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

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by

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Abstract

Smallholder participation in soil carbon projects offers a wide array of ecological, economic, and social benefits. 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. These practices serve to improve soil quality and increase soil fertility, which are crucial for sustaining agricultural productivity and ensuring food security. The promotion of SALM practices primarily relies on the provision of public and private agricultural extension services. Although, agricultural and extension services carry out pivotal tasks, there remains a notable scarcity of accessible and effective extension and advisory services in countries whose economies rely largely on the agricultural sector. The examined Western Kenya Soil Carbon Project promotes the provision of agricultural extension and advisory services as main incentive for participation. Such projects have complex organisational structures, decades long durations, and multiple actors involved. Most project participants are smallholder farmers who implement SALM practices which are integral for the validity of carbon credits issued. Nevertheless, the understanding of non-monetary benefits that accrue to smallholder farmers, and consequently the motivation underlying their participation in carbon credit schemes, has been relatively understudied in research.

This study investigates how benefits can be enhanced for smallholder farmers in a carbon project in Western Kenya contributing to a better understanding of the participation and incentives of smallholders within such schemes. The case study employs the Net-Map method, qualitative interviews, and PRA tools including the Cellphilm and Photovoice technique, and focus group discussions. The findings reveal that the implementing partners carry out crucial tasks in the project including the training and visits of smallholder farmers on the SALM practices. Therefore, sufficient resources must be secured for them and their position must be strengthened. Furthermore, the participating farmers demand more trainings and physical visits by extension service providers, as irregular follow-ups and limited access to information have been identified as factors leading to the discontinuation of SALM practices.

The study identifies two strategies for increasing benefits for farmers: a) the implementation of participatory monitoring methods to actively involve farmers in the data collection process and monitoring activities for soil carbon projects. This approach ensures the collection of necessary data and fosters a deeper understanding and ownership of the carbon project among participating farmers. b) Sharing the collected data to farmers for customised feedback on their farming performance. This can be achieved by project implementers utilising the data to tailor capacity building and provide customised extension and advisory services. This, in turn, may increase farmers' motivation to consistently engage in the project and implement the SALM practices. The outcomes of this study could guide policymakers, stakeholders in carbon markets, and project implementers in designing more inclusive monitoring systems for soil carbon projects while ensuring sustained farmer participation.