



Food and Agriculture
Organization of the
United Nations

FAO's role in advancing sustainable forest-based bioeconomy approaches

The 59th Forest Academy for Decision-Makers,
Majvik, Finland

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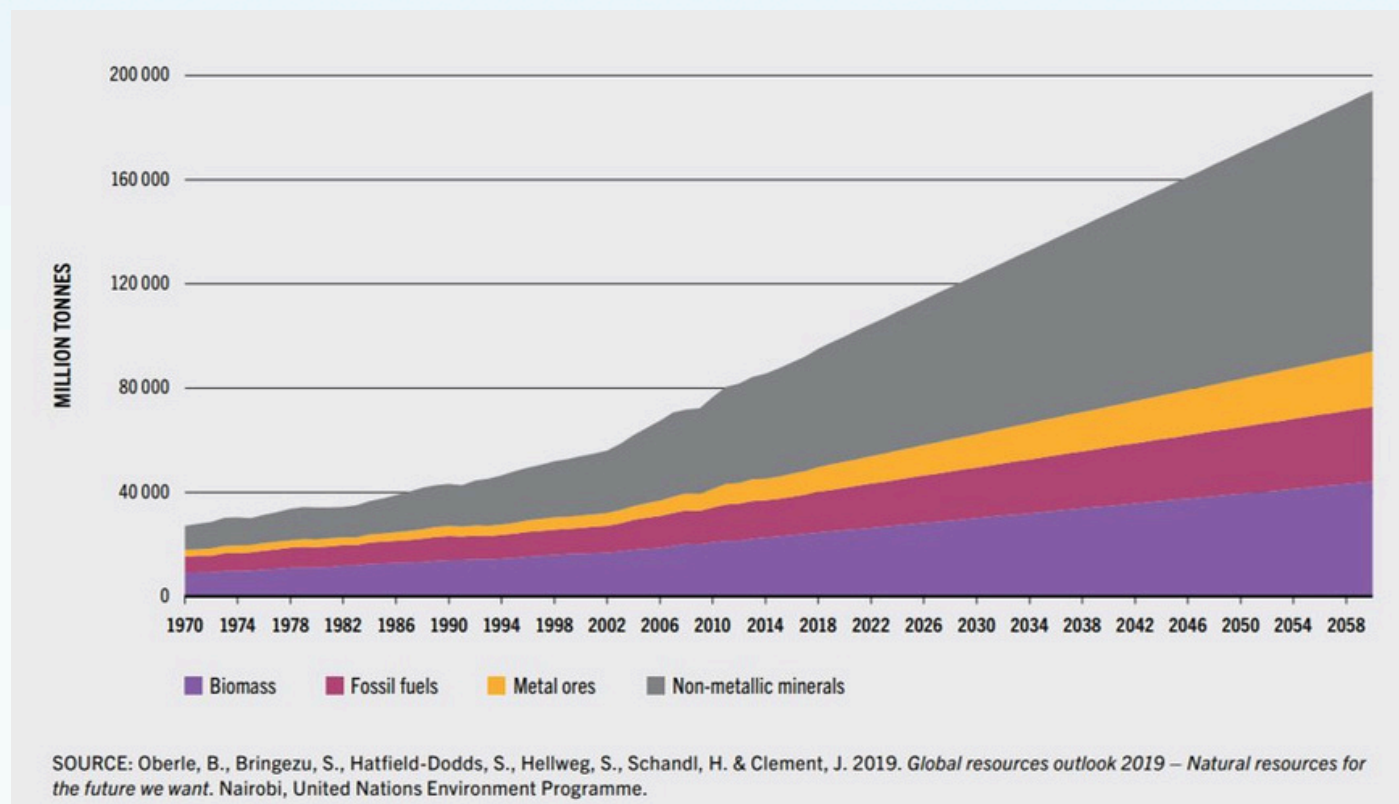
6 May 2026



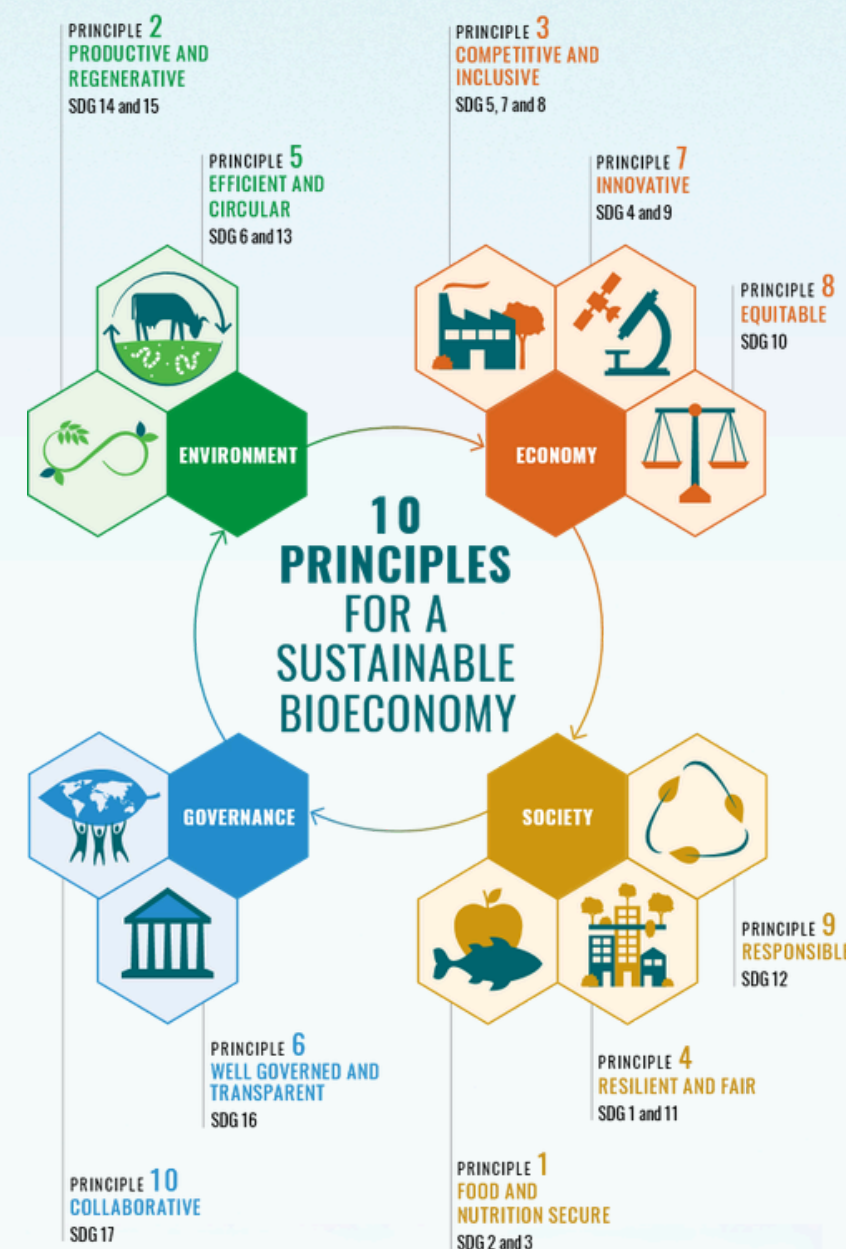
Bioeconomy for sustainable food and agriculture

