This presentation is part of the
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For additional presentations and related event materials, visit: http://spring-nutrition.org/nglee-africa
Translating global evidence and priorities in Africa: A case study of Tanzania
Trends that are impacting food security in Africa

**Rising food imports:** $52 billion in food imports in 2011, predominantly in high value products like meat, milk and dairy products, sugar, and wheat

**GDP growth:** 12 African countries have had annual GDP growth rates of 6% and above for at least 6 years

**Rising incomes, emerging middle class, and persistent poverty:** 34% of Africans are “middle-income”—12.1% in Tanzania, 18.7% in Uganda, 44.9% in Kenya

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**Distribution of African population by income, 2010**

- Rich class (>20)
- Upper middle (10-20)
- Lower middle (4-10)
- Floating class (2-4)
- 2nd poverty line (1.25-2)
- 1st poverty line (<1.25)

<table>
<thead>
<tr>
<th>Year</th>
<th>Rich class</th>
<th>Upper middle</th>
<th>Lower middle</th>
<th>Floating class</th>
<th>2nd poverty line</th>
<th>1st poverty line</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>4.77%</td>
<td>5.17%</td>
<td>9.41%</td>
<td>19.05%</td>
<td>49.99%</td>
<td></td>
</tr>
<tr>
<td>1990</td>
<td>4.32%</td>
<td>5.22%</td>
<td>9.14%</td>
<td>12.59%</td>
<td>49.65%</td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>6.49%</td>
<td>5.06%</td>
<td>8.04%</td>
<td>14.07%</td>
<td>47.82%</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>4.84%</td>
<td>4.70%</td>
<td>8.74%</td>
<td>20.88%</td>
<td>44.15%</td>
<td></td>
</tr>
</tbody>
</table>
Africa’s 1 billion people in 2012 expected to double in the next 40 years

Median age in Africa is 20

Tanzania will be home to 450,000 MORE stunted children in 2020 than today

Female headed households in Tanzania have increased from 18% in 1991 to 25% in 2007

Youth are less likely to engage in subsistence farming, and more likely to:
• Produce staples and annual crops than traditional exports
• Engage in irrigated agriculture
• Lease land
• Be immigrant farmer
• Produce for the market
• Engage in post-harvest activities in addition to production
• Use improved technology – farm machinery etc
Trends that are impacting food security in Africa: Rapid Urbanization
Trends that are impacting food security in Africa:
Food price increases and increased volatility

<table>
<thead>
<tr>
<th>Tanzanian Staple</th>
<th>% Change in Average Wholesale Price Oct 10-Oct 11</th>
<th>% Change in Average Wholesale Price Aug 11-Aug 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maize</td>
<td>41%</td>
<td>20%</td>
</tr>
<tr>
<td>Rice</td>
<td>62%</td>
<td>30%</td>
</tr>
<tr>
<td>Beans</td>
<td>19%</td>
<td>9%</td>
</tr>
</tbody>
</table>

Maize

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Malawi - Liwonde - Maize - Retail (Kwacha/kg)</td>
<td>116%</td>
<td></td>
</tr>
<tr>
<td>Lesotho - Maseru - Maize meal (imported) - Retail (Loti/Kg)</td>
<td>37%</td>
<td></td>
</tr>
<tr>
<td>Haiti - Port-au-Prince - Maize (imported) - Retail (Gourde/Local)</td>
<td>33%</td>
<td></td>
</tr>
<tr>
<td>United Republic of Tanzania - Dar es Salaam - Maize - Wholesale (USD/Tonne)</td>
<td>31%</td>
<td></td>
</tr>
<tr>
<td>Peru - Lima - Maize (white) - Retail (Nuevo Sol/Kg)</td>
<td>29%</td>
<td></td>
</tr>
<tr>
<td>Honduras - National Average - Maize (white) - Wholesale (USD/Kg)</td>
<td>-23%</td>
<td></td>
</tr>
<tr>
<td>Colombia - Bogota - Maize (white) - Wholesale (Colombian Peso/Kg)</td>
<td>-24%</td>
<td></td>
</tr>
<tr>
<td>Nicaragua - National Average - Maize (white) - Retail (Cordoba Oro/Kg)</td>
<td>-30%</td>
<td></td>
</tr>
<tr>
<td>El Salvador - San Salvador - Maize (white) Retail (USD/Local)</td>
<td>-33%</td>
<td></td>
</tr>
<tr>
<td>Bolivia - La Paz - Maize (hard yellow,cubano) Wholesale (Boliviano/Spanish quintal (46 Kg))</td>
<td>-35%</td>
<td></td>
</tr>
<tr>
<td>Somalia - Mogadishu - Maize (white) - Retail (Somali Shilling/Kg)</td>
<td>-40%</td>
<td></td>
</tr>
</tbody>
</table>

