Food Security and Nutrition Monitoring Systems and the Food Crisis: Lessons from the Last Three Decades

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Outline

• Introduction and motivation
• Brief history
• A conceptual framework
• FSNM and the food crisis
• Lessons for informed policy making
• Conclusions
Introduction and motivation

- Policies and programs to achieve development goals
- Policies often made without evidence – high human cost
- Research – information - policy linkages
- Information use in the policy process
- Political economy of policy making
- Strengthening institutions for evidence generation
- NEPAD – CAADP policy process and Knowledge systems
- Food crisis and policy making
### Event/Approaches

<table>
<thead>
<tr>
<th>Event/Approaches</th>
<th>Details</th>
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<tbody>
<tr>
<td>ACC/SSN, Cali Colombia – review of the status</td>
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<td>indicators</td>
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<td>FAO-Famines in Ethiopia, Sudan, Botswana – regional early warning system -SADC</td>
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<td>National early warning system (1983-85) – several SSA countries</td>
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<td>Nutritional surveillance (1985-1990) to include food security indicators</td>
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<td>Food security and nutrition monitoring – review of experience ( Malawi – lessons</td>
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<td>workshop)</td>
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<td>Nutritional surveillance in Asian financial crisis -1997 - Indonesia</td>
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<td>Sentinel nutritional surveillance (LQAS; FANTA II) (UNICEF) (1995-present)</td>
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<td>Development of CAADP - JSR – ReSAKSS – Country level SAKSS (2003- present)</td>
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<td>Food crisis – monitoring of food prices and impact of high food prices (2007-2010)</td>
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<td>Rapid short message services : use of ICT for locating the food insecure and</td>
<td>malnourished</td>
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<td>malnourished</td>
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### Evolution of types and objectives of food security and nutrition monitoring

<table>
<thead>
<tr>
<th>Type</th>
<th>Objectives</th>
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<tr>
<td>Program management and evaluation</td>
<td>To rationalize and maximize the effectiveness of food security, health and nutrition programs</td>
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<td>Development planning and policy design</td>
<td>To enhance food security and nutritional effects to develop policies</td>
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<td>Early warning and intervention</td>
<td>To prevent short-term critical reduction in food availability and access and nutrition</td>
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<td>Problem identification and advocacy (food crisis)</td>
<td>To assess and monitor indicators of nutrition as a basis for allocating resources towards particular problem</td>
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<td>Monitoring effects of specific policies and strategies (structural adjustment)</td>
<td>To monitor food security and nutritional status of the poor to provide feedback to policy makers on the effects of structural adjustment policies</td>
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</table>
General methodology of food security and nutrition monitoring

Situation assessment and diagnose the causal factors of food insecurity and malnutrition

Identify the constraints

Analysis, policy decisions and program prescription

Planning interventions and plans of action

Implementation of intervention policies and programs

Evaluate interventions for improvements in food security and nutrition
Stages in implementing food security and nutrition monitoring

**Situation Analysis**  
(problem identification, information needs, demand and potential clients)

**Organization of Institutions**  
(agencies for data collection, processing, analysis and action)

**Designing Information Generation**  
(conceptualization and analytical methodology)

Information to data

**Data collection**  
(sources and methods of collection)

**Data Processing and Analysis**  
(institution and capacity building)

Data to information

**Results and Policy Discussions**  
(interpretation and transfer)

Review the Monitoring System  
(use of information for intervention and impact)
Conceptual framework for analyzing household food security and nutrition

- Technology availability/adoption
- Resource use (land, irrigation)
- Input availability (fertilizer, pesticides) use
- Labor availability
- Household characteristics
- Livestock production
- Crop/food production
- Employment off-farm/non-farm
- Selling markets/output prices/wages
- Storage technology
- Strategies/exchange for food/cash
- Strategies exchange/wages in kind
- Household income
- Local/private food traders
- Buying market/food prices
- Food availability in market
- Household food security
- Intra household allocation of food
- Health, water, sanitation
- Nutritional status
Figure 1. A conceptual framework for evaluating food security and nutrition monitoring systems.
**Review of FSNM in Selected Countries**

- In response to Food Crisis – organize food policy systems to generate and use information effectively
- Strengthen capacity for policy analysis
- Strengthen use of information in food policy making
- Organized series of consultative national and regional workshops
- Studying the policy process
- Role of actors and players in information generation and use
## Summary of policy responses to the food crisis and information needs