THE TIME IS NOW!

Projected global material extraction, 2015-2060, assuming a continuation of current trends



BIOECONOMY: A Key Driver of Sustainable Development



- **Production, utilization, conservation, and regeneration** of biological resources (e.g. *related knowledge, science, technology, and innovation*).
- Sustainable solutions within and across **all economic sectors** (i.e. *information, products, processes and services*).
- Enable a **transformation** to a sustainable economy.



Bioeconomy in FAO Governing Bodies (2024-26)



COFO27 - Key Takeaways on Forest-Based Bioeconomy

Enhancing the contribution of forestry to bioeconomy – opportunities and challenges (Item 6)

The Committee:

- a. **encouraged** Members and invited FAO to scale up technical support, capacity building and development, and the voluntary sharing of knowledge and practices, research and technology transfer, on mutually agreed terms, to support formulating national, regional and global sustainable forest-based bioeconomy approaches, strategies and action plans fully incorporating sustainable forest management, with a view to promoting cross-sectoral collaboration and inclusive engagement of stakeholders;
- b. **invited** Members to support sustainable practices, market development and investments in sustainable forest-based value chains, and invited FAO to provide technical assistance to Members, upon request, in developing and fostering value-added innovation and material efficiency in the forest sector;

- c. **recognized** FAO’s role in advancing work to support the development of sustainable forest-based bioeconomy approaches and restoration of ecosystems contributing to improved livelihoods, including through building capacities of women, youth, Indigenous Peoples, and local communities, underlining the need to ensure sustainable patterns of consumption and production, and encouraged FAO to build upon its comparative advantages working across agricultural sectors to improve the knowledge base and data collection, analysis and sharing, promote policy coherence and scale up technical support and capacity building to advance sustainable bioeconomy practices across agrifood systems and forestry, and initiate a global bioeconomy partnership and cooperation;
- d. **invited** FAO to convene, subject to availability of extrabudgetary resources, an international conference on the contribution of the forest sector to sustainable bioeconomy and to present its results at the 28th Session of the Committee on Forestry, and to the appropriate Sessions of the FAO Council and Conference; and
- e. **noted** the Brazilian proposal to start the discussion on the possibility of establishing an ad-hoc working group for the negotiation of principles of sustainable forest-based bioeconomy for food and agriculture.

July 2024: 27 th Session – Committee on Forestry (COFO)	July 2024: 36 th session - Committee on Fisheries (COFI)	Oct 2024: 29 th session – Committee on Agriculture (COAG)	Dec 2024: 176 th session – FAO Council
Apr 2025: 177 th session - FAO Council	Jul 2025: 44 th session - FAO Conference	Sep-Nov 2025: Regional Forestry Commissions	Sep 2025: COFI Sub-Committee on Fish Trade
Nov 2025: 141 st session - Programme Committee	Mar-May 2026: Regional Conferences	May-June 2026: 142 PC and 180 CL	Jul 2026: COAG30 and Sept 2026: COFO28

Bioeconomy Developments in other multilateral fora (2025)

January 2025 (Berlin)



Global Forum for Food and Agriculture

Ministers from over 60 countries reaffirmed support for advancing a sustainable bioeconomy for food and agriculture, recognizing **FAO's leadership** and long-standing experience, including its tools and guidance to mainstream sustainability and its ongoing work towards a **Global multistakeholder Bioeconomy for Sustainable Transformation (BEST) Partnership**

May - June 2025



UN EMG Nexus Dialogue Series

Through the EMG Nexus Dialogue, FAO contributed to advancing a bioeconomy supporting system-wide coordination and a coherent across the UN system approach to sustainable bioeconomy

Global Agrifood Biotechnologies Conference

FAO reinforced its role as a **neutral international platform** to discuss governance, opportunities and equitable access to biotechnologies supporting sustainable bioeconomy pathways

September 2025 (Tshwane)



G20 South Africa Initiative on Bioeconomy

G20 members, building on Brazil's presidency, advanced bioeconomy as a pillar of sustainable development. In Tshwane, they urged stronger global and inter-ministerial cooperation and endorsed common standards and monitoring frameworks. FAO introduced a sustainability assessment framework and proposed a global multistakeholder partnership on bioeconomy for food and agriculture.



October 2025 (Rome)



Group of Friends on Bioeconomy

EU and Brazil launched the "Group of Friends on Bioeconomy for Sustainable Food and Agriculture" at FAO in Rome. In early 2026, the Group advanced discussions on national policy frameworks and the foundational pillars of sustainable bioeconomy within FAO

November 2025 (Belém)



Bioeconomy Challenge

At COP30, global partners launched the Bioeconomy Challenge to accelerate a just transition, positioning sustainable bioeconomy as a pathway for climate and development.

FAO is leading the **Metrics and Indicators Working Group** within the Challenge to support internationally comparable standards and evidence-based decision-making

Forests and forests products – a cornerstone of bioeconomy solutions

- Cover nearly **one-third of the Earth's land surface** and contain the **majority of terrestrial biodiversity**.
- Crucial for **building low carbon economy based on renewable biomaterials**.
- Providing important **societies benefit**:
 - More **than half of world gross domestic** product **depends** on **ecosystem services**.
 - **75%** of all rural people live within 1 km of forest.
 - **42 million people** around the world were **employed** in the forest sector in 2022.
 - More than **2 billion people use wood energy** for cooking.
 - **85% of biomass** used **for energy** purposes is provided by **wood-based energy**.