Rice

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rwanda - Kigali - Rice - Wholesale (USD/tonne)</td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td>United Republic of Tanzania - Dar es Salaam - Rice - Wholesale (USD/tonne)</td>
<td>40%</td>
<td></td>
</tr>
<tr>
<td>Mexico - Mexico City - Rice (Morelos) - Wholesale (Mexican Peso/Kg)</td>
<td>40%</td>
<td></td>
</tr>
<tr>
<td>India - Chennai - Rice - Retail (Indian Rupee/Kg)</td>
<td>34%</td>
<td></td>
</tr>
<tr>
<td>Chad - N'Djamena - Rice (local) - Retail (CFA/ Franc)</td>
<td>29%</td>
<td></td>
</tr>
<tr>
<td>Russian Federation - National Average - Rice (local) - Retail (Russian Ruble/Kg)</td>
<td>-7%</td>
<td></td>
</tr>
<tr>
<td>Peru - National Average - Rice (paddy) - Wholesale (Nuevo Sol/Kg)</td>
<td>-9%</td>
<td></td>
</tr>
<tr>
<td>Bangladesh - Dhaka - Rice (coarse) - Wholesale (Taka/Kg)</td>
<td>-23%</td>
<td></td>
</tr>
<tr>
<td>Somalia - Mogadishu - Rice (imported) - Retail (Somali Shilling/Kg)</td>
<td>-48%</td>
<td></td>
</tr>
</tbody>
</table>
What do increased prices and volatility mean for nutrition?

Households in Africa spend 50-80% of their income on food.

In times of crises, households will try to meet calorie sufficiency at the cost of diversifying diets.

Other implications: less spending on health care and education; more work to increase agricultural production.
What these trends mean for chronic undernutrition

Since 1990, stunting has been reduced by 40% globally

In Africa since 1990, stunting has been reduced by 10-15%

Nearly 10 million more children are stunted in Africa today than in 1990

<table>
<thead>
<tr>
<th></th>
<th>1990</th>
<th></th>
<th>2010</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Stunting</td>
<td>Number of</td>
<td>Global</td>
<td>Stunting</td>
</tr>
<tr>
<td></td>
<td>Prevalence</td>
<td>stunted</td>
<td>share of</td>
<td>Prevalence</td>
</tr>
<tr>
<td></td>
<td></td>
<td>children</td>
<td>stunted</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>children</td>
<td></td>
</tr>
<tr>
<td>Africa</td>
<td>42%</td>
<td>45.7</td>
<td>18.1%</td>
<td>36%</td>
</tr>
<tr>
<td>Asia</td>
<td>48%</td>
<td>188.7</td>
<td>74.6%</td>
<td>28%</td>
</tr>
<tr>
<td>LAC</td>
<td>25%</td>
<td>13.7</td>
<td>5.4%</td>
<td>14%</td>
</tr>
<tr>
<td>Global</td>
<td>40%</td>
<td>253.1</td>
<td></td>
<td>26%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>164.8</td>
</tr>
</tbody>
</table>
Increasingly focus on off-farm consumption
Demand for nutritious foods
Keep pace with population growth
High prevalence of stunting in Tanzania’s agricultural “breadbasket”

Dodoma: 56%
Morogoro: 44%
Iringa: 52%
Mbeya: 50%
Global priorities and country action: G8 New Alliance for Food Security and Nutrition

- **Policy commitments**: export ban, crop cess, land, seed policy
- **Investment commitments**: Unilever developing tea plantation in Mufindi, Armajaro in start-up, Tanseed and Shambani have work plans in place (but lack access to finance). SABMiller and UPL in the exploration phase. FtF working directly with Tanseed, Yara, Syngenta.
- **Mutual Accountability**: sector wide program intended to operationalize TAFSIP. PM chairs oversight committee. Leadership Council at global level.
- **Enabling Actions**: IFPRI yield gap analysis, WB risk assessment

**Feed the Future Involvement:**
- **SERA project**: export ban follow-up, land tenure analysis, seed policy support, mutual accountability
- **Nutrition**: support to align National Food and Nutrition Policy with National Nutrition Strategy
- **Value Chain projects**: Collaboration with LOI signers and SAGCOT Center

**Challenge:**

“Crosswalking” all the initiatives
Global priorities and country action: Scaling Up Nutrition Movement

- National Nutrition Strategy launched, implementation plan drafted
- President Kikwete on the SUN Lead Group
- High Level Steering Committee for Nutrition established and has met three times
- Nutrition focal persons in each line ministry appointed with SUN Focal Point in the Prime Minister’s Office
- Guidelines for Nutrition Planning and Budgeting disseminated to Districts
- District Nutrition Officers: 108 of 150 in place
- Fortification standards for oil, wheat, and maize flour in place
- Civil society partnership PANITA established
Intersection of nutrition and agriculture: Multisectoral coordination

