

Sender
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Student Questions to Prof. Dr. Thomas Crowther regarding the meeting on 12. November 2020

In Context of Data Visualisation:

Is there additional data you could provide to us?
Or are there platforms you can recommend to us?

To what extent does it make sense to include the context of global warming, such as the principles for Nature-Based Solutions in our visualisation?

Do you think it is possible to encourage people to be less ignorant towards global warming via data visualization?
What could be an important visual point?

Message related:

What is often misunderstood in your studies?

Where do you think lays the challenge in communicating the right message regarding your studies?

What informations do you think is vital to bring across?

Where are exciting overlap of information?

Where is there potential to make interesting comparisons and point out trends?

How do you think the positive impact of restoration can be conveyed or visualized to the society without losing the urgency of other climate change solutions still being pursued and financed?

How far do you think the role of the media is important in communicating the news to society? Do you have positive or negative past experiences?

Who should be addressed by this project in particular (governments, private organizations, ...)?

How would you explain the whole topic to a five years old, without missing any facts and with having a good influence on the child?

Taking into consideration your new study on carbon stored in soil, how will this new information come together with the tree restoration projects on where resources are best allocated for maximum reach and impact? What do you think are the biggest flaws and miscommunication that could happen when conveying that information to the public?

I recently saw a short reportage about big brands using the "planting tree" movement more for marketing aspects instead of real interest. I mean, there are so many brands out there, but they all working only with few organizations.

Which organization is trustworthy and does this help?

How can I separate the good from the bad ones?

Don't you think this distracts from the real issue?

Is this idea only meant for monocultures or would this work for bio-cultures as well?

Crowther Lab Study related:

Has this project already influenced the implementation of tree restoration projects?

How do you, your team or your partners deal with the problem that certain areas which currently are suitable for a certain biological diversity of trees and plants, will probably in the future, due to the not immediately slowable process of climate change, no longer offers the optimal climatic conditions for the already planted organisms.

«One aspect was of particular importance to us as we did the calculations: we excluded cities or agricultural areas from the total restoration potential as these areas are needed for human life.» (from Jean- François Bastin, Crowther Lab).

Why is the the scope of this study to identify where forests would naturally exist if humans let these areas regrow?

How would you connect this with the term Anthropocene?

Commercial and residential development is booming more than ever. Swaths of trees, huge forested areas are being cut down to make more room to build. In many cases, developers don't bother to leave the trees standing between the houses. Which leads to an increasing loss of trees. It is nearly impossible to argue against the benefits of tree-planting. I'm wondering how that fits with your study, the map you've created, and the proper placement of trees insofar as climate change is concerned?

In the TED talk video, you mentioned RESTOR is going to be able to tell users which species of plant could exist in their garden and how much soil carbon they could accumulate.

If there is not much space left for trees in your garden, would smaller plants also help?

And will there be any informations on RESTOR tackling the placement of barriers for combatting wildfires?

Where do you get the money for your research and the lab. And what are the interests of the donors?

What do you have to do to ensure that you continue to receive money?

Who collects the data and is authorized to upload it?

How is the data collected around the whole globe without getting deviations in the measured values? (What factors make the data trustable?)

Climate change in general:

Is it too late to prevent climate change?

If money cannot provide an incentive for the big nations regarding climate change, what else can do it?

What can someone like us do to rebuild biodiversity other than planting trees?

What do you see as the biggest obstacle, apart from the establishment of global awareness, that stands in the way of acting as fast as possible, which your data clearly indicates is necessary?

Scientific related:

When cutting down a tree, is the stored CO₂ in the ground released again?

What happens when burning it? Is there more, equal or less CO₂ emitted?

At what stage is the tree effective enough to produce fresh oxygen and help reduce CO₂?

How much radiative forcing (W/m²) is in your opinion realistic till the year 2100?

Which carbon capture and storage(ccs)-technology do you think is the most efficient?

How is the difference in climate (composite climatic metric) calculated between a current and future city?

Personal:

What led to your decision to focus on the biodiversity / forest restoration movement?

What do you think could be the reason why many people do not take global warming seriously?

What is your greatest fear regarding climate change?

In addition to reforestation and the use of renewable energies, what approaches do you see as promising?

Costa Rica has managed to reforest 50% of its forests in 25 years by offering financial incentives to landowners. Do you think this principle could be applied globally?

Do you think that farmers would be willing to exchange part of their farmland for new technologies (Precision Farming) to make room for more trees?

How do you feel about huge Google server farms which consume large amounts of resources (green energy of a country and clean water) without being really transparent about it? Is this a sacrifice that must be made for a better future?

What does living in the Anthropocene mean to you?

Since the industrialization of the 18th century, mankind has experienced big geological changes. So far there is no interest to reduce production, how do you envision your theory with the growing production until 2050?