

# Mapping of the Open Data Ecosystem in Kenya

CYBER POLICY CENTRE

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## Executive Summary

The mapping of the current data ecosystem in Kenya shows the need for the **Improving access and use of open data for accountable service delivery Project** (herein referred to as “The Project”) to focus much more on how to best negotiate the political economy of data openness at the national and county levels so as to find appropriate areas of value addition for the project. This will be more valuable for the project instead of focusing on the growth in the number of data portals and different frameworks, which though important, might not deliver the expected impact. It is through this analysis and negotiation of available data generation and use pathways, the actors involved and the power dynamics among them, and existing rules (formal and informal) that entry points for enhancing open data more generally and with regards to gender and equality and women participation in the data ecosystem can be found. For example, this research found that there is willingness of the Kenya Bureau of Statistics in Mombasa County to work with initiatives for enhancing the quality and use of data. There was equally demonstrated willingness at the national level to bring together official statistics and citizen generated data, while building the bureau’s own capacity together with that of citizens and infomediaries to improve data for policy and practice.

This KBNS-Open Data experience opens a huge opportunity for The Project to enhance the move and link between the subnational level data and the national bringing along powerful civil society networks to focus on data for gender and other themes. This seems to be the next step for Kenya. Given the influence that KBNS has on the national and county governments that comes from their legal mandate as an actor in the ecosystem, it should be possible to leverage the work of local networks to achieve more and deeper data openness at the county level. It should be noted, however, that the extent to which KBNS is able to generate influence is dependent on the political will of governors in each of the counties involved.

It is noted that although there has been a high euphoria around the Kenya Open Data Initiative, which as a portal that in theory brings together data from various sources to a single portal, it has in practice struggled to improve the quality and quantity of open data because it is not possible to influence the different bureaucrats to provide timely data and in formats that are useful for the portal. The next step seems to be to support the theme specific and county specific open data efforts where data openness can move together with political will to deliver, especially of the County Executive. There are currently no guidelines to push bureaucrats to deliver the quality of data required and at various parts of the value chain, given the delay in the operationalization of the Access to Information Act, 2016

Lastly, the fourth OGP Action Plan for Kenya presents a great opportunity to find entry points because of its anchorage in the office of the Vice President and hence political will at the highest level of government. This political will could be drawn upon to provide evidence of improvements in openness at County Level although Mombasa and other many Counties are direct participant for the sub-national OGP. The Project can still use the available frameworks to push for openness in general and gender elements in particular.

Specific recommendations:

- 1) Instead of focusing on a single portal for generating and pushing open data, The Project should focus on County governments having their own open agendas and implementation strategies, while linking to national MDAs in different ways.

- 2) In the context of the delayed regulations for implementing the Access to Info Act (2016), use local coalitions to support county governments to effectively develop operationalisation plans by linking openness to their Public Participation Acts, in working with the Office of Administrative Justice (Ombudsman)
- 3) Build a strong campaign for data disaggregation with Kenya National Bureau of Statistics (KNBS), and include strong use-oriented data that directly helps county governments to improve policy, transparency and accountability, especially in relation to gender
- 4) Adopt a data ecosystem approach, including also linking subnational to national. For example, the private sector might be best placed to understand the politics of data in procurement processes, while the media might be more useful for pushing for data disaggregation
- 5) Engage donors, such as the IMF on fiscal transparency and the implementation of the Access to Information Act (2021) which they have already put, 'as a kind of conditionality', in their 2021 (Report No. 20/72) extended credit facility, through which they are also supporting Covid-19 policy reforms for Kenya
- 6) Adopt a Progressive Counties model, or illuminating aspects where a particular county is progressive and using that as an entry point, to be able to generate more counties that are on the pathway of improvement in terms of openness, following on from Makueni, Elgeyo Marakwet and Nandi. Bear in mind the personal commitments of the governors, and try to incrementally institutionalise good practice
- 7) Work with civil society networks and KBNS to improve comparability of data to avoid conflicting data, which might be as a result of self-interested individuals manipulating data to support their cause. This is where an authoritative body (or institutions) is a good way to go forward
- 8) Pay attention to the politics of 'Inside-facing' versus 'outward facing' of data that occupies the government open data presentations e.g. how IFMIS (most of it inside-facing) and Public Procurement data (mostly outside facing that is why there is even a public portal for it). The two are often different and organisations working on open data need to appreciate the government negotiations and dilemmas and know how to work with them.

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## 1. Introduction

*“Kenya’s constitution demands that public institutions allow access to information that they hold. Article 35 of the constitution explicitly gives citizens the right to access public information. We now have the Access to Information Act 2016 enacted. All these instruments offer an enabling environment for open data which is a key ingredient for development to thrive in Kenya. Open data helps in ensuring transparency across systems, driving the participation of citizens in governance and improving service delivery. Open data is used to track political, social and economic trends, improve public services, build trust in government, and promote economic growth” (Kenya OGP Action Plan IV 2020-2022).*

The quote from the Open Government Partnership (OGP) Kenya Action Plan 2020- 2022, signed by the Deputy President, Hon William Ruto; the Speakers of the National Assembly and Senate; one of the Governors of County Governments, and Civil Society, epitomises the highest commitment to open data. However, how this translates into practice as a key focus reflected in the Terms of Reference for the scoping study that this report captures. The assignment was to map the current data ecosystem in Kenya – to determine data sources, access, use, gaps or needs and supply chain in order to inform LENGGO under the Project: **Improving access and use of open data for accountable service delivery** on how to best use open data as an entry point into enhancing civic engagement, service delivery and gender equality.

Open government data means: **Data produced or commissioned by government or government-controlled entities.** Data which is open as defined in the *Open Definition*<sup>1</sup> – that is, it can be freely used, reused and redistributed by anyone. The [Open Definition](#) gives full details on the requirements for ‘open’ data and content. The argument is that citizens and infomediaries of different types can collaborate with their government, both national and sub-national in order to gain mutual value of greater openness through, for instance, improving the quality of government decision making, transparency and accountability (Mungai, 2016).

The ToRs summarise the key features of openness as<sup>2</sup>:

- a) **Availability and access:** the data must be available as a whole and at no more than a reasonable reproduction cost, preferably by downloading over the internet. The data must also be available in a convenient and modifiable form.
- b) **Reuse and redistribution:** the data must be provided under terms that permit reuse and redistribution including the intermixing with other datasets. The data must be machine-readable.
- c) **Universal participation:** everyone must be able to use, reuse and redistribute — there should be no discrimination against fields of endeavour or against persons or groups. For example, ‘non-commercial’ restrictions that would prevent ‘commercial’ use, or restrictions of use for certain purposes (e.g. only in education), are not allowed.

The data available in the ecosystem can be subjected to data value chain analysis, in order to assess the level of openness of a particular data ecosystem as illustrated below:

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<sup>1</sup>Open knowledge’ is any content, information or data that people are free to use, re-use and redistribute — without any legal, technological or social restriction [What is open? \(okfn.org\)](http://What is open? (okfn.org)) .

