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Klamon Impact Award

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Investigating the impact of climate-resilient homestead gardening

Can home gardens irrigated by grey water improve nutritional outcomes and water security in rural India?

Background

- Undernutrition is the primary risk factor for mortality and morbidity among children under 5 in India
- In rural Odisha, increasing water stress and decreasing crop yields are exacerbating water and food insecurity



Study Setting and Rationale

- Emory has a longstanding research partnership with Gram Vikas (local NGO)
- Odisha, India receives erratic rainfall



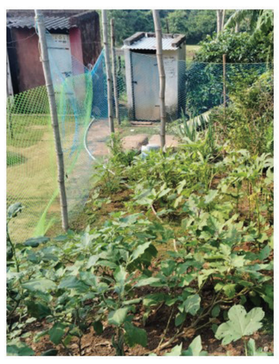
Intervention



Training



Seeds



Greywater harvesting materials

Aims and Methods

- Using *intention-to-treat* and *per-protocol analyses,* quantify the impact of the CROPS intervention on:
  - Dietary diversity in children <5 and women
  - Mid-upper arm circumference in children <5 and women
  - Household food security
  - Household water security



Significance

Addresses a gap in evidence regarding the feasibility and sustainability of small-scale, climate-resilient agriculture practices



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