Advancing sustainability together?

Citizen-generated data and the Sustainable Development Goals.

Executive summary

Citizen-generated data (CGD) expands what gets measured, how, and for what purpose. Initiatives cover areas from cartography to government policies, public services or environmental research. As the collection and engagement with CGD rises in relevance and visibility, public institutions can learn from existing initiatives about what CGD initiatives do, how they enable different forms of sense-making and how this may further progress around the Sustainable Development Goals.

Our research examined different approaches to doing and organising CGD, as well as how governments already engage with these types of initiatives. It identified several concrete benefits for implementing and monitoring the SDGs, underlining the importance for public institutions to further support these initiatives.

Key points:

- Dealing with data is usually much more than 'just producing' data. CGD initiatives open up new types of relationships between individuals, civil society and public institutions. This includes local development and educational programmes, community outreach, and collaborative strategies for monitoring, auditing, planning and decision-making.
- Generating data takes many shapes, from collecting new data in the field, to compiling, annotating, and structuring existing data to enable new ways of seeing things through data.
- CGD initiatives can help gathering data in regions otherwise not reachable. Some CGD approaches may provide updated and detailed data at lower costs and faster than official data collections.
- Beyond filling data gaps, official measurements can be expanded, complemented, or cross-verified. This includes pattern and trend identification and the creation of baseline indicators for further research. CGD can help governments detect anomalies, test the accuracy of existing monitoring processes, understand contextual factors, and initiate their own follow-up data collections.
- CGD can inform several actions to achieve the SDGs. Beyond education, community engagement and community-based problem solving, this includes baseline research, planning and strategy development, allocation and coordination of public and private programs, as well as improvement to public services.
- CGD must be 'good enough' for different (and varying) purposes. Governments already develop pragmatic ways to negotiate and assess the usefulness of data for a specific task. CGD may be particularly useful when agencies have a clear remit or responsibility to manage a problem.
- Data quality can be comparable to official data collections, provided tasks are *sufficiently easy to conduct,* tool quality is high enough, and sufficient training, resources and quality assurance are provided.

Authors

Danny Lämmerhirt (Open Knowledge International), Jonathan Gray (King's College London), Tommaso Venturini (Public Data Lab), Axel Meunier (Sciences Po, Medialab)

Governments can support by:

- Developing sectoral laws and policies to provide for citizens' rights to produce data and to incentivise departments, ministries and agencies (DMAs) to consider, test, acknowledge, and support CGD.
- Developing pragmatic ways to negotiate with citizens when data becomes relevant and when data quality is sufficient. This includes providing resources (trainings, educational material), and dedicated staff to serve as contact person. If data quality classification systems are developed, these should be made public to ensure transparency.
- Proactively communicating how people can contribute data. People should know their rights to contribute data, their rights enabled through data, and how their data can be used within public institutions.
- Publishing statements whenever government decides not use citizen-generated data, so that the public can follow up.
- Fostering open government, open data and right to information policies. These can support CGD initiatives reliant on government data.
- Considering CGD as an expansion of existing participatory and administrative structures. This allows to strengthen these structures and to avoid double costs.
- Including budgets for CGD initiatives alongside funding for institutional data collection. This may be important in environments of shrinking donor funding. Budgets may cover community outreach, coordination, recruiting and training staff, data validation, and other processes.
- Supporting intermediary organisations with established relationships to people. Community networks, maker labs, higher education institutions, and NGOs can provide programs to train, equip, and educate people.

Civil society and intermediaries can support CGD by:

- Documenting and sharing tools, protocols, and other strategies with other initiatives. To increase relevance for other initiatives, be explicit about methodological steps taken and data created, instead of using jargon and exclusive terminology.
- Seeking collaboration and possibilities to share data on existing data infrastructure and with existing communities.
- Considering the depth of engagement with communities. Beyond consultations, this includes training people to collect and analyse data (data literacy), or to help people understand data's relation to public institutions, and their rights (institutional literacy).
- Being mindful when data collections cover sensitive topics or include personally identifiable information.
- Ensuring data protection principles are followed so as to minimise the risk of unauthorised access to sensitive data, or undue and illegitimate data use.
- Clarifying the terms of use under which data is planned to be shared.

Danny Lämmerhirt
Jonathan Gray
Tommaso Venturini
Axel Meunier

Danny Lämmerhirt (Open Knowledge International) was Principal Investigator, leading the project, its conceptualisation, case study development, framing, and overall analysis. Jonathan Gray (King's College London), Tommaso Venturini (CNRS) and Axel Meunier (Sciences Po, Paris) at the Public Data Lab led the mapping of citizen-generated data (CGD) projects, undertaking interviews and empirical work, contributing to research design, framing, and the first draft of several sections in the report and guide (with an emphasis on different ways of doing CGD, inspired by recent research in science and technology studies, new media studies and critical data studies). Members of the Global Partnership for Sustainable Development Data (GPSDD) CGD Task Team provided input and feedback throughout the process.

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Global Partnership for Sustainable Development Data

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