Guide for planning an effective Citizen-Generated Data (CGD) Campaign
April 2017

1. Introduction

This guide has been developed in liaison with the Open Institute, to provide the essential steps for running a project based on Citizen Generated Data in all its guises. It provides tools, methods, resources and steps germane to data professionals, NGOs, Government institutions, community groups, private institutions and any individuals with an interest in Citizen Generated Data.

This guide has been written based on best practices and lessons learned stemming from work done by OI in the Global Goals for Local Impact project and DataShift's SDG 5 project. SDG 5 seeks 'to achieve gender equality and empower all women and girls'. DataShift partnered with the Open Institute in the project to offer residents of Lanet Umoja location in Kenya capacity-building support for use of CDG in the implementation of SDG 5.

Citizen generated Data projects are continuously evolving, based on lessons learned in the planning and implementation of these projects. This guide was developed based on appreciation that for improved generation and use of CGD data, practitioners need to share best practices and lessons learned to ensure universal learning. We encourage you to provide feedback and suggestions on other lessons learned and best practices that you have identified in your CGD work.

Acronyms

Term	Description
CSO	Civil society Organisation
OI	Open Institute
CGD	Citizen Generated Data
SDG	Sustainable Development Goal

2.What is the CGD Approach?

Introduction

Citizen-generated data (CGD) is data produced by people and organizations to monitor or campaign for change on the issues that affect them. As it is actively offered up by people, CGD can be seen as a direct representation of their perspectives, and as such can be a valuable alternative to government datasets.

Citizen-generated data initiatives can be implemented based on varying motivations. It is a useful complement to institutional data, not a replacement for it. It can also highlight issues that are important to people and feed their views up into higher- level policy debates, or be used to verify official narratives and datasets. The initiatives that create citizen- generated data can also empower people, giving them a way to engage with political processes that might otherwise seem removed from their lives.

Datashift is gathering and sharing experiences in using citizen- generated data in civil society projects at initial pilot locations: Argentina, Nepal, and East Africa (Kenya and Tanzania). This is done by directly supporting projects using citizen- generated data, and documenting the practical lessons learned along the way. DataShift will present this information so that it is accessible for civil society groups that are keen to harness citizen- generated data in their work. This work will also inform higher- level policy debates, ensuring that citizen- generated data gets the recognition it deserves in discussions about the data revolution and monitoring the Sustainable Development Goals (SDGs). The DataShift team provides direct financial and technical support and training to organizations to produce CGD to power campaigning and increase government accountability through shadow monitoring.

The open institute on the other hand has spearheaded the Global goals for local impacts project; partnering with the local leadership and community members, training them on the SDGs, the importance of CGD and SDGs, set groundwork for data collection using mobile phones - by community members, developed a dashboard for viewing the data and has linked the community to partners. After tremendous success in the CGD approach, OI is now scaling to other regions.

The "Global Goals for Local Impact" project is a project that was implemented in Lanet Umoja location of Nakuru County (Kenya) by the Open Institute (OI) in partnership with Chief Kariuki (aka the Tweeting Chief - a local government administrator) and the Lanet Umoja community. Datashift has since partnered with OI for SDG 5. The "Global Goals for Local Impact" project focuses on primarily meeting these two objectives: 1) to demonstrate concretely how multiple sources of data, particularly citizen-generated data, can be harnessed to monitor SDG progress; 2) to build the interest, capacity and collaboration of civil society in generating and using data to monitor SDG progress; and further narrow its focus to directly work with local level actors, including local administration and citizens. The expected outcome is that the capacity and confidence of local level communities and civil society to generate and use citizen-generated data for campaigns and to monitor, demand, and drive sustainable development progress,

including on the SDGs as prioritised by them is strengthened.

The SDGs provide an unprecedented opportunity to adopt a new approach to monitoring and accountability – with citizens at the core. To better deliver and monitor the SDGs, a 'Data Revolution for Sustainable Development' has also been called for, to leverage new sources of data, increase access to data, and ultimately support policies and decisions that will improve outcomes for both people and the planet. The organisations are working to ensure that civil society and CGD are included in the SDGs follow up and review process. This includes demonstrating how CGD can support the domestication of SDG targets and indicators, the creation of data baselines, and in national and local development strategies. In the Lanet Umoja project, the CGD approach has been successfully implemented.

