity building & mentoring

# Value chains sustainability assessment

Input/output  
models



**Mapping and quantifying the different forest value chains**



Valuation of ecosystem  
services



**Assessing the actors in the value chain,  
including intermediaries**



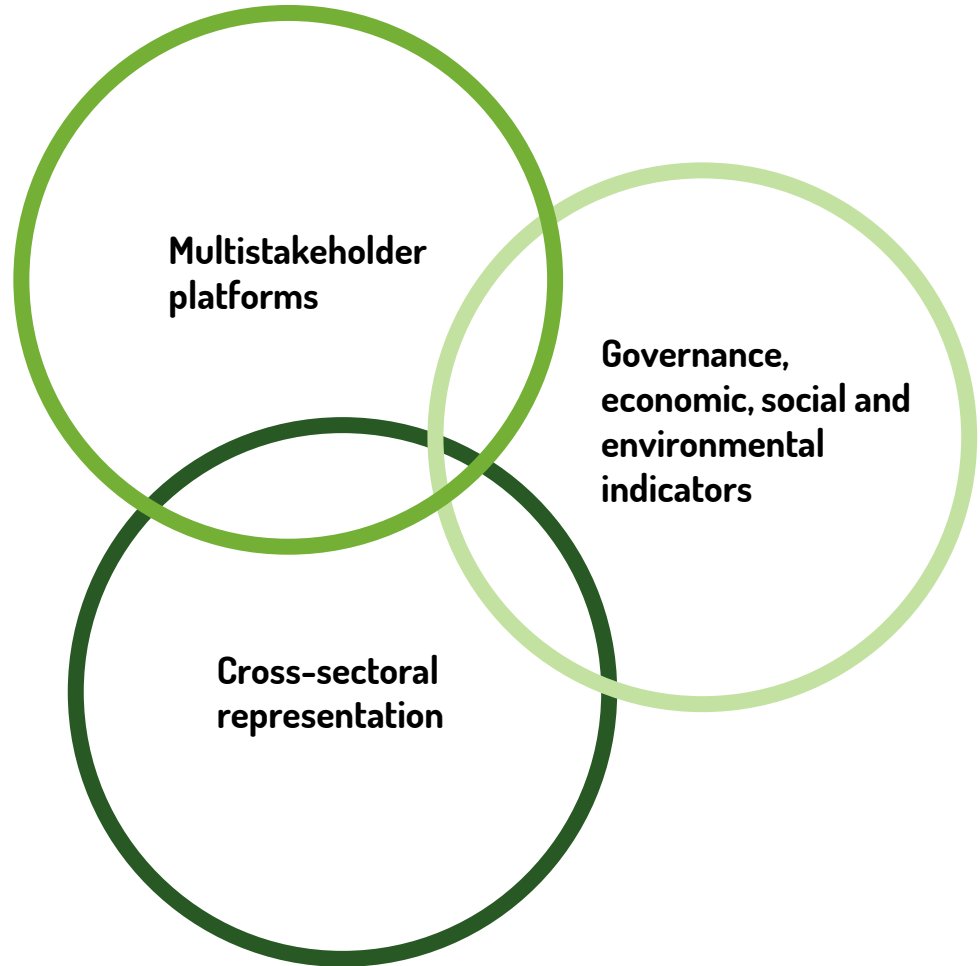
**Mapping interlinkages and governance  
structures**



**Assessing transaction costs**

# Using the assessments to :

- **Identify** – contributions to the SDGs, interlinkages, synergies and trade-offs;
- **Plan** – forest development and investment plan
- **Monitor** – selecting indicators
- **Reduce** – transaction costs

