

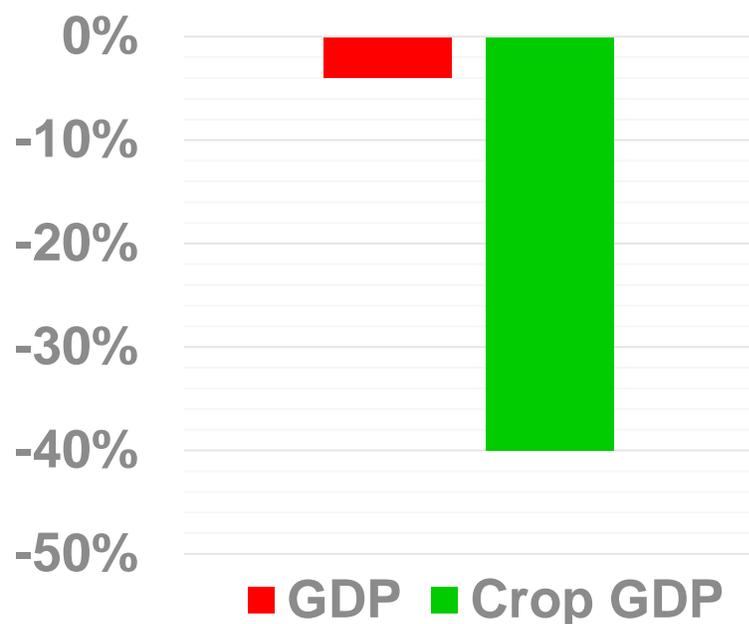
# Economy-wide effects of climate change induced health impacts based on general equilibrium models



## MOTIVATION



**Single impact pathway analysis - example:** Effect of climate change via crop yields until 2050 in the Sudan



But what about simultaneous....

- Effects of heat stress on labour productivity (morbidity)?
- Effects of heat stress on labour stock (mortality)?
- Effects of malaria on labour stock (mortality)?
- Effects of malnutrition on labour productivity?

And what about effects of health interventions?

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## OBJECTIVE AND METHODOLOGICAL INNOVATION

**Objective:** Integrated analysis of health mediated climate change impact & adaptation

**Method:** Develop & apply economy wide model framework for Kenya and Burkina Faso

Database  
(SAM)

Economic model  
(CGE)

Climate change  
scenarios

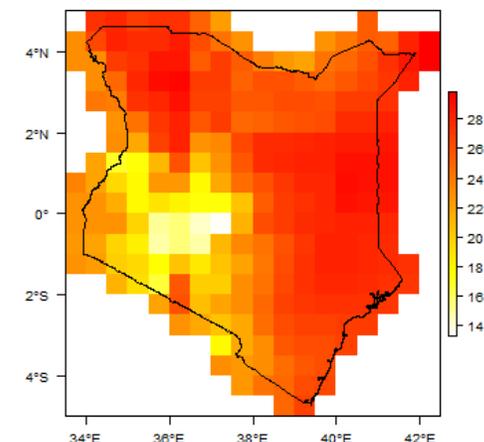
Adaptation  
scenarios

Project timeline

## METHOD INNOVATION

- Integration of impact pathways and analysis of interaction
- Simultaneous spatial labour & household mobility with demographic module

Kleinwechter & Grethe *Am J Agric Economics* 2015



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## COOPERATION AND POLICY IMPLICATIONS