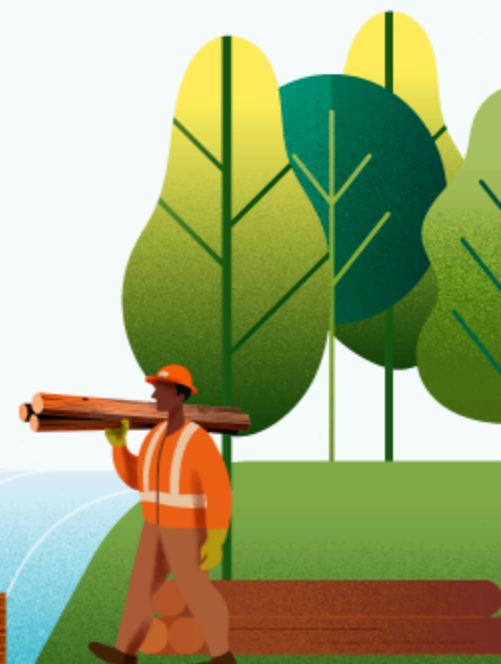


Forests and forests products – a cornerstone of bioeconomy solutions

FAO FORESTRY ROADMAP: From vision to action 2024–2031

Priority Action 11: *“Enhance sustainable production and build sustainable and resilient livelihoods, value chains and bioeconomy”*

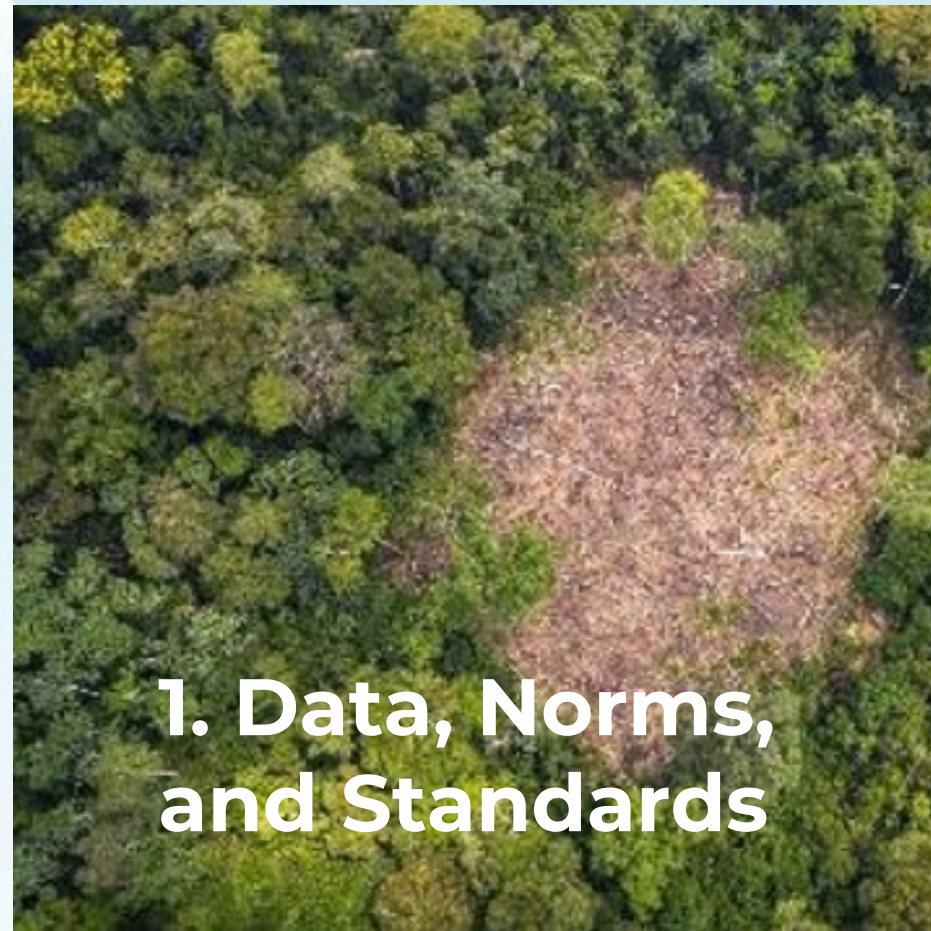
- Fostering sustainable production and consumption practices
- Optimizing forest-based value chains
- Reinforcing bioeconomy approaches for climate action, biodiversity and forest and landscape restoration



Selected FAO-supported bioeconomy projects



FAO's **CORE INTERVENTIONS** on forest-based bioeconomy



1. Data, Norms, and Standards

Improving access to and analysis of data through the development of indicators, classifications, monitoring frameworks, outlook/foresight and technical standards. Assistance covers strengthening national capacities to collect, analyze, and share information via platforms like **FRA, FAOSTAT and other linked systems**.



2. Policy Dialogue, Advocacy and Partnerships

Facilitating policy discussions, partnerships and multi-stakeholder engagement at all levels to integrate forest-based bioeconomy approaches into policy agendas, such as through the **ACSFI, SW4SW, TERRA Initiative, Grow the Solution, CPF Initiatives, and the COLI Initiative**.



3. Value Chain Development, Innovation and Investments

Assessing and upgrading forest value chains for improved enabling environments, inclusive business development, innovations, investments, and markets barriers, encouraging sustainable enterprise practices. **On-the-ground support: Forest and Farm Facility (FFF), EU Forest Governance and Value Chains Programme (FGVC), Restoration-positive value chains and blended Finance (AFR100+).**

