Assessing Drivers of Malnutrition in Nigeria

-- Results of a Multi-sectoral Assessment Informing USAID Nigeria’s Global Food Security Strategy

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Webinar Outline

• Background/Introduction
• IFPRI’s Study
• SPRING’s Assessment
  • Phase 1
  • Phase 2
• Discussion
• Q&A
IFPRI Study

• Scoping study of chronic undernutrition in northern Nigeria – fieldwork done in April & May 2017

• UNICEF conceptual framework used to organize the study
  – underlying and basic determinants

• Mixed methods used
  • Quantitative analysis of 2008 and 2013 Nigeria DHSs
    • Determinants of stunting, followed by decomposition analysis
  • Key informant interview and focus group discussions in Kebbi and Bauchi states – principal approach
Quantitative Analysis

- Children in northern Nigeria significantly more likely to be stunted than elsewhere.
  - Elsewhere, good progress achieved.
  - Need intensified investments in northern Nigeria.
Qualitative Analysis

• Organized study around underlying and basic determinants of young child nutritional status

• Food security
  • Northern Nigeria produces a lot of food, but the poor and farmers with no irrigation have unreliable access
  • No data on food consumption – difficult to judge how important diets are in driving malnutrition in the North

• Water, sanitation, access to health services
  • Low participation in antenatal & well-child clinics
  • Cultural barriers in provision of health services
    • Male health workers offering services to women problematic
    • Suspicion of medical practices, particularly when promoters are outsiders
Qualitative Analysis (cont.)

• Nutritional caring practices
  • Poor practices seen by most experts as dominant determinant of stunting in northern Nigeria
  • Exclusive breastfeeding not practiced - despite years of effort promoting it
    • Mothers believed unable to provide sufficient breastmilk to meet nutritional and hydration needs of their babies

• Gender
  • Women not sufficiently socially or economically empowered to provide nutritional care effectively
    • Often living in seclusion, illiterate, and very young
    • Mothers in northern Nigeria often cannot access knowledge they require so that their children can be well-nourished
  • Continued prodding to empower women is needed to realize deep reductions in chronic undernutrition
Suggestions for Action

• Nutrition actions now in place not sufficient

• Strengthen information flows on nutritional care
  • Mothers at center, but face social constraints - direct outreach to them is challenging
    • More indirect, “whole community” approaches required
      • Involving older women – traditional source of such knowledge; community religious leaders; community health volunteers
      • Expand girls education; use mass media that women may receive

• Greater public health nutrition training
  • Through Colleges of Health Technology at state-level, particularly female students
  • Tertiary training to build cadre of northern Nigerian experts to address northern Nigerian challenges

• Support research – on diets, breastfeeding, drivers of stunting
SPRING - Phase 1
Drivers of malnutrition in Nigeria: Analysis of secondary data sources

Summary

This brief provides information about the status, trends, and drivers of malnutrition in Nigeria, and forms part of a wider nutrition assessment which will inform the development of a five-year Global Food Security Strategy (GFSS) interagency country plan for the United States Government (USG) in Nigeria. In the first stage of this assessment, USAID requested the Strengthening Partnerships, Results, and Innovations in Nutrition Globally (SPRING) project to undertake a desk review of available secondary evidence in order to summarize the current nutrition situation, identify the primary drivers of undernutrition in Nigeria, and explore potential opportunities for strengthening nutrition investments in seven targeted states representing four different geopolitical zones of the country.

This review drew from an analysis conducted in 2017 by the International Food Policy Research Institute (IFPRI) on the drivers of malnutrition in Northern Nigeria, and expanded the scope to include a greater focus on national and regional data. Data sources included: survey reports from the Demographic and Health Survey (DHS), the National Nutrition and Health Survey (NNHS), and the Living Standards Measurement Study (LSMS); national policies and strategies related to nutrition; food security briefings; research reports and other project briefs and reports. SPRING also conducted initial key informant interviews with in-country contacts (Annex 2).
SPRING Desk Review

- Drew upon a large and diverse body of existing literature
- Expanded scope to include all forms of malnutrition
- National, regional, and state-level data
- Key challenges
  - Variations in national nutrition data
  - Lack of representative cross-state data
- Rapid analysis

