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

# Horticulture for Nutrition: Evidence on nutrition and diet quality in rural Bangladesh

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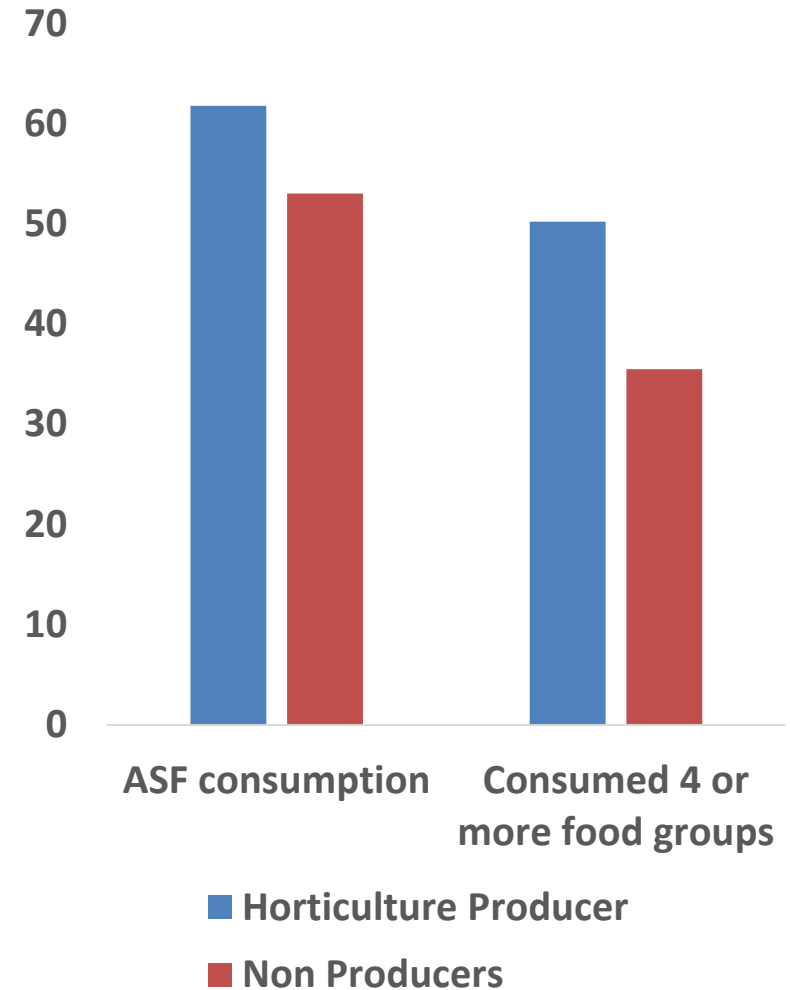
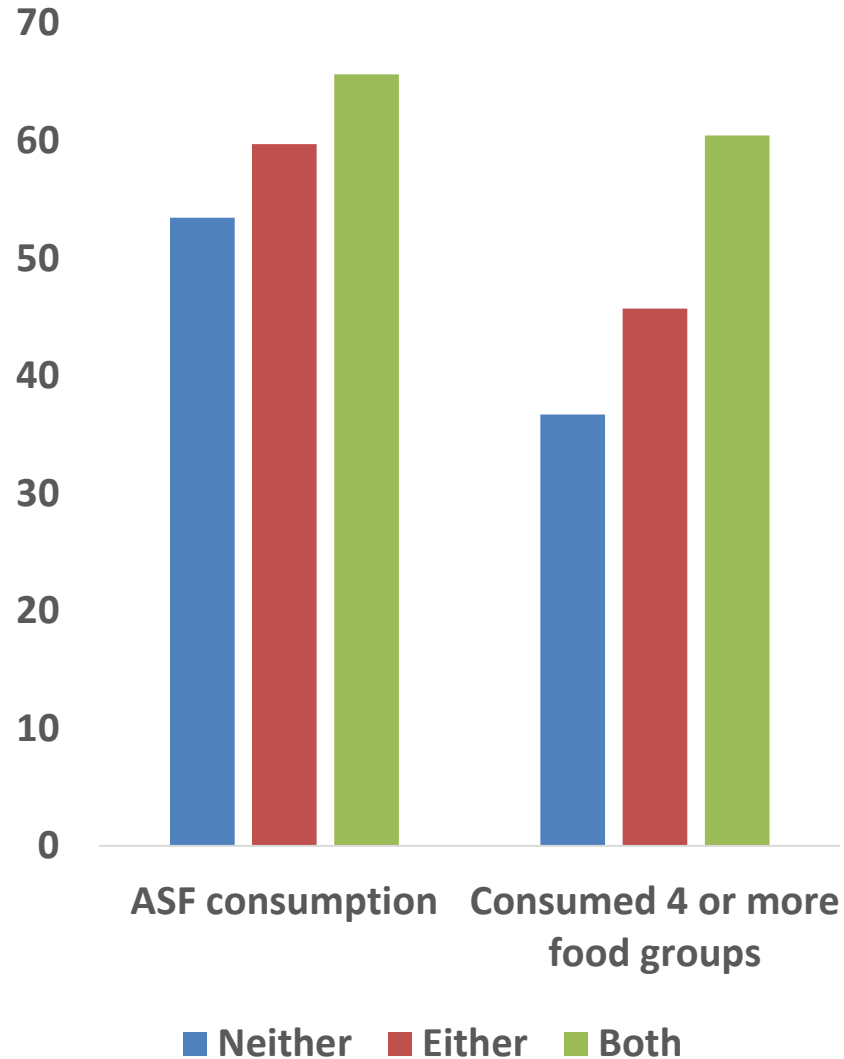
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## Infant Diet By Aquaculture-Horticulture Engagement