<sup>2</sup>Drawn from eight principles of openness including: complete – making available all data that does not violate privacy or security, primary – collected at source with high level of granularity, timely, accessible to widest range of users, machine processable, non-discriminatory, non-proprietary and licence-free – not subject to patents, copyright or trade secret regulations although with exceptions in cases where there is reasonable security, privacy and privileged restrictions (Open Knowledge Foundation, 2012)

## From data to evidence to action to response

Key to our approach is to work along with supply and demand side on the realization of the data value chain: from production and collection of data to sharing, to analysing, to creating evidence to inform policy, informed



In other words, data generation, covering production and sharing; has to overlap with data usage in ways that inform improved action, with provisions for feedback mechanisms and hence delivers the ultimate value.

The improving ‘value chain of public data’ – from generation, to use, to action and response is a *pre-requisite* for fostering civic action and realization, protection and promotion of rights. While laws related to access to information and free flow of information is one part of the story, there is also need to address some of the information asymmetries particularly accrue due to inherent biases at the time of production, processing and sharing of data. For example, unless disaggregated data (based on gender, age, ethnicity, religious backgrounds, rural-urban) is made available by public authorities, the reality would always be subsumed within the broader aggregates. Such a situation warrants a just and democratic governance of data generation, organization, dissemination, and analysis by both government agencies as well as non-government agencies.

This report focuses on the mapping of the open data ecosystem in Kenya, with case study of Mombasa which is the county government of focus for LENGGO. The research addresses four key areas as shown in Box 1:

### Box 1: Key areas of focus for the study

1. Overall assessment and key recommendation for the legal and policy environment:
  - What are key legal / policy obstacles to open data in a country?
  - What are key possible L&A solutions to key “problems” outlined above?
2. Overall assessment and key recommendations for the technical environment and user engagement:
  - Overview of the current open data release and re-use situation in a country;
  - What are key solutions to “problems” outlined above? What are most promising windows of opportunities?
3. Overview of key ongoing projects with added value:

- *Overview of currently ongoing relevant projects;*
  - *What possible actions are required to boost and intensify the currently ongoing work on the ground?*
4. Key insights into the current L&A scene and potential partners: what are the “problems” and what steps need to be taken with specific organization to solve them.
- *Overview of the current situation in relation to L&A for open data;*
  - *What are key windows of opportunities and stakeholders that could be supported?*

These four key areas of interest for The Project shown in Box 1 are addressed throughout the report without having to label them as such in every section. This is in order to present the report in a logical flow while answering the main research questions in the process. The report starts with articulating the objectives of the assignment, along with the scope and methodology,

## 2. Objectives, Scope and Methodology

### 2.1.1 Objectives and Scope

As indicated in the introduction, the overall objective of the scoping study was to carry out a detailed mapping of data ecosystem to determine data sources, access, use, gaps or needs and supply chain. The findings of the scoping study are intended to strengthen the civil society groups as “infomediaries” and Government Agencies as Open Data Generators to advocate for open data, to reinforce sustainability of Open Government Data reforms, and to strengthen oversight on results and performance.

The specific objectives included:

1. Documentation of current levels of openness or availability of open data;
2. Mapping of the open data ecosystem, that is a situation analysis with respect to open data value chain pertaining to landscape of generators and users;
3. Policy Ecosystem for Open Data Governance (laws, policies, institutional set up and Policy and Strategy on National Statistics, Open Government and Access To Information;
4. Identify bottlenecks in the open data value chain including generation, sharing and use
5. Establish whether open data is accessible, that is in in friendly, accessible machine readable format
6. Mapping of key stakeholders and their capacities and enthusiasm for advancing open data;
7. Recommendations on realistic targets and use cases for open data moving forward.

### 2.1.3 Methodology

The methodology comprised of 4 sections with sub-sections and questions to address. These sections cover a number of issues relevant to potential open data intervention in Kenya:

- 1) Law, policy & institutional setup analysis
- 2) Open data value chain in Kenya, landscape of generators and users;
- 3) bottlenecks in the open data value chain including generation, sharing and use
- 4) Key stakeholders, their capacities, existing projects’ analysis and enthusiasm for advancing open data;
- 5) Open data and user engagement analysis
- 6) Analysis of the current situation regarding lobbying & advocacy (L&A) around open data

The methodology, articulated in Annex 1 set out to get the research to map the context, and then generate data from data generators, mainly sections 1 – 4, and then Data users, from sections 4 – 8, with overlaps between them.

The methodology was designed to gather the data using various qualitative research methods, focused at generating the relevant information at the national and subnational levels: interviews, review of law/regulation/policy documents, website reviews etc. In Kenya, the sub-national focus was on Mombasa based on purposive selection by LENGGO. Fieldwork included conducting telephone interviews as well as physical visits to Kisumu and Mombasa to engage in face to face interviews with some of the informants.

### **Study Limitations and Constraints**

Conducting the study in the context of the COVID – 19 pandemic made it difficult to engage some for the stakeholders, made even more challenging because at the start of the this study, the country was experiencing the third wave. According to the ToRs, secondary sources providing empirical evidence of viable methods on data capacity development strategies were encouraged even though physical face to face meetings in cases where they are acceptable or allowed were to be considered as the first option. In all cases, the potential interviewees were asked of they would opt to conduct the interview by phone even if it was deemed safe by the researcher, and all face to face interviews strictly followed Covid 19 protocols.

These limitations, however, did not water down the resolve to get high quality findings and this report provides the depth of data collection, analysis and findings in the best way possible, under the circumstances.

### 3. Situation analysis in relation to data generation and use

#### 3.1 Political Landscape

Whereas most researchers have in the past already chronologically charted the evolution of open data efforts in Kenya, the purpose of this section of the report is to map moments of incidences of Political will as a key driver in incentivizing open data initiatives. In Kenya, government institutions are charged with collecting and storing data that relates to their mandates. Unfortunately, due to policies and ingrained practices of the colonial and early Kenyan governments, most of this information was 'siloed' within the respective institution and was rarely shared, even with other government institutions. Corrupt networks in public institutions benefited greatly from this culture of monopolizing access to information, and used this power to advance their personal interest, usually at the expense of the citizens. Access to this information was extremely difficult and in some cases impossible. These corrupt networks put up a spirited fight against any and all attempts to release data that would have made them accountable (Schwegmann 2013, Kwamboka 2013, Majeed 2012).

On 8<sup>th</sup> July, 2011, President Mwai Kibaki launched the Kenya Open Data Initiative (KODI), making key government data freely available to the public through a single online portal. The website is a user friendly platform that allows for visualizations and downloads of the data and easy access for software developers. The goal of [opendata.go.ke](http://opendata.go.ke) is to make core Kenya Government development, demographic, statistical and expenditure data available in a useful digital format for researchers, policy makers, ICT developers and the general public. (The Kenya Open Data Initiative, 2016)

Paul Kubuko, CEO of the Kenya ICT Board said, "For the first time ever, people in our communities will be empowered to choose the best schools for their children, locate the nearest health facility that meets their needs, and use regional statistics to lobby their constituency representative for better infrastructure and services in their country," to mark the launch<sup>3</sup>. Charles Onyango Obbo, writing for the East Africa Nation Media Group's Executive Editor for Africa and Digital Media, implies that President Mwai Kibaki's acceptance of the open data initiative is linked to "enlightened malice" of an outgoing leader putting measures in place "that make it harder for their predecessors to govern with as free a hand as they did."