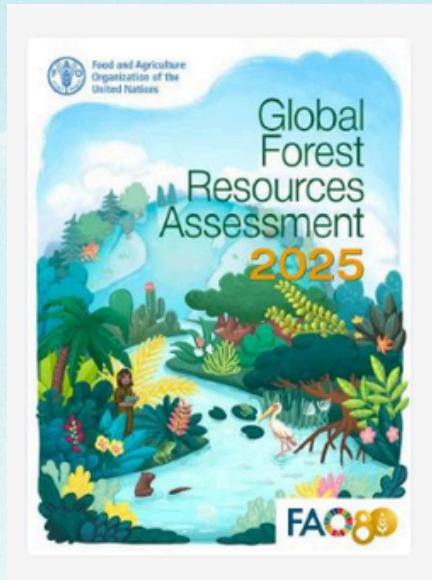


4. Knowledge Generation and Capacity Development

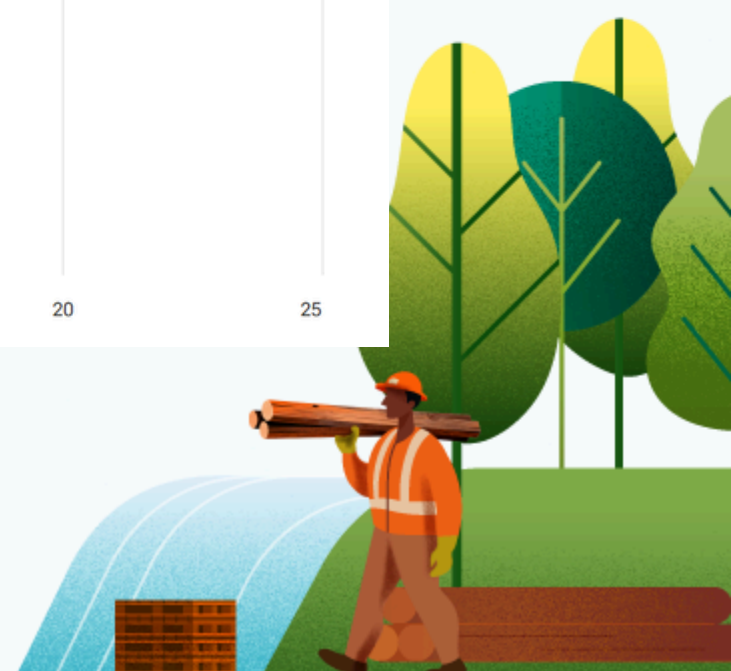
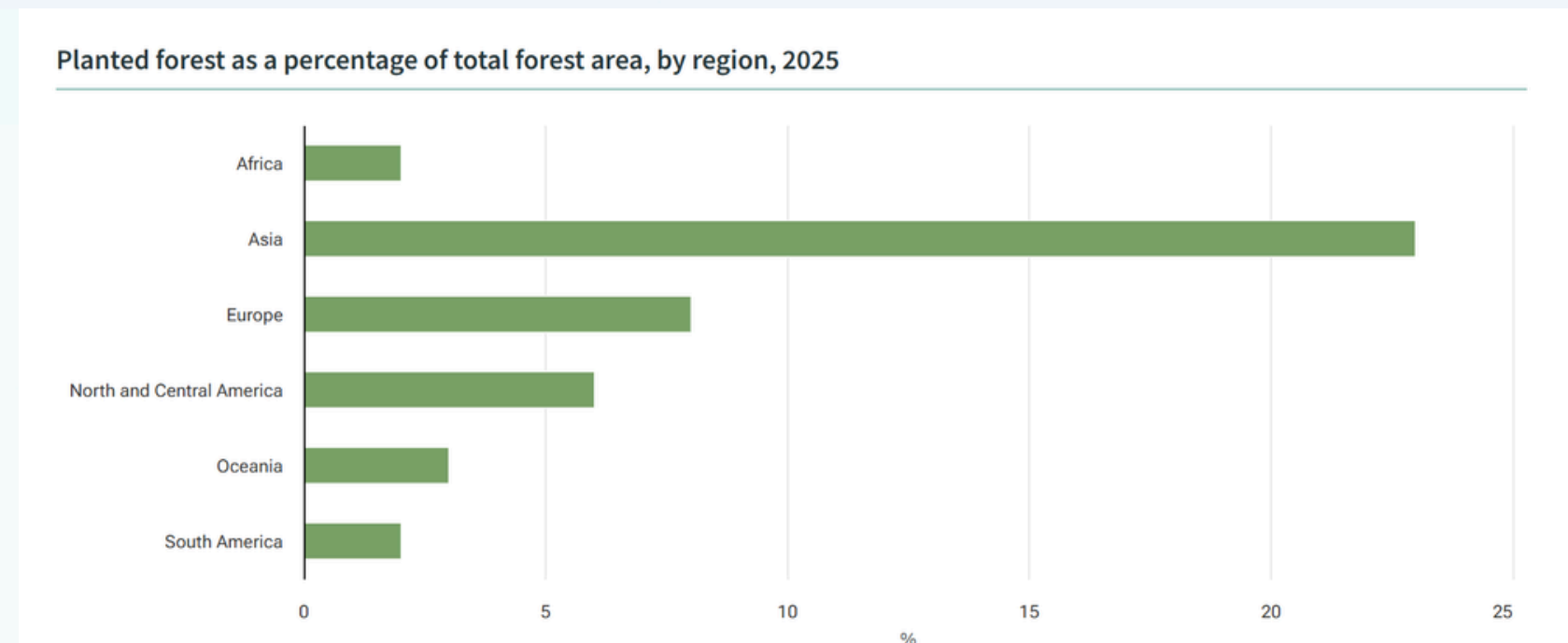
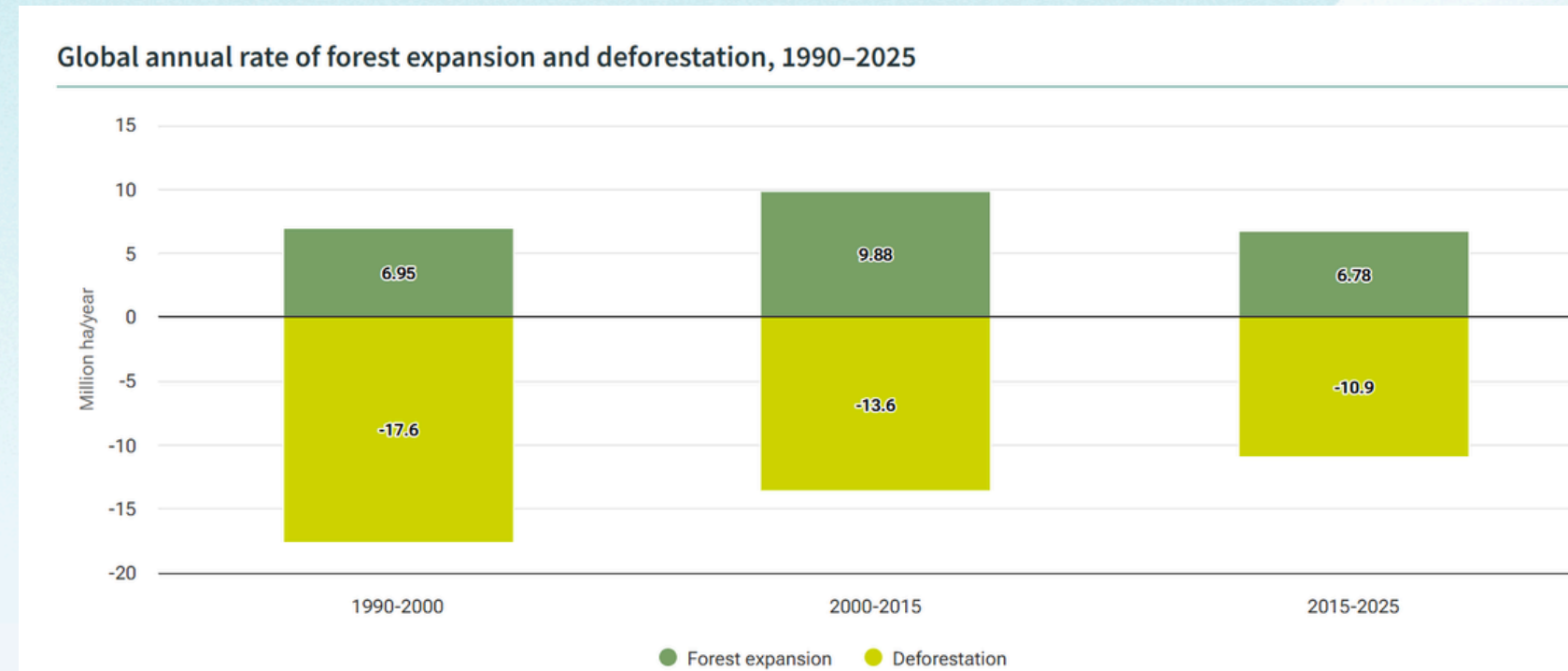
Strengthening institutional and stakeholder capacities to design, implement, monitor, and evaluate evidence-based policies and practices, offering knowledge resources, guidelines, tools, and training to improve skills and bridge the gap between policy and implementation. Examples include a guiding document on **enhancing sustainable forest value chains** and the **FFF Knowledge Hub**.

