

This paper estimates price and fuel expenditure elasticities of demand by applying the linear Approximate Almost Ideal Demand system (LA-AIDS) to 3665 households sampled across Kenya in 2009. The results indicate that motor spirit premium (MSP), automotive gas oil (AGO) and lubricants are price elastic while fuel wood, kerosene, charcoal, liquefied petroleum gas (LPG) and electricity are price inelastic. Kerosene is income elastic while fuel wood, Charcoal, LPG, electricity, MSP and AGO are income inelastic. The results also reveal fuel stack behaviour, that is, multiple fuel use among the households. Main policy implications of the results include increasing the penetration of alternative fuels as well as provision of more fiscal incentives to increase usage of cleaner fuels. This notwithstanding however, the household income should be increased beyond a certain point for the household to completely shift and use a new fuel.