

Tropentag, September 20-22, 2023, hybrid conference

"Competing pathways for equitable food systems transformation: Trade-offs and synergies"

Collaborative learning to encourage adoption of agroecology: A participatory video-based farmer-to-farmer learning process in Cambodia

Lilian Beck $^{1,2},$ Claudia Bieling 1, Delia Catacutan 2, Anna Hofny-Collins 3, Sabine Douxchamps 4

Abstract

Despite many claims of agroecological small-scale farming systems being a future path to improve farmers' livelihoods and secure a sustainable food supply, farmers are only sometimes willing to apply these practices even though they have learned about them. While many studies investigate socio-economic barriers to adoption, only very few investigate socio-cultural barriers and those imposed by the mode of facilitating learning. This highlights the need to evaluate how extension services are typically organised and develop alternative learning approaches considering the socio-cultural context. Therefore, discouraging reasons for applying agroecological practices with a focus on agroforestry among farmers were investigated through an action research process in the North of Cambodia and in-depth interviews with small-scale farmers. By introducing an empowerment process in which comprehension is gained while respecting farmers' perceptions, this study shed light on the divergent world views and negotiation processes farmers consider when making management decisions as well as the barriers imposed by the way farmers' learning is facilitated. This study identified and contributed to three separate but related thematic fields. First, it explored the negotiation processes between different cosmological concepts when farmers decide to apply agroecological practices. Second, it investigated the evaluation by farmers regarding socio-economic, ecological, and technical feasibility and desirability of the technology. Thirdly, it studies the influence of the relationship between farmers and local extension actors in the context of co-creation of knowledge about agroecological methods. It explains thereby how these aspects are influenced by the mode in which learning is facilitated. Based on these insights, an alternative extension approach has been developed, facilitated, and evaluated to overcome the identified barriers to facilitating successful learning among farmers. The proposed alternative is a collaborative learning approach combining farmer-to-farmer teaching and participatory videography.

Keywords: Action research, adoption barriers, agricultural extension, agroecology, Cambodia, collaborative learning, farmer adoption, farmer-to-farmer, innovations, participatory video, transdisciplinary research

¹ University of Hohenheim, Societal Transition and Agriculture, Germany

² World Agroforestry Center, Cambodia

³Swedish University of Agricultural Sciences, Sweden

⁴International Center for Tropical Agriculture (CIAT), Trop. Forages Program, Vietnam