Towards a quantifiable measure of resilience

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Abstract

Facing an increasingly challenging future where economic volatility at both global and local levels, but also more frequent and severe climate and weather related events will affect the population and economy of developing countries, there is an urgency for planners and decision-makers to be able to identify amongst the different options and alternatives that they can afford which ones are the most impact-effective in terms of strengthening resilience. In order to answer these questions, a better comprehension of how people (individually and collectively) respond to shocks is necessary. The first step in this analytical process is to measure resilience. Unfortunately resilience is not ‘something’ concrete that can be measured or quantified as easily as other welfare indicators such as (income)-poverty, child malnutrition, or infant mortality. Measuring resilience is notoriously difficult. The objective of this presentation is twofold. First it will rely on the most recently published and grey literature on resilience in relation to food security to illustrate and discuss some of the challenges related to the measurement of resilience. Second it will propose a new framework that addresses some of the concerns and limits of resilience measurement as identified in the literature. The main postulate of this framework is that the ‘cost of resilience’ (that is, the different ex-ante and ex-post investments, losses, sacrifices, and costs that people have to undertake at individual and collective levels to ‘go through’ a shock or an adverse event) provides an appropriate and independent – metric to measure resilience across scales and dimensions. We will show how the independent nature of this metrics, which is the attribute that most of the current resilience indicators lack, offers an explanatory power that can then be used to infer in a testable and rigorous manner potential causalities between the metric and household and/or community characteristics that are thought to be important preconditions for building resilience. Empirical and theoretical examples will be used throughout the presentation to illustrate different aspects of our arguments.

Keywords: Resilience measurement, Method, Multiscale, Multidimension

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