From August 2016, DataShift partnered with the Open Institute to offer residents of Lanet Umoja location in Kenya capacity-building support for use of CDG in the implementation of SDG 5, 'to achieve gender equality and empower all women and girls', at the local level.

Citizen-Generated Data for SDG 5 - Global Goals for Local Impact

The 17 Sustainable Development Goals (SDGs) offer an unprecedented opportunity to synergise efforts and tackle the unfinished business of the Millennium Development Goals (MDGs). This includes work on SDG 5, focused on "Achieving gender equality and empowering all women and girls" and its constituent targets and indicators. The integrated nature of the goals and targets however calls for new innovative approaches that harness data through multi-stakeholder initiatives. Achieving SDG 5 is interdependent and connected to tracking the progress in the achievement of gender specific indicators that are integrated in all the 17 SDGs.

According to a recent report by Data2x, to achieve gender equality and female empowerment, there's need for robust information about the lives of women and girls. There's need to understand the size and nature of the gender gap and to identify the underlying causes of inequality so as to measure its consequences, design effective policy solutions and have adequate data to monitor progress. Unpaid work in home production, time spent fetching fuel and carrying water, housework, childcare and eldercare, all activities carried out mostly by women and girls, are part of a 'care economy' that society undervalues and, therefore, does not count in official statistics. The challenges have far greater ramifications in least developed, developing, and vulnerable countries where socio-economic and cultural barriers, conflict and fragility, and weak governance and institutional frameworks exuberate gender problems.

Significant progress has been made in the long journey towards gender equality and the empowerment of women and girls. We now have a standalone Sustainable Development Goal (SDG 5) on gender, which places special emphasis on the subject and raises its awareness.

3.Principles of Citizen-Generated Data

Communities

The basis of any CGD initiatives is the community themselves. Communities are key instruments of any CGD program. For this reason, communities must own the CGD initiative, to ensure the viability and sustainability of the initiative beyond the CSO's or any other institution's support. In this case, ownership connotes that communities are empowered to independently collect data, make meaning out of the data collected and persistently engage the government, the development sector and local leadership to communicate their priorities.

CGD initiatives provide an avenue for community members, of various backgrounds, to communicate to governments on their needs and priorities. This makes community members paramount to the success of the data collected and the sustainability of any CGD initiative.

Communities are also prime beneficiaries of any CGD program. They hence need to be consulted before key decisions are made by the implementation organization. This will ensure the relevance of the data collected and tools used in the CGD initiative.

Complementarity

The purpose of Citizen- generated data is not to replace already existing data sets, but to complement these statistics. CGD provide real time data that can fill in data gaps such as the comparability of data to track change over time and the gender data gaps. Data2X identified key gaps in gender data based on need, population coverage, and policy relevance. They identified 28 gaps across five domains: health, education, economic opportunities, political participation, and human security. These are all gaps that can be filled through the use of CGD.

Partnerships

CGD initiatives provide clarity on priorities and the emerging needs of the community. This information generated from CGD initiatives can be used by different organizations and government institutions to address the challenges that communities face. It is essential to partner with other organizations that the data may benefit. Interested partners should prioritise and pivot their work based on the community needs ascertained in the CGD initiatives.

The project MUST partner with the local leadership and citizens for the purposes of mobilisation and support.

Flexibility

As CGD projects are community driven, they need to take a flexible approach to planning and implementation. Figuring out a community's social structure and dynamics takes time, and cannot be achieved at the planning stages. Through implementation of CGD projects, implementers learn new dynamics within the community, and the need to pivot their project approaches such as tools to fit into the community's frameworks.

CGD initiatives also engage a number of stakeholders, including the government, community groups and other organizations. For all the stakeholders to buy in and support any initiative,

they will need to see the value of the initiative. Flexibility in the approach adopted is allowed to add value to relevant stakeholders, ensuring you do not change the key objectives of the initiative itself.

