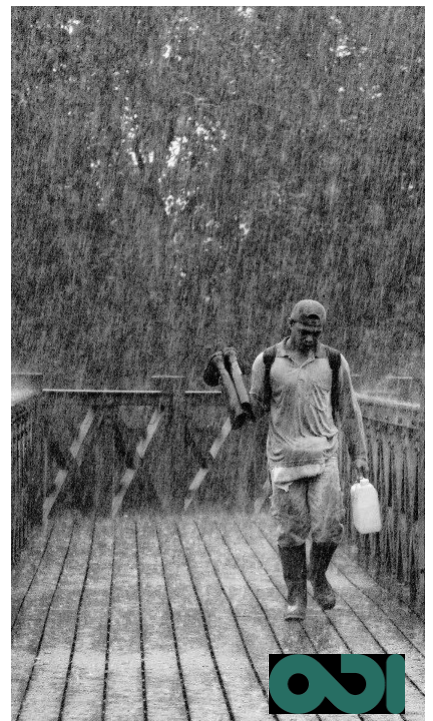


Measuring subjective resilience: outlining a complementary approach to resilience measurement

Lindsey Jones
Research Fellow
Overseas Development Institute (ODI)



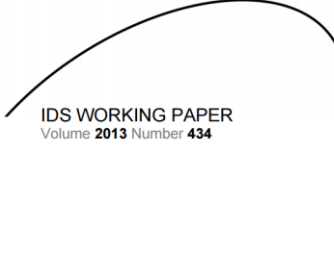
- How should we measure a household's resilience?
- Interest in resilience measurement continues to grow
- A multitude of approaches and methods available



RESEARCH ARTICLE

Measuring household vulnerability to climate-induced stresses in pastoral rangelands of Kenya: Implications for resilience programming

Francis OD Ojijo^{1*}, Oliver V Wasonga^{2,3} and Moses M Nyang'oro²



Towards a Quantifiable Measure of Resilience

Christophe Béné
September 2013

United Nations
action (United
live Reduction-
transformative
need to hazards
er from hazards.
Economic
reproduction

An Exploratory Framework for the Empirical Measurement of Resilience

G. S. Cumming,^{1*} G. Barrow,² D. Poon,³ M. Schmitz,⁴ K. E. Stevens,⁵ J. Southworth,⁶ M. Balfanz,⁷ K. D. Hunt,⁸ C. Stoklosa,⁹ and T. Van Riel¹⁰

¹Department of Biology and Institute of Ecology, University of British Columbia, Vancouver, British Columbia, Canada; ²Department of Biology, University of Alberta, Edmonton, Alberta, Canada; ³Department of Biology, University of Guelph, Guelph, Ontario, Canada; ⁴Department of Biology, University of Regina, Regina, Saskatchewan, Canada; ⁵Department of Biology, University of Alberta, Edmonton, Alberta, Canada; ⁶Department of Biology, University of British Columbia, Vancouver, British Columbia, Canada; ⁷Department of Biology, University of British Columbia, Vancouver, British Columbia, Canada; ⁸Department of Biology, University of British Columbia, Vancouver, British Columbia, Canada; ⁹Department of Biology, University of British Columbia, Vancouver, British Columbia, Canada; ¹⁰Department of Biology, University of British Columbia, Vancouver, British Columbia, Canada

Abstract
Resilience programs promote the goal of long-term sustainability. Although the underlying mechanisms of resilience are complex, the concept of resilience is used to describe the ability of a system to absorb disturbance and reorganize while undergoing change so as to persist in a new state or to return to the original state. Resilience is a multidimensional concept that is not well understood. This paper presents an exploratory framework for the empirical measurement of resilience. The framework is based on the concept of resilience and is designed to be used in a wide range of systems. The framework is based on the concept of resilience and is designed to be used in a wide range of systems. The framework is based on the concept of resilience and is designed to be used in a wide range of systems.

Introduction
Resilience is the ability of a system to absorb disturbance and reorganize while undergoing change so as to persist in a new state or to return to the original state. Resilience is a multidimensional concept that is not well understood. This paper presents an exploratory framework for the empirical measurement of resilience. The framework is based on the concept of resilience and is designed to be used in a wide range of systems.

