ACTING
LOCALLY
MONITORING
GLOBALLY?

**HOW TO LINK
CITIZEN-GENERATED DATA
TO SDG MONITORING**

DATASHIFT

OPEN KNOWLEDGE
INTERNATIONAL

BACKGROUND

The Sustainable Development Goals (SDGs) are an effort to "end all forms of poverty, fight inequalities and tackle climate change" by 2030, worldwide. Much attention has been paid to the question of how to measure and monitor progress around the goals. Monitoring is one out of several elements of decision-making, serving to evaluate progress around a target over time. As such the SDGs are an important benchmark for how sustainable development in nation states develops. A rallying call is that SDG indicators must not only collect national aggregates, but also recognise marginalised and underrepresented communities in order to "leave no one behind" and "make all voices count".

Citizen-generated data (CGD) is data actively created by citizens and their organisations. It is produced to monitor, demand or drive change around issues that are important to them, often collected on the ground and in local contexts. As such, CGD yields the potential to foreground the issues of disadvantaged communities in under-reported locations. Yet, if the SDGs aim to leave no one behind, and if CGD can provide contextual information about marginalised groups, the question is **whether and how CGD can be used for the SDGs**.

CONSIDER THE RELEVANCE AND POLITICS OF DATA

CGD projects are designed to solve an issue by addressing and engaging with stakeholders. Only if CGD is relevant can steer behaviour or enable stakeholders to make better decisions. **Of paramount importance, therefore, is for whom which type of information useful, when trying to scale locally collected data to regional and national levels.** It is important to recognise that **the governance around an issue defines the necessary level of [spatial] data aggregation required**. For instance, national government bodies may be responsible for allocating money to regions for water-point construction. Responsibility for their maintenance may reside with local districts. While national government needs comparative data across regions to allocate infrastructure investments, local districts need hyperlocal water-point information. An ongoing monitoring effort is thus required on a district-by-district basis, built on hyperlocal maintenance data. Before intending to scale CGD, it should therefore be asked **for whom does data at another scale matter**.

The very process of creating CGD is born out of priorities; what to measure and how. In some cases this results in incompatibility of CGD across local contexts. Besides building human and technical capacity to collect data across regions, it is also important to ensure interoperability of CGD collected in different contexts, and driven by different interests and issues. In order to scale CGD projects, collective data standards, metadata, or other documentation can be developed to render CGD comparable.

Shazade Jameson is an independent social science researcher on governance issues;

Danny Lämmerhirt is research coordinator and researcher at Open Knowledge International;

Eko Prasetyo is a practitioner focusing on ICT4D project implementation and evaluation

It should be noted that **standardisation is a highly political process,** potentially evening out local differences between data. There is also a **potential conflict between local interests in data, and interests in scaling the data**.

There are a range of opportunities and challenges when linking CGD to the SDG framework:

■ CGD can deliver **contextual information around an SDG indicator:** For instance, CGD projects working on disaster risk reduction may conduct hazard risk mapping, indicating local vulnerabilities to environmental disaster. The maps can be a baseline used to understand the outcomes of natural disasters but would need to be combined with survey data after a disaster to evaluate the damage.

■ **CGD can help combine quantitative with qualitative data** to increase the validity of the SDG indicators. For example, in the historical case of the Ceará, Northeastern Brazil, surveys, ethnographic research, as well as vital statistics provide complementary context and broader coverage for national statistics, thereby reducing underreporting and resulting in valid, qualitative mortality statistics.

■ CGD matches more readily with the **SDG targets** than with specific indicators. This means that while **CGD can provide evidence around the progress of targets**, it often does not match up with the indicators themselves.

■ While CGD is useful to drive progress on sustainable development issues, **the causal relationship around how CGD influences SDG indicators is often unclear.** For instance while CGD projects may monitor air pollution levels, if related mortality rates are to be calculated further operations on the data are needed afterwards, such as aggregation with government-held data.

■ Some CGD may provide thematic overviews across single SDG indicators. This means that **CGD can contribute to preventing silo-thinking**. For instance data on land acquisition may be usable to understand gender-disaggregated land ownership, as well as the amount of arable land.

■ It is often **the action that is undertaken as a result of CGD** that will contribute the most to driving progress on sustainable development. Yet this local action needs to be scaled up to tie-in to national SDGs. **How decision-making based on CGD aligns with official SDG follow-up and review processes is unclear** and will depend on country-specific interpretation and implementation of the SDG framework.

■ The data collection methods and focus of CGD projects may not align with SDG indicators: Some indicators focus on the **presence of policies and legal frameworks**, whereas CGD rather focusses on the content and implementation of those documents, for instance by proving the effectiveness of development aid through 'groundtruthing'.

RECOMMENDATIONS

In order to use CGD for SDG monitoring, we recommend that civil society
and governments:

■ Work with and build on **existing government processes** to help align interests.
A fair amount of the data required for SDG monitoring is government data.
This data not only needs to be accessible but also the ways in which data
is dealt with within government needs to be understood. **SDG monitoring
projects need to talk to governments** in order to see how they can be of most
support to existing monitoring processes while reducing the risk of becoming
an administrative burden. On the contrary, governments should foster openness
towards CGD, for instance by installing civic contact points (ombudsmen) for
SDG monitoring, and support CGD activities through remuneration systems or
other resources.

