



Tropentag, September 18-20, 2019, Kassel

“Filling gaps and removing traps
for sustainable resource management”

Determinants of Forest Dependent Households’ Participation in PES Schemes in Kenya

ESTHER WARUINGI¹, ROBERT MBECHÉ¹, JOSIAH ATEKA¹, ANJA FASSE², ULRIKE GROTE³

¹*Jomo Kenyatta University of Agriculture and Technology, Dept. of Agricultural and Resource Economics, Kenya*

²*Hochschule Weihenstephan-Triesdorf University of Applied Sciences, Germany*

³*Leibniz Universität Hannover, Institute for Environmental Economics and World Trade, Germany*

Abstract

In the face of increasing deforestation and forest degradation, Payment for Ecosystem Services (PES) schemes which pay land owners in cash or in kind – have been promoted as one of the mechanisms for enhancing forest conservation and livelihoods. The success or otherwise of these programmes is dependent in part on participation of forest dependent communities. This paper uses data from Plantation Establishment Livelihood Incentive Scheme (PELIS), a PES project under implementation in Mt Elgon, Kenya to examine factors that influence households’ participation. Descriptive statistics defined participants while Tobit model estimated determinants of extent of participation in PELIS. The extent of participation was measured using the share of PELIS income out of total agricultural income. The results show that 52 % of the households participated in the programme. Of these, 90 % were male headed, had large household sizes, owned small land sizes, had lower asset value and low incomes illustrating a fair level of participation among the poor. Econometric results indicate that age ($p = 0.041$), attainment of tertiary education ($p = 0.074$) and livestock ownership ($p = 0.000$) negatively influence intensity of participation while household size ($p = 0.033$), membership to FUG ($p = 0.000$), membership to native community ($p = 0.026$) and distance to tarmac road ($p = 0.022$) positively influence intensity of participation. The results suggest a need for increased attention on institutional arrangements such as accountability in social groups and reduction of transaction costs to promote participation. Thus, policies and interventions to improve institutional arrangements are vital for attainment of greater participation by forest dependent households.

Keywords: Forest dependent people, Kenya, payment for ecosystem services, PELIS, Tobit model