



Measuring Resilience in a Volatile World: A proposal for a multi-country system of sentinel sites

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Outline

- My talk is largely based on a background paper for IFPRI's recent 2020 Conference with Chris Barrett of Cornell University:

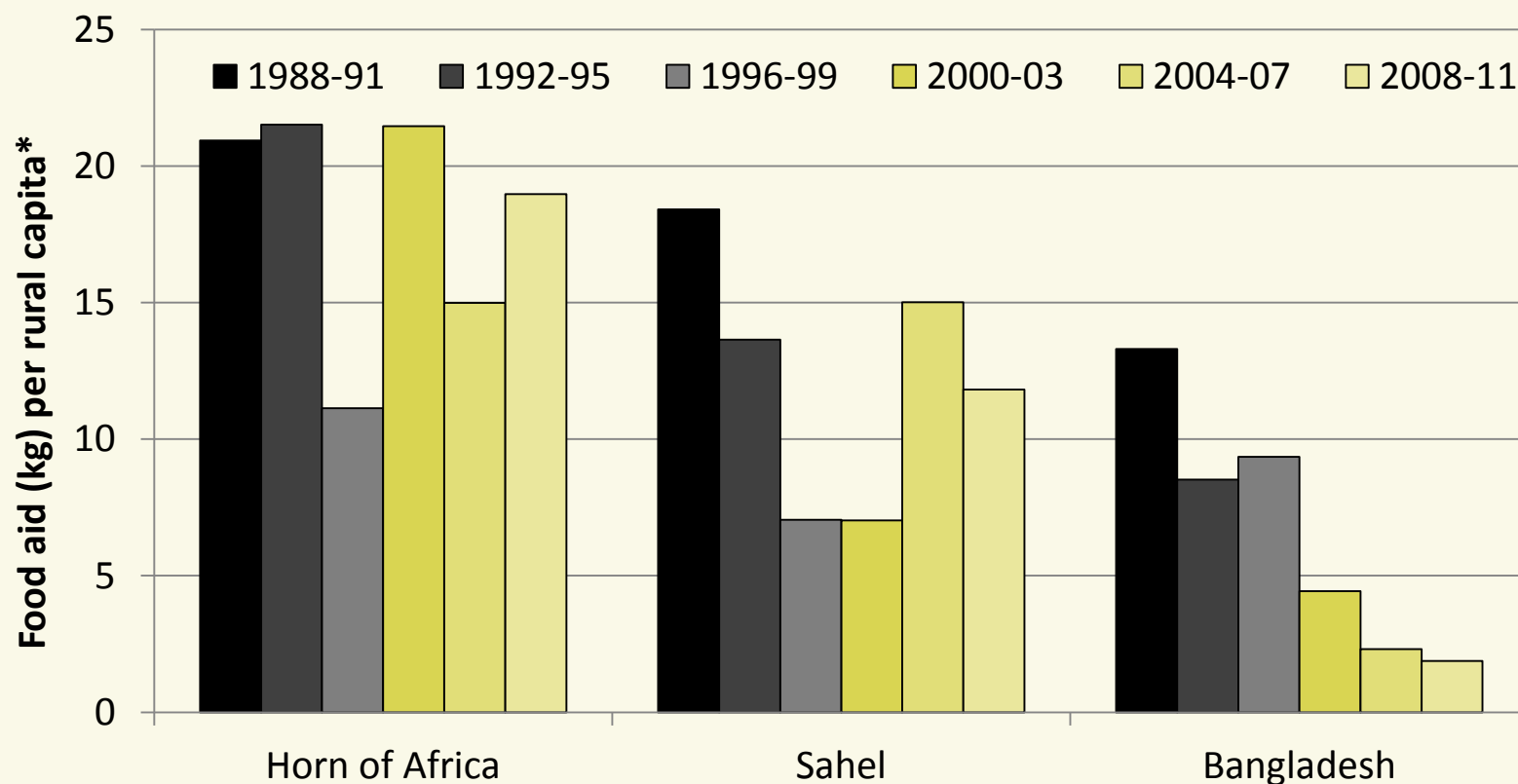
<http://www.2020resilience.ifpri.info/resources/papers/>

- That paper tries to answer several resilience questions: Why? What? How? Where? Who?
- It makes the case for investments in a multi-country system of sentinel sites for monitoring, evaluation and early warning
- My opening remarks are going to draw sparingly on that paper

Why measure resilience?

