Event Report

Digital Forum
CAN TREE PLANTING SAVE OUR PLANET?

Photo by World Agroforestry

CAN TREE PLANTING SAVE OUR PLANET?
DIGITAL FORUM | 29 SEPTEMBER 2020

CIFOR
World Agroforestry
Global Landscapes Forum

KEY MESSAGES

- The right tree for the right place and the right purpose: Tree planters should become tree growers with a long-term time horizon.
- The right tree requires the right seed source. To plant and grow a diverse range of trees means having quality seeds available in the necessary quantities.
- Tree planting is one tool in the fight against climate change and must be supported by other measures, such as carbon emissions reduction and forest conservation.
- Technology and techniques – drones, smartphone apps, remote imaging – accelerate the planting process and provide essential information on potential sites, growth monitoring and natural regeneration.
- Inclusion of local communities, women and youth is vital in the decision-making process to help ensure the survival of a planted tree.

Millions, billions, trillions? How many trees does the world have plant to address the climate crisis, while restoring the landscapes that provide humans with food and livelihoods? Trees perform a range of beneficial functions by storing carbon, absorbing pollution, protecting soil, regulating water supplies and supporting biodiversity. Scientists estimate that an additional 1 billion hectares of forest on the planet could even cut atmospheric carbon by about 25 percent. Yet tree planting is not a stand-alone solution in the fight against climate change and must be viewed among various strategies on the path to building resilient landscapes and a sustainable future.

As deforestation increases in the drive to feed a growing global population, it has never been more urgent to match effective land restoration with sustainable economic development. Choosing the right tree for the right place and right purpose is crucial to every tree-planting initiative and helps to ensure that good intentions yield positive results for local communities, the environment and national economies. Tree planters should also recast themselves as tree growers so that international pledges such as the Bonn Challenge, the New York Declaration on Forests and the AFR100 lead to the sustained growth of healthy trees and help to reach the long-term climate targets of the Paris Agreement.

Within this context, the 'Digital Forum: Can tree planting save our planet?' took place on 29 September as an online meeting hosted by the Center for International Forestry Research (CIFOR) and World Agroforestry (ICRAF) in collaboration with the Global Landscapes Forum. Scientists, community leaders, forestry experts, investors and policymakers participated in the half-day event, the largest ever staged by CIFOR-ICRAF. Almost 5,000 participants from 123 countries tuned in to the forum, which included 27 presentations and reached at least 5 million people via social media. There were 16 female and 11 male speakers, with 16 from the Global North and 11 from the Global South. The forum was hosted by biologist Vania Olmos Lau in Mexico City.

> Maybe we can and should grow an additional trillion trees around the globe. Let's go for it. But if we don't also take numerous other actions to address climate change – specifically including major cuts in fossil fuel emissions – we may just be fueling the fire.

Robert Nasi
Director General, Center for International Forestry Research (CIFOR)
Managing Director, CIFOR-ICRAF

After opening remarks from CIFOR-ICRAF's Howard Shapiro and Robert Nasi, the first panel session dealt with some of the misconceptions of tree planting and pathways to successful tree growing and landscape restoration. Moderated by Cora van Oosten of Wageningen University, the list of speakers included Susan Chomba of CIFOR-ICRAF, Wanjira Mathai of the Wangari Maathai Foundation, Thomas Crowther of ETH Zurich, Agus Justianto from Indonesia's Ministry of Environment and Forestry, and Jad Daley of American Forests.

The speakers emphasized the complexity of tree planting due to gender, socioeconomic and livelihood issues, while highlighting the symbolism of trees as representative of people. An integrated approach that features mosaic landscapes is needed for successful land restoration, and a policy of 'radical inclusion' should harness the wisdom of landscape inhabitants, NGOs, communities and policy makers. It also requires the involvement of women and youth, who are often excluded from decision making and program implementation in developing countries.

> You've got to feel the pain of landscapes destroyed. We have to make it prohibitively difficult for people to cut down trees in order to put up obsolete infrastructure.