Currently, the Kenya Open Data Initiative has more than 849 datasets organized under six subheadings: education; energy, health, population, poverty and water and sanitation. Users can explore data at both the county and country level which has been pooled from 2009 census, government ministries and World Bank. (Provost, 2011). The implementation of the Constitution 2010 and the elections held in August 2017 shifted priorities away from open data. However, Technology tools have also been built to synthesize and visualize the data in simple formats in order to improve access to this government information. Three years later, there has not been substantial documentation of level of use of these datasets or of technology applications built using this data. Further, there is little or no recorded evidence to support consequential social impact of these initiatives and technologies or the way grassroots citizens engage with government data.

In May, 2013 Kenya hosted the Open Government Partnership Africa Regional Meeting, where the ICT Cabinet Secretary spoke optimistically about the prospects for open government in Kenya. However,

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<sup>3</sup> See Gurdian article Kenya opens its books in revolutionary transparency drive  
<https://www.theguardian.com/global-development/poverty-matters/2011/jul/13/kenya-open-data-initiative>

reading from the Executive Orders such as the one on Public Procurement (Executive Order No. 2, of 2018) the new President, Uhuru Kenyatta is persuaded by the idea of open government data and transparency. Kenya has since its submission of the fourth action plan continued to engage with the OGP.

### 3.2 Legal and Policy landscape

The 2010, Kenya **Constitution** includes access to information obligations, which require the government to publish and publicise any important information affecting the country. Article 35, sets out citizens' rights to information: 1) Every citizen has the right of access to: a) information held by state; b) information held by another person and required for the exercise of protection of any right or fundamental freedom 3) The state shall publish and publicise any important information affecting the nation.

The Vision 2030 aims for transparent, accountable, ethical and results oriented Government institutions thus encouraging public access to information and data. **In the Sector Projects Progress Reports on the Vision 2030 (June, 2018)** the ICT sector reported achievements in establishment of digital villages, digitizing government records and providing connectivity to government, learning and social institutions, software development and film production, and establishment of an open data portal. The portal made Kenya to be ranked the second in Africa and twenty second (2012) worldwide in the open data initiative.<sup>4</sup>

Integral to the economic pillar of Kenya Vision 2030 is Information Communication Technology (ICT), viewed as a tool to boost economic growth through providing access to new markets or services for income generation. It is also viewed as central to the political pillar as a mechanism for poverty reduction by contributing to better governance through increased participation, accountability and transparency. This as a result of ICT sector being the main driver of economic growth over the last decade, attracting global attention.<sup>5</sup> According to Mugo Kibati, former Director General, Vision 2030, Kenya has positioned itself to become a global ICT hub, attracting investors who want to extend the ICT revolution domestically and look for applications in other developing countries.

In 2010, Kenya revised its constitution, which included a section giving citizens a right to government information. In 2011, Mzalendo, a civil society group that aimed to increase public participation in government advocated for the release of financial data to allow citizens to scrutinize the governments management of public resources. In response to increasing pressure, President Mwai Kibaki launched the Kenya Open Data Initiative, making key government data freely available to the public through a single online portal. Under the programme, the 2009 census, national and regional expenditure, and information on key public services were some of the first datasets released on the portal.

As one of the 16 countries in Africa whose constitution expressly provide for access to information,<sup>6</sup> Kenya passed the Access to Information Bill into Law in 2016 and hence giving an anchorage to national initiatives such as KODI, the development of a detailed ICT Master Plan, and its subsequent implementation creating the national ICT infrastructure and commitments in the OGP.

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<sup>4</sup> <http://vision2030.go.ke/wp-content/uploads/2018/09/Kenya-Vision-2030-Sector-Progress-Project-Updates-June-2018.pdf>

<sup>5</sup> Open Data Kenya [https://www.researchgate.net/publication/314236877\\_Open\\_Data\\_Kenya](https://www.researchgate.net/publication/314236877_Open_Data_Kenya)

<sup>6</sup> Constitution of Kenya: Access to Information <https://www.klrc.go.ke/index.php/constitution-of-kenya/112-chapter-four-the-bill-of-rights/part-2-rights-and-fundamental-freedoms/201-35-access-to-information>

Article IV(I) of the declaration of Principles on Freedom of Expression in Africa adopted by the African Commission on Human and Peoples' Rights at its 32<sup>nd</sup> Ordinary Session held in October, 2002, provides that "public bodies hold information not for themselves but as custodians of the public good and everyone has a right to access this information subject only to clearly defined rules established by law." "Convinced that it is of critical importance that clear and comprehensive principles are established to guide promotion and protection of the right of access to information in Africa through the adoption and effective implementation of appropriate national laws and regulations."<sup>7</sup>

The right to information is further entrenched in Article 2 (5) and 2 (6) which provide that "the general rules of international law shall form part of the new law in Kenya" and "any treaty or convention ratified by Kenya shall form part of the law of Kenya under the Constitution." In this case, Kenya is a signatory to the Universal declaration of Human Rights (UDHR), the International Convention on Civil and Political Rights (ICCPR), the African Charter on Human and Peoples Rights (ACHPR), the United Nations Convention Against Corruption (UNCAC) and the African Union Convention Against Corruption, all of which create obligations for Kenya to implement on access to information.

Chapter 13 of the constitution also makes provision for the values and principles of public service; and provides in Article 232 (1) (f) that "transparency and provision of the public of timely, accurate information shall be one of the principles of public service." The implementation of the new constitutional dispensation, with its high demands of integrity, openness, transparency and accountability in public service, calls for the inclusion of access to information in other crucial statutes, and these are now being customised at the county level.

Section 96 (1) provides that every Kenyan citizen shall on request have access to information held by any county government or any unit or department thereof or any other state organ in accordance with Article 35 of the constitution"; Section 96 (2) makes provision for the county government and its agencies to designate an office to be used to ensure access to information as required by sub section (1). Section 96 (3) obligates county government to enact legislation to ensure access to information subject to national legislation."<sup>8</sup>

Access to health information is an essential feature of an effective health system, as well the right to the highest attainable standard of health. Health information enables individuals and communities to promote their own health, participate effectively, claim quality services, monitor progressive realization, expose corruption, and hold those responsible to account.<sup>9</sup> In Kenya the right to health is enshrined in Article 43 (1) (a) of the Constitution which states "every person has the right – to the highest attainable standard, which includes the right to health care services, including reproductive health care."

In terms of inclusion of marginalised groups, in most countries, young people's access to information is subject to disproportionate restrictions because of their young age, relative lack of experience and the range of situations – for example, school and home – in which they are dependent on adults for information. The United Nations Convention on the Rights of the Child (UNCRC), makes provision for freedom of expression, access to information and mass media and **children's right** to privacy. Kenya ratified the UNCRC in 1990 and enacted the Children's Act in 2010. However, neither the constitution nor the Children's Act provides for the right of children to access information.