Components of the CGD approach

1. Stakeholder engagement

Engaging local leaders

The local leaders are the main link between the citizens and the implementing organization. By the official debut of the project at the local level, the local leaders should be fully in sync with the project and how it will benefit their community. They ought to have understood the processes and advised which methods will work best for their communities.

Local leaders have a closer relationship with their community members as compared to national and subnational leaders. The trust that the community has in their local leaders in Lanet Umoja is a strength that the project is building on.

Engaging citizens

Citizens are a crucial part of any CGD projects: without them, there is no Citizen Generated Data. For this reason, citizens' understanding of the importance of CGD and its relevance to their needs is key to the success of any CGD project. Citizens will have to fully understand the processes and be aware of the amount of input required for its success. Working with community leaders, we trained the community on data, data collection and analysis processes and how to use the data collected to improve their communities.

Engaging partners

For different issues that may rise up from the data collected, there may be need for engaging more partners who are interested in coming up with solutions to particular issues. For example, if data shows that there is low to no use of sanitary towels in a location, a partner who deals in advocacy for use and distribution of sanitary towels can come on board the project.

2. Technology
Where applicable, incorporating technology can boost the generation and use of CGD. This includes collection, analysis, visualization and dissemination. Use of technology for CGD also improves the skills of the community in using basic technology and ensures timely data collection. It is essential that even the local communities away from the urban areas learn the use of technology and its benefits. Working with Open Institute, the use of mobile phones has been incorporated to collect data and a dashboard to share the analysed data to local authorities, organization and communities.

3. Volunteerism
Another key component of the CGD projects is volunteers. Once the citizens are aware of the benefits the project brings to them, there will more likely be a number of volunteers to be CGD champions. Some will ensure CGD literacy in the community, some will collect data and some will use the analyzed data for advocacy and accountability of the local leaders. Volunteers

develop a passion to have ownership of the project if they sense a strong value in the work they are doing.

4. Open data
For citizens to see the effectiveness of the CGD, they ought to be able to use it. This means that the data has to be open and in a format that can be easily understood and used by the citizen to make decisions. Dashboards may be used to communicate the findings to the audience from the government, private sector and development sector.

3.Citizen-Generated Data Initiative Steps

To highlight the approach to Citizen Generated data, a CGD canvas was developed. The canvas is a guide for civil society organizations (CSOs) to plan an effective Citizen-Generated Data (CGD) campaign based on the experience in the Global Goals for Local Impact project in Lanet Umoja, Kenya. It uses a collective of experiences by OI and DataShift to highlight unique key features of successful CGD Projects. The canvas was developed based on [Strategyzer's](#) Business model Canvas that is a global standard used by companies of all sizes to describe, design, challenge, and pivot your business model. We used the same rationale to outline the key aspects of a CGD to enables CSOs to also design, challenge and pivot their CGD approaches.

Below are ten critical components of implementing a CGD initiative effectively:
1. Identify a driving interest
2. Research - Literature review, speaking to potential stakeholders and community
3. Building relationships
4. Incentives for stakeholders
5. Identify the existing structures and processes that the CGD will engage
6. Resources available
7. Based on availability and gaps identified in assessments of structures, processes and resources available
8. Develop formalized project documents
9. Preparation and actual data collection, analysis and visualization
10. Carry out pilots

1. **Identify a driving interest**

The first step is to establish a common driving interest that can be used to campaign for Citizen Generated Data. These interests can be community, government or global interests that will appeal to both local and global communities. This is important as it will incentivize the community members and partnering organizations to have a common goal and work toward that common goal through the CGD project.

In Lanet Umoja, the local and national government had in place the Nyumba Kumi initiative which is a security initiative. For this initiative to be successful, data has to be collected from all households. Open Institute used this as a platform to campaign for CGD to the local

government and community. The data collection activities were also based on the Sustainable Development Goals (SDGs) which is a global interest that can be construed to reflect the relevant needs of local community. The community members were able to identify five key SDGs relevant to their needs and collected data on these five SDGs.

