4th World Congress on Agroforestry

20-22 May 2019
Montpellier, France

Book of Abstracts

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Mr Emmanuel MACRON
President of the French Republic

4th World Congress on Agroforestry

20-22 May 2019
Le Corum - Montpellier, France

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the members of the Scientific Committee of the Congress.

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RESEARCH PROGRAM ON
Forests, Trees and Agroforestry

CGIAR

Landscape approaches to tackle climate change, and achieve sustainable development and food security

Aerial view of the landscape around Halimun Salak National Park, West Java, Indonesia. Photo by Kate Evans/CIFOR

What is FTA?

The CGIAR Research Program on Forests, Trees and Agroforestry (FTA) is the world's largest research for development program to enhance the role of forests, trees and agroforestry in sustainable development and food security and to address climate change. CIFOR leads FTA in partnership with Bioversity International, CATIE, CIRAD, INBAR, Tropenbos International and the World Agroforestry Centre. FTA's research contributes to 14 of the SDGs.

What do we work on?

- Tree genetic resources
- Forests, trees and agroforestry for smallholder livelihoods
- Sustainable value chains and investments
- Landscape dynamics, productivity and resilience
- Climate change adaptation and mitigation
- Gender, evaluation and impact assessment

A woodseller trades at Montee Parc Market in Yaoundé, Cameroon. Photo by O Girard/CIFOR

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Measuring young trees in an agroforestry plantation, Restinclières, Hérault, France © C. Dupraz

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Our actions in Agroforestry

Why is it important?

After a century of continuous progress made by intensive farming in developed countries, output is stagnating and biodiversity is becoming worryingly impoverished. Agroforestry, which consists in integrating trees into agricultural farming systems, could provide a fair answer to this situation.

Our actions

While modern agroforestry systems have been developed over the past 20 years, research on the subject remains underdeveloped in France. Traditional know-how has been partially lost and basic knowledge is still fragmented. The Fondation de France awards subsidies to encourage students to discover or expand this field of research as part of a high performance team working on these questions.

L10.P.30

Forest windbreaks serving a function of the agricultural land shield from the negative effects of wind

Josimovic B. (bosko@iaus.ac.rs), Milijic S., Bezbradica L.

Inst. of Arch. & Urb. & Spatial Planning, Belgrade, Serbia

Out of 88,361 km² of the Republic of Serbia's territory, 53.76% is agricultural land, amounting to 47,502.173 km². Considerable part of that land is situated in the Autonomous Province of Vojvodina (APV) (19.69 %, or 17,397.92 km²). Its terrain mostly consists of lowlands belonging to the Pannonian Basin, intersected by numerous rivers and canals. About 7% (exactly 7.1%) of land in APV is covered by forest (compared to 29.1% in the Republic of Serbia), while that percentage in the eastern parts of the province, where the effect of the southeastern wind called Košava is the greatest, goes between 1.5 and 7.7%. Lowland terrain and the climate there make this area susceptible to wind erosion, i.e. degradation of the agricultural land. The negative effect is two-fold: deflation of fertile soil particles, and deposition of infertile material over fertile agricultural land. Degradation of the agricultural land due to the wind erosion, salinization of the soil caused by irrigation and flooding, spreading of infrastructure and similar negatively affect the area of land convenient for agriculture. The paper points to all the adverse effects that lead to the decrease of arable land areas in APV, making it vital to protect and preserve the most fertile zones. As a priority measure, raising forest windbreaks is suggested so as to provide a long-term protection of the degraded agricultural land and preserve the existing agricultural land, along with the crops raised there. The purpose of this paper is to analyze the need for, the types of and the techniques of forest windbreaks on the territory of the Autonomous Province of Vojvodina, in the Republic of Serbia, as well as to establish other positive impacts of planting and maintaining forests. It also presents a comparative analysis of the change in the ration between agricultural and forested areas based on CORINE Land Cover – CLC database, illustrating natural and both positive and negative anthropogenic effects on the protection and degradation of the said areas.

Keywords: agricultural land, forest windbreaks, land degradation, wind erosion, protection.

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