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<sup>7</sup> The Africa Platform on Access to Information Declaration (Preamble)

<sup>8</sup> Constitution of Kenya 2010

<sup>9</sup> Kenya: Realising the Right to Information <https://www.article19.org/data/files/medialibrary/38388/Kenya-RTI-for-web.pdf>

Access to Information and other laws need to make a deliberate attempt to enhance **womens** access to information since they are disadvantaged by factors such as geographical location, education and literacy, levels of economic empowerment, access to various media among others. Article 54 of the Constitution of Kenya, 2010 guarantees people with disabilities the right of access to information, “a person with any disability is entitled to reasonable access to information, and to use sign language, braille or any other appropriate means of communication.” Further, Article 120 (1), “the official languages of Parliament are Kiswahili, English and Kenyan Sign Language.”

Other regulations that contain provisions guaranteeing the right to information include; The Persons with Disabilities Act, The Employment Act and the Convention on the Rights of Persons with Disabilities. In addition to these Acts, the President and County Governors also issue Executive Orders, which need not go through parliament and hence are forceful for change<sup>10</sup>. For instance, a 2013 presidential directive reserved 30% of government procurement opportunities for enterprises owned by women, youth, and persons with disabilities (groups identified as disadvantaged groups according to the 2010 constitution of Kenya) to promote economic empowerment. The aim of the AGPO Program is to facilitate the youth, women and persons with disability owned enterprises to be able to participate in government procurement.

### 3.3 Landscape in terms of Data Generators and Data Users

#### 3.3.1 General

This section assesses the technical environment in terms of the generation and use of data in Kenya, paying much attention to what is already being done, trends and gaps. Government is the major generator and potential user of data, understanding the power of data from the perspective of government becomes imperative. Apart from executive branch, the legislative branch of governance also increasingly being seen as a major player in public accountability as members of parliament face the citizens more frequently. For them too, data and information becomes critical ingredient in terms of assessment and analysis of the situation, policy impact and evidence based advocacy.

Critical stakeholders on the supply side of the data include; government line departments (social and economic sectors), finance and budget departments of ministries, general administration, central statistical organization (as nodal agency), county governments, implementing agencies of development projects, donor supported projects, banking and financial sectors, information ministries, ombudsmen and public accountability bodies (like the controller and auditor general office etc). It is to be noted that as a repository of data and information Central Statistical Organization (CSO), plays a significant role.

Citizens, their groups, leadership (women and youth leadership), CSOs, NGOs, INGOs, donors, UN system, academics, media and etc are significant players who consume data in a significant way. They also contribute to the data generation, in terms of their engagements at the field level, but more importantly they play a critical role in data aggregation, analysis, processing and dissemination. There are actors in Kenya such as the Open Institute, the International Budget Partnership and Transparency International that generate a lot of original data of their own, while using data from

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<sup>10</sup>An executive order is a signed, written, and published directive from the President that manages operations of the government. The president derives the powers from the Constitution 2010, Article 132 (3) (b) which empowers the president to: "direct and co-ordinate the functions of ministries and government departments." <https://www.kenyans.co.ke/news/53967-uhurus-executive-orders-why-they-are-game-changers>

Otherwise, researchers, policy think-tanks, journalists, advocacy and campaign groups within the CSO space, human rights defenders, activists are critical players who rely on data and information that is generated from formal and informal sources. It is important to understand their perspective on the current situation of data generation, analysis and dissemination and use.

## GOVERNMENT AGENCIES

Whereas MDAs and different parts of government at both national and sub-national levels generate data as part of their work, as indicated in section, the main centralising institution is Kenya Open Data Portal. The data portal is managed by the Kenya ICT Board in partnership with World Bank and powered by Socrata. Government agencies made a commitment to publish open data to spur innovation in public service delivery and development.<sup>11</sup> The argument is that information is a national asset and its time it was shared: it is key to improving transparency; unlocking social accountability and economic value, and building Government 2.0 in Kenya.<sup>12</sup>

The ministry of Health rolled out a number of interventions in conjunction with select civil society to improve access to health management information through the use of ICT. On the other hand, the National Treasury use of Integrated Financial Management System (IFMIS) at both National and county government level as a tool to enhance accountability and transparency in the use of public resources. Also, it has made possible for integration with other government agencies hence enabling cross referencing of data that reduces any opportunities for fraud.<sup>13</sup>

Kenya was admitted to the Open Government Partnership in 2012, a multinational initiative that aims to secure concrete commitments from governments to promote transparency, empower citizens, fight corruption and harness new technologies to strengthen governance. Similar initiatives were, launch of the National ICT Master plan<sup>14</sup>, public service centres dubbed 'Huduma Centres,' and e-procurement, in 2014.

As indicated earlier, the government also passed the Access to Information **Act** in 2016, to enhance enforcement of Article 35 and government official to release information. Furthermore, the President issued an Executive Order No. 2 of 2013. This executive order provides affirmative action in government procurement opportunities (AGPO) initiative launched by the Kenyan government which seeks to empower women, youth and persons with disabilities by including them in public procurement opportunities. All government procuring entities are required to allocate at least 30% of their procurement spend for the purposes of procuring goods and services from micro and small enterprises owned by youth, women and persons with disabilities.

In Kenya, a 2013 presidential directive reserved 30% of government procurement opportunities for enterprises owned by women, youth, and persons with disabilities (groups identified as disadvantaged groups according to the 2010 constitution of Kenya) to promote economic empowerment. However, studies show that as of 2016, female entrepreneurs continued to be outpaced by their male counterparts. A study conducted in 2019 indicates that female owned businesses are marginalized from accessing public procurement opportunities due to cumbersome application process, limited access to

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<sup>11</sup> Publish open data to spur innovation in public service delivery and development

<https://www.opengovpartnership.org/members/kenya/commitments/KE0026/>

<sup>12</sup> KODI website ([www.kodi.go.ke](http://www.kodi.go.ke))

<sup>13</sup> Integrated Financial Management System (IFMIS) <https://www.treasury.go.ke/ifmis/>

<sup>14</sup> <https://icta.go.ke/pdf/THE%20NATIONAL%20ICT%20MASTERPLAN%202017.pdf>

information, lack of flexible credit facilities, lack of transparency in procurement practices and gender-based discrimination among other barriers (Mohammed R, 2019).

### 3.3.2 Legal and Policy Ecosystem at the sub-national level: the case of Mombasa

In order to properly map the state of data generation and use at the county level, it is important to first articulate the main legal and policy instruments in both counties. Critical to the legal environment are the County Public Participation. These laws are meant to give effect to Articles 1(2), and 10; Chapter 4 Articles 35, 61, 69, 118, 119, 196, 174, 184, 201, and 232 and the Fourth Schedule of the 2010 Constitution; and to the County Government Act (2012). The aim is so that the public can actively inform ‘the form and content of legislation, policy and development plans and programmes by their County government.