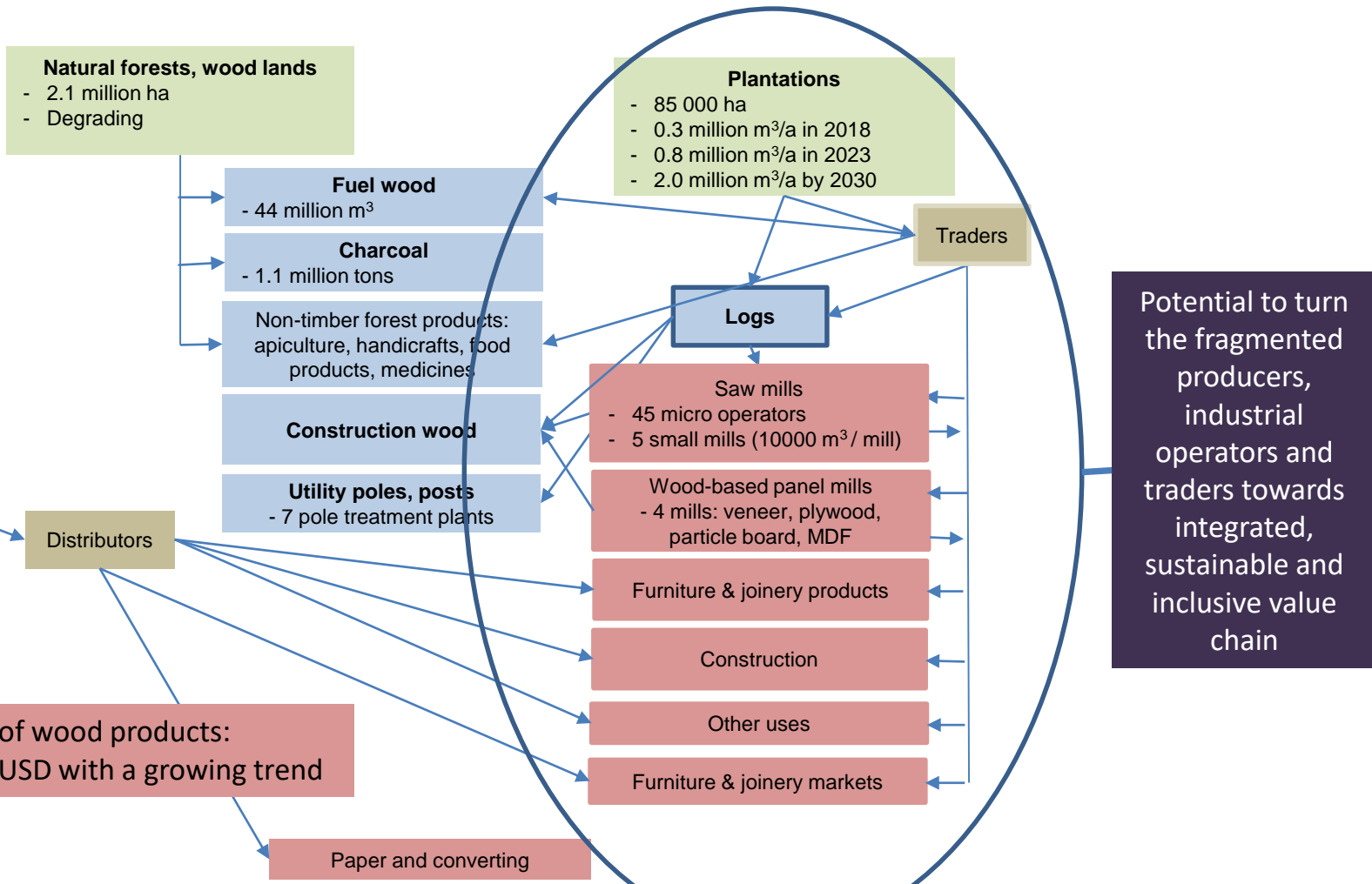






## **4. Examples in Eastern Africa**

# Uganda



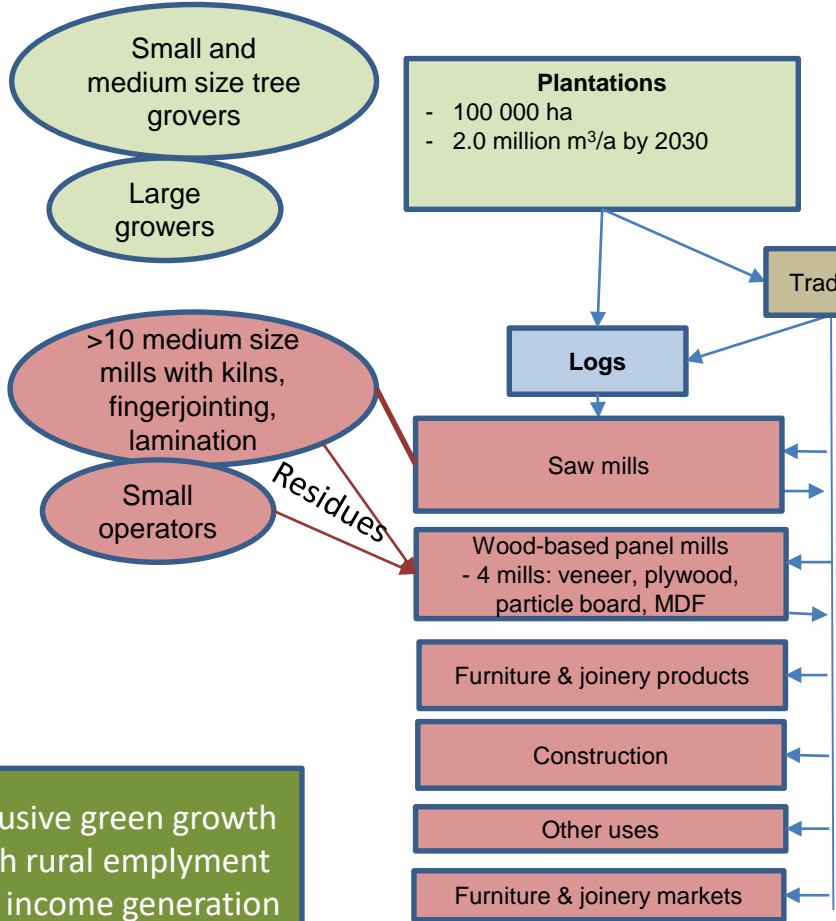
# Pathways to SDGs

Sustainable landscapes: forest land restoration

Efficient use of raw materials and energy

Sustainable products with long life cycle

Inclusive green growth with rural employment and income generation



Preservation of forests is a fundamental prerequisite for the sector's ability to secure wood fiber supply and to behave with integrity throughout its value chain.



The responsible use of wood fiber can expand this carbon sink beyond the forests to the products



The Forest sector is an important producer of renewable and affordable energy

Wood suitability to cascading and circularity makes wood value chains a key component of the bioeconomy



The value chain contributes significantly to employment and economic growth especially in rural areas



# Similar cases

- Tanzania
- Kenya
- Ethiopia

Emerging plantation-based wood value chains have potential to grow



## **5. Towards bioeconomy**



# BIOECONOMY



The bioeconomy is the production, utilization and conservation of biological resources, including related knowledge, science, technology, and innovation, to provide information, products, processes and services across all economic sectors aiming toward a sustainable economy.

# WHAT IS BIOECONOMY?



- ✓ Normally includes agriculture, fisheries, agro-food industries, forests and wood industry, all the other processing of bio-based materials, from construction to textiles, chemicals, pharmacy, cosmetics, energy, etc.
- ✓ No international definition of bioeconomy
- ✓ No international convention or agreement
- ✓ No international statistics



# “Why developing a sustainable bioeconomy is urgent ?



- Limited amount of natural resources
- Quantity of extracted raw materials multiplied by 10 during 20th century
- Urgently tackle climate change
- Reduce waste

➔ **BIOECONOMY ENABLE NATURE-BASED SOLUTIONS TO CLIMATE CHANGE AND ;**





# SUSTAINABLE BIOECONOMY

- Use of renewable materials
- Inclusion of small and medium producers
- Processing and reuse of residues
- Cascading and circularity



# BIOECONOMY PATHWAYS



“How does the **Forestry sector** contribute to the Bioeconomy ?



