COOL INSIGHTS FOR A HOT WORLD:

TREES AND FORESTS RECYCLE WATER AND MODIFY CLIMATE

Planting trees seems like sensible choice when it comes to mitigating climate change, but crucial aspects of the relationships between trees and climate have so far been overlooked, the new review <u>Trees, forests and water: cool insights for a hot world</u> concludes. The authors suggest that the global conversation on trees, forests and climate needs to be turned on its head: the direct effects of trees on the climate via rainfall and cooling may be more important than the well-studied effects through the global carbon balance. Yet, current climate policy tends to focus on carbon.

Therefore, on the occasion of the International Day of Forests (21 March) and World Water Day (22 March), the CGIAR Research Program on Forests, Trees and Agroforestry is hosting a virtual symposium on the linkages of forests, water and climate.

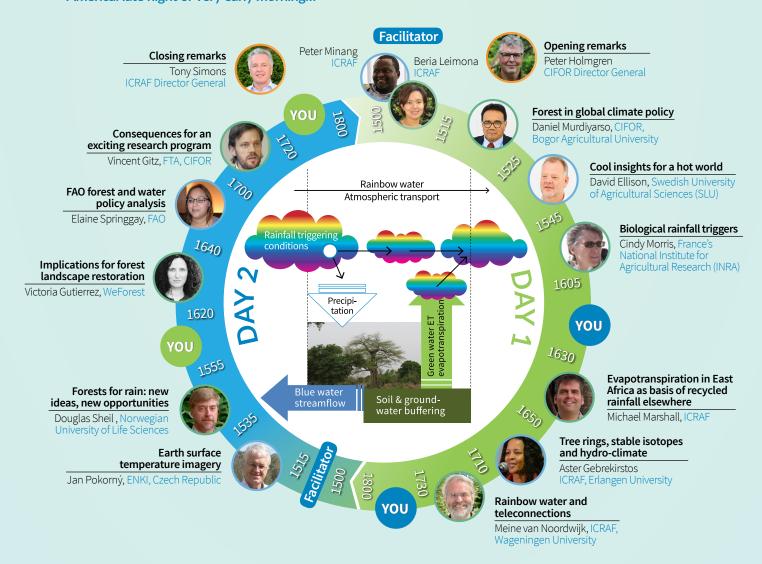
21 March: 8am GMT - 11am GMT* Presentations and initial questions

22 March: 8am GMT - 11am GMT Discussion Forum (e.g. on policy implications)

Note:

* Place where physical meetings are planned to which you are invited

Indonesia: 15:00-18:00 (WIB); Kenya: 11:00-14:00; W Europe: 9:00-12:00; UK: 8:00-11:00; America: late night or very early morning...



or join in the room in Bogor, Nairobi,









http://foreststreesagroforestry.org/coolinsights-for-a-hot-world-virtual-symposium/



In a landmark recent publication, <u>Ellison et al. (2017)</u>* reviewed current understanding of the way trees, forests and climate interact. **Key points for the virtual seminar derive from that review (and underpinning references)**:

- It's a hot world all valid means and pathways are needed to keep climate change in check.
- **Cool insights** three climate scales (micro- (tree), meso-(landscape, forest) & macro-climate) align where we talk of temperature, rainfall, wind speed; stakeholders also synergize/align more easily than in a climate discourse exclusively focused on carbon & other greenhouse gases.
- Forests & trees this is about a continuum, not a forest/nonforest dichotomy; trees in urban and rural settings dominate benefits at microscale, forests in landscapes at meso, and large remaining forests at continental scales.
- **Novelty** 'what everybody knows' now has firm science backing; it's new for existing climate policy and its segregated concepts of mitigation and adaptation; hydroclimate is new as focus; trees and hydroclimate aspects of 'climate smart agriculture' remain obscured in the existing mitigation/adaptation language.
- **Complexity** the multiple scales and multiple feedbacks involved in the full hydrological cycle (interacting oceans, land masses, vegetation, atmosphere) are at the current cutting edge of planetary climate science.
- **Simplicity** the basic idea that 'trees are cool' is easy to grasp, and a pretty safe basis for action within an overarching Sustainable Development Goals framework, with goals on water, climate and human wellbeing; Regional/continental cooperation on 'ecological rainfall infrastructure' doesn't have to wait for international (UNFCCC) agreements and modalities.
- **Urgency** with the carbon-based forest conservation mechanisms not delivering on the REDD+ promise (for various reasons), the direct and multiple hydroclimatic befits of forests and trees can give fresh impetus to managing global land cover and avoid existing bottlenecks.

This symposium is organized as part of the CGIAR Research Program on Forests, Trees and Agroforestry (FTA). This collaborative program aims to enhance the management and use of forests, agroforestry and tree genetic resources across the landscape from forests to farms. CIFOR leads FTA in partnership with Bioversity International, CATIE, CIRAD, INBAR, Tropenbos International and the World Agroforestry Centre.

We would like to thank all funding partners who support this symposium through their contributions to the CGIAR Fund. For a full list of CGIAR Fund Donors please see: http://www.cgiar.org/about-us/our-funders/

^{*} Ellison D, Morris CE, Locatelli B, Sheil D, Cohen J, Murdiyarso D, Gutierrez V, van Noordwijk M, Creed IF, Pokorny J, Gaveau D, Spracklen D, Tobella AB, Ilstedt U, Teuling R, Gebrehiwot SG, Sands DC, Muys B, Verbist B, Springgay E, Sugandi Y, Sullivan CA. 2017. Trees, forests and water: cool insights for a hot world. Global Environmental Change 43:51–61. http://www.sciencedirect.com/science/article/pii/S0959378017300134