FAO's work on forest-based bioeconomy (1)

Data, Norms and Standards



- **Forests cover** more than 4 billion hectares, nearly half of which in the tropics
- The **net loss** of forest area has been reduced by more than half since the 1990s
- **Deforestation** continue to decline
- More than 90% of the world's forests are regenerating naturally
- The rate of increase in **planted-forest area** has slowed down



FAO's work on forest-based bioeconomy (1)

Data, Norms and Standards



- Outlook study to evaluate feasibility and impacts of (a) **increased forest-based biomass production** under the emerging bioeconomy (b) **meeting global forest-based targets** for cover and restoration.
- Outputs will include forest production volume, biomass use, producer prices and net trade as well as carbon emissions and forest cover patterns, synthesized to provide policy-relevant results.
- *Forest employment model* to provide annual estimates of forest-sector employment by gender between 2011 and 2022 for 182 countries and territories, accounting for 99 percent of global forest area
- In 2022, the forest sector provided employment to at least **42 million people** worldwide, which amounted to about **1.2 %** of total employment
- The **manufacture of wood and products of wood** accounted for the **largest share (58 %)** of employment in the forest sector
- Approximately **11 million women** were employed in the forest sector, representing 25 percent of its total workforce



FAO's work on forest-based bioeconomy (1)

Data, Norms and Standards



- The Bauhaus Earth–FRA Special Study assesses how emerging trends in wood product production—particularly the expanding use of engineered wood in the built environment—may shape future demand, with estimates indicating that increased urban adoption could raise global demand by approximately 50–250 million m³

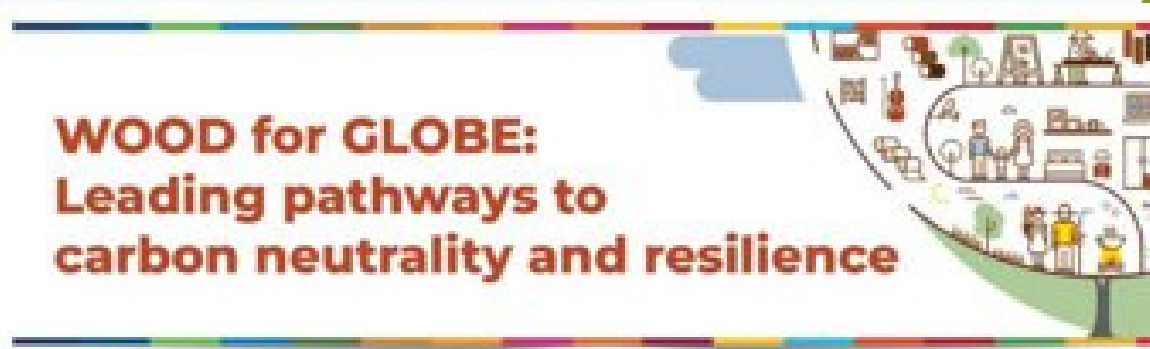
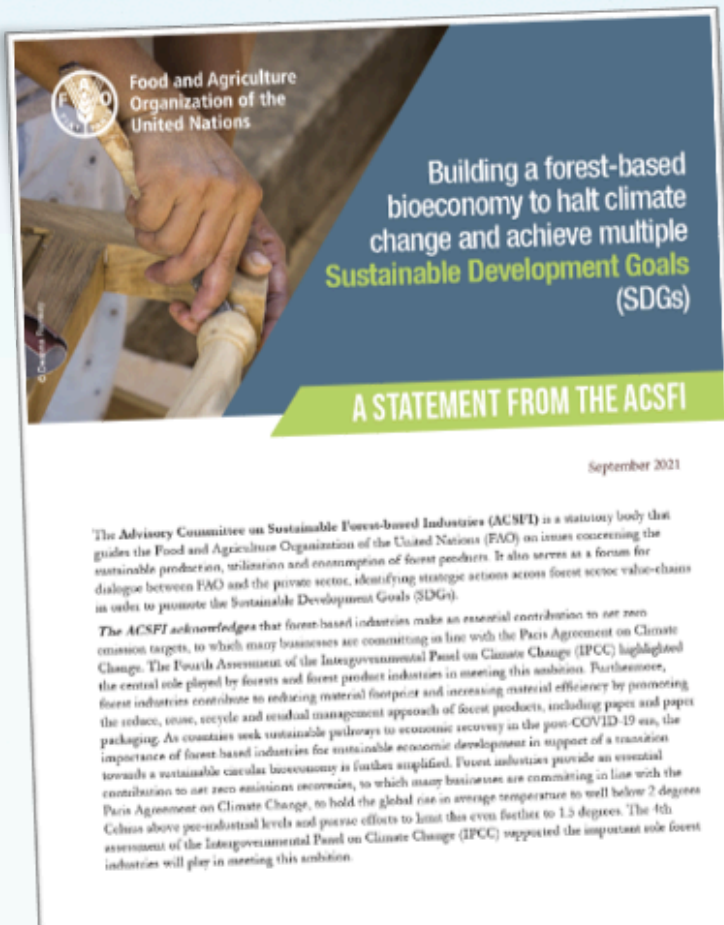


