



# Innovative Methods and Metrics for Agriculture and Nutrition Actions

Leveraging value chains to improve nutrition:  
A collaborative learning initiative on methods and metrics for improving the identification, design and evaluation of interventions.

ANH Academy Week - Addis Ababa,  
20-24 June 2016.

Funded by:



# Background

- Evidence on nutrition double burden – income growth alone will not solve the problem of malnutrition.
- Nutrition perspective challenge
- Value chains as a framework to address malnutrition
- Key role of value chains

# Background...

- However, most apps have focused on understanding a single chain.
- The challenge lies in better understanding the options for leveraging a set of value chains to address the constraints to improve the diets of a given group of vulnerable households.

# Aim

- “To operationalize and validate a multidisciplinary framework, including methods and metrics, to support the identification, design and evaluation of interventions in value chains for nutritious foods ...”

# Aim

- Improve the sustainability and effectiveness of the WFP in Malawi
- Build on an IFPRI-led impact evaluation of integrated agriculture-nutrition-ECD intervention (NEEP) – being implemented by Save the Children.
- We are examining role of markets in shaping the diets of low-income populations.
- **Key question: How can we sustainably improve the diets of low-income populations?**

# Key Research Activities

- Stakeholder engagement, literature review and framework development.
- Secondary data analysis
- Mixed methods primary data collection
- Simulations of effects from potential interventions
- Synthesis and dissemination

# Preliminary insights from secondary data analysis

- Low-income hhs in Mw face multiple constraints
- Food intake – diets dominated by maize with a range of more nutritious foods available on the market and are being consumed.
- However, quantity and balance is not adequate to meet requirements for optimal health

# Preliminary insights

- WFP food transfers are most cost efficient when they include specialized nutritious foods.
- However, there is also evidence that the food environments and markets can deliver nutrient content relatively efficiently, particularly outside seasonal periods when prices peak

