

Composite measures of local disaster impact – Lessons from Typhoon Yolanda, Philippines

Description

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Purpose: When disaster strikes, determining affected areas and populations with the greatest unmet needs is a key objective of rapid assessments. This note is concerned with the logic and scope for improvement in a particular tool, the so-called “prioritization matrix”, that has increasingly been employed in such assessments. We compare, and expand on, some variants that sprang up in the same environment of a large natural disaster. The fixed context lets us attribute differences to the creativity of the users grappling with the intrinsic nature of the tool, rather than to fleeting local circumstances. Our recommendations may thus be translated more easily to future assessments elsewhere.

The typhoon that struck the central Philippines in November 2013 – known as “Typhoon Yolanda” and also as “Typhoon Haiyan” – triggered a significant national and international relief response. Its information managers imported the practice, tried and tested in other disasters, of ranking affected communities by the degree of impact and need. Several lists, known as prioritization matrices, of ranked municipalities were produced in the first weeks of the response. Four of them, by different individuals and organizations, were shared with us. The largest in coverage ranked 497 municipalities.

The matrices are based on indicators, which they aggregate into an index that determines the ranks. Thus they come under the rubric of composite measures. They are managed in spreadsheets. We review the four for their particular emphases, the mechanics of combining indicators, and the statistical distributions of the final impact scores. Two major questions concern the use of rankings (as opposed to other transformations) and the condensation of all indicators in one combined index. We propose alternative formulations, in part borrowing from recent advances in social indicator research. We make recommendations on how to improve the process in future rapid assessments.

Rick Davies comment: Well worth reading!

Category

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