Question: What systemic effect does USAID's support for **aquaculture and horticulture** had on **production of nutrient-dense foods**, and their **marketing, diets and nutrition**?

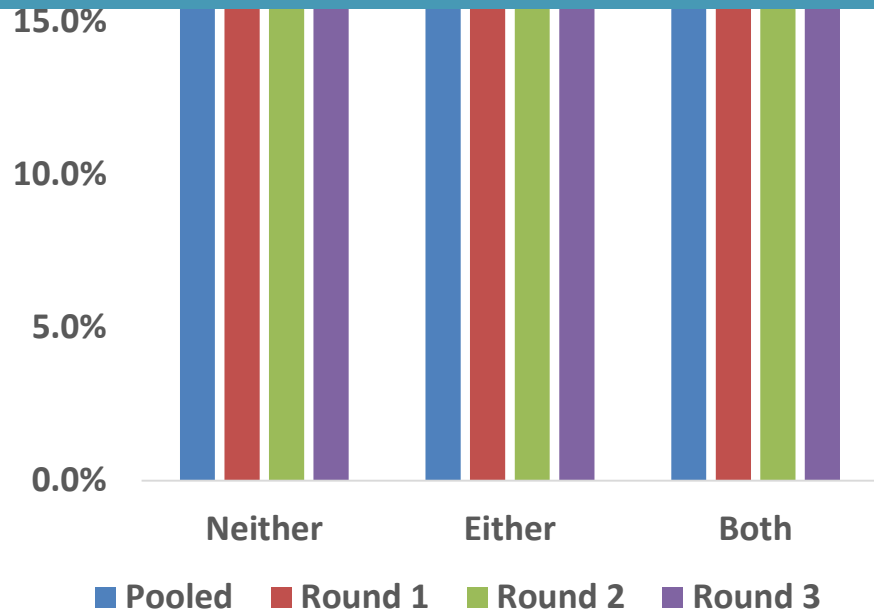


Adjusted for wealth, education, age of the child, gender of household head

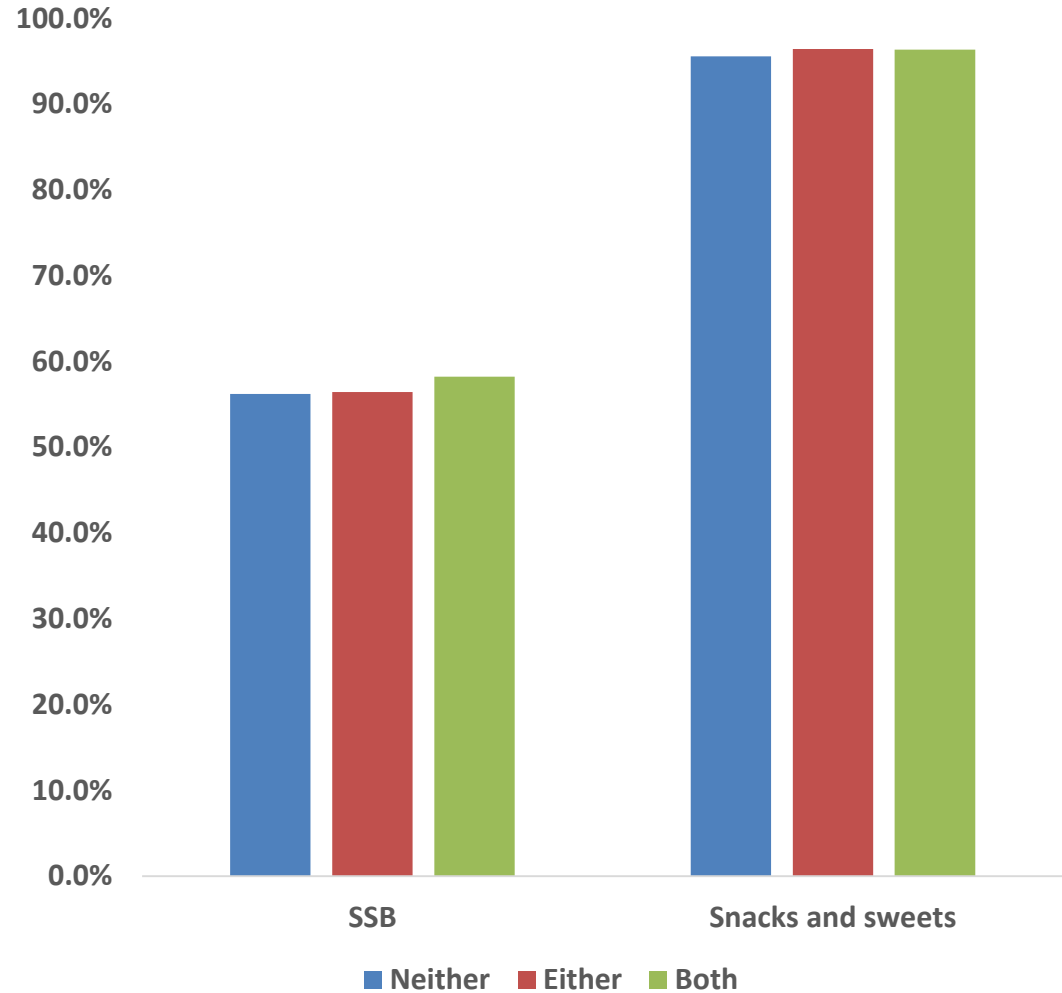


30.0%

Mothers with increasing age, higher education, increasing wealth, and more diverse diets were more likely to be overweight or obese



Percentage of women classified as overweight/obese



Processed and packaged food purchases (7 days)



