FACTORS INFLUENCING MULTI-STAKEHOLDER LINKAGES FOR INNOVATIVE AGRICULTURAL DEVELOPMENT IN THE GADAM SORGHUM GROWING SEMI-ARID AREAS OF KITUI, MACHAKOS AND MAKUENI COUNTIES, KENYA

JUSTUS MUTETI KAVOI

A Thesis Submitted to the Board of Post Graduate Studies in Partial Fulfilment of the Requirements for the Award of the Degree of Doctor of Philosophy in Agricultural Extension of Egerton University

EGERTON UNIVERSITY

NOVEMBER, 2014
DECLARATION AND RECOMMENDATION

Declaration
I declare that this Thesis is my original work and has not been published or submitted to this or any University for the award of a degree.

Signature ______________________________ Date ______________________
Justus Muteti Kavoï
Reg. No. ED12/0324/11

Recommendation
This thesis has been submitted with our approval as University supervisors.

Signed _________________________________ Date ______________________
Prof. John Gowland Mwangi
Professor of Agricultural Education and Extension
Department of Agricultural Education and Extension, Egerton University

Signed _________________________________ Date ______________________
Dr. Geoffrey Mbuthia Kamau
Principal Research Officer
Adaptive Research Programme, Kenya Agricultural Research Institute, Nairobi
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DEDICATION

To my beloved wife Jane Ndumi, my children Emmanuel Ngumbau, Magdalene Mutanu and Vatillas Mbuvi, my mother Monica Nthengo for their support, understanding and encouragement in the entire period of my study and to my late father Gideon Kavoi who never lived to see me graduate.
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ABSTRACT

Smallholder farmers in Kenya’s semi-arid areas of Kitui, Machakos and Makueni Counties experience food insecurity due to challenges of low, erratic and poorly distributed rainfall and poor infrastructure. To address these challenges, leaders in the region have seen the need to involve local actors in sustainable development activities. Poor performance of Multi-Stakeholder Linkages for Innovative Agricultural Development (MSLIAD) in development initiatives in the region inhibits farmers’ ability to increase farm productivity and household income. Analysis and documentation of the information on the factors responsible for the poor performance of MSLIAD initiatives were inadequately understood and poorly documented. A study to determine the factors influencing MSLIAD in the semi-arid areas of the three Counties was carried out. A pilot study involving 30 respondents was done in Kambu location, Kibwezi Sub-County to determine the Cronbach alpha (α) reliability coefficient of data collection instruments. A Cronbach alpha (α) reliability coefficient of 0.86 was obtained, which was above the minimum 0.70 threshold for acceptable reliability in social sciences. The researcher adopted a Working Research Design within the agricultural innovation systems (AIS) framework. Structured Key Informant (KIs) interviews (34 respondents), Focus Group Discussions (FGDs) (55 respondents) and Face-to-Face interviews involving 165 respondents were used to collect data. The study used a total of 254 respondents. Data were analysed using the Statistical Package for Social Sciences (SPSS) software versions 12.0 and 17.0. The unit of analysis was an individual respondent for Household and Key informant interviews and a group for FGDs. Main study data gave a Cronbach alpha (α) reliability coefficient of 0.87, which was well above the minimum of 0.70 threshold for acceptable reliability in social sciences. Study findings showed relatively weak linkages among development partners (weak linkages were significantly higher than strong linkages (\(\chi^2 = 76.07, \text{df} = 2, p = 0.001\)); breach of contracts (breach of contracts was significantly higher than distorted farm-gate and market prices (\(\chi^2 = 59.49, \text{df} = 2, p = 0.001\)); undefined networking and mistrust among development partners. The researcher concluded that key stakeholders supported joint MSLIAD initiatives; strong linkages were needed for defining the existing relationships and networks and improving trust among stakeholders. Agricultural innovation systems (AIS) presented a useful framework for analysing technological, economic and institutional change in agriculture. The researcher recommends that stakeholders working in the target area should take advantage of the prevailing stakeholders’ support to MSLIAD initiatives to accelerate agricultural development; Policy formulation process should embrace an all inclusive formulation to achieve a positive and sustainable policy impact on the productivity of the agricultural sector; Stakeholders should promote use of AIS and formation of PPP-based linkages to improve agricultural productivity in the target area sustainably.
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