Mombasa county gazetted the Mombasa County Public Participation Act (2017), which sets out clearly to, among other objectives, provide a framework for “informed, effective, efficient, and sustainable engagement of the public in the County in the formulation of policy, legislation, and development plans ...” {See section (e). It also includes commitment to ensuring transparency and accountability in decision making, partnership and collaboration in public processes, public awareness and understanding of government processes, and to reduce conflicts between government officials and the public decisions and enhance community ownership of public decisions. Furthermore, there are stipulated principles for citizen engagement among which five have an explicit bearing on open data (italics mine),

- (f) the public shall have access to information to enable their participation in a meaningful manner
- (g) communication to the public on how their input affected the decision – *which pertains to feedback in the data value chain*
- (k) provision of meaningful information in a format and language that is readily understandable and tailored to the needs of target groups – *which includes gender disaggregated data*
- (i) provision of information in advance of consultation activities and decision making.
- (n) openness and transparency, inclusiveness in representation of views including of vulnerable groups and marginalised

Some counties, especially Makueni and Elgeyo Marakwet have open data portals<sup>15</sup> and have demonstrated improvements in citizen participation by implementing their participation policies, towards the ‘Collaboration’ and ‘Empowerment’ types of participation, which are helping meaningful citizen participation. However, more innovations are required to make these portals meaningful in engaging infomediaries and citizens given that data portals, just like websites, on their own do not achieve much. In Makueni, the process has been helped by a systematic methodological undertaking in linking open data to open contracting.

As part of the methodology, an analysis of the key county government departments that interviewees selected as critical for open data at the county level, the case of Mombasa County.

	Friendly to Openness	Neutral to Openness	Opposing Openness
Department of Finance			X

<sup>15</sup><https://makueni.go.ke/>

and Planning			
Department of Statistics	X		
Department of Devolution		X	

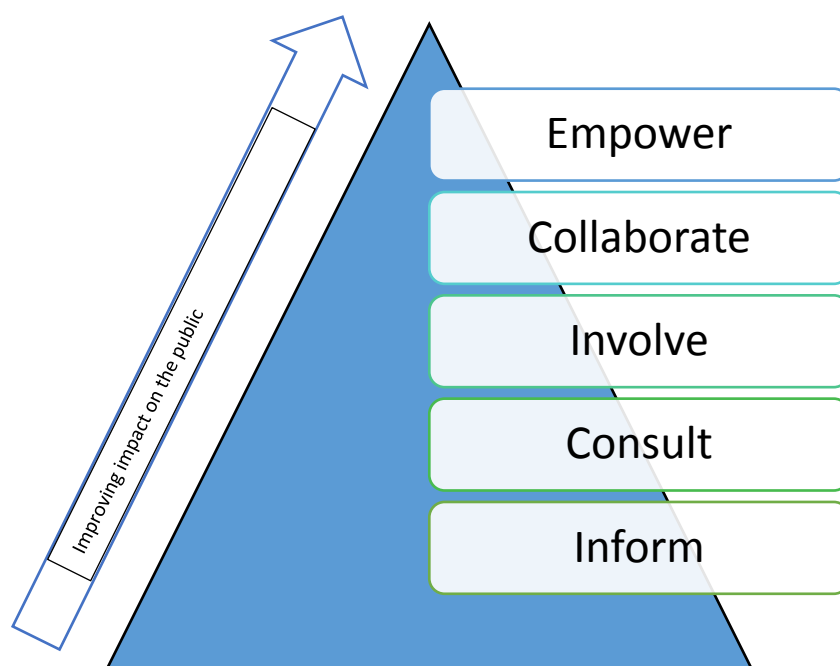
In this case, the fact that the Department of Finance and Planning is not keen to engage in open government data as defined in this research explains why most interviewees in Mombasa gave access to county budget data a rating of 2 out of a maximum of 5. On the other hand, the department of statistics, a component of the Kenya National Bureau of statistics was rated as friendly to open data, which reflects also in the collaborative work KNBS has been doing with the Open Institute and other partners on Citizen Generated Data, aimed at improving the overall quality of data. This friendliness should open doors for LENGGO in Mombasa to engage around strengthening disaggregation of data around gender and other variables. The fact that the Department of Devolution is rated as neutral suggests that it can be persuaded towards data openness at county level, which can positively work for using its powers to leverage openness by the devolved ministries such as education, health and agriculture.

#### 4. Key Opportunities and Bottlenecks along the Data Value Chain

There are several challenges that open data faces which affect the possibility of realizing its potential, some of which include: disclosure policies that limit providing open data; copyright that creates contention on who owns government data; poor data quality and management practices which increase the cost of converting the data in machine readable format; enormous and discrete nature of government data that require extra effort and cost when transforming it to open data; and collation of datasets from government agencies; increasing public interest and awareness of open data that includes public servants, citizens and the private sector (Ubaldi, 2013).

Some of the specific challenges generated during the study are identified and explained below. However, one of the key underlying factors to openness is the understanding of participation itself and the interests of government actors. This approach is drawn from the participation schema developed by the International Association of Public Participation (IAPP) ranging from 'Informing' to 'Empowerment', as described in Figure 1.

*Figure 1. Participation levels as provided in the terms of reference*



Source: Author's own formulation

Key for Figure 1:

- *Inform: To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities or solutions.*
- *Consult: To obtain public feedback on analysis, alternatives and/or decisions.*
- *Involve: To work directly with the public to ensure that public concerns and aspirations are consistently understood and considered.*
- *Collaborate: To partner with the public in each aspect of the decision, including the development of alternatives and the identification of the preferred solution.*
- *Empower: To place final decision-making in the hands of the public.*

According to the research findings, most of the 'Public Participation' has often been the types of 'Inform and Consult' which cannot enable citizens to participate in a meaningful manner as required in the Public Participation Acts of the County governments. An associated problem is the timing of the 'consult' participation, which does not provoke incentives for generating local demand for granular and meaningful data. In the current budget in Mombasa, for instance, information that should have been shared by 1<sup>st</sup> April, 2021, was shared just a day before consultation meetings at the end of June, 2021. Given the complexity and incompleteness of the data (including lack of disaggregation to include vulnerable groups) shared with CSOs, media and citizens, there was no time even for intermediaries to tease the complex data into simplified and more granular formats so as to enhance usage and engagement.

Furthermore, even though there is an Access to Information Act, 2016, County governments still do not have guidelines for how to implement the Access to Info Act at county level, a process that is stuck in the Office of the Administrative Justice. This context hardly pushes government officials towards data openness that enables collaboration and empowerment type of participation. Some elected members (e.g. Members of County Assembly and Wards are caught up in the confusion implicit in the 'why did they elect me if I cannot represent them', which projects a picture of representation that is not of self-

interested individuals. In reality, these representatives have self-interests, a case that has often been raised in connection with the management of Constituency Development Funds.

