Resilience Index Measurement and Analysis II

RIMA-II

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RIMA

- Mixed latent variables and regression analysis
- Pre-existing or ad-hoc data (LSMS-type)
- Mixed-method
- Mixed subj-obj measures
- Shocks and food security indicators exogenous to the estimation of resilience
- Four pillars of resilience
Descriptive measure

• It provides **information** on household resilience capacity.

• RIMA-II employs latent variable models to inform funding and policy decisions by permitting policy makers to target and rank households from most to less resilient.
Causal measure

- RIMA-II estimates the main determinants of food recovery and moves the resilience analysis in the long term perspective.
- The **causal measure** can be adopted as a predictor tool for interventions that build and strengthen resilience to food insecurity.
- It provides new depth and breadth to resilience analysis and permits decision makers and other stakeholders to better understand the dynamics of positive trends in resilience and thus develop strategies that will yield positive results.
Main outputs of the application of RIMA:

• **Resilience and food security analyses** conducted at country level by national institutions (e.g. CNSA Senegal or OPM Uganda) and supported by FAO.

• **Impact assessments** – *e.g.* Somalia and Lesotho

• **Analyses capturing seasonality** – *e.g.* Triangle of Hope (Mauritania)

• Analysis on the relationship between Resilience, Food Security, Conflict - *e.g.* DRC, Niger, UPPSALA University

• **Analyses of perception of well-being and social inclusion** – *e.g.* Matam (Senegal) and Triangle of Hope

• **Analyses of resilience thresholds**

• **Crisis-RIMA**
How we do IA

• Definition of the **sampling strategy** based on the aim of the IA: how many households to be interviewed and where?

• Contextualization of the **questionnaire** to capture specificity of the context and of the programmes/interventions to be assessed.

• **Data collections** (baseline, mid-term, final): enumerators’ trainings, pilot of the survey and protocols for controlling data quality.

• **Quantitative analysis** to assess the effect of the programme on outcomes of interest (resilience capacity, pillars and food security) employing different econometric techniques within a mixed method approach.

• **RCT** or, by far, quasi-experimental design
Completed or ongoing Impact Assessment

• Joint Resilience Strategy in Somalia
• Joint Resilience Strategy in Karamoja (Uganda)
• Child Grant Program (Cash Transfer) in Lesotho
• 3RBA project in DRC, Niger, Somalia (CIDA funded)
• Israeli-Palestinian conflict in GS
• Forestry Intervention in Kyrgyzstan
• Conflict in Mali
• FAO OED for GCF
• FAO-WFP-UN Women Action in the Borno State (Nigeria)
RIMA seeks to understand drivers of main rural inequalities

• Gender perspective
• Focus on Refugees
• Conflicts and Food Security
• Perceived Resilience, well-being, and social inclusion
• Most Vulnerable People
• Livelihoods at risk
Impact evaluation in Dolow (Somalia)

- Impact evaluation in Dolow, Somalia, is being implemented within the framework of the Joint Resilience Strategy programme launched in 2012 by FAO, UNICEF and WFP.
- It is based on a baseline and on a mid-term datasets.
- Results show an increase in resilience capacity (23%), obtained through a positive impact on agricultural production, income deriving from livestock, transfers, diversification of income sources and access to infrastructures.

![Graph showing resilience index over time for Dolow and Luuk]
In this report Average Treatment Effect (ATE) has been estimated, formally:

\[ ATE = E[Y_1 - Y_0] \]

\[ Y_{it} = \beta_0 + \beta_1 D_i + \beta_2 T_t + \beta_3 (T_tD_i) + \varepsilon_{it} \]
Conclusions

- 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%).

Limitation of an IE for resilience

- Results can be driven by dynamic variables;
- Confoundness with other projects;
- Difficult interpretation of an increase/decrease or RCI; and
- Need more evidence on how this works.
Resilience analysis on refugees (Uganda)

Main finding 1: Refugees’ integration into the local economy is a long-term process.

Main finding 2: Displacement and refugees’ arrival create opportunities for operating business enterprises.

Main finding 3: Refugee households headed by a woman or a young person are more entrepreneurial, as are also those refugees who participate in training programmes and associations.
THANK YOU!

Contact me…  
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