Investing in resilience: how co-learning with local people leads to more diverse and inclusive agroforestry options

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Figure 1. The co-learning framework that integrates local and global scientific knowledge through a multistakeholder engagement process to design, evaluate and improve context-sensitive agroforestry options and transformative strategies for scaling agroforestry

Background

There is a lot of interest in the contribution that agroforestry can make to reverse land degradation and create resilient multifunctional landscapes that provide a range of socio-economic benefits.

But so far, approaches that promote a few priority tree species, within a restricted set of technological packages have dominated research and practice with limited spread beyond project sites.

Reflections on the agenda for scaling up agroforestry suggest that there is no ‘one-size-fits-all’ technology that can be promoted across large areas; instead menus of options have to be tailored to fit variation in local contexts (Coe et al. 2014).

There are critical knowledge gaps in our scientific understanding of how a diversity of native and exotic trees under given management practices can be enhanced to deliver a range of benefits and services (Ordonez et al. 2014).

Farmers’ knowledge about agroecological interactions is rich and complementary to science; it can be articulated both qualitatively and quantitatively (Sinclair & Joshi 2000).

New methods are needed to generate diverse sets of agroforestry options that could reconcile production and conservation objectives, and embrace varying local conditions across large scale domains (Smith Dumont et al., 2017).

Structured stakeholder engagement

An innovative stakeholder engagement approach was used in eastern DRC — it built on explicit acquisition of local knowledge to facilitate a systematic consideration of trees at field, farm and landscape scales (Smith Dumont et al. 2017).

Enabling the consideration of different options, in terms of practices/technologies but also market interventions and institutional reform against the contexts for which they were relevant (covering ecological, economic, social and cultural factors).

Led to a change in the attitudes and knowledge around tree planting by stakeholders, with an important shift away from the promotion of a handful of exotic tree species in woodlots, largely benefiting wealthier men, to recommendations for over 70 tree species, 30 of them native, with management practices that addressed the needs of women, various ethnic groups and different types of farmers.

Co-learning framework for scaling

This aims to implement more inclusive, locally-adapted and diversified tree-based options that deliver both environmental and socio-economic benefits to a wide range of stakeholders.

Integrating local and scientific knowledge through the facilitation of broad-based stakeholder participation helps identify agroforestry options for different people, and contexts and any preconditions for their uptake.

An essential part of the process is to evaluate and refine these options by measuring their performance in terms of their impact on all relevant ecosystem services across the range of contexts for which they are intended (Coe et al., 2014).

Next steps are to investigate the extent to which, by being sensitive to the needs and context of different smallholder groups, a co-learning framework leads to more effective scaling up of agroforestry than conventional approaches to tree promotion and its cost-effectiveness.

Reference


Ordonez, J. C., Luedeling, E., Kindt, R., Tala, H. L., Harja, D., Jamnadass, R., & van Noordwijk, M. (2014). Constraints and opportunities for tree diversity management along the forest transition curve to achieve multifunctional agriculture. Current Opinion in Environmental Sustainability 6: 54-60