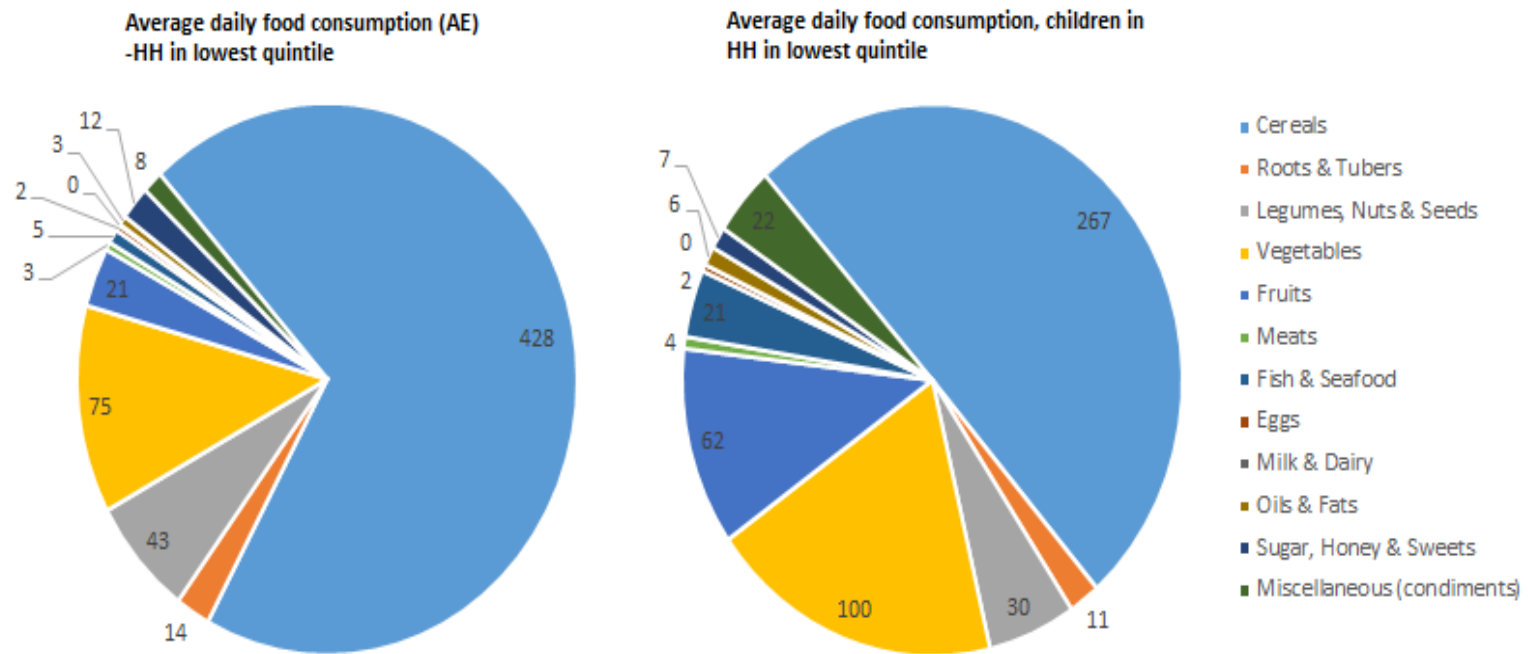


# Preliminary Baseline Results

- What are the contributions of different foods relative to the overall dietary intake?
- What are the sourcing patterns for the different foods?

# Characterizing Dietary Patterns

- Food consumption dominated by maize, though other nutritious foods are also being consumed
  - ~1 kg of food per day consumed on average, and to only 60% of that amount in households from the lowest expenditure quintile



Estimated average per adult equivalent (AE) daily food consumption (grams) by food group for households in the lowest expenditure quintile from 7 day recall, and in children aged 3-6 years in Malawi from 24 hr recall

# Food Sourcing Patterns

Food	Calories	Protein	Iron	Vitamin A	Zinc	Folate	Own Production
Maize	0.73	0.68	0.75	0.02	0.75	0.49	0.59
Rice	0.01	0.01	0.00	0.00	0.01	0.00	0.01
Other Cereals	0.03	0.03	0.03	0.01	0.03	0.03	0.32
Cassava	0.01	0.00	0.00	0.00	0.00	0.00	0.20
Potato	0.00	0.00	0.00	0.00	0.00	0.00	0.07
Sweet Potato	0.00	0.00	0.00	0.02	0.00	0.00	0.18
Beans and Soya	0.02	0.03	0.03	0.00	0.03	0.05	0.39
Peas	0.02	0.04	0.03	0.01	0.03	0.07	0.68
Groundnut	0.02	0.04	0.02	0.00	0.03	0.03	0.18
Tomato	0.02	0.03	0.03	0.20	0.02	0.04	0.08
Pumpkin	0.00	0.00	0.00	0.00	0.00	0.00	0.84
Leafy Green Vegetables	0.01	0.01	0.02	0.14	0.01	0.04	0.60
Other Vegetables	0.02	0.04	0.05	0.44	0.03	0.19	0.17
Banana	0.00	0.00	0.00	0.00	0.00	0.00	0.40
Mango	0.02	0.01	0.01	0.13	0.00	0.03	0.81
Other Fruits	0.00	0.00	0.00	0.01	0.00	0.01	0.54
Eggs	0.00	0.00	0.00	0.01	0.00	0.00	0.36
Fish	0.01	0.05	0.01	0.00	0.02	0.01	0.03
Meat	0.00	0.01	0.00	0.01	0.01	0.00	0.39
Dairy	0.00	0.00	0.00	0.00	0.00	0.00	0.05
Fats and Oil	0.04	0.00	0.00	0.00	0.00	0.00	0.01
Sugar and Sweets	0.02	0.00	0.01	0.00	0.00	0.00	0.13
Condiments	0.00	0.00	0.00	0.00	0.00	0.00	0.01

Share of per capita total nutrient content available, and share of total consumption from own production, by food items consumed, lowest expenditure quintile households in the post-harvest season in Malawi

# How can we sustainably improve the diets of low-income populations?

- Role of markets? This is the key question examined in the Immana project
- (NEEP) Impact evaluation will assess whether pre-schools can provide cost-effective platforms to scale-up nutrition sensitive interventions to improve diets.
- Analysis is just underway...
  - Strong seasonality effects!

# Thank you!

