

Capturing the carbon sequestration value of coffee agroforestry systems in Uganda (Junior Fellowship: Dr. Susan Tumwebaze)

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Climate change (CC) is one of the greatest global environmental and economic challenges. The impacts of CC are predicted to be more harmful in developing countries than others. Coffee farmers in Uganda are likely to experience effects of CC through reduced yields. However, they can play a vital role in mitigating CC if trees are integrated in their farms. Coffee agroforestry systems (CAS) can contribute to carbon sequestration; nonetheless, there is inadequate information to confirm their potential in this function in Uganda. This study aims at assessing and valuing the carbon sequestration potential of CAS and provides recommendations for improving institutional ability of local communities to benefit from carbon trading. The study will be conducted in four regions in Uganda. Shade tree biomass will be determined using existing models while destructive sampling will be used to obtain above and below ground biomass of coffee shrubs and converted into carbon. The expected outputs include: amount and economic value of carbon sequestered by CAS; biomass models for shade trees, Arabica and Robusta coffee; and a procedure for aggregating carbon from different farms.

Projektbeteiligte

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