Using Policy and Economics to Prevent Seasonal Hunger and Its Impacts

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Points of Discussion

• Seasonality, food insecurity and famine
• Economic hits to households, countries and regions
• Crises, conflicts, hunger and undernutrition
• Political will and action to address food crises
Seasonality, food insecurity & famines

- Most of the world’s acute hunger and undernutrition occurs not in conflicts and natural disasters but in the annual “hunger season,” the time of year when the previous year’s harvest stocks have dwindled, food prices are high, and jobs are scarce.
- What happens during seasonal hunger and what happens in famine differs only in severity, but coping sequences are similar.
- The link between them is causal, and lead to a chain of shocks that leads to erosion of resilience.
- These stress-shocks can sometimes lead to conflict.
Seasonality in Niger

The convergence of malaria and rainfall at specific times of the year generates seasonal patterns of hunger and undernutrition.

Seasonality Affects Food Prices and their Volatility

- In most contexts, food prices are determined by market factors. They fluctuate by season and year, responding to supply-demand interactions.
- Food price volatility is associated with the underlying variability inherent in agricultural production, i.e. due to seasonality, variable weather, incidence of pests and diseases, etc.
- Food price volatility poses risks for everyone – from farmers to consumers.

Volutility Can Lead to Shocks & Coping Strategies

- foodcrisis
  - reversible
    - loss of diet diversity
    - discontinuation of school studies
    - reduction in food consumption
    - reduction in health care
    - collecting of herbs, berries
    - consumption of seeds
  - irreversible
    - selling of farm animals
    - slaughtering of farm animals
    - selling of land
    - prostitution
    - emmigration

## Impacts of Food Price Shocks

<table>
<thead>
<tr>
<th>Effect</th>
<th>Victim/result</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poverty trap</td>
<td>Consumers and farmers</td>
<td>Temporary coping strategies (e.g., sale of possessions or dietary cutbacks)</td>
</tr>
<tr>
<td>Reductions in private investments</td>
<td>Farmers</td>
<td>Smaller harvests due to less use of fertilizer</td>
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<tr>
<td>Macroeconomic</td>
<td>Price fluctuations/influence on distribution of resources</td>
<td>Reduced economic growth</td>
</tr>
<tr>
<td>Political processes</td>
<td>Democratic institutions/long-term economic effects</td>
<td>Riots which deter overseas investors/subsidies which inhibit investments in the general welfare of the populace</td>
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Food Price Hikes and Intensity of Civil Conflict: Nigeria 2000-2013

Source: Authors’ estimation based on food consumer price index (CPI) and conflict data from the Food and Agriculture Organization of the United Nation’s Statistical Division (FAOSTAT) and the Armed Conflict Location & Event Data Project (accessed September 27, 2014).

Note: High food price months are months that have food price inflation rates higher than normal. The food price inflation anomaly is calculated over the period 2000–2013 as: \[ A = \alpha CPI_{t} + \beta CPI \].

Ricochet Effect: Food Security Linked to Political Instability

World Food Prices: 2008-2012

Andrew Holland Arab Spring and World Food Prices: http://www.americansecurityproject.org/climate-security-report/
"A Hungry Man is An Angry Man"

Correlation between violence and hunger.

Source:
State of Food Insecurity.
FAO, 2015 and
FAO’s suite of Food Security Indicators.
It Matters for Nutrition Outcomes

Prevalence of child stunting and annual average change in developing countries by civil conflict status

Source: Authors’ estimation based on data from the World Health Organization’s Global Health Observatory, the Uppsala Conflict Data Program, and the United Nations Department of Economic and Social Affairs databases (accessed September 23, 2014).

Notes: A country is classified as affected by major civil conflict if it experienced an average of more than 100 battle-related deaths or fatalities in nonstate conflicts or other clashes over a period of three years. The beginning of the past two decades spans the period 1994–1996, and the end of the past two decades, the period 2011–2013. N is the number of countries. The country averages are calculated based on population weights. The child-stunting rates used are the first and the last estimates taken in the past two decades.
Caveat: El Nino Effects

Proliferation of conflicts (as of October 2015)

Whereas there has been a decreasing intensity of conflict in Sudan, South Sudan and Burundi, the location of conflict events has not materially changed since May.

Source: Armed Conflict Location & Event Data Project (ACLED)
## Policy Responses

<table>
<thead>
<tr>
<th>Entitlement category</th>
<th>Impacts of drought &amp; flood</th>
<th>Policy response</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Production-based</strong></td>
<td>• Harvest failure</td>
<td>• “Productivity-enhancing safety nets” (Starter Packs)</td>
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<td></td>
<td>• Employment opportunities decline</td>
<td>• Public works programs</td>
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<td></td>
<td>• Real wage rates fall</td>
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<tr>
<td><strong>Labor-based</strong></td>
<td>• Market failure</td>
<td>• Open market operations</td>
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<td></td>
<td>• “Failure of exchange entitlements” (terms of trade decline)</td>
<td>• Food price subsidies</td>
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<tr>
<td><strong>Trade-based</strong></td>
<td>• Failure of informal safety nets</td>
<td>• Pricing policies</td>
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<tr>
<td></td>
<td>• Food aid failure</td>
<td>• Food aid</td>
</tr>
<tr>
<td></td>
<td>• “Priority regimes”</td>
<td>• Cash transfers</td>
</tr>
<tr>
<td><strong>Transfer-based</strong></td>
<td></td>
<td>• Weather insurance</td>
</tr>
</tbody>
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Social Protection as a Coping Mechanism

Social protection
- Cash and in-kind transfers to enhance welfare, productivity and economic activity

Social development
- Health, education

Economic development
- Macro-economic policies, trade, agriculture

Humanitarian programmes
- Food distribution, cash transfers, therapeutic feeding

School feeding, nutrition programmes, education stipends, fee waivers

Market-based instruments: public works programmes, input subsidies, risk insurance

Source: Slater et al., 2010.
Other Actions

- **For the most vulnerable:** Expand social safety nets to cover those who are susceptible to hunger before it becomes too late.

- **For farmers:** Promote public policies that stabilize prices paid to farmers, subsidize agriculture capital, enhance availability of seed and livestock quality through locally adapted systems, crop/livestock insurance, reinforcement of extension services.

- **For policymakers/states:** Release food stocks and create new food reserves, establish price controls on staple goods (important for diets of the most poor), address export bans and waive import tariffs on staple commodities.

- **For researchers:** Improve our understanding of the relationship between seasonality, food insecurity and political instability.

- **For global community:** Have a moral responsibility to do our part because food should be considered exceptional.
Thank you!

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