

Climate Change and Health in sub-Saharan Africa

# Home gardening for climate change-resilience: Co-designing a nutrition-sensitive intervention in rural Kenya

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# Introduction



## **Study location**



# Matrial & Methods



Figure 1: Flow-chart rational of intervention

**Figure 2**: KEMRI/CDC Health and Demographic Surveillance System, Health Facilities Map\*

#### Study Aim

Identify perceptions and experiences with regard to home gardening in rural Kenya...

- $\rightarrow$  from the existing literature
- → of farming families & local stakeholders

... in order to co-design & succesfully implement a home gardening intervention

# Results

## **Study participants**

Household Participants (n=30)

- caregivers of children <5 years
- $\rightarrow$  female n=30
- → farmers n=15
- $\rightarrow$  experience with home gardens n=23
- $\rightarrow$  land for HG n=25

## Stakeholder Participants (n=26)

• from the agriculture & nutrition sectors

 $\rightarrow$  academia n=4

- $\rightarrow$  government n=4
- $\rightarrow$  international originations n=5
- $\rightarrow$  local organisations n= 15

## **Barriers & solution approaches**

Figure 6: Categories of barriers for home gardens reported by participants

Managem

#### Yields &



#### **Present home gardens**

- well-established practice but mostly only conducted seasonally and rarely high yielding
- perceived as a means of diversifying the households' nutrition and livelihood
- limited training or education in garden maintenance
- partly depended on the use of chemical fertilizers and pesticides





#### Sustainability of the home gardening project

Figure 7: Categories of sustainability of home gardening projects reported by participants



## Conclusions

-> home gardening is a promising approach to combat the impacts of climate change on food self-sufficiency in rural Kenya

-> although home gardens are widespread in Siaya, their efficiency, adaptability, and resilience remains to be enhanced

-> the set-up should be tailored closely to individual needs and resources to facilitate caregivers to contribute to household food security

-> a comprehensive training, community support, and involvement of local stakeholders are key for ensuring the sustainability of such programs

#### Acknowledgements

This project is funded by Fiat Panis Foundation, Heidelberg Graduate School of Global Health, & German Research Foundation (DA 1881/3-1)

\* Image 1 source: Profile: The KEMRI/CDC health and demographic surveillance system-Western Kenya - Scientific Figure on ResearchGate. Available from: https://www.researchgate.net/figure/KEMRI-CDC-Health-and-Demographic-Surveillance-System-Health-Facilities-Map\_fig2\_230763435 [accessed 7 Sep, 2021]

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