

Affordability of Nutritious Diets in Africa: Mainstreaming New Metrics in Ghana's food price monitoring institutions

Daniel Bruce SARPONG
University of Ghana

Collaborators:

Anna Herforth
Columbia University

William A. Masters
Tufts University

Jennifer C. Coates
Tufts University

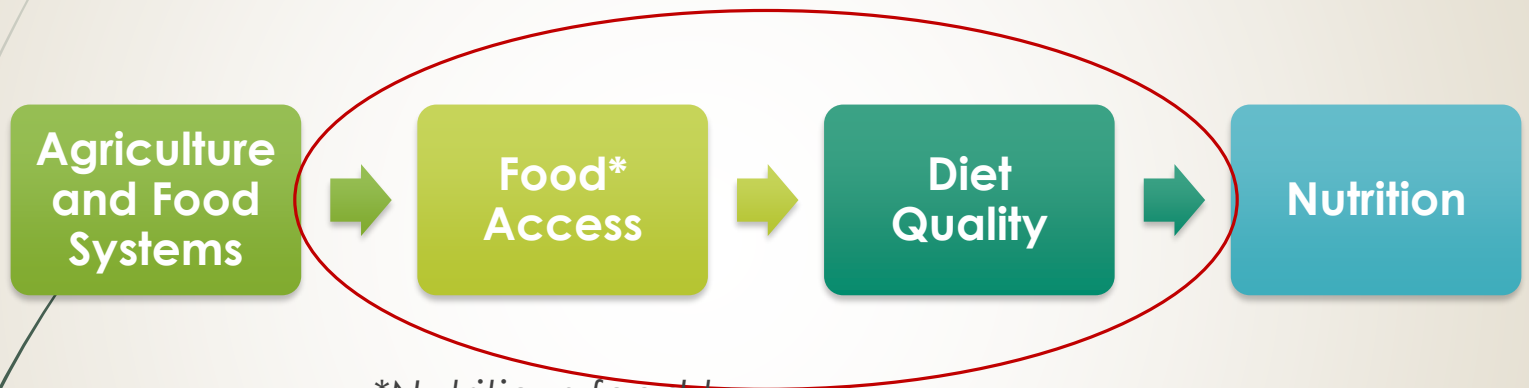
“Quantitative Methods for Integrated Food and Nutrition Security
Measurements – Lessons to be learned!”
Brussels, Belgium, 15-17 November 2017



IANDA—Vision: Food prices that reflect nutritious diets

- Agriculture and food systems can make nutritious diets more available and affordable.
 - But, governments and projects typically don't have an information system that tracks prices of nutritious diets.
- Countries can use existing food price monitoring systems better to understand availability and prices of nutritious foods.
- International agencies could monitor these across countries.

In the key area of agriculture-nutrition linkages, metrics are inadequate



**Nutritious food to meet dietary needs*

The problem

- In SSA, Food availability data is mostly focused on starchy staples and calories
- Food price data monitoring across countries is also mainly focused on starchy staples
- Prices are less available for diverse foods most lacking in diets.
- Existing food price indexes are not based on a nutritious diet.

Why does this matter?

- Without data on the basic situation, policy solutions to the problem of expensive nutritious diets are much more difficult to devise

Current food price monitoring in Ghana

- MoFA-SRID collects prices of many foods in one or more markets in every district in Ghana, at least once per week
 - Retail, Wholesale, and Farm Gate
- Data reported
 - District level (weekly and monthly averages)
 - Regional level (monthly averages)
 - National level (weekly, monthly, annual)

Current Uses of the Data

- For making quality informed decisions
- Planning
- Calculating real prices
- To compare prices across countries
- Research purposes
- Food security analysis
- Policy formulation, project implementation, monitoring and evaluation

Ministry of Food and Agriculture (MoFA-SRID): Need to fill a data gap

- Currently missing: A statistic that covers price of a nutritious diet
- Difficult to formulate informed policies and programs toward food and nutrition security without data showing the problem areas

Presentation focus

- The question we address here is: what is the status of MoFA's food price data collection and how has IANDA enhanced MoFA's food price data to reflect nutritious diets?
- The process
- The outcomes
- Lessons to be learnt

IANDA's Process of engagement

- Participatory process of data identification and consultation
- Collaborate with government food price data collectors
- Consult with food price data end-users
- (In Tanzania: partner with National Evaluation Platform, a model for SUN National Information Platforms for Nutrition)

Process 1:

Data landscaping Methods

- Brainstormed all the relevant sources of food price data
- Explored food price data through contacts at:
 - MoFA-SRID (government)
 - GSS (government)
 - GAPTO (private: Agricultural Producers and Traders Organization)
 - Esoko (private, grant-funded)

Process 2: First stakeholder workshop in Ghana (April 2016)-- Participants

- MoFA-SRID
- Ghana Statistical Service (GSS)
- (FAO UN)
- University of Ghana (Nutrition, Agric Economics Depts)
- Esoko
- World Food Program
- Ghana Standards Authority
- UNICEF
- GIZ
- among others.