<table>
<thead>
<tr>
<th>Country &amp; Policy problem triggered by the food price crisis</th>
<th>Example of food policy responses and information needs</th>
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<tr>
<td><strong>Bangladesh:</strong> Sharpe rise in food prices in domestic markets. Significant number of households sliding into poverty. Increased vulnerability of marginalized groups.</td>
<td>Long-term food security goals such as price support, fertilizer and fuel subsidies maintained. Net-importing, yet 4th largest rice producer in the world. Increased allocation of funds for social safety nets. Built higher food stock and reduced import tariffs on food for open market sales in urban areas. Banned rice exports and eliminated import duty on rice and wheat.</td>
</tr>
<tr>
<td><strong>Ethiopia:</strong> Chronic food insecurity and low productivity of agriculture accentuated by the food price increase.</td>
<td>Imposed export ban on all cereals crops. Released grain stocks to distribution centers and to grain mills. Targeted food distribution to affected population.</td>
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<td><strong>India:</strong> Food price increase at the international level had little direct influence on domestic prices. However, high domestic food inflation was criticized by opposition parties and civil society organizations; structural change in demand for high value commodities combined with poor supply response</td>
<td>Ban on common rice and wheat exports. Additional procurement of wheat was doubled in 2008/09. Government proactively increased the support price for major cereals, increased the food subsidies, released the food stocks in open markets, and increased the fertilizer subsidy.</td>
</tr>
<tr>
<td><strong>Kenya:</strong> Food prices began steadily increasing since 2007. Policy distortions and under provision of public goods were identified as major causes of food insecurity and reinforced by high food prices.</td>
<td>Policy responses were slow. Policy responses included producer support policies and other supply side interventions. Increased importation of food grains to build up domestic stocks. Reduction of wheat import tariff and suspension of maize import tariff.</td>
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<tr>
<td><strong>Malawi:</strong> Export of maize forging ahead with input subsidies during the crisis. Media criticized the government.</td>
<td>Ban on export of maize. Restriction on private domestic trade. Commitment to produce additional maize through fertilizer subsidy. Export commitments not kept; strategic grain reserves.</td>
</tr>
<tr>
<td><strong>Mozambique:</strong> Domestic food prices continued to rise even after the international prices started to decline resulting in demonstrations on the streets of Maputo by the end of 2010.</td>
<td>Reduced import tariffs in early 2008, cut the tariffs of maize, wheat, and rice from 25 percent to 2.5 percent. Trade policy measures were generally effective in reducing the international price shock impact.</td>
</tr>
<tr>
<td><strong>Nigeria:</strong> Droughts in some parts of the country; growing food shortages in many parts of the country.</td>
<td>Released stocks of food grains and increased rice imports. Emergency meeting of governors. Increased fertilizer subsidy and other subsidies for small scale machines. Implemented guaranteed minimum price, commercial agricultural credit program, and national food crisis response program.</td>
</tr>
<tr>
<td><strong>Vietnam:</strong> Although a major rice exporter, increase in international prices was seen not as an opportunity to increase the income of rice farmers. Poor consumers in rural and urban areas became vulnerable to food price increases.</td>
<td>Export ban on rice preceded by lowering the rice export quota. Domestic food grain market was fully liberalized. Fulfilling domestic demand for rice became the prime policy objective of the government. Procured rice from farmers and built up food stocks.</td>
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### Characteristics of FSNM systems during the food crisis

