

Introduction to IANDA: Motivation, Data, and Collaborations

Anna Herforth, Ph.D.
Project Director, IANDA
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Vision

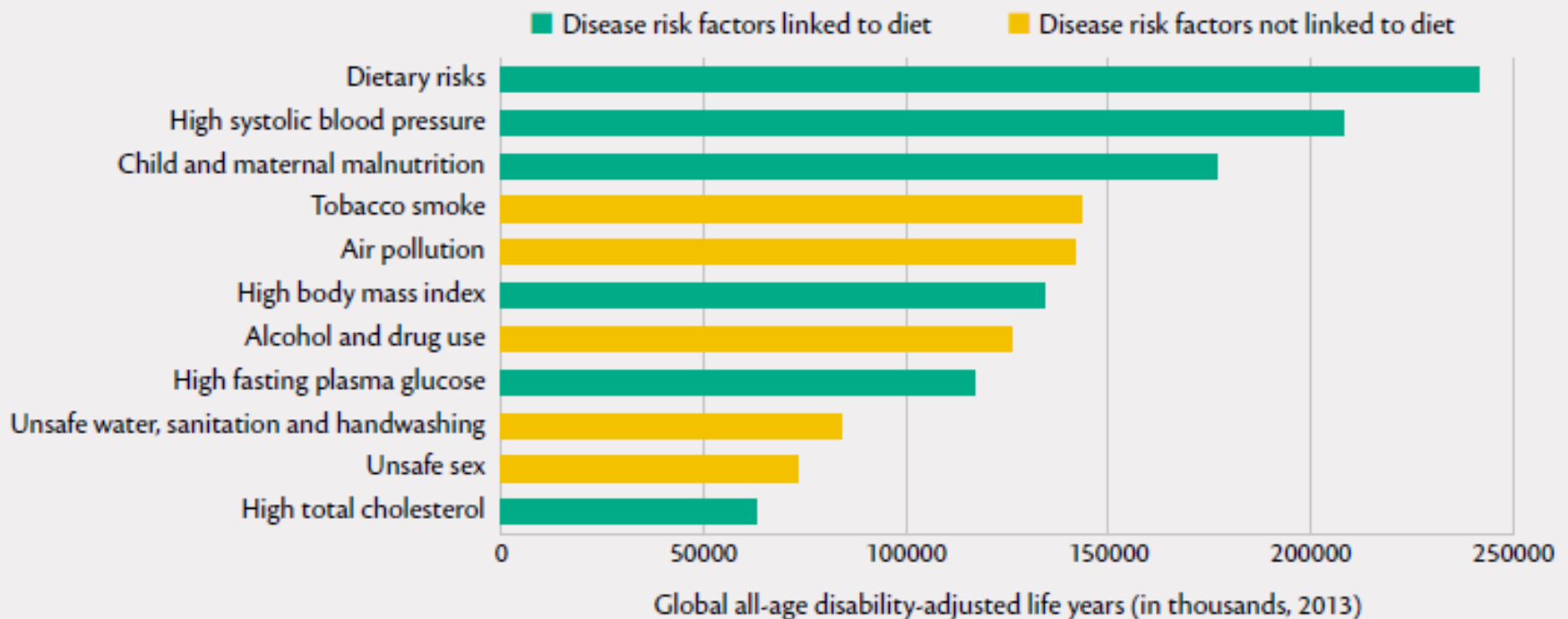
- When we speak of “food” prices, we should be able to have a measure that reflects the food people need for active and healthy lives.
- *Food security: All people, at all times, have physical and economic access to sufficient, safe, **nutritious food to meet dietary needs** and food preferences for an active and healthy life. (FAO 1996)*



**Nutritious food to meet dietary needs*

Diet: the #1 risk factor within the global burden of disease

FIGURE 1: Six of the top 11 risk factors driving the global burden of disease are related to diet