- I think we are fumbling in the dark on many issues
- A good example is the Horn of Africa
- Like the Sahel, talk of permanent crisis
- Yet strikingly, we have **no reliable numbers** on welfare trends in the region
- Take livestock: fallen by half, or actually going up?
- Is this an escalating crisis, even though livestock exports are booming?
- Are diets and nutrition outcomes really deteriorating?
- Are pastoralist drop-outs doing better or worse?

Figure 1. Trends in food aid receipts in the Horn of Africa, the Sahel and Bangladesh: 1988-2011



Source: Authors' estimates from the WFP's Food Aid Information System (FAIS), <http://www.wfp.org/faais/>

Why measure resilience?

- Another fascinating example is Bangladesh
- Henry Kissinger’s “basket case” now receives almost no food aid
- Unlike Africa, we do have good data and analysis:
 - Long run household income and expenditure survey
 - HKI’s nutrition surveillance project (NSP) conducted high frequency surveys for 2 decades
 - 6 rounds of DHS
 - Plus many other surveys (e.g. IRRI, IFPRI, BBS)

What is resilience?

- Key to resilience is not that it's new, but
 - i. it **unifies** traditionally disparate dimensions of ill-being and well-being: food security, nutrition, health, sustainability, coping mechanisms, social and political stability, relief & development, etc
 - ii. It is a **multi-tiered** concept: individuals, households, communities, governments
 - iii. It is a more **dynamic** conceptualization of ill-being and well-being: traps and thresholds
- In other words, resilience is more than the sum of its parts

What is resilience?

- The complexity of this concept also makes measurement very difficult
- There is a danger that we'll take something rich and complex and dumb it down into a single index for institutional and political convenience
- A single resilience index *might* be a useful communication device, but it will always obscure more than it reveals
- The greater challenge is to generate a sufficiently rich *array of information* on the resiliencies and vulnerabilities of different communities

How do we measure resilience?

- How do we go about generating a sufficiently rich array of data?
- What do we need to do to move measurement systems closer to the latent construct that is resilience?
- How close are existing measurement systems to this construct?

How do we measure resilience?

1. Multi-dimensional, multi-disciplinary surveillance

- Surveys, like the scientists that implement them, are generally highly specialized
- DHS are weak on economic indicators
- Economic surveys are weak on health & nutrition
- Advantages to specialization, but disadvantages in terms of understanding how these different dimensions intersect and interact
- Ideally, resilience measurement systems need more inter-disciplinary collaboration than existing systems offer

How do we measure resilience?

2. Multi-tiered surveillance

- Traditional surveillance systems focused on household level – but this seems to miss much of the complexity of social and political determinants of vulnerability and resilience
- So a particular challenge is to understand the interactions between households, communities, governments, and broader environmental and economic factors
- Suggests the need for a deeper marriage of quant and qual techniques

How do we measure resilience?

3. Dynamic surveillance

- Resilience is an inherently dynamic concept, but existing measurement systems are mostly focused on occasional snapshots (every 4-5 years)
- Occasional surveys don't help us understand either predictable shocks (seasonality) or unpredictable shocks (droughts, floods, etc)
- So understanding resilience requires higher frequency surveys than is currently the norm
- For most indicators, it also requires panel data (nutrition is the main exception)

How do we measure resilience?

- One way to achieve these three criteria – to generate the rich array of data – is to focus on sentinel sites that are surveyed year after year
- Select sites based on strategies considerations – e.g. agroecologies, market access, socioeconomics
- Combine household (HH) level analysis with local socio-political and ecological analysis
- Follow communities and HHs year after year
- Conduct thick rounds of surveillance more occasionally, thin rounds for time-sensitive key indicators (e.g. child wasting)

Maximizing the benefits

- This surveillance system would:
 - Bolster early warning systems
 - Hugely improve monitoring and surveillance
 - Feed into impact evaluation of a wide range of programs and projects: relief, DRM, traditional development interventions, safety nets, etc
 - Feed into blue sky research – e.g. climate change adaptation, community level resilience
 - Help re-design programs that aren't working;
 - Scale up programs that are working

Minimizing the costs

- Select countries and sites strategically
- Use thick and thin rounds of data collection
- Build up local capacity to have enumerators with a permanent presence in the field
- Utilize ICTs (selectively, experimentally)
- Ensure high quality data dissemination and usage
- Spread the costs over multiple agencies – important because the data will be a public good, and because there are major coordination failures:
30 agencies implementing 30 different surveys yields little benefit, at maximum cost

- Thank you