



NATIONAL RESEARCH CONFERENCE - 2021

**Theme: Sustainable Use of Land and Natural
Resources to Enhance Food Security**

24th to 25th November 2021

**Averting Climate Change Crisis
In Lower Eastern Kenya Through Weather-based
Advisories:
Are The Existing Policies Effective And Supportive
Enough?**

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- In addition to the four economic factors of production;- Land, Labor, Capital and entrepreneurship, Climate change adaptation information (agro-advisories) should be one of the factors
- Climate change value chain that entails generation of forecasts, development of agro-advisories, dissemination of information and lastly consumption/use should receive support from the government and other rural development partners
- There are no deliberate and effective policy measures to promote the use of agro-advisories in the study counties

- Brief Introduction
- Problem Statement
- Research Questions
- Study Methodology
- Results/Findings
- Conclusions and Recommendations

- Climate change is a global crisis
- Adaptation and mitigation are sought as a panacea
- Recent reports by Inter-governmental Panel on Climate Change(IPCC), United Nations Framework Convention on Climate Change(UNFCCC) and conferences such as Conference of Parties (CoP) 26 emphasize the need for **action**
- Agro-advisories provide an opportunity for adaptation as well as mitigation in the long run
- Crop and livestock insurance should equally be incorporated in this arrangement
- Through agro-advisory preparation, dissemination and use there is hope for improved agricultural productivity and a food secure nation

- Unpredictable climate patterns have left farming communities make the least of every season
- Information that enables informed planning is scarce
- As a result agricultural productivity continues to decline
- Communities in Arid and Semi-Arid Lands (ASALs) are thus food insecure
- Based on this state of rural livelihoods, the study sought to determine agro-advisory access for both strategic and tactical planning
- The findings directly contribute to Big 4 Agenda, Vision 2030 and Sustainable Development Goals(SDGs)

1. What are the existing climate change adaptation information and dissemination pathways used by farmers in Lower Eastern Kenya?
2. How effective are the existing policy regimes in supporting the access to climate change adaptation information among farmers in Lower Eastern Kenya?

- Study site- Lower eastern Kenya (Makueni, Machakos and Kitui)
- Target population- Farming households in the region
- Sampling design- Multistage sampling was used to draw a sample of 400 households
- Purposive sampling was used to draw 15 key informants from relevant departments
- Empirical method – Data reduction process- Principal component analysis was used to determine the types of agro-advisories received in Lower Eastern ASAL regions
- Qualitative Analysis- Thematic analysis and descriptive statistics
- Analysis- EXCEL and STATA

Principal Component Analysis

1. Through ICT, farmers received information on crop/variety adjustment strategies
2. Through groups and extension, the information received was soil/water conservation strategies, adjustment in farm operation practices and crop/variety adjustment techniques

Thematic analysis

Presence of policies-Yes (National Climate Change Action Plan, National Climate Change Framework Policy and Climate Change Act, 2016)

At the county level-

Kitui-Kitui County Climate Change Fund Regulation, Kitui Climate Change Information Services Strategic Plan,

Makueni –Makueni Climate Change Fund Regulation, Makueni Climate Change Information Strategic Plan, Makueni Agricultural and Livestock Extension Policy,