This activity was conducted
with the assistance of the European Union



FAO's work on forest-based bioeconomy (2) Policy Dialogue, Advocacy and Partnerships

Joint action is crucial to expand awareness and adoption of sustainable forest products in the bioeconomy



Vienna Call for Action

“We, the participants at the Global Summit... ***Call on*** governments, inter-governmental organizations, private sector, research and academic institutions, and other forest-related stakeholders to join forces and accelerate the following five collective priority actions advancing sustainable forest-based bioeconomy approaches:

1. Take leadership for systemic transformation
2. Ensure an inclusive bioeconomy
3. Mobilize targeted financial resources
4. Create enabling conditions for forest-based value chains and innovation
5. Build collaborative partnerships at all levels”

Vienna Call for Action

for a sustainable forest-based bioeconomy



Policy Dialogue, Advocacy and Partnerships

Grow the Solution

Raising awareness about the benefits of sustainable wood

Grow the Solution is an initiative of the Collaborative Partnership on Forests. It aims to raise awareness among the public and policymakers about the role of sustainable wood in construction and climate action

Grow the Solution produces communication products, including more than **5 million views** – and counting – through its *Wood you?* social media campaign

COLI identified Grow the Solution as a key tool for strengthening public understanding of – and trust in – sustainable forest-based solutions



 Federal Ministry
Agriculture and Forestry, Climate
and Environmental Protection,
Regions and Water Management
Republic of Austria

 Canada

 Federal Ministry
of Agriculture, Food
and Regional Identity

With the support of

 Finnish Forest
Association

#GrowtheSolution hashtag reach: 18.6 million



FAO's work on forest-based bioeconomy (3) Value Chain Development, Innovation and Investments

Enhancing forest-based value chains by working directly with the private sector to innovate and access finance and knowledge

e.g. Forest and Farm Facility
(FFF)

Expanding **smallholder** plantation-based value chains

Improved SFM, value added and conservation with **community** concessions

Smallholder **restoration** with carbon credits combined with value chains

Integrating forest-based value chains for conservation and restoration

e.g. African Forest Landscape Restoration Initiative Programme
(AFR100)

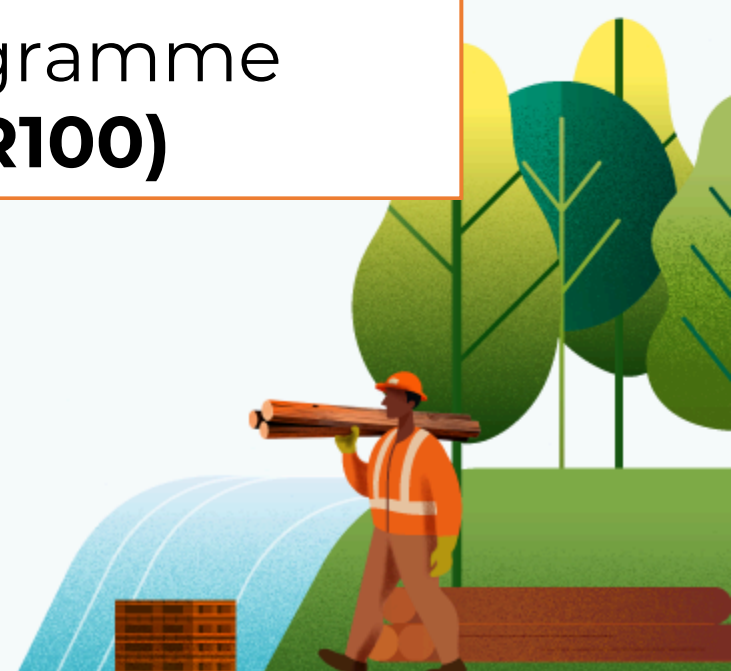
e.g. EU Forest Governance and Value Chains Programme
(FGVP)

Improvement in the **business environment** for sustainable forest-based value chains

