

Strategy: | The crowdsourcing strategy to measure local public goods and violence

How it works: | **The key idea of this strategy is** to combine innovations in information communication technologies (ICT) with local knowledge for gathering precise localized data. Whereas most public goods inputs and outcomes as well as conflict data are highly aggregated, the response of government, humanitarian agencies and peacekeeping missions must be localized. A crowdsourcing approach seeks to overcome this problem of dearth of granular accurate data. It does so by combining the strengths of crowdsourcing technologies to generate detailed real-time data, with the strengths of traditional approaches that rely on representative samples.

The strategy entails sampling villages, and recruiting reporters (“seeds”) who are given a phone and trained on how to send text messages to a centralized IT system. Importantly reporters should be recruited from different villages strata: traditional and religious leaders, women groups, and villagers holding non-leadership position. This ensures representative reporting, but also allows for cross-validation.

Reporters’ role is to send a text-message whenever they encounter a public goods problem (e.g., teacher absenteeism, shortage of vital medication), corruption (e.g., observing kick back between government and contractors) or conflict related event (such as the presence of military forces or attacks on the village). By using special pre-assigned codes in the body of the SMS, the communication is both “encrypted” and ready for automated data cleaning, aggregation, compilation and analysis. Reporters are reimbursed for messages they send to the IT system to make the system incentive compatible. Alternatively, system operators (usually NGOs) may use a call center for short weekly voice interviews /polls.

Data gathering strategy: | Via crowd-seeded decentralized mobile-based information (local informants).

SDG goals this could be used for: | Allows measuring violence as stipulated in subsections 16.1 and 16.2 at the local level.
Allows measuring corruption and bribery locally (16.5)

Advantages: | All measures (public goods problems or local conflict) are in real time.
Minimizes the social costs that is associated with monitoring local service providers
Overcomes reporting biases of conflict data using media sources (e.g., ACLED)

Disadvantages: | Depends on the truthful reporting of seeds
Costly start up costs (identifying and training seeds, providing phones)

References: | P. van der Windt, and M. Humphreys. 2015. “Crowdsourcing in Eastern Congo: Using Cell Phones to Collect Conflict Events Data in Real Time.” *Journal of Conflict Resolution*.
B. Leo, R. Morello, J. Mellon, T. Peixoto, and S. Davenport. 2015 “Do Mobile Phone Surveys Work in Poor Countries?” *Center for Global Development Working Paper*, N. 398.