

## ABSTRACT

---

Besides climate-smart agriculture's (CSA) potential to meet the world's increasing food demands in the face of climate variability through sustainably increasing food production, its acceptance among farmers is still low. This could be partly because of limited insight into the contextual underpinnings of its uptake. Therefore, the purpose of this study was to establish the relationship between selected socioeconomic factors and the adoption of CSA in Gilgil Sub-County. This study's results were attained from a binary logistic regression model, using a sample of 120 smallholder potato farmers in two wards of Gilgil Sub-County of Nakuru County, Kenya. An analysis of the five hypothesized explanatory socioeconomic variables contained in the model disclosed that a relationship between socioeconomic factors and adoption of CSAPs was statistically significant at a 5% level of significance ( $\chi^2 = 17.966$ ,  $df = 5$ ,  $p < 0.05$ ). It further revealed that only two variables had a significant relationship with the adoption of CSAPs. Among these, included gender which was negative and statistically significant at a 5% level of significance (Wald  $\chi^2 = 6.701$ ,  $df = 1$ ,  $p < 0.05$ ) and annual farm income, which was positive and statistically significant at a 5% level of significance (Wald  $\chi^2 = 8.402$ ,  $df = 1$ ,  $p < 0.05$ ). Therefore, securing access to vital resources for women farmers is indispensable to enhance their capacity and compliance to adjust production methods in response to climate change. Facilitating increased farm output and income among the farmers is greatly recommended.