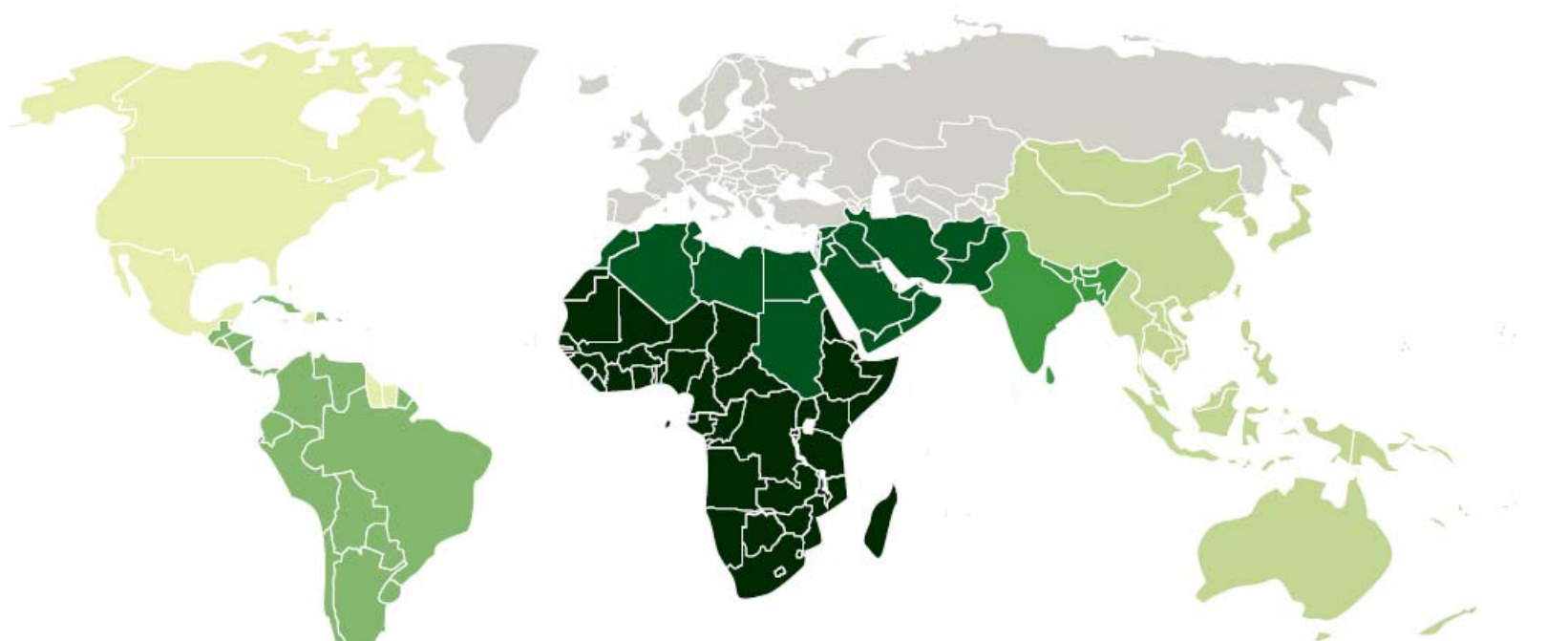


Source: Global Burden of Disease Study 2013 Collaborators (2015), Figure 5

Note: The graph shows global disability-adjusted life years (DALYs) attributed to level 2 risk factors in 2013 for both sexes combined.

