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## How to increase the benefits of soil carbon projects for smallholder farmers? A case study from Kenya

FIONA HASENBACH, ATHENA BIRKENBERG, CHRISTINE BOSCH, MANUEL DÍAZ, REGINA BIRNER

University of Hohenheim, Inst. of Agric. Sci. in the Tropics (Hans-Ruthenberg-Institute), Germany

## Abstract

Future and current agricultural activities rely heavily on the fertility of soils. Implementing Sustainable Agricultural Land Management (SALM) practices as promoted in soil carbon sequestration projects target the increase of soil organic carbon (SOC) stocks in agricultural soils. Due to the wide-ranging positive effects of increasing carbon contents in soils, soil carbon sequestration projects have been the focus of development initiatives in the recent decade to supply carbon credits. Such projects have complex organisational structures, long durations (20 years) and multiple actors involved, ranging from farmers to project implementers and carbon buyers. Smallholder farmers who implement SALM practices for the issuance of carbon certificates make up the majority of project participants. However, they are largely underrepresented in project design, monitoring and evaluation, and benefits for smallholder farmers are rather limited and active participation is low. The long-term motivation and involvement of smallholder farmers implementing SALM practices which are crucial for the legitimacy of the carbon credits issued, has received minimal attention in research. This study investigates the potential of farmer participation in data collection for monitoring of soil carbon projects and how the related benefits can be increased for participating smallholder farmers. The case study employs the process net-map method, qualitative interviews, focus group discussions, and the cellphilm and photovoice technique, to get deeper insights into an ongoing soil carbon project, the Western Kenya Carbon Project. Two strategies for increasing benefits have been identified: a) Participatory monitoring involving farmers in data collection and monitoring for soil carbon projects. This ensures the required data collection for monitoring purposes and may contribute to a deeper understanding and ownership of the carbon project by participating farmers. b) Sharing collected data with farmers to provide feedback on their farming performance. This can be achieved by project implementers using the data as a basis for tailor-made capacity building and customized extension and advisory services. The results could help policymakers, donors and project implementers to design more inclusive monitoring systems for soil carbon projects.

Keywords: Capacity building, development projects, participatory monitoring, soil carbon project

**Contact Address:** Fiona Hasenbach, University of Hohenheim, Social and Institutional Change in Agricultural Development (490c), Wollgrasweg 43, 70599 Stuttgart, Germany, e-mail: fiona.hasenbach@uni-hohenheim.de