MOBILE PHONE AND RURAL LIVELIHOODS: CONTEXT, LEVEL, DIMENSION OF USE AND CHALLENGES AMONG SMALLHOLDER FARMERS IN MACHAKOS COUNTY, KENYA

BY ISAAC MUTWIRI MUTUNGA

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN COMMUNICATION AND INFORMATION STUDIES

SCHOOL OF JOURNALISM AND MEDIA STUDIES

UNIVERSITY OF NAIROBI, NAIROBI, KENYA

NOVEMBER 2013
phone and rural livelihoods; context, level, dimension of farmers in Machakos County, Kenya. It addressed the following concerns: 1) the effects of mobile phone communication on smallholder farmers' livelihoods, 2) the challenges of using mobile phone to provide agricultural and rural development information, 3) how the context of mobile phone use affect smallholder farmers' livelihood outcomes and 4) how the level and dimension of mobile phone use affect smallholder farmers' livelihood outcomes.

A sequential exploratory mixed method design was adopted, with 422 respondents and 36 key informants being interviewed and semi-structured participant observation conducted throughout the duration of the study. The qualitative data was cleaned and coded and presented using descriptive statistics and thematic narratives and the findings were used to develop the survey questionnaire. Questionnaires were cleaned, edited and coded before being analyzed using the Statistical Package for Social Science (SPSS) and presented using descriptive statistics. Both qualitative and quantitative findings were integrated at the discussion and interpretation stage.

We found that the effect of mobile phones on smallholder farmers' livelihood was not equal and uniform and depended on its context, level and dimension of use. The study revealed that mobile phone improved market-oriented farmers' livelihood by increasing their income or reducing losses but did not directly affect smallholder farmers' livelihood but helped them to get off-farm part-time or permanent jobs: Only 1.4% of the respondents indicated higher-level of mobile phone usage such as mobile based information services and passive and inter-passive media consumption.

This study concludes that mobile phones are valued because they keep farmers connected to their friends and relatives and not necessarily used to access and share agricultural and rural livelihood information. The social livelihood asset afforded by mobile phones helps smallholder farmers in times of emergencies. Mobile phones' potential to improve the livelihoods of smallholder farmers is not optimized due to lack of awareness and training, subsistence farming system, inadequate infrastructure and weak M4D institutional policies and regulations.

The study recommends that; subsistence farmers be empowered to transit to market-oriented farming, government and nongovernment organization subsidize or provide toll-free alert and updates, stakeholders to create awareness and train smallholder farmers on how to use mobile phones to improve their livelihoods and governmental and non-governmental institutions to create polices and regulations that would enable mainstreaming and integrating mobile phone communication into core agricultural and rural livelihood activities.

This study contributed to academia and practice by developing a conceptual framework, formulated testable hypotheses and filled the gap in the field of mobile phone and agricultural and rural livelihood studies in Kenya by providing evidence on the context, level and dimension of mobile phone use by smallholder farmers.