

## ABSTRACT

Natural resources have continued to be degraded largely because of lack of well-defined property rights, population pressure, high levels of poverty and the lack of proper understanding of deleterious impacts of human activities on forest and watershed resources depletion. The social cost of exploiting the resources is larger than the private benefits and individuals have incentives to excessively extract natural resources at an expense of conservation. This study considers the socio-economic aspect, farm size and activities, water availability, the distance of the agricultural activities to the edge of the forest and riverbank and agricultural management practices employed by the population in Mt. Elgon District of Western Kenya. A proxy price was obtained using hypothetical structured question on willingness to pay and willingness to accept. The sample of 236 households was used to obtain data. Field surveys, structured questionnaires, interviews with key informants, and review of secondary sources were the main tools used for data collection. Statistical package for social science (SPSS) and Excel was the main software for data analysis. The results reveal average household of 8 persons, with most households living below poverty threshold (one dollar per person per day) and on average farm size holdings of 3.105 acres per household. The results also show that most farms are within the edge of the forest and riverbank at a distance ranging about 8 km and 1 km, respectively. More than 50% of the sample population do not practice water and soil management, resulting in reduced physical properties of the water such as volume of water, turbidity, taste and smell to undesired state. The contingent value of ecosystem pricing from willingness to pay (WTP) and willingness to accept (WTA) exercise yield mean prices of the responses Ksh. 728.82 and Ksh. 6,631.44, respectively. In conclusion, the household activities of the community in Mt Elgon landscape encourage resource depletion. Therefore, adoption of sustainable agriculture and ecosystem management that consider conservation of natural resource in order to have desired qualities of the ecosystem products and to reduce the costs to the population living downstream and around are recommended. There is need to educate the local population living around the forest and watershed areas to practice sound farming practices.