A related factor is the tendency for Kenya Government ministries not to release data because of the **Official Secrets Act** that prevents government employees from sharing official information. This has created a closed culture in government and starved the Kenya Open Data Initiative of much needed information (Greg, 2013). Others have argued that the implementation of the 2010 constitution hinders government officials from incorporating open data in their already overburdened work streams as a result of adjusting to new roles and responsibilities.<sup>16</sup> Lack of any clear implementation and complaints mechanism, and citizens' lack of awareness of their right to information are some of the other barriers.

### **Operationalisation of relevant laws and policies**

Several informants referred to the difference between 'the letter and the spirit of the law', arguing that most of the laws are articulate in the letter but they lack practical application because the spirit of the law is not carried along. In discussion with the county government officials they indicated that firstly, in terms of the letter of the law, the Kenya constitution puts national value and principle to public participation which all officials are to adhere to whether at national or county was core to the promotion of open data. The argument is that effective public participation cannot be achieved if there is no access to data. Access to information (ATI) is also espoused in the constitution and the public participation was seen as one mechanism that operationalised ATI especially to the rural and marginalised communities. From that perspective, then it was viewed by some government officials that open data has been fairly achieved even though in essence based on the operating definition, it is not.

The availability of the ATI Law, passed in 2016 provides a great opportunity for improving open data initiatives in Kenya. However, the fact that it is yet been formerly operationalised, along with associated laws such as the Leadership and Integrity Act (2012), Ethics and Anti-Corruption Commission Act (2012) makes it a stumbling block. For instance, the recent IMF report (April, 2021) detailing agreement with the government, focusing on fiscal transparency, has prioritised publishing of procurement information, including beneficiary ownership data of companies awarded contracts. However, these can only work if there is an operationalization of the Access to Information Act, among other factors.

The IMF report (2021) also refers to the Public Procurement and Asset Disposal Regulations that were developed in 2020. These regulations strengthened obligations to release more information on the Public Procurement Information Portal that was launched in 2018 in response to the Presidential Executive Order No. 2 of 2018 which required public procuring agencies to publish comprehensive information on all public tenders including beneficial ownership information. However, in the absence of the regulations, the publishing of data was random and not comprehensive, despite the Executive Order. Furthermore, regulations on themselves might also not work on their own, but might gain from donor leverage from the involvement of the IMF and other donors. This also speaks to the extent of domestication of external laws, such as is the case with most laws that attempt to tackle marginalisation, require a lot of work in terms of building capacities of citizens, legislators, the Executive and many other actors in the ecosystem.

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<sup>16</sup> <https://openinstitute.africa/kenyas-open-data-portal-failing-can-still-succeed/>

The county level performance on both Access to Info in general and public procurement information in particular is much scanty and lower as counties are still following national government practice in most cases, except in the case of Makueni and Elgeyo Marakwet.

### **Authenticity and politicization of the data/information**

Both county officials and CSOs questioned the authenticity of some of information and data provided by the government agencies. Since the methodologies of generating the data and information are not usually clearly provided, there were many occasions where the CSOs did not trust the data/information provided by both the county and national governments. At the same time county officials also found that they doubted about some of the data and information provided by the national government for instance the population census by the National Bureau of Statistics.

During the Covid period, there has been contradictions in the data produced by the two levels of government. Different entities provided different statistics of prevalence, hospitalization, death. It was particularly difficult for media and CSOs who were involved in broadcasting and awareness creation to know what data was authentic especially when the CS would provide different data from what the county would provide, or different from what was actually visible at the local level facilities. The lack of open data meant that the users were not able to know exactly where the differences in the statistics were coming from. If the information was provided accompanied by the details found in open data, the recipients could have verified some basic differences and understand why the differences were arising.

Due to the fact that data today is also closely linked to the resource redistribution, the respondents both from government and CSOs indicated that there is an increase in the politicization of data, especially of population census. This indeed further show the need for increased demand for open data as it will increase the transparency related to the generated information, its authenticity and the basis for redistribution of resources and development decisions.

At the national level, the population census conducted in 2009 took almost 2 years to be confirmed due to controversies with regards to the validity of data from some part of the country. While for many years Kenya's data was considered authentic locally and internationally, the mistrust of the population census was sowed since that time. The open data principle can begin to resolve some of the mistrust introduced then.

### **Increased cases of 'miscellaneous amendments'**

Among the suggested solutions is the need for the Open Data initiatives to work closely with the Office of the Administrator of Justice (Ombudsman), because she is in-charge of the implementation of the Access to Information regulations and can help interpret the current laws competently, and increase openness in various parts of government. The common avenue for trying to address lack of openness has been to take cases to court, hence the legal root.

Working towards authenticity of data is an area which needs to grow much more as an area of co-creation between official data and citizen-generated data<sup>17</sup> so that in an incremental way, especially under devolution, county governments develop the level of sophistication and rigour that is not just methodologically robust but also inclusive of data sets that are sufficiently disaggregated, aggregated

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<sup>17</sup> [Assessing development impacts: lessons from a case study in Ghana \(data4sdgs.org\)](https://data4sdgs.org/)

and presented for use by both the government agencies and data users, resulting in improvements in the overall quality of policy and its implementation and positively impacting lives of people.

### **Devolution and increase in access to information**

The devolution process was considered to have been a positive move towards increasing opportunities for open data. The devolve units are semi-autonomous and have fiscal transfers that allow them to make decisions on their utilization of budget. To this end, they have the opportunity to increase access to information and to also open data centres.

Public participation on budget estimates ought to have happened ahead of 30th April 2021, at the formulation level and thus this (public participation exercise) ought to have been only for purposes of approval (validation) at the County Assembly. As a result, the civil society network on budgets expressed disappointment to note that these documents were only provided on 23rd May 2021. The network argues that even this sharing of information happened because they asked for it or otherwise there would not have been any public participation.

This agrees with the findings of the International Budget Partnership (IBP Kenya office) which conducts surveys for all the 47 counties and rates them on a scale of (0) lowest to (100) highest, which, it could be argued is a good way to incentivise improving performance on budgets. The rating of county governments is in terms of their ability to provide timely and comprehensive government budget information to the public that can allow effective dialogue on the priorities, revenues, and spending, for delivery of services to the people. In terms of Mombasa, the budget transparency survey rated the transparency of the County at 28 out of 100. In this case, Mombasa County published three budget documents online in 2020, which included the Programme-Based Budget but citizens cannot tell whether it is approved or not. They scored 13 out of 100 in terms of citizen inputs into the County Integrated Plan.

### **Lack of capacity/finances**

There was an indication that there may be lack of skills and also other capacities such as financial challenges that affect the generation of authentic data at the county levels. In the past, under centralized government, the national bureau of statistics had offices all over the country and would regularly collect data. That capacity was not seamlessly shifted to county governments. Therefore, a gap has been created.

There should be a clear budget line and consistent collection of data at the county level, with clear linkages to research think tanks, which are at the moment very much national government focused and have not decentralised. In terms of the budget lines

The absence of County Budget and Economic Forum (CBEF) has frustrated engagement of the residents of Mombasa since the election of the current regime therefore making the whole issue of public participation in budget making less meaningful. The same can be said for the absence of sector working groups which are fundamental in budgeting and Community Participation. The county assembly should seriously take up its role of holding the Executive (the Governor) accountable and ensure that institutions to facilitate public participation are put in place.

