

# Mapping Hotspots of Risk and Vulnerability in the COMESA region



APM08  
ILRI ANNUAL PROGRAM MEETING

Livestock Science for Development: ?  
Who cares

## Introduction

- ✓ The COMESA region has high poverty levels, persistent low food security and is exposed to a wide variety of natural and man-made hazards
- ✓ Comprehensive Africa Agriculture Development Programme (CAADP) advocates agricultural led growth that at the same time ensures that the vulnerable populations are the ultimate beneficiaries of this growth (Pillar 3 of CAADP).

### This analysis contributes to:

- Increased understanding of the underlying causes of vulnerability
- Providing information for targeting:
  - Where are the geographical areas and vulnerable population groups most likely to be affected?
  - How to allocate limited resources for high impact to the vulnerable communities?

### What did we know before?

African farmers are exposed to various risk factors that contribute to their vulnerability

### What do we know now?

There is a high degree of vulnerability in the Pastoral and Agro-pastoral systems, multiple risk factors e.g. political risks (e.g. civil wars, tribal clashes) and natural disasters (including floods, draughts, climate variability, land degradation-see the natural disaster map below) are more prevalent in these systems than it is the case in the mixed systems.

### Who cares ?

Various actors designing and implementing policies and programs to tackle and reduce vulnerability in COMESA e.g. the COMESA secretariat, EAC, WFP, FEWS NET, PACAPS, RELPA, development agencies (such as The World Bank, USAID, SIDA and DFID) and governments in the COMESA region.

## Conceptual Framework and Methodology

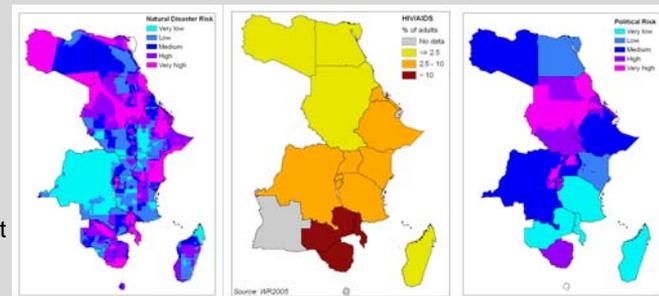
### Conceptual Framework

VULNERABILITY = Exposure to risk - Ability to cope

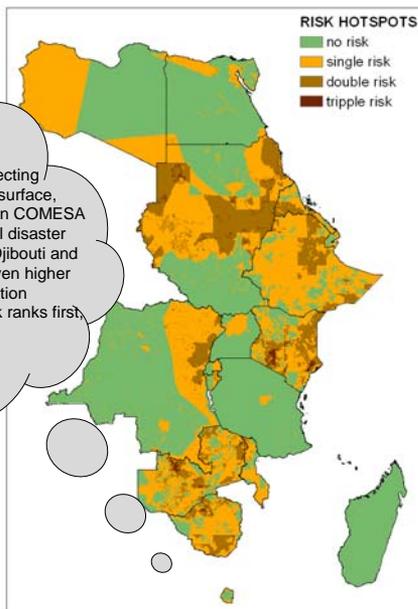
### Methodology

- Literature review and wide stakeholder & expert consultation
- Risk indicators five categories: i) Natural disasters, ii) Socio economic, iii) Human Health, iv) Crop and Livestock diseases, v) Governance and Conflict
- Principal Component Analysis (PCA) → remove redundant set of factors
- Multicriteria Evaluation Techniques → incorporate expert knowledge

### Examples of the input risk factors



## Preliminary results in January 2008

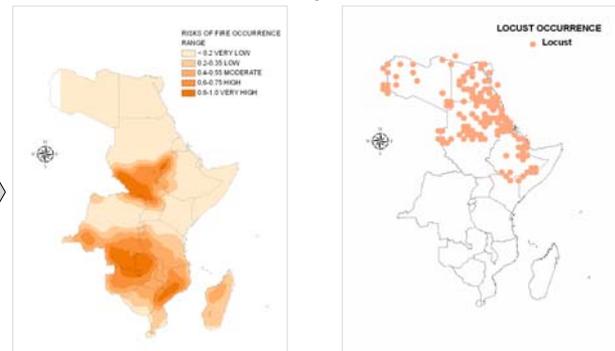


Natural disaster risks are affecting almost 20% of the total land surface, while 14% of the population in COMESA is subject to very high natural disaster risk. In some countries, i.e. Djibouti and Malawi, this percentage is even higher than 80%. In terms of population affected, socio-economic risk ranks first, at 26% of the population.

## Way Forward

Preliminary results were presented in a stakeholders workshop in January, 2008. It was recommended that more indicators are included in this analysis. Inclusion of the new indicators is on the final stages

Some of the new risk maps to be included



## Conclusion

An analysis such as this one is not only useful for targeting interventions but also in generating data for CAADP Monitoring and Evaluation, if updated over time

