DEFINITION AND TYPES OF SHOCKS AND COPING STRATEGIES TO BE MONITORED

PEP-CBMS Network Coordinating Team

Technical Workshop on “Monitoring Household Coping Strategies during Complex Crises”
Sommerset Millennium Hotel
March 21, 2011
OUTLINE OF PRESENTATION

SHOCKS, COPING STRATEGIES, & RECOVERY

I. Definition
II. Nature
III. Typology
IV. Empirical literature
V. What info to collect
DEFINITION OF SHOCK IN LITERATURE

1. **Shock** is an event that can trigger decline in well-being, which can affect individuals (illness, death), a community, a region, or even a nation (natural disaster, macro-economic crisis). (World Bank, 2000-01)

2. When a risk materializes, it can become a **shock**, whereby a **shock** refers to a risk that causes a “significant” negative welfare effect (e.g., major income loss, or major illness related costs). (Heitzmann, Canagarajah, & Siegel, 2002)
DEFINITION OF SHOCK IN LITERATURE

3. **Shocks** are events that can reduce group or individual well-being, such as illness, unemployment, or drought, and which may themselves cause or compound poverty. (Marques, 2003)

4. The manifestation of risk (as a shock) also leads to undesirable welfare outcomes. (Hoogeveen, Tesliuc, Vakis, & Dercon, 2005)
DEFINITION OF SHOCK IN LITERATURE

5. **Shocks** refer to the realization of different states of the world. Examples of **shocks** include the occurrence of an earthquake, substantial movement in terms of trade, or the death of a household member. (Kozel, Fallavier, & Badiani, 2008)
DEFINITION OF SHOCK

**Shock**

- Refers to an actual event
- May result to income and non-income losses for household
- Associated with uninsured risk
**Shocks** are distributed across space and time.

- **Frequency**
  - common $<-----$ rare
- **Duration**
  - one-off $<-----$ persistent
- **Intensity**
  - mild $<-----$ catastrophic
- **Idiosyncrasy**
  - limited $<-----$ widespread
Shocks are typically classified based on scope or origin.

**Idiosyncratic** shocks affect individuals or households. On the other hand **covariant** shocks affect groups of household, communities, regions or even entire countries.

Shocks can be natural, health-related, social, economic, political, or environmental.
## SHOCKS ACCORDING TO SCOPE

<table>
<thead>
<tr>
<th>Idiosyncratic shock</th>
<th>Covariant shock</th>
</tr>
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<tbody>
<tr>
<td>e.g.</td>
<td>e.g.</td>
</tr>
<tr>
<td>-illness</td>
<td>-armed conflict</td>
</tr>
<tr>
<td>-injury</td>
<td>-financial crisis</td>
</tr>
<tr>
<td>-death</td>
<td>-changes in food prices</td>
</tr>
<tr>
<td>-job loss</td>
<td>-drought</td>
</tr>
<tr>
<td>-crop failure</td>
<td>-flood</td>
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<tr>
<td>-loss of transfers</td>
<td>-social unrest</td>
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</tbody>
</table>
## SHOCKS ACCORDING TO ORIGIN

<table>
<thead>
<tr>
<th>Natural shock</th>
<th>Economic shock</th>
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</thead>
<tbody>
<tr>
<td>e.g.</td>
<td>e.g.</td>
</tr>
<tr>
<td>-flood</td>
<td>-business closures</td>
</tr>
<tr>
<td>-drought</td>
<td>-mass layoffs</td>
</tr>
<tr>
<td>-typhoon/cyclone</td>
<td>-price increases</td>
</tr>
<tr>
<td>-earthquake</td>
<td>-job loss</td>
</tr>
<tr>
<td>-volcanic eruption</td>
<td>-wage cuts</td>
</tr>
<tr>
<td>-tsunami</td>
<td>-loss of remittances</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Social shock</th>
<th>Health shock</th>
</tr>
</thead>
<tbody>
<tr>
<td>e.g.</td>
<td>e.g.</td>
</tr>
<tr>
<td>-civil unrest</td>
<td>-serious illness</td>
</tr>
<tr>
<td>-war</td>
<td>-injury</td>
</tr>
<tr>
<td>-crime</td>
<td>-death</td>
</tr>
<tr>
<td>-eviction</td>
<td></td>
</tr>
<tr>
<td>-violence</td>
<td></td>
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</tbody>
</table>
1. **Coping** is defined as a short-term strategy adopted within the prevailing value system to avert a negative effect on the actor. (Davies, 1993 & Gore, 1992 in Sauerborn, 1996)