<table>
<thead>
<tr>
<th>Country</th>
<th>Type of monitoring system</th>
<th>Key objectives</th>
<th>Infrastructure for data collection</th>
<th>Capacity for data processing, analysis, and interpretation</th>
<th>Timely generation of information</th>
<th>Commitment of decision makers</th>
<th>Impact of information on decision making</th>
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<tbody>
<tr>
<td>Bangladesh</td>
<td>Food policy monitoring system in the Ministry of Food</td>
<td>Monitor food prices, production, and stock levels</td>
<td>Data from the districts, food controllers, and household surveys</td>
<td>At the national level through externally funded projects</td>
<td>Regular joint sector reviews allow for sharing of information with policymakers</td>
<td>High level commitment to use data for determining the extent of food emergencies and the need for data.</td>
<td>National level policymaking benefits from macro systems; challenges prevail on assessing the impact of various interventions and refining them</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>Various systems, both national and international</td>
<td>Monitor food prices, production, vulnerability</td>
<td>Regional offices mandated to collect information</td>
<td>Weak capacity in government NGOs fill time capacity gap</td>
<td>Timely information is produced by international agencies</td>
<td>High commitment of decision making to use information; high role of politics</td>
<td>Information used by donors to guide decision makers</td>
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<tr>
<td>India</td>
<td>Various systems in agriculture, food, and nutrition</td>
<td>Monitor food production and consumption</td>
<td>Highly developed infrastructure for data collection</td>
<td>High capacity for data processing and analysis</td>
<td>Regular bulletins on price and food availability</td>
<td>High commitment to policy responses but low level engagement with evidence/ information use</td>
<td>Analysis of information left to researchers who have limited access to policy makers</td>
</tr>
<tr>
<td>Kenya</td>
<td>FEWS NET provided regular information on food prices</td>
<td>Information price and production trends</td>
<td>Mostly data on price and food products; household level data collection was maintained</td>
<td>Capacity in government ministries is weak, some capacity in think tanks</td>
<td>Policy research think tanks provide information for decision making but was not systematic</td>
<td>Opposition party played key role in raising concerns and increasing the commitment of the government</td>
<td>Food security steering groups help in use of information for policymaking</td>
</tr>
<tr>
<td>Malawi</td>
<td>Various approaches, including famine early warning system</td>
<td>Food security vulnerability assessments</td>
<td>Good infrastructure to collect data</td>
<td>Capacity continues to be limited</td>
<td>Regular collection of data helps update information</td>
<td>Strong commitment and leadership of policymakers</td>
<td>Donors support groups that regularly met and demanded information for decision making</td>
</tr>
<tr>
<td>Mozambique</td>
<td>No nationally organized monitoring system; FEWS NET</td>
<td>FEWS NET monitors food prices and food production</td>
<td>Weak infrastructure for data collection</td>
<td>Some capacity exists but needs strengthening</td>
<td>Information from filed delays due to poor capacity</td>
<td>Policymakers are committed but do not have capacity</td>
<td>Systematic use of information for decision making</td>
</tr>
<tr>
<td>Nigeria</td>
<td>No functioning food security monitoring in place</td>
<td>No well-defined objectives exist for monitoring</td>
<td>Data collection infrastructure exists but is poorly used</td>
<td>Capacity for data analysis weak in government agencies</td>
<td>Policy think tanks generated information but it was not timely and government did not use it</td>
<td>National food crisis response program but was not successful</td>
<td>Implementation challenges faced due to lack of information sharing among agencies</td>
</tr>
<tr>
<td>Vietnam</td>
<td>Well established food price monitoring systems in the Ministry of Agriculture</td>
<td>Information on trends and variations in food prices and food availability in the regions</td>
<td>Data collected through the existing channels of regional and district administration</td>
<td>Capacity for regular analysis of the data and connecting the food prices to the household indicators remains low</td>
<td>Food price data was available on time, but sharing with public was limited</td>
<td>Decision makers were highly committed but over reacted to price increase, hurting small scale producers</td>
<td>Information was not effectively used due to limited analysis and political pressure</td>
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Global Weather Hazards Summary
December 6-12, 2013

Suppressed rainfall forecast in eastern Zambia, southern Malawi and western Mozambique

Africa Weather Hazards

1. While some local areas observed some rains, recoveries along the Raba river basin in southern Somalia during mid-November, the absence of rainfall in October has led to considerable moisture deficits across many parts of southern Somalia and eastern Kenya. This dryness is likely to negatively impact the development of crops, and pastoral conditions with little opportunity for recovery before the end of the rainy season.

2. Wet episodes over western Ethiopia and central Somalia during mid-October have led to downstream flooding and elevated water river levels along the Shabelle River, particularly the lower Shabelle region of Somalia.

3. During November, poorly distributed rainfall has resulted in growing moisture deficits and deteriorating ground conditions over many local areas of south-central Tanzania. Moderate rainfall is forecast across the region during the next seven days, which may help to relax dry conditions.

4. A prolonged delay of the onset of the rainy season and erratic rainfall distribution during November have resulted in developing dryness across eastern Zambia, southern Malawi, and western Mozambique. Suppressed rainfall is forecast over the region during the next week, which could worsen conditions on the ground.
EMERGENCY NUTRITION QUARTERLY BULLETIN
(Third Quarter 2010)
Emergency Nutrition Coordination Unit
(Disaster Risk Management & Food Security Sector)

1. NUTRITION SITUATION

The current nutrition situation in Ethiopia is monitored on a monthly basis by the ENCU of the EPRDF in collaboration with nutrition cluster partners at both regional and national levels by collecting, analyzing, and using data and information from four sources: 1) periodic assessments in the Ethiopian Health and Nutrition Survey (ENHS); 2) district food security information; 3) data from the ENCU from multiple sources; and 4) information from humanitarian and government organizations.