Enhancing **non-wood forest product**-based value chains

Enhancing efficiency and competitiveness through business clustering

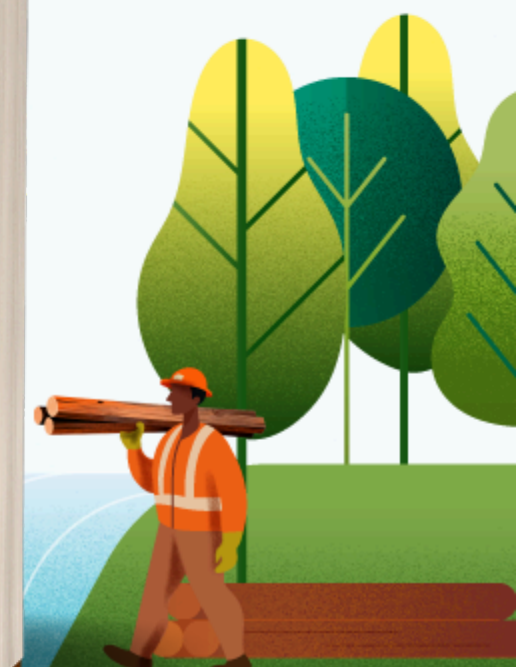
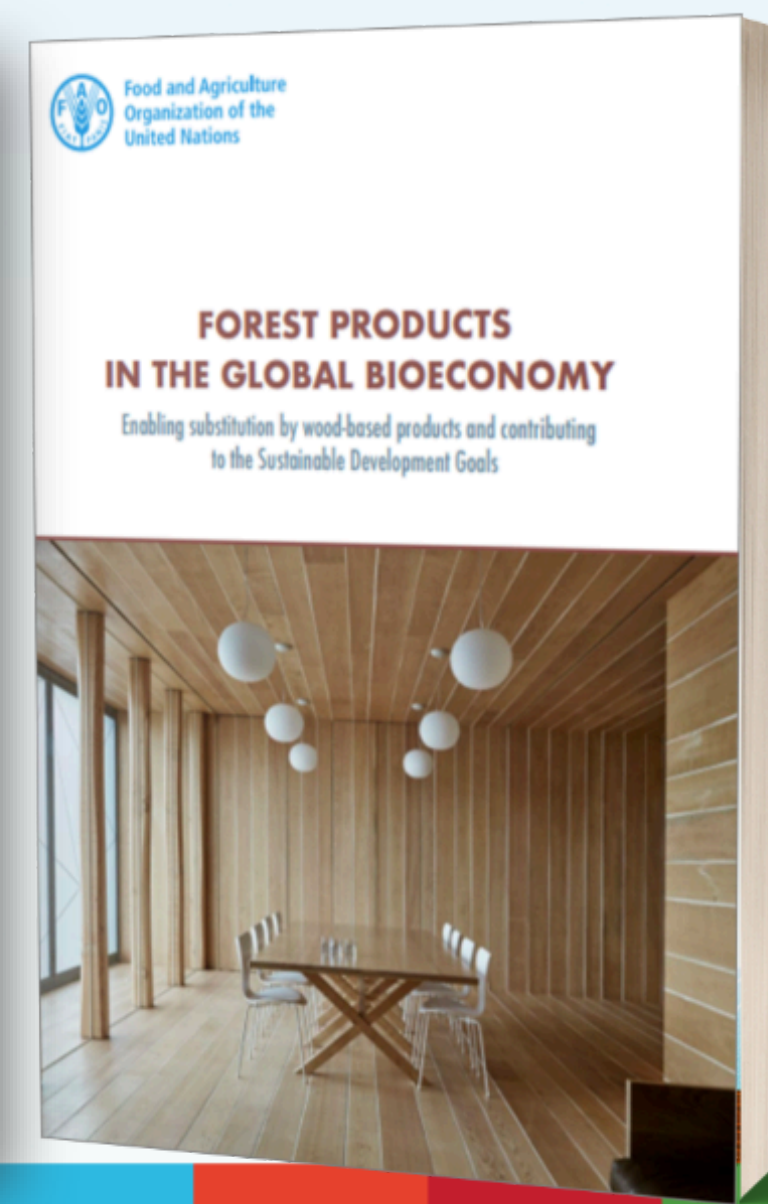
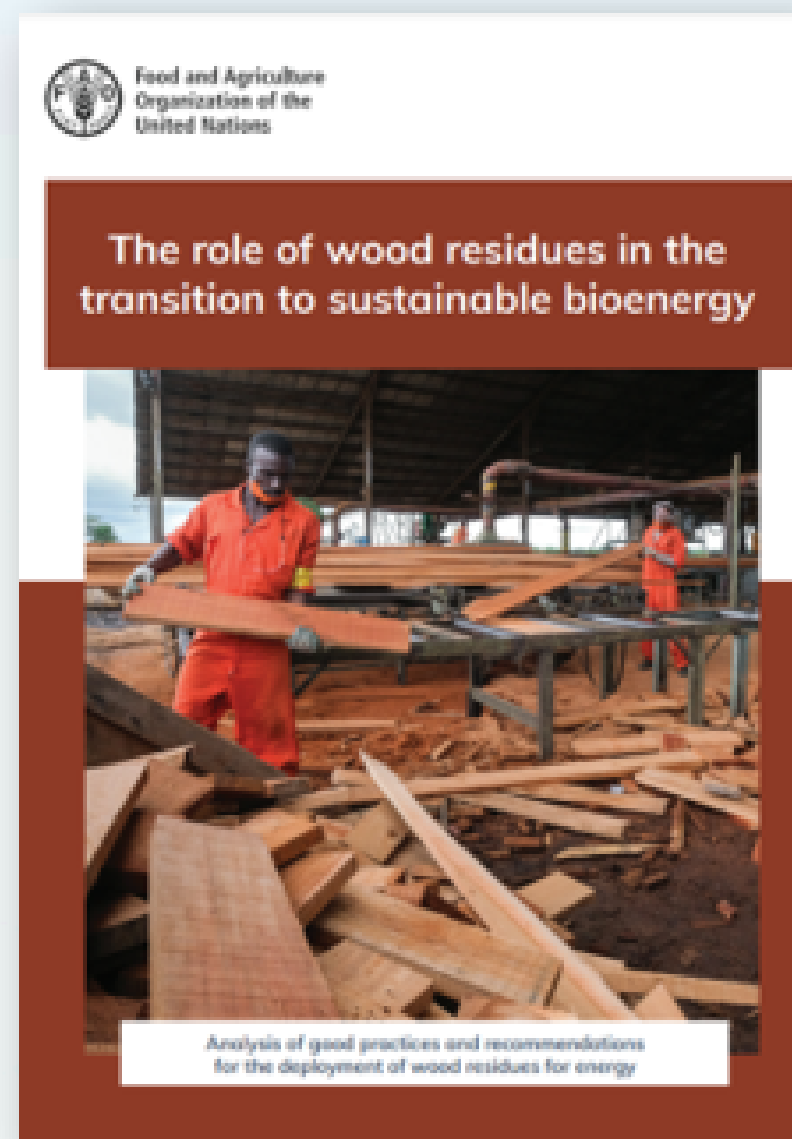
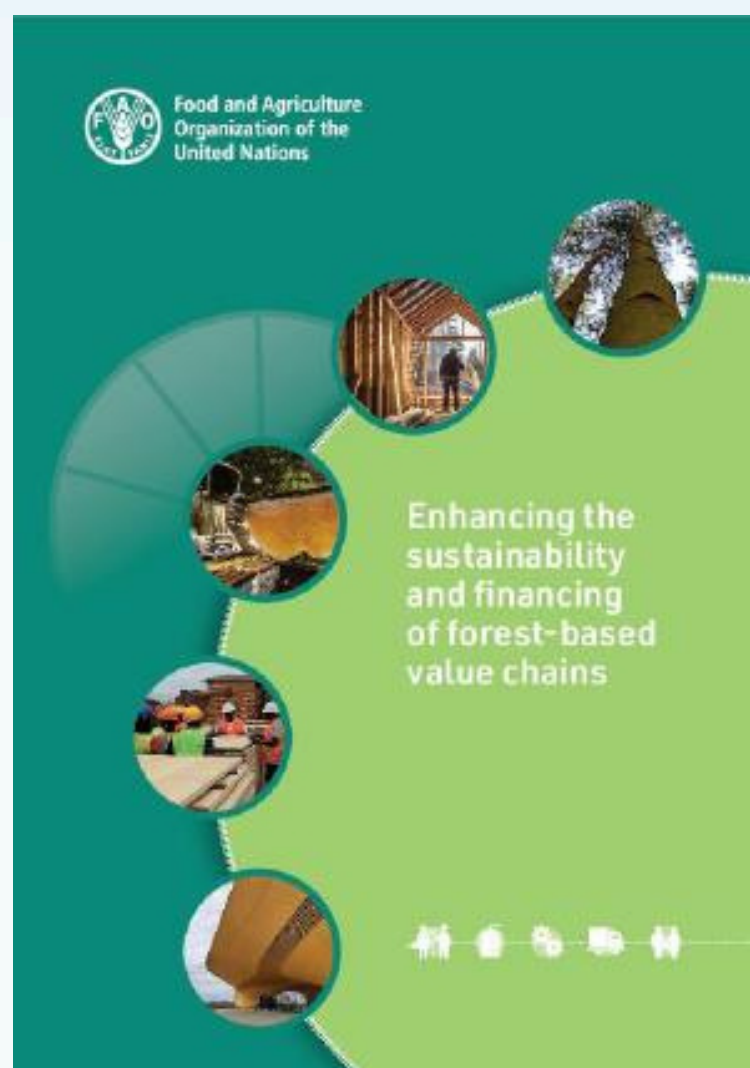
New products, new technologies and new markets with engineered wood products



