

## Linking Science, Technology, Policy, and Best Practice



Pedro H. S. Brancalion

There is unprecedented awareness and financial mobilization internationally to restore degraded forests and other ecosystems at large spatial scales. This brings into focus the need to better integrate the different components of restoration activities – science, technology, policy, and best practice – to make the promise of large-scale restoration come true. Each component alone has a limited potential to leverage large-scale restoration unless associated to these other components. Yet linking science, technology, policy, and best practice in a durable fashion will require restoration advocates to leave their “silos” and interact with other groups, in the search of synergies and a common ground. Not only technological, but also institutional and interdisciplinary innovation will play a major role in this context. In this talk, I will use the case study of the Atlantic Forest Restoration Pact in Brazil to describe examples on how innovation and collaboration among different stakeholders groups may contribute to remove barriers for effective large-scale restoration. As an example of institutional innovation, I will describe the organization of a coalition of restoration stakeholders involving private companies, research institutions, governments and NGOs to work collectively to overcome major barriers for restoration. As a case of innovation linking all components of restoration, I will describe the development of a monitoring system, based on research about restoration trajectories in the Atlantic Forest, on a smartphone app to collect data in the field, on a data-management system to support decision-making, and on legal instruments that establish standards of restoration quality to be achieved in mandatory restoration programs. These examples will be used as a platform to discuss the need for integration and innovation to support restoration in the coming decades, and to better contextualize research in order to better match the knowledge gaps of large-scale programs.