Health and Nutrition in Agricultural Production: Evidence from Tanzania
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Motivation

- Access to nutritious foods—pillar of food security. How do people access nutritious foods?
  - Developed countries: buy in store
  - Developing countries: buy in store or grow at home
- Agriculture plays dual role:
  - Income generation
  - Food (and nutrition) provision
- Existing policies and programs: target agricultural commercialization and intensification
- Objective: Are household nutritional demands (and consumption) affected by household agricultural production?

Data

- Data from 2010-2011 Tanzania National Panel Survey:
  - 2, 230 farm households
  - Nationally representative
- Seven-day recall for 46 different foods aggregated into 6 groups:
  - Staple foods
  - Cereal products
  - Pulse
  - Vegetables and fruits
  - Animal products
  - Meal complements
- Nutrient decomposition: using FAO conversion factors to calculate consumption of:
  - Calories (kcal)
  - Protein (g)
  - Iron (mg)
  - Zinc (mg)
  - Vitamin A (μg RE)
  - Riboflavin (mg)
  - Folate (μg)
  - Vitamin B12 (μg)
  - Vitamin C (mg)
- Construct regional price indices for nutrients, cash crops, and non-food market goods

Results

Nutrient Consumption by Source of Food

Nutrient Deficiencies (Per Capita Daily Consumption Levels)

Household Demand for Nutrients

Policy Implication

- Result 1: Households obtain nutrients both from home production and purchasing on local markets.
- Result 2: There are significant deficiencies for some nutrients
- Result 3: Agricultural prices affect demand for nutrients providing evidence that markets for purchasing nutrients are constrained.