



**FEED THE FUTURE**

The U.S. Government's Global Hunger & Food Security Initiative

# The Linkages Between Multiple Use Water Systems and Nutrition

**EMERGING RESEARCH FROM FEED THE FUTURE  
PROGRAMS**

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# Weather Variability

## Weather impacts:

- Water availability
- Nutrition
  - + Less food production
  - + Lower birth weight for newborns
  - + Lower body weight for women
  - + Crops show decreased protein, zinc and iron





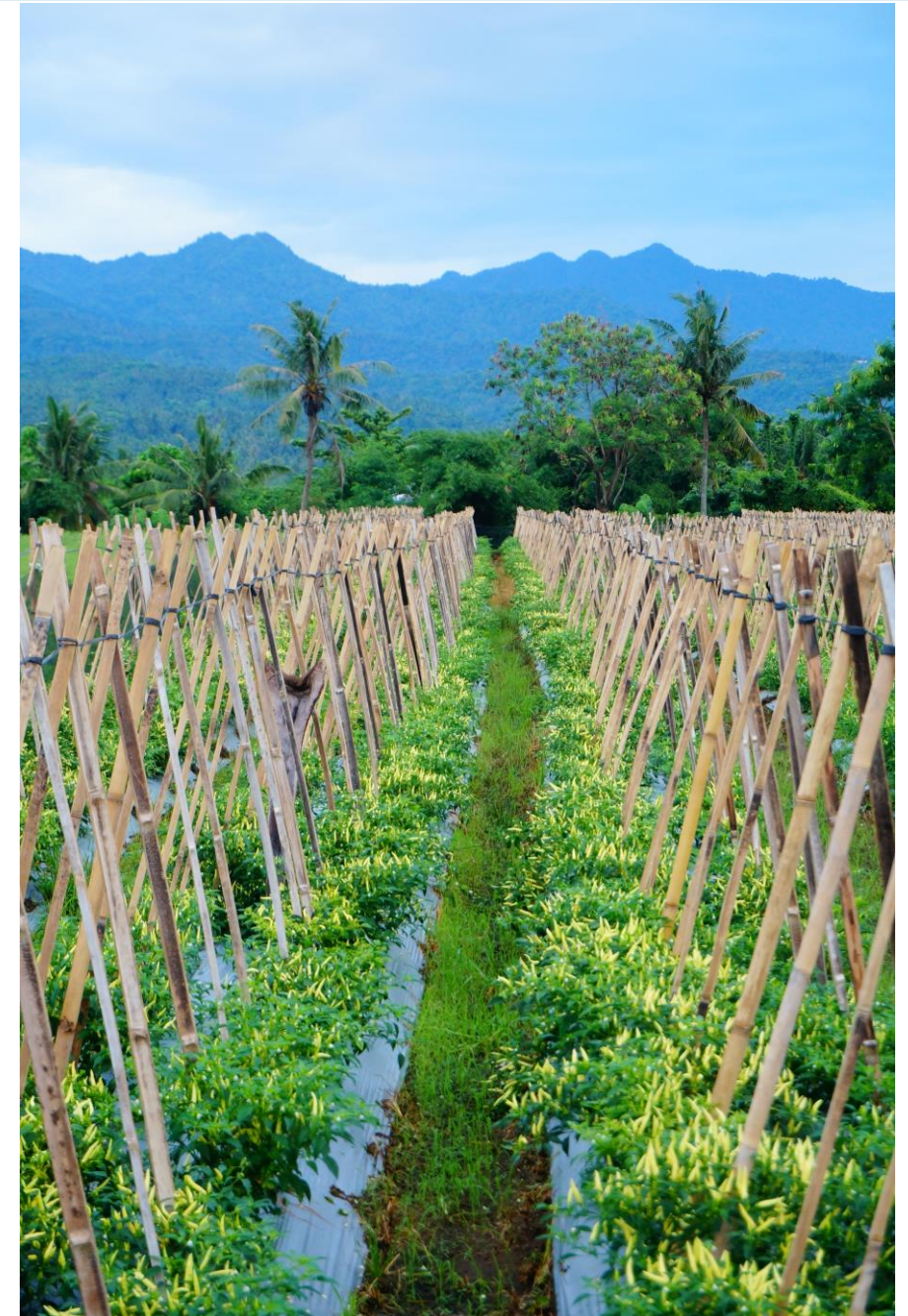


## USAID Activities with MUS Components

- **Ethiopia: Lowland WASH Activity**
- **Kenya: Resilient Arid Lands Partnership for Integrated Development Activity**
- **Tajikistan: Farmer Family Program**
- **Global: Gender, Climate Change and Nutrition Integration Initiative**
- **Global: Innovation Lab for Small Scale Irrigation**

# Key Takeaways

- **MUS contributes to an increase in dietary diversity**
  - + Availability of kitchen gardens
  - + Diversity of crops
  - + Increased income
  
- **MUS can contribute to better environmental stewardship, which can lead to improved food security**
  - + Land cover associated with reduced hunger scores







## Future Research

- **Linkages between MUS and nutrition**
- **MUS:**
  - + Economics (profitability)
  - + Labor constraints
  - + Opportunity costs
- **Operational consideration and opportunities to deploy MUS successfully**



A smiling man with a mustache, wearing a white cowboy hat and a dark, vertically striped button-down shirt, stands in a coffee plantation. He is looking towards the camera. The background shows rows of coffee plants in a field with dark soil and black irrigation lines.

Thank you!