<table>
<thead>
<tr>
<th>Region</th>
<th>Acute Malnutrition (A/N)</th>
<th>Severe Acute Malnutrition (SAM)</th>
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<tbody>
<tr>
<td>Oromia</td>
<td>2.4%</td>
<td>0.5%</td>
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<tr>
<td>Amhara</td>
<td>2.8%</td>
<td>0.6%</td>
</tr>
<tr>
<td>SNNP</td>
<td>3.0%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Afar</td>
<td>3.2%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Somali</td>
<td>3.4%</td>
<td>0.9%</td>
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</table>

Figure 1: Nutrition Survey Results in Ethiopia July-September 2010

ENCU September 30, 2010  Page 1

January 2008 Data Report
Malawi Integrated Nutrition and Food Security Surveillance System

Introduction
The food security and nutrition situation in Malawi is monitored through the Integrated Food Security and Nutrition Surveillance System (IFSS) supported by the Malawi Integrated Nutrition and Food Security Surveillance System (MIFSS) with technical support from Action Against Hunger. Nutrition indicators are collected from five growth monitoring clinics (GMC's) in each of the 20 districts in Malawi except for Likoma, which has only one GMC. The GMCs are selected and have their weight, height, and upper-arm circumference measured monthly. Thus, the surveillance system monitors the numbers of children of 60 months of age who are selected for the survey and monitored monthly. The survey is conducted in each of the 20 districts and the data is analyzed and reported on a monthly basis. This bulletin provides information on recent changes in the nutrition indicators and food security situation for the month of January 2008 and the previous months.

Summary
This bulletin provides information on recent changes in the nutrition indicators and food security situation for the month of January 2008 and the previous months.

Nutrition Assessment
1. Generally, when comparing nutrition indicators of January 08 with the previous month, we observe an increase for the three regions in Malawi. The situation is also worse than previous January 07.
2. Of all the three Regions, the South continues to have the highest proportion of children who are wasted followed by Central Region.
3. Both GAM and SAM are increasing when compared with the previous month 6.9% for GAM and 1.6% for SAM. However, when compared with previous year we observe that SAM is slightly higher but not significantly.
4. Chikwawa, Chiradzulu and Nchewi are the three districts with the highest rates of wasting and severe wasting.
5. A total number of 2,432 children were measured in January 08 and the total portion of usable data (100%) decrease when compared with previous months.

Food Security Assessment
1. This month the Food Security Index (FSI) has been stable on the previous month’s value but not as high as for the month of December.
2. Exception is made for the Northern Region, where median grain holdings have significantly increased in July and being kept in August up to December where it is slightly higher compared to same time last year.
3. Projections values are expected to decrease in all regions.
Status of FSNM in responding to the food crisis

- Limited investment in FSNM system
- Few national FSNM systems functional
- Quality of information
- Producing timely and usable information
- Choosing appropriate indicators
- Information at the household and community levels
- Decentralization of monitoring systems
- Experienced cycles of support and neglect
Bridging data – policy capacity

- External dependence
- Data collection
- Less processed
- Much less analyzed
- Even less is reported and used
- Local capacity of the institutions
- Low credibility and trust in local analysis
- Trained individuals needed to bridge information to policy
• Research impact on policy
• Improving information gathering infrastructure
• Improve the effectiveness of the system
• Increase the cost effectiveness (reduce donor dependency)
• Making it sustainable
• Check the relevance meet the changing needs (food crisis)
Lessons from FSNM in responding to the food crisis

- Connecting national systems to regional and global systems
- Increasing information and decision making linkages
- Cross-country learning
- Well-developed national systems contribute to global information
Lessons from FSNM in responding to the food crisis

- Increasing the commitment of country governments
- Reorient donor funding towards capacity development
- Political economy of policy making and information use
- Streamlining the information base and creating synergy among duplicative efforts
Conclusions

• Early warning systems are able to help policy decision making the most
• Externally driven and funded
• Not yet mainstreamed
• Polices continue to be developed and implemented on an ad-hoc basis
• Strategic investment in monitoring systems
• Increasing the resilience of food systems
• Multidisciplinary capacity needed