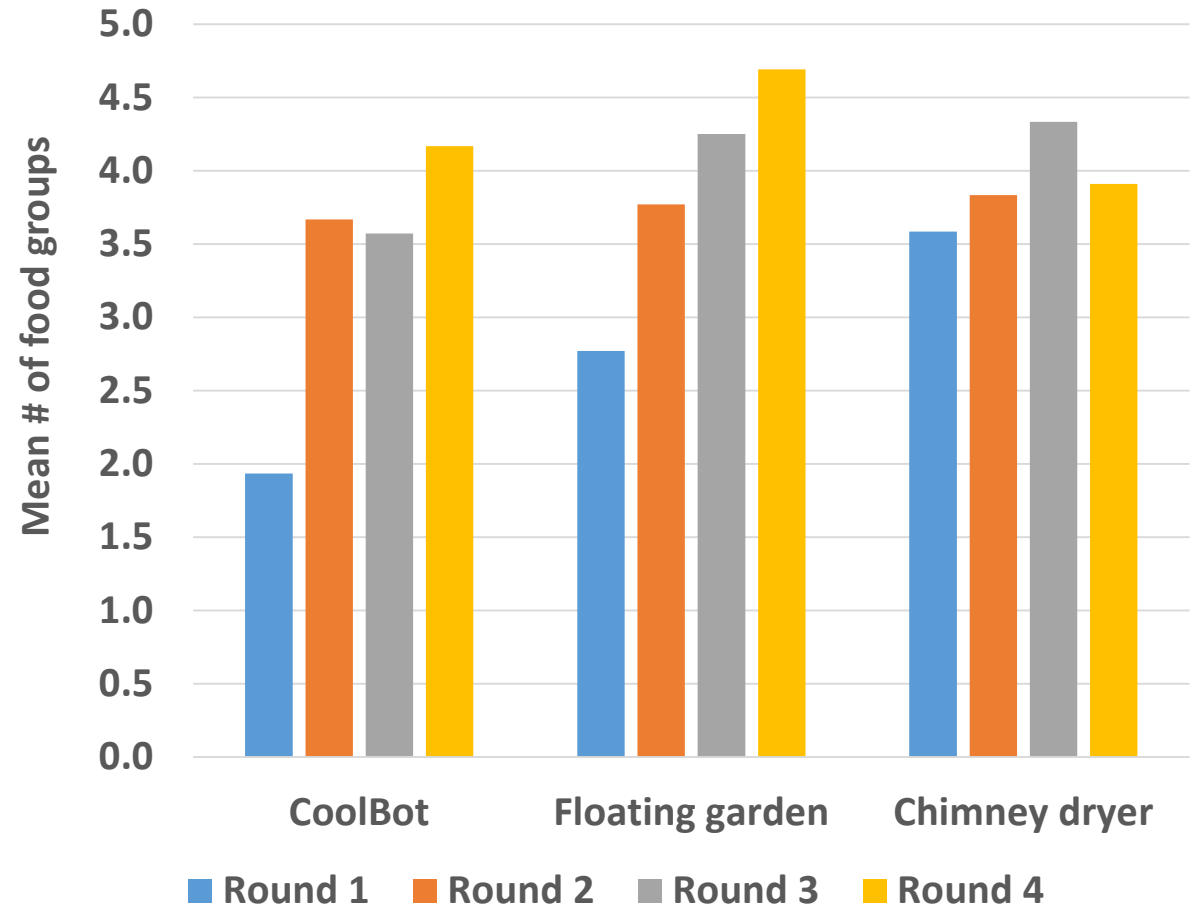
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## NEED FOR POST HARVEST TECHNOLOGIES

- To improve access to nutrient dense foods (fruits and vegetables, animal source foods)
- To reduce waste and improve food safety, increase shelf life
- Three technologies
  - Cool Rooms
  - Solar Dryers
  - Floating Gardens

## CHILD DIET DIVERSITY



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## POST HARVEST TECHNOLOGIES FINDINGS

- Cool Rooms
  - + improved ability to negotiate prices, improved food safety
  - stable electric supply, limited availability of commercial vendors
- Chimney Solar dryers
  - +reduced losses, improved food safety, increased shelf life, incomes
  - size of the dryer was a barrier for increasing profit margins
- Floating gardens
  - +increased access to fruits and vegetables, pesticide free
  - Limitations of season, insects and rodents



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## KEY TAKEAWAYS

- Dietary Diversity and animal source food consumption in early life associated with engagement in aquaculture and/or horticulture
- While diets are getting nutrient dense, consumption of packaged and processed foods is increasing (as measured through expenditure)
- Overweight and obesity rates in women are increasing-future policy and programmatic implications of nutrition transition and the co-existence of the triple burden
- Post harvest technologies: Cool Rooms and Chimney Solar Dryers  
Scale up along the value chains, linking to markets, commercialization (agribusinesses), transfer of technology for local production



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