2. **Research - Literature review, speaking to potential stakeholders and community**

After identification of the driving interest, carry out a fact-finding exercise to establish:
- What issues need to be addressed and what the possible solutions are.
- Identify the groups of people that are impacted by the issues, directly or indirectly.
- What solutions can be implemented in the target community that have successfully addressed these issues in the past

In Lanet Umoja, the project team identified that Chief Kariuki had already recognized the need to collect data relevant to the needs of the Lanet community, in order to prioritize and address the needs. This was the basis of his implementation of Nyumba Kumi. However, this data collection exercise was paper based and Open Institute saw the opportunity to improve the Chief's data collection and analysis processes. To do this, Open Institute took the time to understand Nyumba Kumi and the challenges Chief Kariuki was facing in the implementation of the Nyumba kumi initiative. This gave rise to the Global Goals for Local impact that aimed at empowering communities and local governments to achieve the Sustainable Development Goals at the most local level possible through having the right data to address the issues the community faces.

3. **Building relationships**

Successful CGD projects are based on the potent collaboration of all key stakeholders. It is hence paramount to Identify the stakeholders required for the CGD campaign to be a success. This entails looking at different parties that will be involved i.e., local administration, community members, potential partner organizations and individuals. Establish relationships with the different stakeholders by incorporating their objectives and coming up with formalized agreements on the partnerships, to the benefit of all involved.

In the Lanet example, The Open Institute, DataShift and the local government demonstrated collaborative approaches to implementation of a CGD project. This included identification of individual organization objectives thereafter realization of relevant objectives across the organizations that were considered in the implementation activities of the project. This included:
- *Open institute's objectives of improving the community's capacity to own and implement the CGD project*
- *DataShift's objectives to empower communities to engage the government in addressing their needs based on the gender data gathered and analysed.*
- *Chief Kariuki's objective to collect data on the needs of the Lanet community to be able to prioritize and address these needs.*

4. **Incentives for stakeholders - What does the person get in exchange for contributing data?**

Citizens

Because citizen generated data is consciously given by citizens, each project has to consider the incentives for data contribution. Citizens will contribute data only if it benefits them. With this in mind, each CGD project should have a clear answer to the following question: 'What does the person get in exchange for contributing data?'

The benefits of a CGD project include:

● The most immediate benefit is the perception that data helps addressing an issue that is relevant to citizens;
● Citizens can also benefit through the feeling of belonging in a community and the possibility to learn from others through data;
● Data may also align with personal values and interests. Thus it is important to explain what a project wants to achieve and to demonstrate how citizens are important in achieving the goal;
● Paying people is an incentive for local community members to collect data that is otherwise not relevant to them. The difficulty to find and access the information is compensated through extra payments.

Partners

As for the partners, the more ways a dataset can be used, the more different types of actors will become interested in the data. To facilitate different use cases by different actors, data needs to be accessible and presented in an interoperable format.

In the Lanet Umoja example,using the data initially collected as a basis for distribution, each household received a water filter distributed by [Start with One Kenya](#) that would ensure that community members have access to clean drinking water. This was a key incentive to citizens as they saw the direct benefit of up to date data on the needs of the community, in this case, the pressing need to access clean drinking water that was demonstrated by the data collected.

Civicus and other partners within Lanet Umoja Location participated, led by the community, in submitting a memorandum to the county government. The memorandum, issued to the county governor's office was a sum up of all the issues and challenges that the citizens are faced with that the government may spearhead solutions to; the SDGs that have been pinpointed, and the proposed solutions of note to the government as a major stakeholder. This was a key incentive to the community as they realized that data can be a tool used to communicate to their key needs to the government.

5. **Identify the existing structures and processes that the CGD will engage**

A CGD campaign can leverage on existing structures and processes within the communities, governments and partnering institutions. There is need to identify the structures in place and the processes of communication. This comes in handy in identifying roles and saving on time and resources in implementation.

