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## PRESS RELEASE

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# Tree Crops Key to Advancing Sustainable Development Goals

- In a recent study published in *Nature Sustainability*, a scientific team led by the Doñana Biological Station emphasizes the untapped potential of tree crops for biodiversity conservation, socio-economic development, and climate change mitigation.



**Caption:** Sustainable traditional olive grove rich in biodiversity in Jaén, Spain. Photo courtesy of Domingo Cano.

**Seville, January 13, 2025** – Tree crops like olives, coffee, fruit trees, and cacao collectively cover more than 183 million hectares worldwide, yet remain largely overlooked in agricultural policies globally, despite their critical role in achieving Sustainable Development Goals (SDGs). A recent article by an international team, coordinated by the Doñana Biological Station - CSIC and published in *Nature Sustainability*, highlights how



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these crops are not only essential to global diets and economies but also hold immense potential for biodiversity protection, climate action, and improving livelihoods for millions worldwide.

“We’re missing an opportunity to leverage tree crops to address some of the biggest environmental and social challenges of our time,” says Carlos Martínez-Núñez, researcher at the Doñana Biological Station and coordinator of the study. “When managed properly, these agricultural systems can be a powerful tool for biodiversity conservation, climate change mitigation, and rural poverty alleviation, in addition to producing around 1,000 million metric tons of food annually.”

The study’s findings urge policymakers to develop specific agendas promoting sustainable practices in tree crop agriculture. Agricultural policies typically focus on annual crops, such as wheat, sunflower, or rice, which have shorter life cycles, from germination to harvest, within a single year. While fostering sustainable practices in annual crops is crucial, the ecological benefits of these systems are often limited due to their simpler structure and short-term dynamics. Tree crops, by contrast, are structurally more complex and provide stable habitats that can support diverse biodiversity when managed sustainably.

With their permanent root systems and extensive leaf litter, tree crops also prevent soil erosion, enhance fertility, and provide habitats for many species year-round. They contribute to greenhouse gas reduction through carbon sequestration, improve habitat connectivity for fragmented ecosystems, and buffer protected areas from the impacts of intensive agriculture. Socioeconomically, perennial tree crops tend to be less mechanized and require more manual labor, offering vital employment opportunities, particularly in developing countries where these crops are widespread.

The article calls for the implementation of regulations, financial incentives, and supportive policies aimed at improving agricultural practices for tree crops to maximize their contribution to global sustainability. “We need policies tailored to various contexts, from economic incentives to restore natural areas within intensive crop regions to international regulations that promote sustainable agriculture in producer countries,” explains Ignasi Bartomeus, a researcher at the Doñana Biological Station.

This call to action represents a crucial step in rethinking agriculture’s role in building a fairer, more sustainable future.

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**Referencia:** Carlos Martínez-Núñez, Elena Velado-Alonso, Jacques Avelino, Pedro J. Rey, G. Martijn ten Hoopen, Guy Pe’er, Yi Zou, Yunhui Liu, Philip Antwi-Agyei, Adrien Rusch, Charles Staver, Tharaka S. Priyadarshana, Denis J. Sonwa, Damayanti Buchori, Lucas A. Garibaldi, Elena D. Concepción, Owen T. Lewis, Ivette Perfecto, Ignasi Bartomeus. **Tailored policies for perennial woody crops are crucial to advance Sustainable Development.** *Nature Sustainability*.