# Current Choices and Future Needs: Farmers Responding to Pressures of Climate Change in Kenya

Kinfe Asayehegn a,b,c, Ludovic Temple b, Berta Sanchez c, Ana Iglesias c, \*

aSupAgro Montpellier, 2 Place Pierre Viala, 34060 Montpellier Cedex 1, France

bCirad, UMR Innovation, 73 Avenue Jean-François Breton, 34398 Montpellier, France

c Department of Agricultural Economics and Social Sciences, Universidad Politecnica de Madrid, Avenida de la Complutense SN, 28040 Madrid, Spain

One of the most widespread anthropogenic challenges affecting smallholder agricultural development in developing countriesis climate change and variabilities. Realistic assumptions about people’s behaviour towards climate change are essential to develop adaptation policy. This paper, therefore, evaluates the response of farmers to current environmental and social changes and their perception of climatic variability, to define adaptation strategies to climate change. The methodology is applied to a real case (i.e. coffee and food crop farmers in Kenya) where respondents are directly affected by the recent changes in the economy and the climate and these changes have affected positively or negatively their wellbeing. Farmer's behaviour is primarily due to lack of resources to adapt to changes in the market and climatic pressures. However, farmers that are aware of changes in climate are more willing to explore adaptation strategies. The analysis is based on extensive farmers' consultation during 2014, and uses a multinomial Logit model to evaluate the relative importance of the direct and indirect explanatory factors as well as examine the main factors influencing farmers to choose for climate change adaptation strategies. We found that choice of adaptation strategies to climate change are influenced by a number of direct and indirect explanatory variables. The results of this research are a valuable contribution to climate change policy in Africa since knowing how a local issue is incorporated in current farmers’ decisions could help to inform the next steps of public action and deliberation on climate change policies. Among others, local policy actors and academia will be benefited from this research.

Current choices, climate change perception, climate pressure, Kenya