Resilience Measurement Technical Working Group

Resilience Measurement Principles

TOWARD AN AGENDA FOR MEASUREMENT DESIGN



January 2014



- So far, efforts to measure resilience largely focus on the use of 'objective' frameworks and methods of indicator selection
- Typically depend on a range of observable socioeconomic variables
- Objective methods have their uses, but suffer from well-documented biases



- Key challenges for resilience measurement:
 - Choice of indicators
 - Context-specific nature of resilience
 - Difficulties of capturing less tangible processes (social cohesion, empowerment/marginalisation, risk perception, etc.)
- Alternative approaches are needed to complement objective approaches



- Based on premise that people have an understanding of the factors that contribute to their own resilience
- Defined as: an individual's cognitive and affective self-evaluation of their household's capabilities and capacities in responding to risk
- Challenges the notion that experts are best placed to evaluate other people's livelihoods.



- Relies on people to self-assess and consider what characteristics are most important to the resilience of their household
- Opportunity to capture the perspectives of those who may know most about their own resilience: the people themselves
- More of a bottom-up process than traditional forms of 'objective' resilience measurement



- Resilience is heavily shaped by sociocultural and psychological factors
- Given that the point of view rests with the individual directly, subjective forms of measurement allow for many of these ‘softer’ aspects of resilience



OECD Guidelines on Measuring Subjective Well-being

- Build on the insights and success of subjective wellbeing
- Factoring contextual elements of resilience
- A complementary tool for evaluating household resilience



- A range of methods, surveying tools and applications can be used to measure subjective household resilience
- Each with their own methodological advantages and challenges



- Qualitative examinations using open and semi-structured interviews may allow for in depth understandings of people's resilience (many examples)

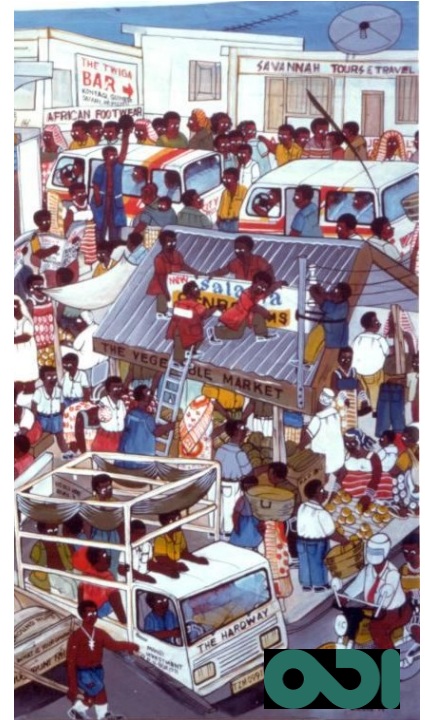


- Closed ended questions may provide the most practical means of evaluating and comparing levels of resilience
- Can insights into a household's resilience be collected from short & rapid questions at scale?
- Other fields suggest yes, but unknown for resilience



Insights from Tanzanian survey:

- Large share of Tanzanians perceived their household to have low resilience-related capacities to respond to extreme flooding
- Male and female respondents provide very similar responses across the board
- Subjective measures, by and large, do not have strong statistical correlations with traditional objective socio-economic characteristics



- Could indicate that traditional objective characteristics have less of an influence on resilience
 - Cast doubt on the suitability of objective characteristics as effective measures of household resilience overall
 - May be explained by biases, survey design, and/or approach
- Part of the difficulty in establishing which of these two positions is applicable is that there is no present means of validating one or the other
- Showcases the utility of ICT-based methods for data collection
- Need for more experimentation, innovation and comparison



For more see:

Jones, L. and Tanner, T., 2015. Measuring 'Subjective Resilience': Using Peoples' Perceptions to Quantify Household Resilience. Overseas Development Institute. London: UK

Jones, L. and Tanner, T., (In Press). Measuring subjective resilience to climate extremes and disasters at the household-level. Regional Environmental Change

Jones, L. and Samman, E. 2016. Measuring subjective resilience to climate extremes in Tanzania. Building Resilience to Climate Extremes and Disasters (BRACED). London: UK

