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## SOCIO-ECONOMIC VALUATION OF INFORMATION FOR CLIMATE CHANGE ADAPTATION AND MITIGATION: A CASE OF FARMERS' RESPONSES IN KAKAMEGA COUNTY

## JUMA SHEM G 1, MUTAI BETHWEL K2, NGAINA JOSHUA3

<sup>1</sup>Dissertation Scholar, Department of Meteorology, University of Nairobi, Kenya

<sup>2</sup> Graduate Assistant, Department of Meteorology, University of Nairobi, Kenya

<sup>3</sup>Part Time Lecturer, Department of Meteorology, University of Nairobi, Kenya

## **ABSTRACT**

This study investigates the socio-economic value that farmers in Kakamega County place on information on climate change adaptation and mitigation.

The Data used in this study consisted of household data, observed rainfall and temperature data from Kakamega Synoptic Station and PRECIS Model output for rainfall and temperature spanning 2050 over the area of study.

Trend analysis for observed and PRECIS RCM simulated Rainfall and temperature data was done. Methods used in the analysis of cross-sectional data included Descriptive statistical analysis, The OLS, Logit, Probit and Tobit Analysis.

The results show that Rainfall is on a decreasing trend under A1b scenario while temperature is on an increasing trend over the region of study both in the recent past and near future. Results from the OLS/Logit/Probit/Tobit for willingness to pay reveal that for an increase in education period (educ), there is a significant point increase in the predicted value of willingness to pay (WTP) while for a unit increase in income (inc) there is a significant point increase in the predicted value of WTP. The results for age show that there is a reduction in the predicted value of WTP for a unit increase in age of the farmers.

KEYWORDS: Climate Change Adaptation, Climate Change Mitigation, OLS/Logit/Tobit, Willingness to Pay