Key Data Sources:
- Demographic and Health Survey (DHS)
- National Nutrition and Health Survey (NNHS)
- Living Standards Measurement Study (LSMS)
- National policies and strategies related to nutrition
- FEWSNET updates
- Project briefs and reports (e.g. ORIE, WINN)
- Research reports
Key Findings - Nutrition Situation

• 37% of children are stunted (DHS 2013) – down from 42% in 2003

• High rates of wasting, at 7.8%

• An estimated 1.9 million children suffer from severe acute malnutrition

• Among women, a double burden of thinness (11%) and obesity (25%)

• 71% of children, and 48% of women, are anemic

• Nearly a quarter (23%) of babies are born small-for-gestational-age
Key Findings - Immediate Causes

- Poor maternal health; High rates of adolescent pregnancy
  - Adolescents less likely to receive antenatal care, have shorter than average birth intervals
- Poor IYCF practices
  - Average duration of EBF is less than one month, water commonly given
  - Lack of dietary diversity, both for households and children
- Illness is a primary driver, especially for acute malnutrition
Key Findings - Underlying Causes

• Widespread seasonal food insecurity, driven by volatile food prices
  • Market-based economy – most food is purchased
  • Areas of severe food insecurity in areas affected by conflict – another type of “double burden”

• Underdeveloped agriculture system
  • Minimal irrigation, gender inequity, high food waste, lack of storage

• Widespread shocks and hazards
  • One-third of HHs report experiencing a shock in the past 5 years

• Access to health and hygiene services
  • WASH and health access particularly constrained in Northern states
Key Findings - Basic Causes

• **Access to resources**
  - Poverty is a primary driver of undernutrition
  - Only an estimated 3% access social safety nets – mainly food aid

• **Cultural and social norms**
  - Women disadvantaged in access to land, assets, healthcare, and education
  - Average age of marriage in northern states: **15.3 years**
  - Roles of older women, religious leaders as influencers

• **Policy environment**
  - Roll-out of strategies and plans, health financing
# Rapid State Comparisons

## Annex 1: Table of Relevant Indicators

<table>
<thead>
<tr>
<th></th>
<th>Kebbi (NW)</th>
<th>Kaduna (NW)</th>
<th>Niger (NC)</th>
<th>Benue (NC)</th>
<th>Ebonyi (SE)</th>
<th>Cross River (SS)</th>
<th>Delta (SS)</th>
<th>NATIONAL</th>
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<tbody>
<tr>
<td><strong>Poverty</strong></td>
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<tr>
<td>Multidimensional Poverty Index (MPI) (DHS 2013)</td>
<td>0.553</td>
<td>0.311</td>
<td>0.324</td>
<td>0.28</td>
<td>0.265</td>
<td>0.146</td>
<td>0.107</td>
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<td><strong>Food Security</strong></td>
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<td>19.6</td>
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<tr>
<td>% Households that experienced food shortage in past 12 months by zone (LSMS 2015/2016)</td>
<td>15.0 (North West zone)</td>
<td>15.0 (North West zone)</td>
<td>10.2 (North Central zone)</td>
<td>10.2 (North Central zone)</td>
<td>34.3 (South East zone)</td>
<td>16.6 (South South zone)</td>
<td>16.6 (South South zone)</td>
<td>19.6</td>
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<td><strong>WASH</strong></td>
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<td>60.6</td>
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<td>% Households with improved drinking water source (DHS 2013)</td>
<td>21.9</td>
<td>65.8</td>
<td>48.1</td>
<td>37.3</td>
<td>67.7</td>
<td>69.6</td>
<td>68.8</td>
<td>60.6</td>
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<tr>
<td>% Households without toilet (GHS 2015)</td>
<td>14.5 (North West zone)</td>
<td>14.5 (North West zone)</td>
<td>53.0 (North Central zone)</td>
<td>53.0 (North Central zone)</td>
<td>23.7 (South East zone)</td>
<td>13.9 (South South zone)</td>
<td>13.9 (South South zone)</td>
<td>24.3</td>
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<td><strong>Stunting</strong></td>
<td></td>
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<td>36.8</td>
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<tr>
<td>% of children under five who are stunted (&lt;.22) (NNHS 2015)</td>
<td>58.3</td>
<td>52.1</td>
<td>38</td>
<td>23.8</td>
<td>20.6</td>
<td>18.5</td>
<td>19.9</td>
<td>36.8</td>
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# of indicators worse than national average

| 9 | 6 | 4 | 3 | 3 | 0 | 1 |

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Recommendations from The Desk Review

