

TRANSFORMATIVE RESEARCH CHALLENGE 2025

Forestry Innovation Prize



Forestry Innovation Prize

(Co-hosted by the FAO Forestry Division (NFO))

Forests are vital for global sustainability, playing a key role in maintaining environmental health, supporting social well-being and driving economic growth. With global wood production reaching 4 billion m³ annually and nearly 6 billion people relying on non-wood forest products, forests face immense pressure. The demand for forest products is expected to rise significantly by 2050, exacerbating issues like deforestation, unsustainable harvesting and climate-related challenges such as wildfires and pest outbreaks.

The Forestry Innovation Prize recognizes youth-led, transformative solutions to address these challenges by fostering innovative, scalable and adaptable approaches to sustainable forest management. It aligns with FAO's Strategic Framework (2022–2031), Science and Innovation Strategy, and Forestry Roadmap (2024–2031), all of which prioritize scaling scientific and evidence-based innovations to increase forest's sector contributions to global solutions and sustainable agrifood systems transformation.

Objectives of the prize:

This prize encourages youth-led innovations that address critical gaps in forest sector sustainability with a focus on technological advancements and aims to:

- Identify and nurture innovative solutions within the domains of the themes listed below;
- Promote scalable innovative solutions that are science-based, inclusive and responsible within the domains of the themes listed below;
- Encourage collaboration and dialogue between young forestry researchers, FAO forestry professionals as well as relevant external and international experts; and



 Increase awareness and advocacy on the potential of innovation in the forest sector to achieve the Sustainable Development Goals and the Global Forest Goals.

Themes of the prize:

The Forestry Innovation Prize will focus on technological innovations. FAO defines technological innovations as the application of science and knowledge to develop techniques that deliver products and services that enhance the sustainability of agrifood systems. Technologies are innovative when they are introduced, adapted or used in new ways in a

given context.

Technological innovations can be categorized as three sub-types:

• Digital technologies

Technologies for improved forest and land-use data collection, management, dissemination and use, to support decision makers and stakeholders in forest conservation, restoration and sustainable use. This can include satellite monitoring, remote sensing, cloud-computing platforms, Al and tools for local community led forest monitoring.

• Product/process

Technologies used to enhance and increase efficiencies in forest value chains and create a shift towards bioeconomy. This can include using forest raw materials as alternatives to non-renewable materials, technologies to optimize materials flow, reduce costs, improve real time supply chain visibility and communication, ensure better worker safety, and reduce risks of errors and delays in production and supply.

Biotechnology

Technologies to increase forest yields, improve resistance to pests and diseases and adapt to climate change. This can include techniques to identify and breed high yield, locally suitable and resistant trees species, and genetic resource characterization of wildlife.



Application Deadline:

Researchers must submit their applications by 9 May 2025.

What do young researchers gain?

- Research Funding: Winning teams receive up to USD 10 000 in research funding to implement their research projects. In addition, one team will be selected from the winners of each TRC category as the overall winner of the 2025 Transformative Research Challenge and will be awarded an additional USD 10 000 in research funding.
- **Global visibility:** Finalist teams receive recognition for their innovative work through the WFF website and social media channels, showcasing their projects to a global audience.
- **Networking opportunities:** Finalist teams will be able to connect with a global network of young leaders, agrifood experts and representatives from the public and private sectors, as well as the United Nations.
- **Capacity development:** Semi-finalist teams receive expert guidance to strengthen their skills in research proposal development.
- Invitation to FAO headquarters: Finalist teams are invited to present their research at the TRC Finals held at FAO headquarters in Rome in October 2025, in front of a high-level jury and a global audience via live stream on a range of platforms including UN Web TV.
- Post awards support: Finalists are invited to apply for the WFF
 Youth Food Lab incubator programme. Winning teams may also
 receive continued support to further develop and implement their
 research proposals.



In addition, winning teams will receive:

 Networking and partnership opportunities with forest-sector professionals working in the multilateral development space, scientists and researchers in forest sector innovation, from institutions across regions. This will support the further development and potential scaling of the innovative solutions.