In Lanet Umoja, the project team identified the communication structures in the location already established within the community. The structures are through the 'Nyumba Kumi' security initiative pioneered by the government. This initiative requires all sublocations to have clusters comprised of households. Each cluster has a cluster leader whom each household reports to . .The Cluster leader then to the sub-chief, who reports to the chief. This means that the chief has a cascading reach to all households. This gained them trust from the community as well as their leaders. It also made it easier to communicate and create relationships with the community members. Following protocol enabled them to have a relationship with the head of other locations, thus also giving them an upper hand in scaling to other locations.

6. **Resources available**

Before the CGD campaign begins, find out the available resources you can use to effectively and efficiently implement the project. These include: Stakeholder relationships, Stakeholder capacities, finances, available data, physical resources, political resources. These resources will greatly reduce your project costs or enable you to prioritize your spending on other key resources essential for the success of the project.

In Lanet Umoja, DataShift leveraged on Open Institute's ICT capacity to develop dashboards and integrate different mobile technology. The project team also worked with the Chief to use the chief's offices and community halls in the location that would host the different community trainings.

7. **Based on availability and gaps identified in assessments of structures, processes and resources available**

After assessment of the available structures, processes and resources, a decision needs to be made on whether they are sufficient for the implementation of the CGD project to take place. If after assessment of resources they turn out to not be enough, make a decision on whether to:
   a. Refine objectives and data plan to fit the resources available or
   b. Seek out additional resources needed.

In Lanet Umoja, after assessment of the available resources, Open Institute partnered with DataShift as DataShift brought in their expertise in implementation of SDG 5 CGD projects.

8. **Develop formalized project documents**

Once the resources have been identified, proceed to formulate project documents. These include
   - Stakeholder agreements;
   - Theory of change;
   - Flexible work plans,
   - Monitoring, evaluation and learning (MEL) plan for inputs, processes, outputs and impact; and Dissemination plans - how are you going to share what you learned from this project - blogs, events.

These will provide clear definition of the stakeholder roles and more importantly, outline key aspects necessary for the sustainability of the project.

In Lanet Umoja, the project team developed flexible work plans that factored in external factors like stakeholder meetings that would require a review of the project activities. They came up with a documentation plan that included blogging activities that would ensure transparency in all project activities. They also contracted a monitoring and evaluation firm to carry out the MEL process of the project. The MEL took a flexible approach, to fit the activities and changes in activities.

9. Preparation and actual data collection, analysis and visualization

Once the resources and documentation are in place, prepare for the actual CGD campaign. This includes:

- Coming up with methodologies for collecting data and ensuring quality,visualisation as well as dissemination. For example, printed material and events.
- Determine the criteria for identifying data collectors. Once you have this criteria, develop curricula for training of the data collectors and their community leaders on data collection and interpretation. It is important to note that establishing good relationships with the data collectors is essential for ensuring standardized data collection and quality data.
- After the trainings, develop data collection, analysis and visualisation tools. These tools should cater for safe storage of data, authorised access to the data and simplified data cleaning processes.

Note that, you should evaluate Information Communication Technology (ICT) value-add to your data collection, analysis and visualization. This will help you decide on whether ICT tools benefits in your project outweigh the challenges. Once you have decided on ICT tools, plan for integration of these tools. These tools require time set aside for testing so as to have bug free tools by the beginning of the data collection training. However, if the challenges of using ICT tools outweigh the benefits, develop other tools for data collection.

In the Lanet Umoja project, the project team developed data literacy training curricula for the community and their leaders. Together with the identified data collectors, the team designed a data questionnaire. They went ahead to use mobile phones for data collection. This proved to be more efficient quality and time wise as compared to alternative data collection methods. It should be noted, however, that there was an earlier trial of mobile phone data collection. It did not work due to the quality of the phones initially used: the storage and battery capacity were low, and the processor was slow thus it took longer than expected to complete an entry. The second trial worked due to better quality phones.

For data privacy, the team ensured that only the chief can access the raw data that contains sensitive information. The rest of the stakeholders can only access general data that was agreed upon in consultation with chief. Access to the dashboard also requires one signing up with their credentials.