1. Scale up high-quality information and communication on nutrition
2. Invest in a health system capable of meeting nutrition needs
3. Specifically target the needs of women and girls
4. Ensure sustainable and diverse food production and consumption throughout the year
5. Prioritizing pro-poor investments and interventions
6. Supporting nutrition coordination and roll-out of strategies and plans
SPRING - Phase 2
Selection of the states and LGAs

• USAID Priority value chains
• Spread of agro-ecological zones
• HPN investment
• Socio-cultural distinctions

North – Kebbi
Central – Niger & Benue
South – Cross River
Argungu (north): Rice
Zuru (south): maize and rice
Niger & Benue LGAs and VCs

Bida (south): maize and rice

Makurdi (north): maize and rice, aquaculture

Gwer East (north): maize, rice, and soybean
Biase (south): aquaculture
Yakurr (central): maize and aquaculture
Ogoja (north): aquaculture, maize, and rice
Overview of Methodology

Original data collection

- Small-scale producers (SSP) household survey
- SSP focus group discussion
- Community transect walk
- Key informant interviews at national, state, LGA and community level
Field work details

• Timeline (September 9 – October 5, 2018)
  • Finalization of data collection tools (3 days)
  • Training and orientation of research assistants (3 days)
  • Data collection (16 days)
  • Preliminary analysis (3 days)

<table>
<thead>
<tr>
<th>Data Collection Methods</th>
<th>Kebbi</th>
<th>Niger</th>
<th>Benue</th>
<th>Cross River</th>
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<td>37</td>
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<td>Key informant interviews</td>
<td>93</td>
<td>60</td>
<td>59</td>
<td>49</td>
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<td>Focus group discussions</td>
<td>24</td>
<td>4</td>
<td>7</td>
<td>13</td>
<td>-</td>
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<tr>
<td>Community transect</td>
<td>6</td>
<td>6</td>
<td>8</td>
<td>6</td>
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</table>
Findings: Agriculture-led economic growth (IR 1-4)

• Public sector challenges
  • Agricultural Development Projects (ADP) -- Underfunded and inefficient
  • Weak research-extension-farmer linkage
  • Government policy and regulatory Systems not well coordinated, e.g. double taxation

• Farming systems
  • Largely dependent on manual tools
  • Input markets – high cost, adulterated, low quality
  • Output market – middlemen, insufficient production, standards
  • Poor postharvest practices - lack of capacity, equipment, or infrastructure
  • Not climate smart

• Lack of engagement of women & youth in value chains
  • Labor-intensive
Findings: Resilience (IR 5-6)

• Disaster prevention / emergency action system unclear
  • No effective early warning system to alarm people on events that will affect their production and livelihoods
  • Warnings actually issued lacked actionable guidance

• Lack of systems for shock recovery
  • Lack of access to formal and informal safety nets
  • Communities lack the buffer capacity to adapt to or recover from shocks
Findings: Maternal & child nutrition (IR 7-9)

• Low adoption of exclusive breastfeeding practices due to lack of education/awareness and traditional beliefs
• Poor complementary feeding practices
• Monotonous, inadequate and seasonally determined diet
• Inadequate knowledge and practice on WASH
• Severely limited resources and capacity to implement ten priority nutrition interventions at the health facility level
• Limited collaboration between Ministry of Agriculture, Ministry of Health, and other line ministries with direct link to nutrition and health
Findings: national level

• Data and evidence gaps
  • Consumption and nutrient intake
  • General lack of a diverse diet due to production or purchase

• Malnutrition is not seen as an issue by the public
  • Culture, religion, and gender equity (add value or change norm)

• Food and WASH are areas that connect the two sectors
  • Interventions tailored to farmers at different stages of readiness to participate
  • Combined approach (diversified homestead production, and value chain commodity production)
  • Training of ADP on nutritional contents of foods, and safety practices
Field Team

Lead consultants
• Dr. Yemisi Shittu – Niger & Benue
• Mr. Bassey Archibong – Cross River
• Dr. Muyiwa Owolabi – Kebbi

Research assistant/data analyst:
• Frank Onuah – Abuja

SPRING staff
• Dr. Lidan Du – Abuja
• Ms. Lisa Kowalski – Niger & Benue
• Ms. Sarah McClung – Cross River
• Ms. Sarah Hogan - Kebbi
Thank you!

For more info, please contact:

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