

“Enhancing Adaptive Capacity of Pastoralists to Climate change – induced Vulnerability in Northern Kenya”

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Introduction

- Pastoralism is the main source of livelihood for communities in Northern Kenya
- Pastoralism is a dynamic system comprising of people, livestock, natural resources such as vegetation, soil, water, temperature, wind; traditional knowledge system; and economic attributes such as markets.
- This pastoralist support system is very prone to climate variability and change



Introduction contd

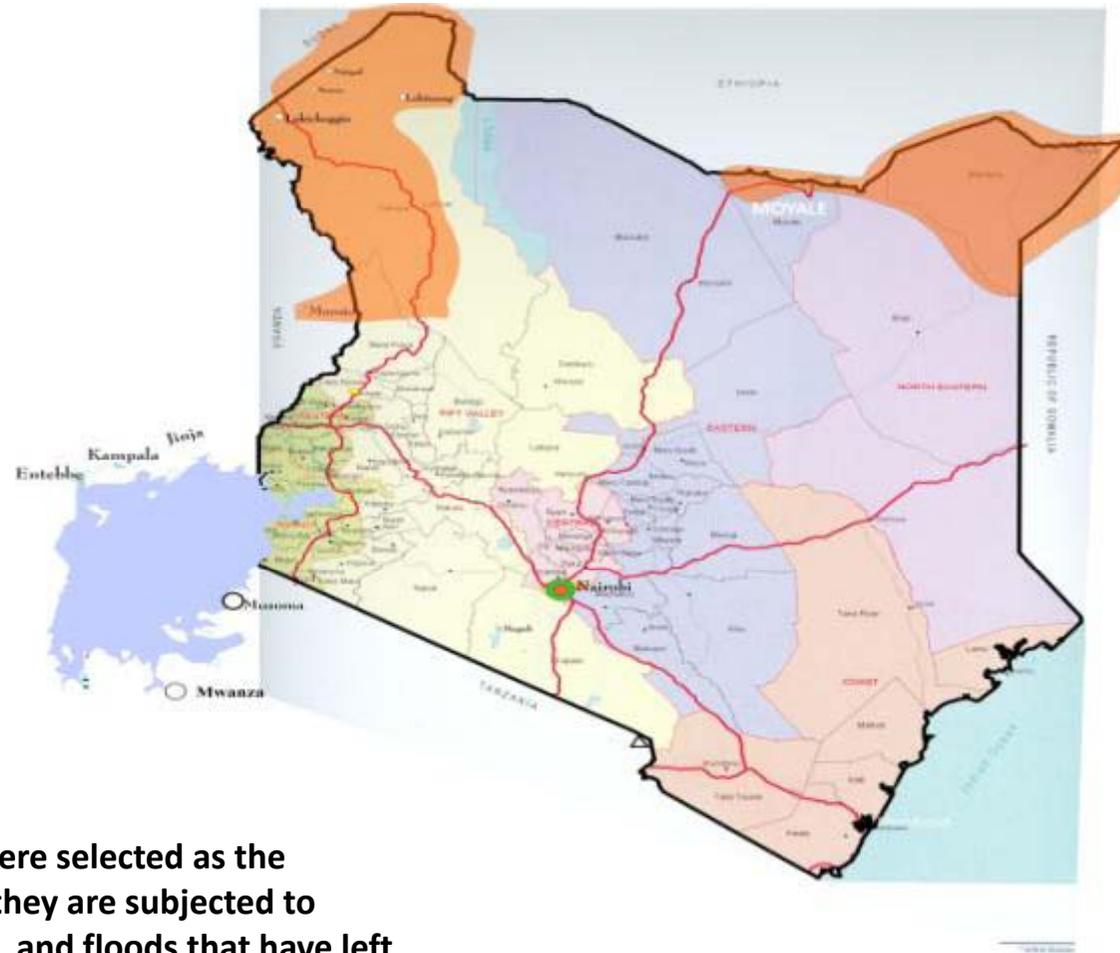
- Pastoralists have already lost their livelihood due to droughts and floods
- Information on how pastoralists adjust to climate change variability impacts is not available
- Many interventions are being undertaken with little success and some have major policy implications
- This research project is geared towards establishing adaptation options being used by communities and role of formal and informal institutions in both transferring knowledge from individuals to communities and for the development of collective practices that have community-wide benefits.



Objectives

1. Identify structural issues characterizing low development and ecological factors contributing to vulnerability of pastoralist communities to climate change in Turkana and Mandera districts.
2. Identify and evaluate gender dimensions of vulnerability to climate change among the social groups in Turkana and Mandera communities.
3. Undertake participatory identification of traditional and emerging climate change adaptation options and strategies at household and community levels and test them against future scenarios.
4. Identify factors constraining pastoralists' access to and use of climate change adaptation options and strategies in pastoral ecosystems of Turkana and Mandera districts.
5. To identify and analyse the institutional barriers to and opportunities for incorporating climate change adaptation measures into national development policies.

