

Policy implications to the socio-economic analysis of adoption determinants of new agricultural technologies in Kenya: the case of south western Kenya region

Effective agricultural development requires equal contributions from research, extension, and the farmer. A growing concern among agricultural development researchers is that the farmer has often been sidelined with many development strategies considering the farmer as more of a recipient than a contributor in the technology adoption process. The overall objective of the study was to classify smallholders in South Western Kenya using the farming systems approach and then analyse factors influencing adoption of new agricultural technologies in order to determine simultaneity of technology adoption among smallholders in South Western Kenya. In all cases, a sequential random sampling was used to select potential respondents of 90 farmers in each of the designated regions for a total of 270 respondents. Contingency tables and odd ratios of technology adoption in South Western Kenya were calculated. The results of the study showed that the least adopted technology regionally was Artificial Insemination (AI) and grade livestock breeds. The following relationships within the equations were statistically significant: income of previous year; financial remittance in the current year; and regional disparity. An important finding of the study was that deciding to adopt hybrid maize; pesticides, and fertilisers simultaneously implied that farmers in the study area respond to extension services available in the region. This indicated that smallholder farmers in the study area were open-minded and would be influenced to adopt various technologies at the same time provided positive attributes can be gleaned.