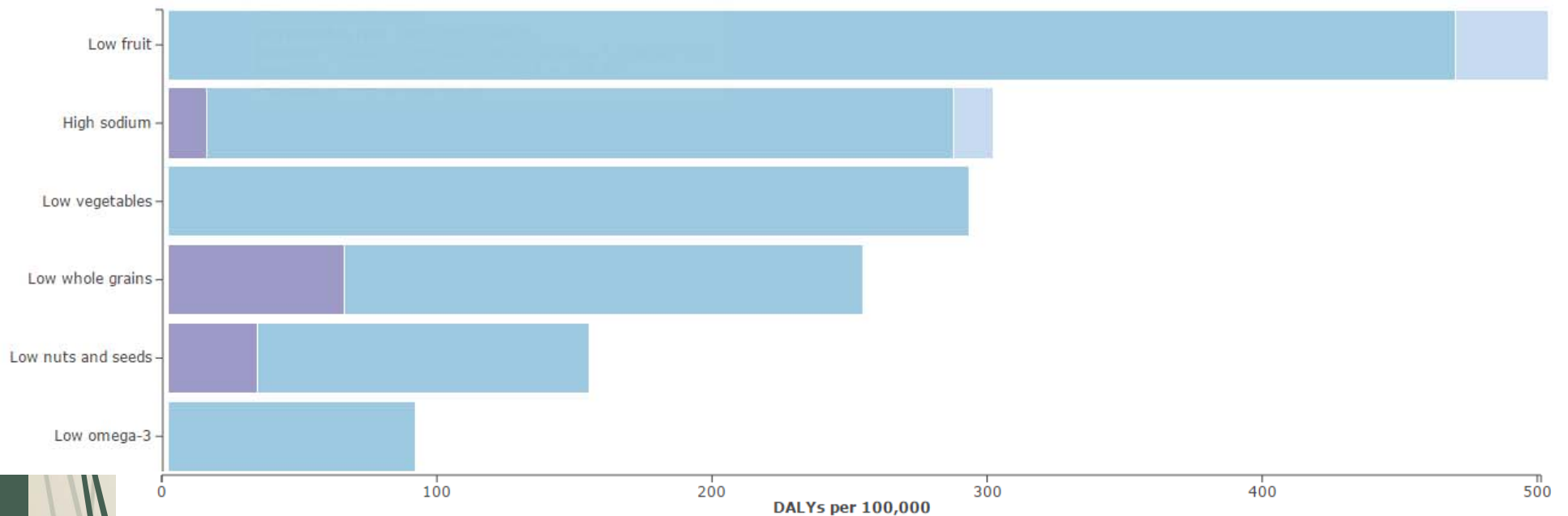
Projected increases in diabetes to 2030

Map: IDF Regions and global projections of the number of people with diabetes (20-79 years), 2011 and 2030



| REGION | 2011 MILLIONS | 2030 MILLIONS | INCREASE % |
|--------------------------------|------------------|------------------|---------------|
| ● Africa | 14.7 | 28.0 | 90% |
| ● Middle East and North Africa | 32.8 | 59.7 | 83% |
| ● South- : Asia | 71.4 | 120.9 | 69% |
| ● South and Central America | 25.1 | 39.9 | 59% |
| ● Western Pacific | 131.9 | 187.9 | 42% |
| ● North America and Caribbean | 37.7 | 51.2 | 36% |
| ● Europe | 52.6 | 64.0 | 22% |
| World | 366.2 | 551.8 | 51% |

Top dietary risks in sub-Saharan Africa



Source: Global Burden of Disease Study

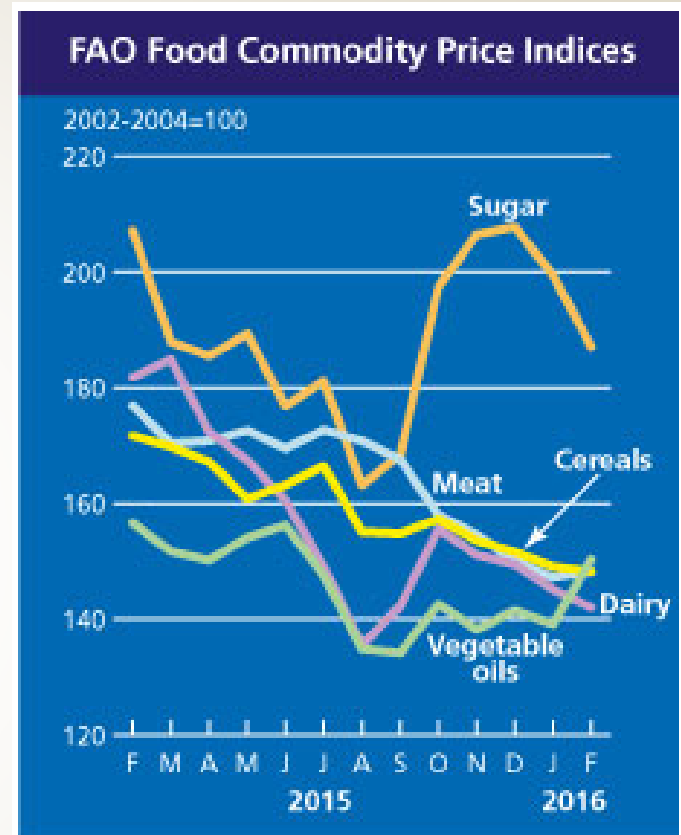
In these key areas, metrics are inadequate