Capacity of legislators, engaging experts. The CBR report, for instance points to MCAs as they most consulted but not able to tease out reports. The same can be said about their capacity understand emerging concepts of marginalisation such as LGBT plus.

### **Operating in silos/no central repository**

There was clear indication that since the county officials operated in silos, there was no specific centre for data and information. To access specific sectoral information meant that one had to visit the specific department. Even then there was no specific official that was fully authorised to avail the data and the inquirer would be led from one office to another. The CSOs noted, some of these inconsistencies to access to information were by design and not due to lack of capacity. This also showed in terms of the finding that there are a lot of instances where government does not use its own data to inform policy processes.

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### **KNBS facilitation of open data**

It was said that while KNBS is the core holder of data, the institution has not made the data as open as it ought to be. The fact that one has to write officially or visit to access some of the data was a major concern to both county government and CSOs respondents. One of CSOs respondents however, found it open since the institution does provide a library or information centres both at Nairobi and the county level.

### **Disaggregated data**

In most cases when one finds the data, it is not disaggregated. The government institutions have not mainstreamed gender and this makes the policy and development implementation to be largely gender blind or neutral. Even when data is collected is disaggregated, in most cases the analysis is not robust enough to nuance the gender differences. Therefore, the push for disaggregated data and information is crucial.

There is a general blindness in gender responsiveness of the budget estimates for example, priority mismatch when it comes to the allocation of more resources in planning at the department of youth gender and sports at the expense of financing gender mainstreaming which is key considering that emerging issues like covid 19 pandemic has accelerated the cases of SGBV and GBV hence more money should have been allocated in that department/sector. Financing the gender mainstreaming sub thematic is key towards achieving the generation equality coalition dream which Kenya is party to.

### **Use of new technologies to increase access**

There have been discussions to establish good platform for county interaction with citizens through an ICT. The interactive platform for public participation would require dedicated resources, finances and personnel. However, even the basic infrastructure for internet connectivity is lacking not only in other county areas, but also in the county offices internet connectivity is a challenge. "The county will not have succeeded if it establishes an information centre where internet hangs the whole day or there are

outages all the time,” said one of the county officials. There is need to upgrade the technology infrastructure and access in the county.

Most counties have websites but these websites do not have up to date info. The challenge remains one of lacking authority to cause department heads to provide the necessary information on time, and in formats that are user friendly. This challenge was identified in the interviews with KNBS and the Chief

Digitization process that is now being put in place also may allow opening of data that previously was difficult to access. For instance, the ministry of land was digitizing all the lands records. Once fully done, it will imply that at a touch of a button, information on land will be available. More and more departments should consider digitizing records and making data available online. This will of course work in tandem with changing behaviours towards sharing more information, having rules that protect those who share information so that they are protected from losing their jobs by the powers higher up the line, and rewarding good examples. In the case of the Integrated County Plan, the poor quality of participation results in budget lines and amounts that are predetermined – and often do not relate to spatial data.

### **Timeliness of Data**

In many cases information and data is released late. The delays in sharing the data has made many media houses use incomplete data in their broadcasting and reporting. The CSOs have not been able to do their evidence-based advocacy due to delay in the data. For instance, while participation meetings are religiously held, the budget documents due for deliberations are only availed on the day of the forums, which make meaningful engagement a myth.

For example, the Mombasa County Governance Civil Society Network and the Budget Champions took their County government to task for posting the Annual Development Plan on 24th June 2021, and inviting stakeholders to a consultation meeting on 25th June 2021, thus hindering access to information on the important document necessary in reviewing the PBB 2021/2022. The network rated this action by their County government as a gross transgression of rule of law and those involved needed to be investigated and prosecution ensuing. The fact that these observations are happening despite the County Public Participation Act in Mombasa confirms the observation by most interviewees during this research that there is a huge gap between the letter of the laws and policies and the spirit that drives action. The focus of LENGGO therefore needs to be much more on the politics and spirit of data openness than on the growth in the number of data portals and different frameworks, which though important, might not deliver the expected impact.

## 5. Key stakeholders and their capacities

### INSTITUTION SET UP

Government Open Data in Kenya is spearheaded by the Kenya Open Data Initiative, which operates under the Kenya ICT Authority, a state corporation under the Ministry of Information Technology.<sup>18</sup> The Kenya Open Data is a portal that makes public government datasets accessible for free to the public in easy reusable formats in an effort to inform and be accountable to citizens. Also, information shared by one government agent is vital to other government stakeholders in planning and implementation of their programmes.

County governments and Ministries, Departments and Agencies of the Central Government are encouraged to provide their development, demographic, statistical and expenditure data, which can be availed in a useful digital format to various stakeholders and the general public.

#### 3.1 Functional analysis and capacity of ICT Authority

**Kenya Open Data Fellows Programme** In aid for national and county institutions to open up and share their datasets, Kenya Open Data is placing fellows experienced in data mining and presentation in these institutions. This has seen Fellows placed in twenty government offices some of which include: office of the Auditor General; Agriculture and Food Authority, Kenya Forest Service; Posta Kenya, State Department for Housing and Urban Development, and Thika Water and Sewerage Company. In the counties, fellows have been placed in Kiambu, Kisumu, Nakuru and Embu. Some of the activities that Fellows do to improve openness of data are shown in Box 2

*Box 2: Some of the activities that the Kenya Open Data Fellows Programme staff perform*

**Significant Number Blog** involves publication of a blog explaining a phenomenon using a significant number identified from one of the data sets. Particularly by identifying a dataset, analysing of the data and pointing out significant numbers that are interesting.

**Request a dataset** is a feature in the portal that allows citizens to request for datasets. This enables the KODI team understand the datasets people are interested in and use it as a criteria to determine which government agencies to engage to obtain the data and the agencies to prioritise for the data fellow program. There has been slow down of responses due to bureaucratic processes.

**Data Release Form designed by ICTA** helps define the contract between them and a government agency per dataset. This provides proof that both organisations consented to the publication and continuous update of a particular dataset.

**Awareness and Capacity Building Workshops** targetting government agencies, academia, media, civil society organisations, developers and the general public to increase buy-in.

Other issues in the functioning of Kenya Open Data Initiative are Internal Capacity Building for the fellows; ICTA KODI project funding relies on the World Bank there is need to restructure and upscale the project; and KODI relies on official government data rather than crowd sourced.

