

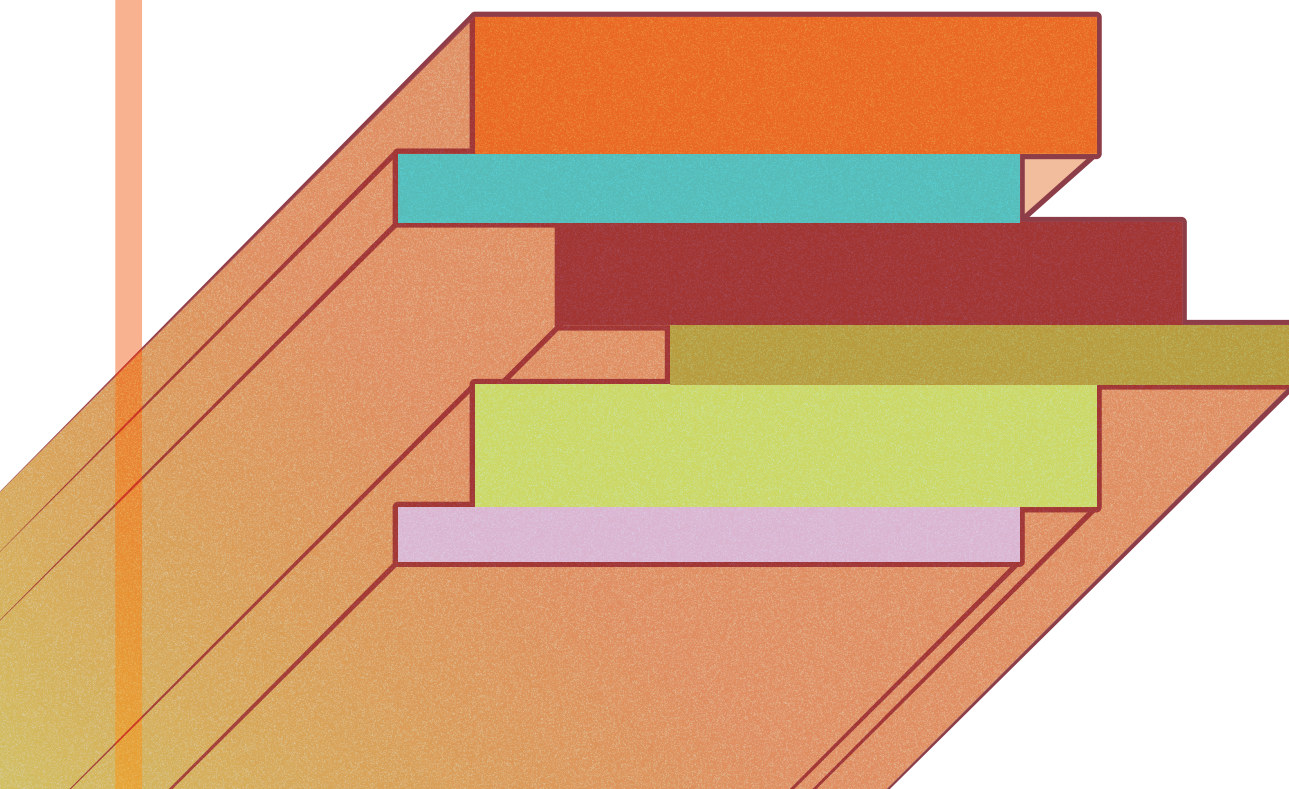


RESEARCH
PROGRAM ON
Forests, Trees and
Agroforestry

FTA 2020 Science Conference

Forests, trees and agroforestry
science for transformational change

14-18 | 21-25
September 2020



Book of Abstracts

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Local agroforestry knowledge and development of an online decision-support tool (shadetreeadvice.org) for selection of trees to be associated to coffee in Southeast Asia and beyond

In agroforestry systems (AFS), associated trees provide multiple ecosystem services and contribute to 1) improve soil fertility; 2) buffer climate extremes and help adapt to climate change, 3) provide refuge for biodiversity and a micro-climate favorable to biological antagonists to pests and diseases (P&D), and 4) diversify on-farm revenues (fruits, timber, fuelwood, fodder, medicinal products, honey, etc.) and reduce exposure to price volatility, particularly for crop commodities such as coffee or cocoa. Still, associated trees can also compete with crops underneath for water, light and nutrients, or favor some P&D, hence providing ecosystem disservices when farmers use locally inadequate tree species and/or poor agroforestry practices.

There is an untapped wealth of knowledge gained by farmers over generations on agroforestry practices and ecosystem services and disservices provided by trees on their farms. The South-east Asia team has been working with male and female coffee farmers in Yunnan, China, Northwest Vietnam and Central Laos documenting the local knowledge on trees and refining an online decision-support tool (shadetreeadvice.org) to help select the right tree species adapted to the local context.

This presentation will highlight some of the insights from the Yunnan, Laos and North Vietnam studies with respect to soil fertility, gender perceptions of trees and so on. It will present briefly the ongoing studies in Nicaragua, Central Vietnam, Cameroon and Colombia that will contribute to broaden the geographic scope of this tool. Finally, it will also present the latest developments to refine the online tool to make it more user-friendly.

KEYWORDS

Agroforestry, coffee, local knowledge, decision support tool

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