**Nutritious food to meet dietary needs*

“Food Prices”

- Usually reflect either starchy staples, or a basket of foods most often purchased
- Does not typically mean the price of foods that human beings need to have adequate nutrition or thrive.



Issue 30 | January 2016

The Market Monitor

Trends and impacts of staple food prices in vulnerable countries

Needed: 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.

Indicators of Affordability of Nutritious Diets in Africa (IANDA)

- ▶ Tufts University, University of Ghana, Sokoine University (Tanzania), Johns Hopkins University
- ▶ Funded by an IMMANA grant (UKAid)
- ▶ Goal: To use existing food price data systems to monitor the affordability of nutritious diets

Food price landscaping

- ▶ Interviewed representatives from:
 - ▶ MoFA-SRID (government)
 - ▶ ESOKO (private, grant-funded)
 - ▶ GAPTO (private; Agricultural Producers and Traders Organization)
 - ▶ GSS (government)

Prohibitive limitations of some sources

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

Key data sources for IANDA

- Ghana
 - Ministry of Food and Agriculture
 - Ghana Statistical Service

- Tanzania
 - [*Ministry of Industry and Trade (MITI)*]
 - National Bureau of Statistics

- National government organizations; nationwide operation; mandate to provide public data; adequate diversity in food lists

Collaborations with Ghana Food Price Data Collectors

- Ministry of Food and Agriculture: Statistical Research and Information Directorate (MoFA-SRID)
 - Robust monitoring system in all districts in the country
- Ghana Statistical Service: collects CPI
 - Could compute and track a nutritious food CPI
 - Collects a standard list of 82 foods

Market Information System vs. Consumer Price Index

| | MIS | CPI |
|---------------------|---|---|
| Collected by | Various organizations at National, Regional, Sub-National, Local, and International levels (e.g. MoFA) | National Statistical Organization |
| Purpose | Inform farmers, monitor food security | Track inflation, inform govt programs |
| Public availability | Open data or available upon request (Private sources charge for subscriptions) | Annually, quarterly and/or monthly; Reported internationally |
| Representativeness | Generally representative of the level covered (market, district, region, country) | Representative but has an urban bias |
| Granularity | Can be highly locally-specific | National and Regional level |
| Products included | Agricultural commodities; No packaged goods | Usually a long list, 60-100 products, agricultural commodities and packaged/processed |



MoFA-SRID enumerator
collecting food price
data

Visiting markets with
Ghana Ministry of
Food and
Agriculture staff



Photos: Anna Herforth



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

Minimum Dietary Diversity – Women (MDD-W)

MDD-W is a dichotomous indicator of whether or not women 15–49 years of age⁷ have consumed at least five out of ten defined food groups the previous day or night. The proportion of women 15–49 years of age who reach this minimum in a population can be used as a proxy indicator for higher micronutrient adequacy, one important dimension of diet quality.

The ten food groups are:

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

Importance of using MoFA and GSS food price data for nutrition

- 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; can easily be used to reflect the cost of a nutritious food basket
 - Could be useful for international comparisons

Better Information for decision-making

- These data 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

- ▶ 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!
 - ▶ This 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