Wanjira Mathai
Chair, Wangari Maathai Foundation (WMF)

GREEN FUNDS

Finance remains a significant challenge for tree planting initiatives. Even as governments around the world commit to restoring hundreds of millions of hectares, there is still untapped potential to nurture public-private partnerships at scale through sustainable investment. Moderated by Leona Liu of Resilient Landscapes, the second session featured speakers Bonnie Norman of E3 International, Boris Saraber of Earthworm Foundation, Tanja Havemann of Clarmondial, Caroline van Tilborg of the Pollination Group and ICRAF's Tor-Gunnar Vagen.

Yvonne Aki Sawyerr
Mayor of Freetown
Sierra Leone

> We identified the key areas where we wanted to plant trees and we went door to door asking residents to become tree stewards and engage with us.

Yvonne Aki-Sawyerr has been the mayor of Freetown, the capital of Sierra Leone, since May 2018. A chartered accountant with more than 25 years' experience in the private sector, she also served as director of planning for the National Ebola Response Centre during the Ebola epidemic in 2014–15. As part of her commitment to address the effects of deforestation caused by urban population growth, Mayor Aki-Sawyerr has embarked on an ambitious science-led campaign to plant 1 million trees under the hashtag #FreetownTheTreeTown. With the support of the World Bank, the West African city of 1.2 million people has engaged local community organizations to appoint stewards who will plant and care for around 15 tree species, which are tracked via an app, monitored monthly and entered into a database. In the Creole tradition, trees are also planted along with a mother's umbilical cord following childbirth in Sierra Leone, allowing people to nurture their own personal tree over a lifetime.

Havemann noted the investment challenges of untested business models, uncertain investor returns and the long duration of projects in high-risk countries. With $700 billion in finance needed every year for biodiversity and more than $300 billion for food security, there is a huge opportunity for private companies to play a greater role in filling the financing gaps. Van Tilborg cited Australia-based Pollination Group's recent partnership with the banking giant HSBC to create multibillion-dollar natural capital funds for sustainable investments.

TECHNIQUES AND TECHNOLOGY

The final session covered tree planting technology under various climate scenarios, the role of biodiversity and the case for natural regeneration. Moderated by CIFOR-ICRAF's Ramni Jamnadass, the list of speakers included Nicole Schwab of the World Economic Forum, Lauren Fletcher of Beta Earth, Harrie Lovenstein of Land Life Co. and Joice Ferreira of the Brazilian Agricultural Research Corporation (EMBRAPA).

Fletcher, who invented tree-planting drone technology, highlighted the scale of the task by claiming that 2 trillion trees need to be planted to restore global ecosystems. Spreading seeds from drones can accelerate this process by planting 400,000 trees per day, instead of only hundreds if carried out manually by people, he said. Lovenstein of Land Life Co., a Dutch ecosystem restoration organization planning to reforest hundreds of thousands of hectares, aims to plant 3 million trees this year and to track every one of them through a database.

In some cases, natural regeneration is preferable to tree planting. Brazil-based Ferreira noted that this form of land restoration is favorable in most areas of the Amazon because they have relatively recent land-use chains and agricultural activities are fairly low intensity, making it easier for the landscape to recover. She also urged policy makers to consider the increasing frequency of fires and droughts when devising land restoration programs.

Bonnie Norman
President
E3 International

"We are quantifying the benefits of biodiversity and tree planting so we can tell a story that is backed up by science.

Bonnie Norman is president of Washington-based E3 International (E3I) and is an entrepreneurial leader in clean energy, resilient infrastructure and green banking. With more than 800 completed projects (totaling over $1 billion) on three continents, E3I's mission is to scale up investment in climate-smart energy and resilient infrastructure solutions. One of its key areas is Serbia, where the company aims to invest at least 1 billion euros in more than 40,000 hectares of degraded agricultural land in Vojvodina Province. With a focus on short rotation biomass plantations, E3I is helping to promote the energy transition and reduce deforestation, while creating jobs for many underemployed or unemployed farmers. In addition to the natural, political and social benefits that biomass offers, investors can expect to see a return on their investment within about five years.

“We need to address the drivers of deforestation, to mobilize financing at scale, to connect these commitments to the local communities and support local livelihoods.