First stakeholder workshop in Ghana (April 2016) - Dialogue

- ▶ Three (3) main food price data collectors in Ghana made presentations on mandates, data collection procedures and data collection outcomes:
 - ▶ The MoFA-SRID
 - ▶ Ghana Statistical Service (GSS)
 - ▶ Esoko (a private food price data collector)

Stakeholder workshop

Outcome 1: Prohibitive limitations of some sources observed

- Food list not diverse enough
- Geographically limited
 - Only operating in certain areas of the country
- Not open data
 - Business model to pay for data

Stakeholder workshop

Outcome 2: Focus on MoFA and GSS food price data for nutrition

- MoFA and GSS are the primary sources of food price data
 - National government organizations; nationwide operation; mandate to provide public data; adequate diversity in food lists
- These entities collect food price data in similar geographies / markets

Potential for improved food price monitoring by the gov't agencies

- MoFA aims to help ensure economic viability for farming in Ghana, and also food and nutrition security for Ghana.
 - High agricultural population; can use information for policy and programs to address high prices of nutritious foods
- GSS collects consumer prices
 - used to reflect the cost of an economically important food basket; could be used to reflect the cost of a nutritious food basket
 - Could be useful for international comparisons

Needed a “lens” to evaluate the extent of nutritional diversity in the data: found in MDD-W

A popular metric of diet quality is *diversity*

Minimum Dietary Diversity for Women

A Guide to Measurement

1. Grains, white roots and tubers, and plantains
2. Pulses (beans, peas and lentils)
3. Nuts and seeds
4. Dairy
5. Meat, poultry and fish
6. Eggs
7. Dark green leafy vegetables
8. Other vitamin A-rich fruits and vegetables
9. Other vegetables
10. Other fruits



Outcome 3: Missing foods?

- Dark green leafy vegetables
- Diverse fruits and vegetables in general
- Dairy
- OTHERS???

Lesson learned:

MoFA-Buy in was key!

- **Agreed:** Food security means access to nutritious foods to meet dietary needs
- **Realized:** Missing a statistic that covers price of a nutritious diet
- **Realized:** difficulty in formulating informed policies and programs toward food and nutrition security without data showing the problem areas

Hence could not meet its core mandate!

Process 3: Consultative review of MoFA food list

- Aim: To include nutritious foods that are *commonly consumed* by the *average household* in Ghana.
 - Not very rare, not very expensive
- Compared it to the list of foods collected by GSS
- **Interviewed nutritionists at Ghana Health Service, MoFA-WIAD (Women in Agricultural Development), and University of Ghana**
- Needed to have at least one or more foods from each of the 10 food groups for the dietary diversity indicator

Process 4: Piloting an expanded food list

What MoFA-SRID did...

After MoFA-SRID buy-in and on consensus from the stakeholder workshop on need for the data:

- Piloted the additional missing foods to their existing food lists in 9 markets across 7 districts
- Working with the IANDA team to assess the results and construct indicators
- Incorporating appropriate missing foods and new indicators into food price monitoring systems at national level
- Continuing collaboration with key stakeholders (GSS) to enable use of the data

Process 4: Piloting an expanded food list

What IANDA did...

- Provided Training to MoFA enumerators
- Supported and monitored piloting of new list in 4 key but diverse ecological ZONES (Nov 2016-Jan 2017)
- Developed indicators to use the new list

The IANDA project has helped Ghana MoFA expand price data collection to include more diverse foods

Cereals	White Roots and Tubers	Plantain	Pulses	Nuts and Seeds	Dark Green Leafy Vegetables	Seed Oil
Maize	Yam	Plantain	Cowpea (white)	Groundnut (unsh)	Nkontommire	Coconut oil
Millet	Cocoyam		Soya bean	Groundnut (red)	Jute mallow	Palm oil
Sorghum	Cassava		Bambara Bean	Melon Seeds	Alefu (Amaranthus)	Groundnut oil
Rice	Gari					
	Sweet potato					
	Cassava dough					
	Dried cassava					

Meat, Poultry and Fish	Vegetables	Fruits	Egg	Dairy
Beef	Tomato	Mango	Egg	Fresh Cow Milk
Pork	Garden Egg	Pineapple		
Salted dried fish	Okro	Palm fruit		
Live chicken bird	Onion	Watermelon		
Smoked herring	Ginger	Orange		
Anchovy	Pepper	Banana		
Fresh fish	Cabbage	Coconut		
Chicken meat	Lettuce	Avocado		
Snail	Carrot	Pawpaw		
Goat meat				
Mutton				

Ghana's Weekly Market Price Reports will soon include the additional foods marked in red, for 20 major markets

Process 5: Indicator development Using the New list for tracking nutritious diets in Ghana

- Absolute cost:
 - Cost of Nutrient Adequacy (CoNA)
 - Cost of a Recommended Diet (CoRD)

- Indexes:
 - Nutritious Food Price Index (NPI)
 - Cost of a Diverse Diet (CoDD)

Process 6: Second stakeholder workshop, Accra Aug 2017

- Indicators and initial results shared with stakeholders
- Key next steps discussed:
 - MoFA-SRID to continue scaling up expanded food list
 - GSS to pursue reporting indicators as national statistics
 - Both institutions discussed uses of the indicators to inform policy
 - MoFA and GSS to collaborate on data collection quality efforts, and raising awareness of new indicators

Generally: Food diversity in the data matters (Lesson learned-1)

- ▶ Results are implausible with the old data; the erroneous conclusion is that it is not feasible, nor affordable, to consume adequate nutrients
 - ▶ --> erroneous policy decision that supplements are necessary
- ▶ **Results are more realistic with the expanded food list**

Better Information for decision-making (Lesson learned-2)

- These data reflecting nutritious-diverse food prices and resulting indicators can be used for decision-making toward a more nutritious food system
- Information on more diverse foods presents more potential business opportunities as well

Ghana as a pioneer (Lesson learned-3)

- Ghana has demonstrated that *existing food price data monitoring systems can be used, with very little added cost, to provide better information for nutrition impact*
- **Ghana may be the first country to commit to monitoring the cost of nutritious diets**
 - **Other countries may follow!**
 - **The Ghana process can be a model for how food price monitoring can reflect nutritious food, and how it can better inform policy, production, and program decisions to promote healthy diets**

Thank you!



Visiting markets with
Ghana Ministry of
Food and
Agriculture staff

MoFA-SRID enumerator
collecting food price
data



Photos: Anna Herforth