



RESEARCH  
PROGRAM ON  
Forests, Trees and  
Agroforestry

# FTA 2020 Science Conference

Forests, trees and agroforestry  
science for transformational change

14-18 | 21-25  
September 2020

A decorative graphic on the left side of the page, consisting of several overlapping, 3D-style rectangular blocks in various colors (orange, teal, red, olive, light green, purple) that resemble a stack of books or a staircase. The blocks are arranged in a descending staircase pattern from top-left to bottom-right.

# Book of Abstracts

Corrigendum of 10.03.2021

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# Active restoration in secondary and degraded tropical forests as a nature-based solution to answer the global wood demand

In this talk, we will address issues related to the potential of tropical secondary and degraded forests (SDFs) as sustainable and complementary alternatives for wood production, from case studies in Central American countries. We will also discuss the potential of wood production in SDFs as an effective NBS for the climate crisis, i.e. associated to effective mitigation in the future.

Tropical secondary (1) and degraded (2) forests are disturbed forest areas, growing in formerly deforested areas (1) or which have suffered from unsustainable human activities, such as unplanned and repetitive logging or fire (2). They have consequently lost their capacity to provide a high level of goods and services.

SDFs are important worldwide as they account for swathes of forest landscapes and are invaluable forest ecosystems related to biodiversity recovery, carbon storage, but also a diversity of other forest ecosystem services.

However, they are fragile and endangered forest ecosystems, as they are located in highly dynamic pressured landscapes and are susceptible to catastrophic events. Without appropriate silvicultural management designed to increase their economic value, they may well be cleared for more economically productive activities.

Moreover, the increasing demand for tropical timber in recent decades and in the near future may worsen the pressure on these fragile ecosystems.

We suggest that active restoration implemented towards wood production in SDFs may amount to a sustainable and complementary alternative for wood production in the future. Wood production is definitely an opportunity for SDF conservation in the context of the increase in wood demand, while limiting pressure for wood demand on the remaining natural forests. Moreover, SDF maintenance and restoration through secondary forest dynamics contribute significantly to the maintenance of crucial ecosystem services in the context of the climate crisis.

Following the CATIE project on secondary forest dynamics and valuation in Central American countries (IKI Funding program 2017–2020), we are setting up with FTA support (2020), work on the assessment and the improvement of wood production potential from secondary forests through analysis of data from national forest inventories in Central American countries.

During the FTA science conference 2020, we will present the first results of this work. We will discuss the limitations and opportunities associated with wood production in tropical SDFs nowadays in the global context, but also the mitigation potential associated to wood production in these SDFs.

## KEYWORDS

**Active restoration, secondary forests, degraded forests, increase in timber demand, mitigation potential**

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