Machakos- Machakos County Climate Change Action Plan

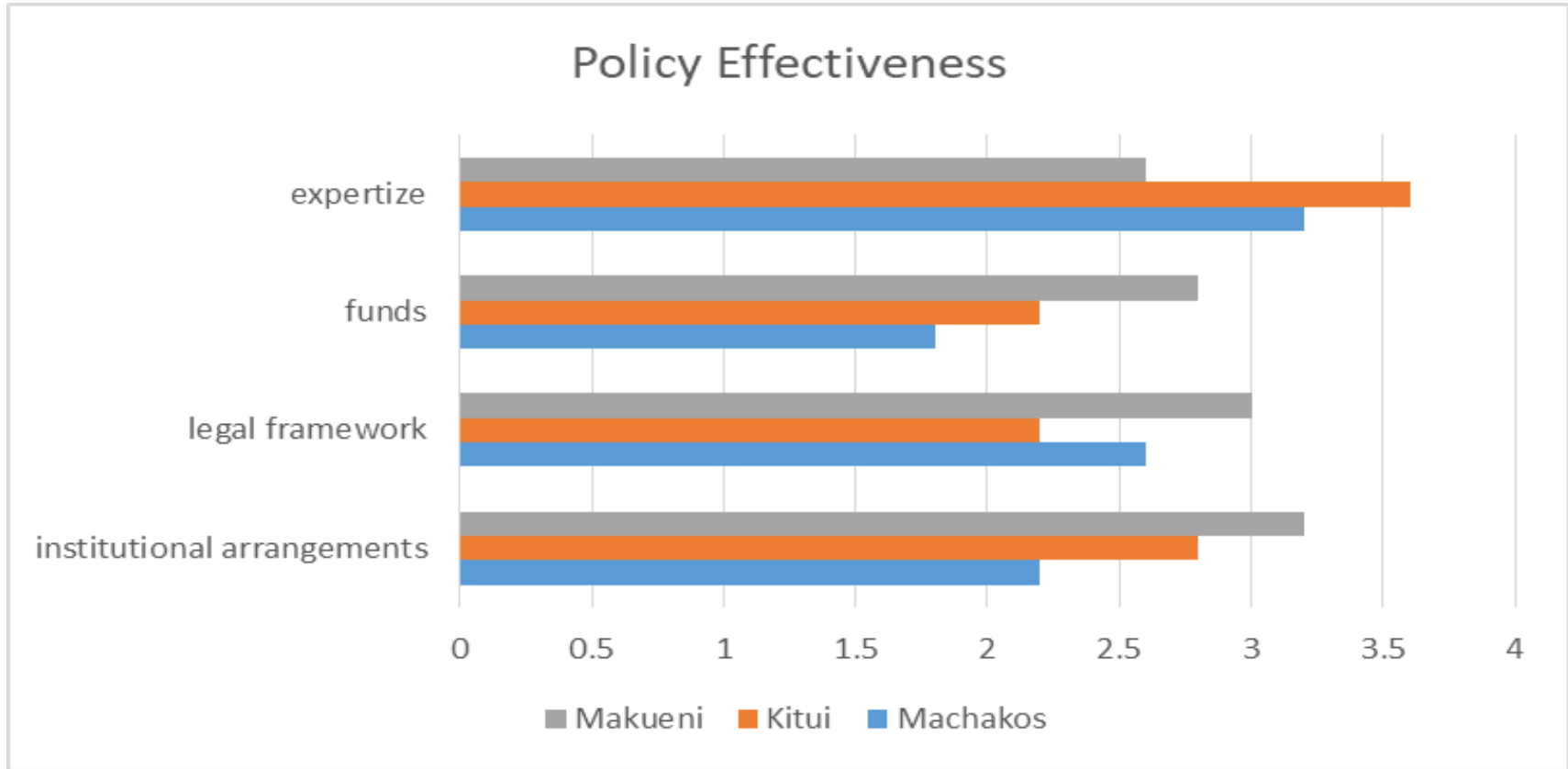
Thematic analysis

Pathways used for information dissemination- Extension, groups and ICT

Information type- 70% forecasts and warnings

Modern ICT platform - Present in Makueni (M-extension). Kitui and Machakos rely on traditional ICT such as radio and extension

Funding- 1% for climate action (Inconsistent)



- The agro-advisories currently issued are majorly accessed through extension and groups
- The information entails practices such as adjustment in farm operations, soil/water conservation and crop/variety adjustments
- Current policies do not effectively support agro-advisory dissemination with the least effective instrument being funding
- Based on these findings, the following recommendations are made;

- Advisories should incorporate a wider range of adaptation measures such as environmental protection, livelihood diversification and even drought control
- The existing policies should be reviewed for effective and practicable institutional arrangements and funding mechanism that would facilitate seasonal agro-advisory dissemination that is done at the appropriate time
- There is need to consider climate change adaptation information as a critical factor of production

Funding - International Development Research Centre(IDRC)

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Thank You
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