FAO's work on forest-based bioeconomy (4)

Knowledge Generation and Capacity Development

Examples of knowledge resources, guidelines, tools to support the forest-based bioeconomy



FAO Regional Forestry Commissions 2025

NORTH AMERICA

09-11 September,
Chicago, United
States

EUROPE AND CENTRAL ASIA

22-25 October, Istanbul,
Türkiye

MEDITERRANEAN AND NEAR EAST

29 September-01
October, Jeddah,
Saudi Arabia

ASIA-PACIFIC

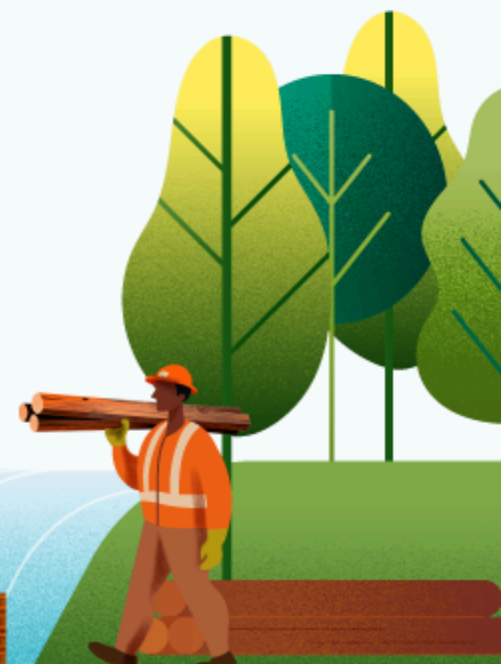
04-07
November,
Chiang Mai,
Thailand

LATIN AMERICA AND CARIBBEAN

01-05 September,
Panama City,
Panama

AFRICA

1-5 December
2025, Gambia,
The Gambia

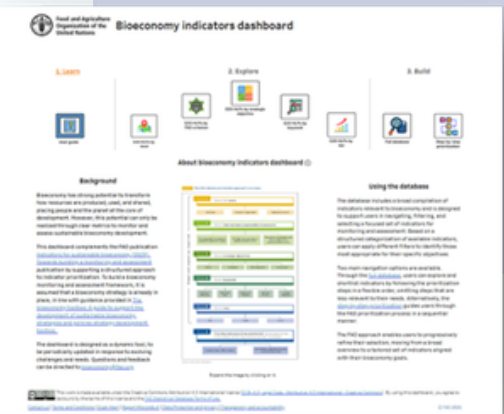


Bioeconomy in the 2026-2027 biennium

Key priorities by PPA BE2 pillar

Data, information and knowledge

- **Advance work on data systems** i.e., indicators and metrics for sustainable bioeconomy, bioenergy (including through leadership of the Bioeconomy Challenge WG).



Partnerships

- Advance towards the possible establishment of the **multistakeholder global Bioeconomy for Sustainable Transformation (BEST) Partnership**, mandated by COFO 27 and COAG 29.
- **Global Bioeconomy Summit, Dublin, Oct'26**



Policy coherence

- Scale up **country support** on bioeconomy strategy development and implementation.
- FAO's Technical Committees: **COAG31, COFO28, and COFI27**
- **CBD COP17, UNFCCC COP31**

Bio-innovations on the round

- Leverage **funding opportunities** including GCF and GEF, with technical priorities in bio-based products, nutrient & input recycling, and innovative bioeconomy solutions.



Conclusion

Global Trends & Emerging Focus

🌍 **Material demand rising** → bioeconomy and forests offer sustainable alternatives

🌐 **Bioeconomy** must be **locally adapted**

🔄 **Forest value chains** support low-carbon economies, livelihoods and ecological integrity

🔧 **Sustainable wood growing relevance** → need for sustainable production and trade planning

🗺️ **Integrated approaches are essential** → 4 core actions: Data, Policy & Partnerships, Value Chains, Capacity development

🌿 **Successful field-based actions exist** → value chain development linked with forest production, restoration, value addition, and livelihood improvement

Looking ahead - momentum continues 2026

💬 **COLI Global Summit follow-ups**

🌲 **COFO 28 & UNFF21**

🌐 **Global Bioeconomy Summit**

🤝 Strengthening **partnerships** for forest-based bioeconomy





Food and Agriculture
Organization of the
United Nations



**Forests and economies: sustainable production
and bioeconomy pathways**

**Let's join forces to advance
forest-based bioeconomy
approaches – today and for
future generations!**

THANK YOU!

