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The use of secondary data for resilience measurement with RIMA

Resilience Evidence Forum

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RIMA is a quantitative approach

- **Direct** and **indirect** measure of resilience capacity and structure
- Pre-existing or ad-hoc data (LSMS-type)
- Integrated with qualitative data (mixed-method approach)
- Employing both latent variable models and regressions

Quantitative approach

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Lesotho Cash Transfer Project

- The CGP is an **unconditional cash transfer** programme, implemented by the Ministry of Social Development (MoSD), targeting the poorest families with children in: Berea, Leribe, Mafeteng, Maseru and Qacha's Nek.

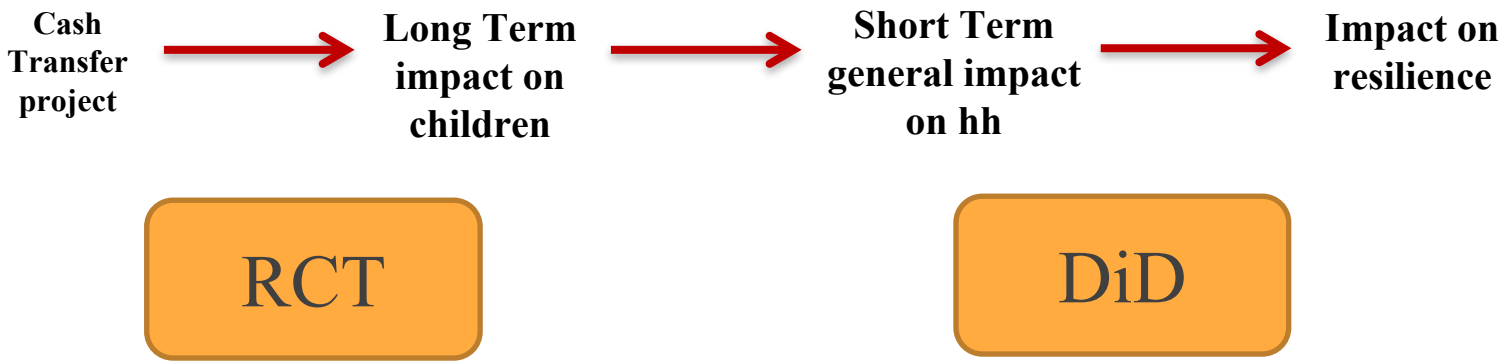
- Over four years, between 2009 and 2013, around 20,000 households received cash transfer on a regular, monthly basis.

- The primary goal of the CGP was to increase well-being of children living in the poorest households in Lesotho. Encouraged the beneficiaries to spend the received cash on the youngest

- The baseline data include information for 3,054 households
- In the follow-up round only 2150 of those interviewed in baseline were captured.
- The attrition rate is equal to 6 percent
- Randomized Control Trial

The Lesotho Dataset

Lesotho Cash Transfer Project



- Positive effects on household resilience (+2.2%);
- Strong effect on food insecure (+0.8%) and borderline (+1.4%);
- Stronger effect on MHH then FHH (+3.9%); and
- Strong effect on labor constrained (+4.6%).

Conflict in Northern Mali

- The **first set of data** comes from two surveys: the Multiple Indicator Cluster Survey (MICS) and the Enquête Légère Intégrée des Ménages (ELIM), implemented by the National Institute for Statistics and the Ministry for Health, Social Development and Promotion of Family in Mali in 2009/2010.
- The **second set of data** comes from the Enquête Agricole de Conjoncture Intégrée aux conditions de vie des ménages 2014 (EAC-I 2014) supported by the LSMS-ISA.

- No possibility of panel analysis
- Pseudo-panel analysis through creation of cohorts
- Detailed HH questionnaires
- Anthropometric measures

Conflict in Northern Mali

Conclusions and way forward:

- Households' resilience is lower in the North than in the South (i.e. poor governance and political marginalization). Resilience in Mopti is better due to income diversification and limited violence (compared to the northern regions);
- Conflict, as expected, has a negative impact on resilience capacity of households in Mali, and is therefore more reflected in Timbuktu, Gao and in Mopti;
- These findings suggest to repeat the analysis in order to detect long-term effects of conflicts on resilience;
- Effect of conflict on resilience capacity and food security.

THANK YOU!

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www.fao.org/resilience/background/tools/rima

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ISDC policies for peace and prosperity

Gaza:

- **742 – 1,066 fatalities** (OCHA; NGOs; HRC)
- **12,620 housing units totally destroyed** and 6,455 severely damaged (OCHA, 2015)
- **17,670 families displaced** (OCHA, 2015)

Israel:

- **6 civilians died and 1600 injured** (IMFA; MH)
- **10,000 civilians displaced** (HRC)

Source: UNOSTAT (2014)

Context

Data

- The Socio-Economic and Food Security (**SEFSec**) **household survey** implemented by the FAO-WBGS with the PCBS, the UNRWA and the WFP, under the Food Security Sector (FSS).
- **Panel dataset** (2014-2015) representative at district level: balanced sample of 2,413 HHs
- Detailed HH **questionnaires**

- **Timing**:

- **Limitations:** GIS localization and data or interview missing.

Conclusions

Key message:

- Food security of households in Gaza was not directly affected by the conflict;
- Household resilience capacity that is necessary to resist food insecurity declined as a result of the conflict, mainly due to a reduction of adaptive capacity, driven by a deterioration of income stability and income diversification.
- Conflict increased the use of social safety nets (cash, in-kind and other transfers) and access to basic services (mainly sanitation and school).

Extensions:

- New waves of the panel dataset to study the persistency of the effects;\
- Additional sources of data (e.g. child malnutrition)

Two panel-datasets from LSMS-ISA (World Bank)

1. Uganda National Household Survey - UNHS (2009-10, 2010-11 and 2011-12)
2. Tanzania National Panel Survey - TZNPS (2008-09, 2010-11 and 2012-13)

Food security patterns

	Tanzania		Uganda	
	Frequency	Percent	Frequency	Percent
Total households	2,866		2,015	
Suffering a loss in food expenditure between time *t* and *t*+1	1,440	50.24	1,341	66.55
Recovering the loss in food expenditure between time *t+1* and *t*+2	869	60.35	957	71.36
Suffering a loss in dietary diversity between time *t* and *t*+1	1,483	51.74	1,417	70.32
Recovering the loss in dietary diversity intake between time *t+1* and *t*+2	856	58.33	712	50.25

Two other geo-referenced datasets for risks

3. Climatic dataset (Arslan *et al.,* 2016): environmental variables to describe local conditions and to build a **natural shock** variable long-term coefficient of rainfall variation
4. Data on conflicts (Carlsen *et al.*, 2010): to build a **conflict intensity index** (Bozzoli *et al*., 2011) by aggregating events in a given year and discounting them by their distances from where the household lives

⟹ attempt to go beyond self-reported evaluation about shocks

⟹ limitations: no economic shocks, CV rainfall constant over the period