Nicole Schwab
Co-director, Platform to Accelerate Nature-Based Solutions & 1t.org

The forum also included a video presentation by CIFOR-ICRAF's Roeland Kindt, Muhammad Ahmad and Tor-Gunnar Vagen on the Africa Tree Finder and Regreening Africa, two mobile apps that provide information on the best tree species for different landscape restoration or agroforestry efforts. The apps collect information on how farmers are managing and protecting trees on their farms, helping those involved in landscape restoration make better decisions.

Tree planting is essential to addressing the five challenges of our time: forest degradation, rapid biodiversity loss, accelerating climate catastrophe, broken food systems, as well as increasing inequalities and inequities. As the effects of climate change become ever clearer over time, it is vital to tap nature-based solutions that can reverse the environmental damage caused by human behavior.

Panelists and participants at the digital forum highlighted radical inclusion and knowledge-based land restoration as critical next steps. They also said it was important to mobilize more private capital, secure a better supply of quality seeds and recognize the full value of trees as a social asset. Other suggestions for future action included overcoming the misconceptions of tree planting as a silver bullet for climate change, improving the efficiency through technology and techniques, and including fire prevention and natural regeneration in land restoration efforts.

Planting a tree to save the Earth is a simple step that everyone can take – as long as we think before we plant.

Elizabeth Wanjiru Wathuti
Founder
Green Generation Initiative

“Nature has always been my best teacher. I spend time with her, listening to her, understanding her, and now I feel her pain. That's why I am standing today in the fight against environmental injustices.

Elizabeth Wanjiru Wathuti is a Kenyan environment and climate activist as well as the founder of the Green Generation Initiative, which encourages young people to be environmentally conscious and has now planted 30,000 tree seedlings in Kenya. Planting her first tree at age 7, Elizabeth was inspired by the work of Wangari Maathai and later won a scholarship in honor of the 2004 Nobel Peace Prize winner. Since founding the Green Generation Initiative, Elizabeth and her colleagues have trained more than 20,000 schoolchildren across Kenya, inculcating in them a tree-growing culture. This gives every child the opportunity to plant and adopt a tree in their school compound. The group also addresses the issue of food insecurity by planting mixed fruit trees in schools, which later provide food for the children. The Green Generation Initiative has planted more than 30,000 seedlings in school compounds.

If you release CO2, you increase the temperature of the Earth, and an increase in temperature increases the likeliness of lightning strikes and wildfires. Therefore, if you emit CO2, you are also an arsonist. Let's shame the arsonists.

Tony Simons
Director General, World Agroforestry (ICRAF)
Executive Director, CIFOR-ICRAF

Participants can now look forward to the **GLF Biodiversity Digital Conference: One World - One Health** on 28-29 October 2020.

The digital forum also included the operational launch of CIFOR-ICRAF's 'Resilient Landscapes' initiative to leverage the power of the private sector and to spur private finance investment in nature-based solutions. In a slide presentation given by Howard Shapiro, listeners learned how Resilient Landscapes will draw on CIFOR-ICRAF's.

$1.8 billion invested in scientific research | **700** staff members | in **33** countries

1000 completed projects | in **70** nations

at least **25,000** publications and knowledge products

If there are three things to take away from Resilient Landscapes' amazing project, it is mobilizing capital, value chains and the role of trees.

Howard Shapiro
Distinguished Senior Fellow, Resilient Landscapes
Distinguished Senior Fellow, World Agroforestry (ICRAF)

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CIFOR-ICRAF

Founded in 1993 and 1978 respectively, CIFOR and ICRAF are centers of scientific and development excellence that have united to conduct research-in-development on the most pressing challenges facing the world's landscapes. We are committed to an equitable world of sustainable landscapes that foster human well-being. We strive to use the world's best science to eradicate hunger, reduce poverty, provide affordable and clean energy, protect life on land, and combat climate change.

CGIAR

CIFOR-ICRAF are members of the CGIAR, a global research partnership for a food-secure future, focusing on poverty reduction, increased food and nutritional security, and sustainable natural-resource systems. Our work also strongly addresses the Sustainable Development Goals and the Paris Agreement.