# How to expand a wood-based sustainable bioeconomy?

CASCADING USE

RESOURCE-EFFICIENCY

CIRCULARITY





# KEY OBJECTIVES OF CASCADING USE

- **Decouple** economic growth from quantitative resource use
- **Extract** and generate more added-value from wood
- **Convert** more forest biomass “waste” into bioproducts
- **Improve** environmental footprint and recyclability
- **Give evidence** of sustainable production to meet citizens and consumers’ expectations



# ESSENTIAL REQUIREMENTS FOR ENABLING THE BIOECONOMY

- ✓ Cross-sectoral policies institutions favoring sustainable production and responsible consumption
- ✓ Clear market signals
- ✓ Life-cycle analysis and management of uncertainty
- ✓ Capacity building and operational means for traceability systems

# RECOMMENDATIONS FOR ENHANCED FOREST-BASED BIOECONOMY

- ✓ **Developing** research and market for amplifying the resource base and diversification of species (softwood-hardwood)
- ✓ Investing in technology development and transfer for **increased efficiency** in the wood industry and for **new value chain segments** (downstream processing, etc...)



# RECOMMENDATIONS FOR ENHANCED FOREST-BASED BIOECONOMY

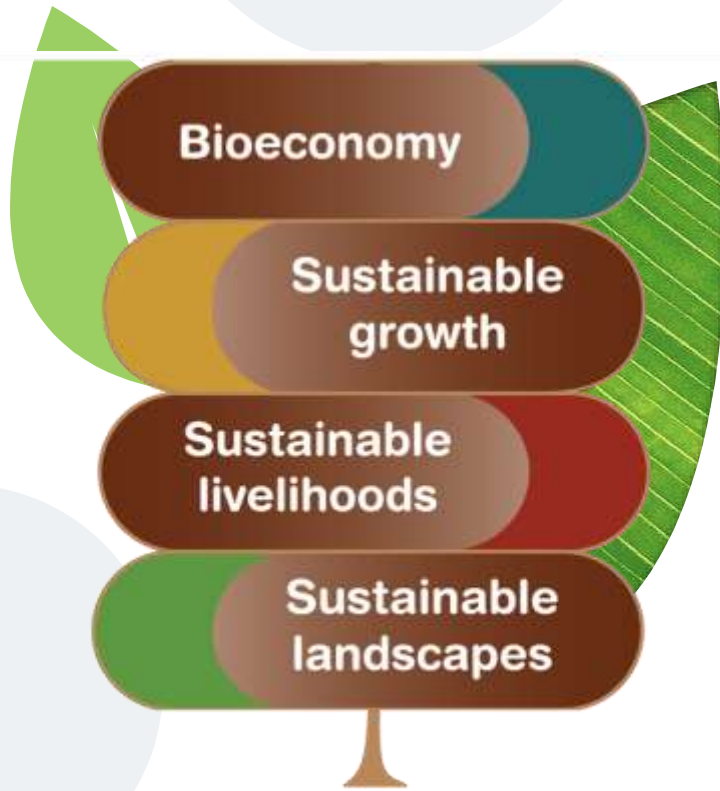


- ✓ Size and performance of wood industry for provision of residues in **industrial clusters** with possible economies of scale, fostering investment in increased material efficiency
- ✓ FAO data used for **monitoring** the evolution of forest-based bioeconomy (**FAOSTAT** on wood products + **FRA** reports)
- ✓ Setting up a monitoring framework to assess **dimension, performance** and **sustainability** of forest based bioeconomy





## **6. Key takeaways**



- Tool to design targeted interventions to optimize forest contributions to the SDGs
- Critical for sustainable rural and urban landscapes
- Necessary planning and monitoring framework to unlock contributions from wood value chains with environmental integrity



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# Thank you!

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<http://www.fao.org/forestry/sustainable-wood/en/>

**#WOODISGOOD**

**#SW4SW**