10. Carry out pilots

Finally, carry out a pilot for the data collection and planned advocacy. Have measures in place

to ensure good quality of data is collected and monitor impact of the data on decision making. These measures will ensure that there is sufficient and reliable data to have accurate analysis, carry out advocacy, hold leaders accountable and make better informed decisions at personal or community level.

In Lanet Umoja, after the development of data collection tools, the project team assisted the identified data collectors to do a pilot. There were constant data quality checks. There are monitoring measures in place to assess impact of the data on decision making and public forum participation. After the advocacy and public participation analyses, there shall be a complete scalable model, using the tools used in Lanet and improved through the lessons learned in this pilot.

4.Resources
4.1 CGD Canvas Tool

Building Relationships	Research on Issue	Driving Interest	Existing structures and processes that the CGD will engage	Decision after assessments of structures, processes and resources
Mapping out stakeholders Relationships building between stakeholders Identify stakeholder objectives Identify roles of the stakeholders in the project - Formalised agreements, formalised deliverables, timelines	Who is affected? What needs to be addressed, improved? Who is impacted? What are possible solutions?	Government Interests Global Interests Community Interests	Community Government Other as relevant to the project	Option 1: Refine objectives and data plan based on assessments done to fit the resources Option 2 :Seek out additional resources needed
	Stakeholder Incentives Incentives for citizens to share out data to meet the objectives Reusability of the data to meet multiple stakeholder objectives - Data use plan		**Resources Available** Stakeholder relationships Stakeholder Capacities Current and upcoming events Financial Physical, example office space, Available data Political - Security, policies, stability	

Formalise project documents	Preparation and actual data collection, analysis and visualisation	Pilot
Stakeholder agreements Theory of change Flexible work plans MEL plan - input, processes, outputs, impact and theory Dissemination plan	Methodology Data collectors Develop tools for data collection, analysis and visualisation Data lifecycle planning	Test the tools Theory of change Capacity of collectors Intended visualisation done

4.2 Examples of Resources available to leverage on

Stakeholder relationships • Partnerships • Contacts • Interests Stakeholder capacities • Expertise, • Time, • Internal communication, • Internal organizational processes (financial, staffing, procurement, ICT capacity, and legal status to carry out assigned roles).	Finances Available data from • Government, • Academic, • Private sector	Physical resources • Office space, • Meeting space, • Network and internet, • Roads and transport Political resources • Security, • Policies, • Stability • Commitments

Appendices

Stakeholder information

About Open Institute (OI)
The Open Institute is a think-do tank that works with governments, civil society, private sector companies, media organisations and others to realise citizen-driven open societies in Africa. The Open Institute believes they can best achieve the SDGs when they involve citizens at local level in small communities of a few thousand people. The organisation feels it is easier to identify specific households with specific needs and therefore to address them at village level than it is to support hundreds of thousands of households at national level. The Open Institute takes the view that the Sustainable Development Goals are best achieved at the most local level possible. This view is what brought the Open Institute and Chief Kariuki together to achieve SDGs at the local level.

About Lanet Umoja location
Lanet Umoja location is in Nakuru North sub-county, Nakuru county, Kenya. Official statistics from the Kenya Census 2009 lists Lanet Umoja location as having 29,000 people living in 7500 households. These households are represented by 300 community leaders who help the area chief connect with his community better. Most of the population in Lanet Umoja is literate.

About Chief Kariuki
Chief Francis Kariuki is the area chief of Lanet Umoja location. He is popularly known as the Tweeting Chief. He promotes technology by using Twitter to communicate with the residents of

his location on security, community meetings and other issues. He is also championing the achievement of SDGs by working with the Open Institute and CIVICUS, among other partners, to achieve specific SDGs in Lanet Umoja that are relevant to them.

Resources:

http://civicus.org/thedatashift/

http://civicus.org/images/ER%20cgd_brief.pdf

https://www.openinstitute.com/category/ggli/ Accessed April 2017

Closing the Gender Gap http://data2x.org/wp-content/uploads/2017/03/Closing-the-Gender-Data-Gap-Mayra-Buvinic-and-Ruth-Levine.pdf