

The Rutgers University Policy Research Consortium

Cost of Nutritious Diets as a Policy Indicator for Agricultural Transformation and Healthy Food Systems

Target Countries: Malawi

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Contract: Rutgers University

Subaward: Tufts University

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Why measure the cost of nutritious diets?

- Rural and urban food markets are changing rapidly
- To track food systems for nutrition, we need new kinds of price indexes
- Measuring the cost of nutritious diets can guide intervention
 - where do diet costs exceed earnings, so transfers are needed?
 - which foods & nutrients drive costs up, so access can be improved?

What do we find in Malawi?

- High food prices make nutritious diets out of reach for the poor
- Variation over space and time reveals opportunities for intervention

The cost of a nutritious diet is highest in pregnancy and lactation, and well above local and global poverty lines

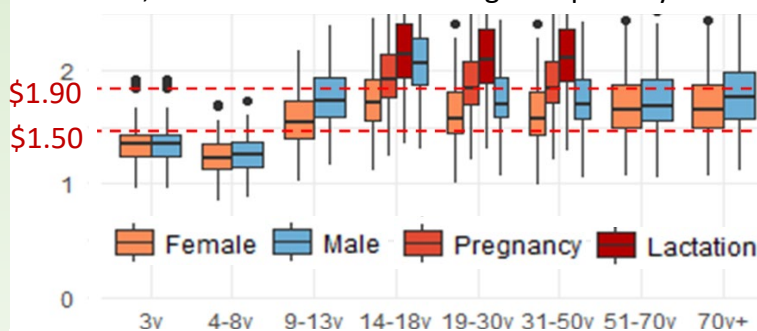


Figure 1: Range of costs per day across 29 markets in Malawi, each month from Jan. 2007 to July 2017, by life stage and reproductive status, relative to the global (\$1.90) and local (\$1.50) poverty lines, in US\$ at 2011 prices

How do we define cost of nutritious diets?

- For *affordability*, we seek the least expensive foods needed to meet each nutritional standard
 - Data are retail prices for all items available at each place and time
 - Matched to food attributes associated with health outcomes
- For *nutrition*, we use established diet quality metrics
 - *Nutrient adequacy*, based on requirements for essential nutrients
 - *Recommended diets*, based on guidelines for food groups
- The cost of meeting each diet-quality standard answers a different question, and can be compared to household income

What do we find across countries?

- Retail prices for perishables vary with local conditions, driving differences in cost of diets

The cost of a nutritious diet relative to subsistence calories reveals food system performance

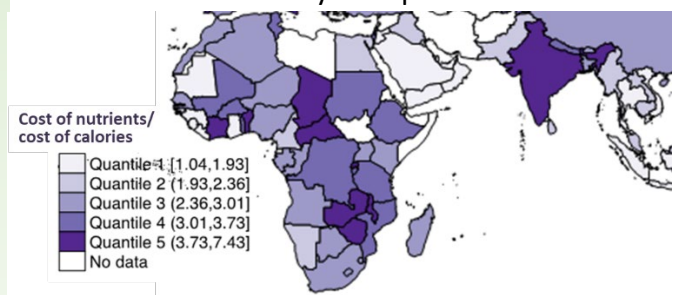


Figure 2: Ratio of cost for nutrient adequacy to cost of calories for 158 countries in 2011, for an adult woman