STUDY AREA-MAP OF KENYA



Turkana and Mandera districts were selected as the research areas on the basis that they are subjected to historical and recurrent droughts and floods that have left them vulnerable

Methodologies used

- Questionnaire survey
- Workshops
- FGDs
- Interviews
- Literature review
- Observation

Meetings with government officials

One on one discussions



Workshop



Community participation

Indoor workshop



Field experience



Focus Group Discussions

Women only



Men only



Key results

Objective 1

- ✓ Drought occurrence and cycle has reduced from 10 years to 5 years or less , with 87% of Mandera indicating that the drought is very severe; 13% moderately severe and in Turkana, 82% indicating an increase in severity and frequency of drought. The most severe droughts are remembered more vividly by respondents
- ✓ Floods affects the occurrence and frequency of livestock diseases. 38.4% of respondents indicate that drought increases livestock diseases and 52% indicate that floods affect livestock diseases
- ✓ The respondents recognise that floods and drought have affected the environment and landscape
- ✓ Insecurity or livestock raids was ranked high in contributing to vegetation changes in Turkana through restriction of movement of livestock thereby resulting in overgrazing in more secure areas.
- ✓ Regarding how they contribute to vegetation change: Drought 41.7%; Floods 36.8 %;

Coping strategies

- ✓ Mainly migration to other areas, however this is being restricted by conflict.
- ✓ In terms of structural issues 4.1% can access health centres within 1hr walking; 57% walk for more than 6 hrs to access the nearest livestock and crop produce markets



Objective 2

- ✓ *Climate variability has led to changes in gender roles and responsibilities. Some roles customarily allocated to either women or men are now being performed by both (E.g. construction of houses).*
- ✓ Both girls and boys are now being taken to school to give them opportunity for employment and incomes
- ✓ Both men and women are forced to explore alternative sources of income derived from local resources
- ✓ Migration due to prolonged drought has led to split of families. Women, children and the elderly remain alone during drought while men move to other areas in search of pasture and water.
- ✓ With regard to traditional meetings, decisions are made by clans through appointed elders referred to as "*the tree of men*". Women do not attend traditional meetings held under the tree of men
- ✓ Women's domestic workload increases their vulnerability to droughts because they have no time to invest in productive activities hence depend on their husbands
- ✓ Men are vulnerable because they are predisposed to insecurity and possible death during livestock raids and conflicts. Loss of animals through drought or raids renders them incapable of feeding their families.



Objective 3

- Adaptive livelihood options - Aloe farming, cattle raiding, fishing, small scale trading, irrigation, firewood & charcoal burning
- Pastoralism is changing from nomadism to agropastoralism, semi-permanent settlements (80.2% in Mandera & 64.5% in Turkana)
- Household heads – Mandera (27.1%), Turkana (25%)
- The frequency of conflict among pastoralists is increasing due to pressure on natural resource base
- Monogamy tendency is increasing as opposed to polygamy
- Change of herds from grazers (cattle) to browsers (goats, camels)
- Increased appreciation of education and skills development



Objective 4

- Remoteness is a constraint to information access
- Illiteracy is a major barrier to accessing information for coping and adaptation
- Many people depend on indigenous knowledge from diviners (emorons in Turkana) for early warning



Objective 5

- The government officers meant to implement the policies do not work as a team e.g. only Arid Lands Programme shares out their work plans. The government officers were not aware that the District Environment Committee existed and its roles. The government officers were not adequately facilitated to execute their work. Insufficient meetings held at district level to coordinate and share information on operations of diverse stakeholders at the district level
- Provincial Administration (PA) is the closest arm of government to the people at local level and are trusted
- The technical government officers do very little to assist PA - and thus adaptation was not technically informed.
- “Climate change” was a new concept and government officers could not differentiate it from the “environment”. Signing of performance contract targets for government officers did not have relevance at the grassroots level.
- Insecurity hinders implementation of government policies at the local level
- Government officers trust Meteorological



Conclusion

- Climate change parameters indicate that changes have occurred in the region
- Communities are aware of climate variability and change
- Traditional knowledge and practices widely used in coping to climate change and variability
- Climate change has forced communities to diversify their sources of livelihoods
- Men and women are both vulnerable to climate change variability but women suffer greater brunt
- Remoteness and illiteracy are barriers to climate change adaptation
- The government officers have not mainstreamed climate change in their programmes and operations
- The outcomes of this study will pave way for opportunities for addressing issues identified

Way forward

- Pilot projects to upscale best bet adaptation practices
- Dissemination prioritized
 - Awareness materials for use at the local level being developed
 - Masters course at KU and MU
 - [Short course](#) for policy makers and implementers
- Development of local and contextualized policy as provided by EMCA 1999 Part V

Thank you