Nature's contributions to people through reforestation in the tropics: Whose benefits? Whose burdens?

Presenter: Sarah Jane Wilson; PARTNERS restoration network, University of Connecticut  
Presenter Email: sjwil@umich.edu  
Authors: Sarah Jane Wilson, PARTNERS postdoctoral researcher Robin Chazdon, PARTNERS PI and Forestation Founder

Restoring trees and forests through different approaches can contribute to human wellbeing in many ways, but these are co-produced, utilized, valued, accessed, appropriated, and commercialized differently by various stakeholders, with consequences for who benefits – and who does not.

Our goal is to understand how different reforestation approaches benefit or do not benefit different stakeholders in different contexts, and the evidence base (or lack thereof) for this. Here we 1) comprehensively review the scientific evidence regarding the outcomes of different reforestation approaches for the co-production of Nature’s Contributions to People (NCP), and 2) assess current knowledge on how these outcomes lead to benefits or burdens for different groups of stakeholders.

We apply three levels of disaggregation in our novel approach: 1) we separate outcomes of different reforestation interventions, 2) categories of forest-related contributions to people, and 3) stakeholder groups. This approach acknowledges the important tradeoffs among forest types, supply rates of different types of forest functions and products, and the often conflicting needs and priorities of different stakeholders and forest user groups. Tradeoffs in ecosystem services have been examined in many ecosystem types, but not with respect to forest restoration approaches in tropical forest regions, nor with respect to benefits or co-production across different stakeholder groups.

Preliminary findings on NCEPs produced show that significant gaps are present in the literature comparing two or more forest types over a single service, while suits of services are almost never compared between two or more secondary forest types. Specific findings will be elaborated on in the talk, and an illustrative example will be presented from Brazil, but from the studies that do exist it is clear that benefits produced are context-dependent, with different types of forests preforming ‘better’ in different social and ecological contexts. This needs to be explicitly recognized when setting goals for restoration in different contexts.