2. **Coping** is an array of short-term strategies adopted in response to crisis. (Davies, 1993 in Adams et al., 1998)

3. **Coping strategies or mechanisms** are remedial actions undertaken by people whose survival and livelihood are compromised or threatened. (WHO, 1998)
DEFINITION OF COPING IN LITERATURE

4. **Coping strategies** refer to all strategically selected acts that individuals and households in a poor socio-economic situation use to restrict their expenses or earn some extra income to enable them to pay for the basic necessities and not fall too far below their society’s level of welfare. (Snel & Staring, 2001)
5. **Coping** strategies are strategies designed to relieve the impact of the risk once it has occurred. (Holzmann, 2001)

6. **Coping** means the managing of resources in difficult situations. It includes finding ways to solve problems, to handle stress or to develop defense mechanisms. (Bhrami & Poumphone, 2002)
DEFINITION OF COPING

Coping mechanism or strategy

-Pertains to a reaction triggered by an adverse event
-Can be characterized as a calculated and rational move
-Intended to minimize impact of shock on wellbeing
Coping strategies are complex set of behaviors

- Dependent on exogenous and endogenous factors
e.g., household characteristics, previous experience, local economy, infrastructure, and networks

- Finite
  - because household resources and assets are limited

  - coping strategies follow a general order in terms of adoption
MODEL OF FACTORS THAT INFLUENCE HOUSEHOLD COPING

Lifted from Adams, Cekan & Sauerborn (1998)
SEQUENCING OF HH COPING RESPONSES

Adapted from USAID Food Security & Early Warning Vulnerability Assessment Manual (1999)
## TYPOLOGY OF HH COPING RESPONSES

...in terms of **SEVERITY**

<table>
<thead>
<tr>
<th>1st. Non-erosive coping</th>
<th>2nd. Erosive coping</th>
<th>3rd. Failed coping</th>
</tr>
</thead>
<tbody>
<tr>
<td>borrowing</td>
<td>borrowing with</td>
<td>heavy reliance on</td>
</tr>
<tr>
<td>-reduction in food</td>
<td>exorbitant interest</td>
<td>dole-outs</td>
</tr>
<tr>
<td>consumption,</td>
<td>-sale of productive</td>
<td>-out-migration</td>
</tr>
<tr>
<td>-substitution of</td>
<td>assets (e.g., farm</td>
<td>-prostitution</td>
</tr>
<tr>
<td>cheaper food,</td>
<td>animal, land, or</td>
<td>-stealing</td>
</tr>
<tr>
<td>-cut in non-essential</td>
<td>tools),</td>
<td>-begging</td>
</tr>
<tr>
<td>expenses</td>
<td>-bonded labor</td>
<td></td>
</tr>
<tr>
<td>-sale of non-</td>
<td>arrangements,</td>
<td></td>
</tr>
<tr>
<td>productive assets</td>
<td>-child labor</td>
<td></td>
</tr>
</tbody>
</table>

Adapted from WHO (1998)
TYPOLOGY OF HH COPING RESPONSES

...in terms of RESOURCE UTILIZATION
1. Use of internal household resources
2. Mobilization of external resources

Mingione (1987)

...in terms of INTENSITY of use of household
human, physical, financial and social capital
1. Active strategies
2. Social net strategies
3. Passive responses

Lokshin & Yemstov (2001)

...combination of RESOURCE TYPE and INTENSITY OF USE
1. Limiting household expenses
2. Intensive use of household resources
3. Market-based strategies
4. External assistance from

Snel & Staring (2001)
DEFINITION OF RECOVERY IN LITERATURE

1. a sustainable return to a pre-crisis situation;
2. improvement on the pre-crisis situation; or
3. improvement on the pre-crisis situation along with measures to reduce and prepare for future risk and increase resilience.

Lifted from WFP document on UPDATE ON THE FINANCIAL FRAMEWORK REVIEW: PROGRAMME CATEGORIES (2010)
Barrientos (2007) summarized the fast growing literature on vulnerability and well-being into 3 thematic groups:

a. **direct effects** of shocks on well-being
b. role of **buffers** against shocks
c. household response to shocks and its **indirect effects** on well-being

...individual and household coping during crises is a **critical, but understudied** issue (Rankin & Aytac, 2009)

...**new modules** on shocks and risks have been included in a handful of household surveys (Cafiero & Vakis, 2006)
TRANSMISSION MECHANISMS

According to Lustig & Walton (1999), macro-economic shocks are transmitted to households and communities through four mechanisms:

1. labor demand
2. prices
3. public spending cuts
4. changes in assets

Fuentes & Seck (2007) identified transmission channels of climate-related shocks to households namely:

1. death and disability
2. sudden loss of income
3. depletion of assets
4. loss of public infrastructure
5. macroeconomic effects
INTERPLAY OF SHOCKS AND COPING STRATEGIES

Source of shock to household:
- Labor markets
- Credit markets
- Product markets
- Government services

Household responses:
- Increase disposable income
  - Labor supply
  - Dissaving/borrowing
  - Informal safety nets
  - Formal safety nets
- Reduce household expenditure
  - Durable goods
  - Food
  - Education/health
  - Insurance
  - Other

Household welfare impacts:
- Impact on poverty
- Impact on long-term human capital accumulation
- Impact on savings and assets

Adapted from World Bank (2011)
STYLIZED DEPICTION OF HOUSEHOLD WELFARE OVER TIME

Adapted from Glewwe & Hall (1998)
EXAMPLES OF SHOCK, COPING STRATEGY, RECOVERY

SHOCK: Job loss
COPING STRATEGY: Look for job
RECOVERY: Got new job

SHOCK: Food price increase
COPING STRATEGY: Reduced number of meals
RECOVERY: Increase in per capita food consumption

SHOCK: Crop failure
COPING STRATEGY: Borrowed money
RECOVERY: Bumper harvest & loan payment
## Capturing Recovery Information

<table>
<thead>
<tr>
<th>Survey Instrument</th>
<th>Recovery Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethiopian Rural Household Survey (ERHS)</td>
<td>questions on (a) whether the household had recovered to pre-crisis period; and (b) recovery period (how long did it take for the household to recover, in no. of years)</td>
</tr>
<tr>
<td>Ghana CFSVA Survey</td>
<td>question on whether the household had recovered from impact/consequences of the difficulty.</td>
</tr>
<tr>
<td>Encuesta Nacional de Condiciones de Vida (ENCOVI)</td>
<td>questions on (a) whether the decrease in income or assets had been totally resolved; and (b) if household did not resolve effect, how long would it take to resolve the effect options being within 6 mos., between 6 and 12 months, more than 1 year, and don't know when</td>
</tr>
<tr>
<td>Indonesian Family Life Survey - 1 (IFLS-1)</td>
<td>a question on approximate cost in local currency to overcome the economic hardship during the reference period</td>
</tr>
<tr>
<td>Indonesian Family Life Survey - 2 (IFLS-2)</td>
<td>no module on recovery</td>
</tr>
<tr>
<td>Indonesian Family Life Survey - 3 (IFLS-3)</td>
<td>a question on approximate cost in local currency to overcome the economic hardship during the reference period</td>
</tr>
</tbody>
</table>
### Capturing Recovery Information

<table>
<thead>
<tr>
<th>Survey Instrument</th>
<th>Recovery Information</th>
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<tbody>
<tr>
<td>Indonesian Family Life Survey - 4 (IFLS-4)</td>
<td>questions on (a) repairing and rebuilding of house; (b) receipt of assistance from government and NGOs; (c) place of temporary housing; (d) length of stay in temporary housing; (e) whether household returned to original residence.</td>
</tr>
<tr>
<td>Malawi Integrated Household Survey</td>
<td>no module on recovery</td>
</tr>
<tr>
<td>Rwanda CFSVA Survey</td>
<td>a question on whether the household had recovered from losses</td>
</tr>
<tr>
<td>National Income Dynamics Study (NIDS) Survey</td>
<td>no module on recovery</td>
</tr>
<tr>
<td>Kagera Health and Development Survey</td>
<td>no module on recovery</td>
</tr>
<tr>
<td>Ghana CFSVA Survey</td>
<td>a question on whether the household had recovered from inability to have enough food</td>
</tr>
<tr>
<td>DFG756 Household Survey</td>
<td>questions on (a) whether the household still have to reduce household consumption expenditures because of the event; (b) years did it take for the household to recover from the event - less than a year, 1 year, more than 1 year, but now recovered, and not yet recovered</td>
</tr>
<tr>
<td>Turkey Welfare Monitoring Survey (TWMS)</td>
<td>no module on recovery</td>
</tr>
</tbody>
</table>
WHAT INFORMATION TO COLLECT

- What types of shocks to capture?
- What coping strategies to collect?
- Is information on recovery useful to gather?
Thank You!

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THE CONTINUUM OF COPING

Adapted from Adams, Cekan & Sauerborn (1998)