- Prime Minister’s Office
- Regional Administration and Local Governments
- Health and Social Welfare
- Agriculture, Food Security, and Cooperatives
- Livestock Development and Fisheries
- DPG Agriculture
- DPG Health
- DPG Nutrition
- Finance and Economic Affairs
- SAGCOT
- Trade and Industries
- National Food Fortification Alliance
- Education and Vocational Training
- National Nutrition Strategy and Implementation Plan
- SUN Focal Point and President’s Nutrition Advisor
- New Alliance Cooperation Framework
- Tanzania Food and Nutrition Center
- REACH
- Water
- Community Development, Gender and Children
- COUNSENUTh
- PANITA Network
- Intersection of nutrition and agriculture: Multisectoral coordination
## Intersection of nutrition and agriculture: National strategies

### Tanzania’s National Nutrition Strategy Implementation Plan

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Five year total estimated cost (Tsh)</th>
<th>Five year total estimated cost (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategy 1: Accessing Quality Nutrition Services</strong></td>
<td>726,665,800,000</td>
<td>454,166,125</td>
</tr>
<tr>
<td><strong>Strategy 2: Social and Behavior Change Communication</strong></td>
<td>28,302,000,000</td>
<td>17,688,750</td>
</tr>
<tr>
<td><strong>Strategy 3: Legislation For A Supportive Environment For Optimal Nutrition</strong></td>
<td>39,787,900,000</td>
<td>24,867,437</td>
</tr>
<tr>
<td><strong>Strategy 4: Mainstreaming Nutrition Interventions Into National And Sectoral Policies, Plans And Programs</strong></td>
<td>13,674,500,000</td>
<td>8,546,562</td>
</tr>
<tr>
<td><strong>Strategy 5: Technical Capacity For Nutrition</strong></td>
<td>19,509,900,000</td>
<td>12,256,187</td>
</tr>
<tr>
<td><strong>Strategy 6: Advocacy And Resource Mobilization</strong></td>
<td>14,334,200,000</td>
<td>8,958,875</td>
</tr>
<tr>
<td><strong>Strategy 7: Research, Monitoring And Evaluation</strong></td>
<td>17,261,900,000</td>
<td>10,788,687</td>
</tr>
<tr>
<td><strong>Strategy 8: Coordination And Partnerships</strong></td>
<td>36,061,500,000</td>
<td>22,538,437</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td>895,697,700,000</td>
<td>559,811,063</td>
</tr>
</tbody>
</table>
**Household income:** Higher incomes used to purchase more food, higher quality food, and a more diverse diet

**Allocation of resources within the household:** Women earning greater income affects how households spend money, how food is allocated, and the types of assets accumulated

**Agriculture production:** Farm level—introduction of new crops through innovation in crop breeding (such as biofortification). Market level—make existing foods produced within countries available to new markets

**Processing:** Can benefit nutritional status where foods are fortified with micronutrients

**Labor devoted to agriculture production and work patterns** Could lead households to reduce time spent on other income-generating activities, greater use of child labor, could reduce time spent on health and nutrition, and could make work physically more or less intensive

*Hoddinott, 2011*
Nutrition assessment, counseling, and support

Training of district multi-sectoral teams and community and facility health workers

Social and behavior change communication targeting pregnant women and young children

Iron and vitamin A supplementation

Staple food fortification

Micronutrient powders to be introduced in early 2013

Intersection of nutrition and agriculture: Nutrition specific approaches
Unlocking market potential for horticulture

Environmental sustainability studies for irrigation systems

Increasing access to safe water

Introduction of orange-fleshed sweet potatoes

Reducing post-harvest losses

Home and community gardens

Intersection of nutrition and agriculture: Nutrition sensitive food systems

Nutrition sensitive food systems

Increasing access to safe water
Tuboreshe-supported millers increased their value of incremental sales by $80,000 in the last year.

NAFAKA assisted 48 savings and internal lending communities with a cumulative value of savings of TZS 30 million.

TAPP-supported farmers experienced a 45% increase in yields and with an average gross margin per hectare at $1,665 for targeted horticulture crops.
Intersection of nutrition and agriculture: Measuring our progress

**Inclusive Agriculture Sector Growth**
- Improved agriculture productivity
- Improved markets
- Increased private sector investment
- Improved policy enabling environment

**Improved Nutrition, Especially for Women and Children**
- Increased resilience of vulnerable communities
- Improved access to diverse and quality foods
- Improved nutrition behaviors
- Improved utilization of MCH and N services

Irrigation and Rural Roads

NAFAKA: Rice and maize value chains

Food Processing and Consumption

Tanzania Agriculture Productivity Program (horticulture)

Mwanzo Bora Nutrition Program

iMARISHA

FANTA

SERA (policy), iAGRI and SUA (Research), M&E
Intersection of nutrition and agriculture: Measuring our progress

Challenges:
- Going beyond calorie sufficiency at a national level and with ministries of agriculture
- Collection information within households
- Frequency of data collection
- Which partners measure what indicators?
- Dietary diversity measures
- Where will the nutrition impact be?