■ **Use SDGs as a common framing for collaboration.** Previous research has
underlined the importance of aligning interests in order to encourage the
uptake of CGD. The SDGs can help provide a common language to move
towards integrated development because of the international standing of the
framework. CGD projects have seen the benefits of the SDGs as a means of
providing **a linking mechanism** to connect projects working on similar issues
within and across countries. This may benefit the sharing of best practices, data
conventions, as well as networking and encouraging collective action.

■ **Recognise the different roles CGD plays** in a project. Of which, there are
three main approaches. Each is associated with different ways this data can
contribute to monitoring the SDGs:

  ■ Data showing the **extent or diversity** of an issue can be used to fill gaps in
  coverage and establish a baseline of how things currently are. If monitoring
  data is part of the CGD project's framing, this fits directly with the SDGs.

  ■ Data **stimulating action** by presenting the result of a campaign / action can
  deliver evidence for progress around the SDGs.

  ■ **Services** creating transactional CGD as a by-product can be repurposed
  to monitor SDGs. Here it should be noted that this excludes passive data
  collection. Collecting data without actively engaging citizens does not count
  as citizen-generated data (as defined by DataShift), but is part of the larger
  spectrum of big data.

■ **Understand the interests and stakes in creating data at various geographic scales.** It is important to be aware of potential conflicting interests in collecting data. An interesting approach is followed by the Everyone Counts project. It seeks to enable local communities to collect data about topics that matter to them. By using additional metadata, the initiative wants to collect regionally comparable data in addition to local data. Aligning interests on what data to collect is a political process and can be steered by multi-stakeholder-meetings during, or a participatory design at the beginning of a project.[1]

■ **Build methodological capacities around standardisation** of both data types and collection methods to facilitate comparison and foster trust in the data. Ideally, there would be standardised methods and data conventions for each type of indicator. At a global level this may help national governments frame their monitoring efforts. At a local level, data conventions between parties can help build the capacity of citizens and their organisations to contribute to SDG monitoring.

■ Use CGD as **longitudinal data snapshots** to measure across time, in order to contribute to trend analyses where the 'snapshot' that is captured by a short-term CGD project is then repeated (and thus, standardised) at a later stage (a few years later, for example), and the difference between the two states represents the trend. This is important because SDG monitoring requires data which is persistently captured over time, but not all CGD projects aim for this longevity–for instance, some aim to address temporary problems.

FUTURE POSSIBILITIES

CGD has significant potential to expand SDG monitoring, both in terms of multi-stakeholder collaboration with governments and civil society-led, independent (shadow) monitoring:

■ **CGD can help create alternative indicators,** where projects work on topics at the intersection of several SDG targets. This is a challenge and opportunity at the same time: whilst CGD may be difficult to fit into the existing framework, it can potentially deliver data that can be more flexibly applied across different targets, thereby helping to facilitate overcoming silo thinking when used for different analyses that are based on a common denominator, for instance land purchases.

▬

1   Further details, see: Lämmerhirt, D., Jameson, S., Prasetyo, E. (2017):
    From Evidence to Action. Turning citizen-generated data into actionable information to improve decision-making.
    Available at: **http://civicus.org/thedatashift/learning-zone/**

■ **CGD can significantly contribute to progress on SDG 16** because a considerable amount of CGD focuses on social audits, community scorecards, and other accountability-driven initiatives. The concept of 'institutional capacity' is only loosely defined in the 2030 Agenda, and the targets under SDG 16 are also **some of the most open-ended,** addressing 'all levels' of governance. This leaves a lot of room for CGD projects, particularly those working on local-level issues, to slot into the SDG framework. However, such accountability-driven CGD initiatives may also provide data that cuts across other SDG indicators. Therefore it is advisable for CGD not to follow a siloed approach, but to link to the SDG framework in a way that serves best to tackle a sustainable development issue. **Holistic, non-siloed, flexible data collection is one of the largest benefits CGD can bring to the SDGs.**

■ **Think through the collaborations and governance arrangements required.** Linking CGD to the SDG monitoring effort will require collaboration across the board, though certain actors are better placed to address some of the points highlighted in this report. For all initiatives seeking to build these linkages, be they government or civil society, **mapping the governance levels involved as data moves up scales is crucial**. Using the SDGs as a common framing for collaborations and building capacities for methodological rigour and standardisation will also be important for civil society and government cooperation. Some aspects, such as creating alternative indicators and issues around civic space in SDG 16, will be better taken up by civil society holding governments to account.

Join the **DataShift Community** of civil society organisations, campaigners and citizen-generated data and technology practitioners by signing up at **www.thedatashift.org** and follow us on Twitter **@SDGdatashift**

DataShift is an initiative of **CIVICUS**, in partnership with **Wingu**, **The Engine Room** and the **Open Institute**. We are part of a growing global community of campaigners, researchers and technology experts that is using citizen-generated data to create change.