

Innovation needed to maximize contributions of forests to sustainable development

Statement by ITTO Executive Director Sheam Satkuru on 2024 International Day of Forests

Tropical forests have a central role to play in sustainable development in tropical countries and in maintaining global environmental health. For example, their sustainable use contributes to national economies and supports the livelihoods of millions of people. Sustainably produced wood has a wide range of uses and is an essential material for the transition to a more sustainable bioeconomy. Sustainably managed tropical forests perform many vital ecosystem services, inter alia carbon sequestration, the provision of habitat for biodiversity, and water-related functions.

Tropical forests are under pressure, however, such as from conflicts over land use, the expansion of the agriculture sector, climatic changes, and wildfire. We need to find ways of averting the threats facing forests and boosting their roles as nature-based solutions to global challenges.

This year's theme of the International Day of Forests, "Forests and innovation: solutions for a sustainable world", is directed towards this need. The forest sector is evolving quickly, with new technological advances, institutional arrangements and policies supporting improved forest management, the expansion of forest landscape restoration, and the sustainable use of a vast and growing range of forest products.

ITTO has been a pioneer of new approaches in tropical forestry, and our innovative work continues today, in collaboration with member countries and many partner organizations.

For example, ITTO-funded projects in the three tropical regions have developed various techniques for improving traceability along supply chains. In Panama, barcodes and a phone app are used for tracking timber from the stump to the market. In Madagascar, to assist in wood identification, an ITTO project established a reference collection for rosewood and other valuable timber species and a protocol for building such collections worldwide. In Brazil, a project conducted as part of the ITTO–Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Programme successfully tested a field technique to identify mahogany wood using near-infrared spectroscopy.

Also in Brazil, an ITTO project has helped develop a computer tool to accelerate and improve forest management planning. Called BOManejo, the software enables forest managers to improve their processes for selecting trees for felling and estimating the wood volumes to be harvested.

In Indonesia, an app developed with ITTO assistance was launched in 2022 to assist fire brigades in preventing and suppressing wildfires. The SMART Patrol Information System records and reports the real-time action of fire prevention patrols based on 88 parameters to better enable wildfire prevention, detection and early suppression. The app (available for mobile devices and via a website) has been integrated into the Ministry of Environment and Forestry's Forest and Land Fire Management Information System and is being used by patrol

teams in Kalimantan, Nusa Tenggara, Sulawesi and Sumatera.

In Guatemala, an ITTO project has developed a smartphone app for calculating log volumes. The app, known as CUBIFOR,¹ is simple to use because it requires only a photograph of the stack of logs (or other wood product), either on the truck or in the mill yard or other location, plus the average width and length of the stack, to estimate volume. CUBIFOR has strengthened the capacity of forest companies in Guatemala to control their inventories, improved the efficiency of activities requiring the quantification of timber volumes, and generally advanced sustainable forest management in the country. The app can be adapted and applied elsewhere in the tropics.

These are only examples of the many innovative approaches being developed in ITTO projects, including those related to forest governance and institutional development. In addition, the Organization has produced a wide range of innovative policy solutions for the tropics, such as its criteria and indicators for sustainable forest management, along with groundbreaking guidelines on biodiversity conservation in production forests, integrated forest fire management, sustainable forest management and forest landscape restoration.

If we are to maximize the contributions of forests to sustainable development, we will need more such innovations. Fortunately, there is no shortage of inventiveness in the forest sector. Around the world, millions of forest stakeholders continue to research and identify solutions that enable the conservation, sustainable management and sustainable use of forests, where urgent investment is needed to encourage increased uptake. The role of international cooperation under the Collaborative Partnership on Forests (CPF) and organizations like ITTO, who is a member of the CPF, is to support them in their efforts and to spread the best innovations for the benefit of communities worldwide. We will continue to do so, in close collaboration with our partners and members.

¹ CUBIFOR, a free Android app in Spanish, is available from Google Play.