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for managing natural resources and a better life for all”

Co-creation of agroecological practices combinations in agroecology living labs

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Abstract

Agroecology offers pathways to increase productivity and build resilience to socio-ecological, economic, and climate shocks by delivering holistic solutions to complex challenges in agriculture and food systems. However, we lack co-designed, co-tested, and context-specific agroecological practices (AEP) to guide a transition. In response to this, the CANALLS project is set to drive agroecological transitions in the humid tropics of Central and Eastern Africa via multi-actor transdisciplinary Agroecology Living Labs (ALLs). Central to the ALLs is co-creation through the active engagement of diverse stakeholders, including farmers, experts, governmental agencies, NGOs, the private sector, and civil society. In CANALLS, co-creation focuses on co-designing combinations of AEPs to address the key challenges encountered by farmers and other stakeholders along the value chain.

Our co-creation framework follows a structured 4-step cycle: 1) identification and comprehension of challenges; 2) mapping, prototyping, and prioritising AEPs; 3) evaluation of AEP combinations in real-life settings; and 4) assessment of outcomes and formulation of scaling strategies and/ or plans for subsequent co-creation. Co-creation activities commenced with two workshops in 6 ALLs, resulting in the identification of key challenges and the prioritisation of 2–4 AEPs per ALL. The AEPs included biopesticide measures, alternative sources to soil fertility improvements, erosion control techniques, and improved shade management in agroforestry systems. Once the AEPs were co-mapped, project partners, together with ALLs stakeholders, conducted field visits to prototype farmer-led experiments on cocoa systems in Cameroon, cassava in Rwanda, maize-legume intercropping in Burundi, and coffee and rice fields in the Democratic Republic of Congo.

Key lessons learned in the co-creation process and establishment of ALLs are: 1) stakeholders showed high interest in agroecology and commitment to participate actively in the project; 2) the bottom-up approach in co-creation brought new ideas and concepts while co-defining the key challenges in agroecology; and 3) each ALL is unique and therefore the design, implementation, and evaluation of AEPs must be adapted to the local context.

Keywords: Agroecological practices, agroecology living labs, Central and Eastern Africa, co-creation