However, some of the data gaps identified in this area include unavailable current data (disaggregated at minimum by age, sex and disability) of registered firms and beneficiaries under the respective

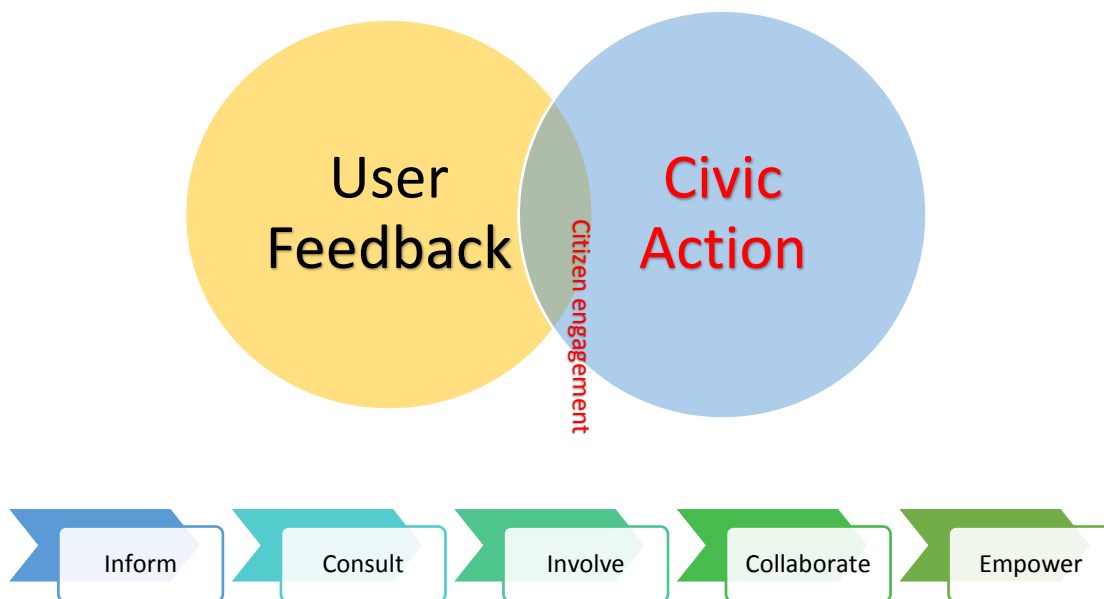
<sup>18</sup> Kenya Data Report <file:///C:/Users/user/Downloads/Kenya-Data-Report-v2.pdf>

affirmative action procurement schemes in Kenya. There is also unreliable data available on the capacity of women to engage in market opportunities under affirmative action procurement including data available on key factors of power and inclusion affecting women's meaningful access and participation in public procurement markets.

### Capacities of Infomediaries

What is important is the evidence of movement towards 'empowerment' models. In conceptualising these participation forms in terms of citizen voice and accountability, a useful related framework has been developed shown in Figure 3

Figure 3: Conceptualising citizen engagement



*The upper part of the framework has been adapted from Peixoto and Fox, 2017, p.57, the rest is the author's own formulation.*

Figure 3 demonstrates the fact that it is 'citizen engagement' and not just 'citizen feedback' that is associated with building civic action, which is in the arena of 'empowered citizen participation'. Therefore, the data value chain should be concerned about how data adds value so as to achieve citizen engagement which leads to civic action which in turn is a form of citizen empowerment'. The argument here is that given that according to the participation schema, most County government provide access to data (where they do) for participation as 'Inform' and 'Consult'. This is why giving info to citizens just a day before the consultation day is not an issue. This kind of data access, however, does not really count for improving 'citizen voice and government accountability' as there is no meaningful feedback expected from citizens (e.g. in most forms of e-government platforms). It still is included in the 'feedback arena, as shown in the figure, as a preliminary form of connection with government, where some form of feedback might still be expressed (e.g. through open acceptance or rejection of information).

## 6. Key Observations and Recommendations

- Instead of focusing on a single portal for generating and pushing open data, it might be important to focus on County governments having their own agenda, and also linking to national MDAs in different ways.
- In the context of the delayed regulations for implementing the Access to Info Act (2016), it might be important to support county governments to effectively link openness to their Public Participation Acts, in working with the Office of Administrative Justice (Ombudsman).
- Build a strong campaign for data disaggregation with KNBS, and include strong use-oriented data that directly helps county governments to improve policy, transparency and accountability.
- Adopt a data ecosystem approach, including also linking subnational to national. For example, the private sector might be best placed to understand the politics of data in procurement processes, while media might – and beyond national.
- Engage donors, such as the IMF on fiscal transparency and the implementation of the Access to Information Act (2021) which they have already put, ‘as a kind of conditionality’, in their 2021 (Report No. 20/72) extended credit facility, through which they are also supporting Covid-19 policy reforms for Kenya.
- Adopt a Progressive Counties model, or illuminating aspects where a particular county is progressive and using that as an entry point, to be able to generate more counties that are on the pathway of improvement in terms of openness, following on from Makueni and Elgeyo Marakwet. Bear in mind the personal commitments of the governors, and try to incrementally institutionalise good practice.
- Work with civil society networks and KBNS to improve comparability of data to avoid conflicting data, which might be as a result of self-interested individuals manipulating data to support their cause. This is where an authoritative body (or institutions) is a good way to go forward.
- Pay attention to the politics of ‘Inside-facing’ versus ‘outward facing’ of data that occupies the government open data presentations e.g. how IFMIS (most of it inside-facing) and Public Procurement data (mostly outside facing that is why there is even a public portal for it). The two are often different and organisations working on open data need to appreciate the government negotiations and dilemmas and know how to work with them.

## 7. Conclusion

This mapping study has shown that despite the huge progress in technology and data initiatives in Kenya, there are still a lot of challenges with usage of data in terms of informing policy making, especially at the county level. Most of these challenges emanate from lack of coordination mechanisms and political will to translate the progressive written rules and laws into practice. LENGGO has an opportunity to enhance data for policy making and practice on two main fronts. These include, working with data generators that are active at both the national and county levels, such as the Kenya National Bureau of Statistics to innovate into how to best generate disaggregated data that includes gender and other forms of marginality; and

to work with theme-based networks at county level to develop effective advocacy strategies beyond taking officials to courts. Working towards developing multi-stakeholder coalitions based on issues and power analysis could help in this regard.

## Annex 1:

Indicator	Type	Establishing	Baseline	Goal
<b>Policy context</b>				
1a. Political context and top national priorities / strategic plans create enabling environment for L&A around open data in the country.	S	Review of national policies	Kenya Vision 2030 Kenya's development is guided by the Kenya Vision 2030 as implemented by the Medium-Term Plans. Several developments that have taken place will further inform the Institute's strategic direction in undertaking research and informing policy. Key among them are the Sustainable Development Goals (SDGs) and African Union (AU) Agenda 2063. "Big Four" agenda. This includes undertaking research on food security, universal healthcare, affordable housing and manufacturing To be filled	Policies have explicit commitment to open data
1b. Key political leaders (prime minister / ministers / president) have expressed publicly visible support for open data or open government data;	P	Media appearance records	Vice President on OGP Executive Orders e.g. on procurement To be filled	Leaders' explicit visible commitment
1c. Key data owning agencies have expressed publicly visible support to broader open data issues;	P	Official statements, media appearances	To be filled	Agencies' explicit visible commitment
1d. Key data-owning agencies have established policies for release of the information related to the: generation and release of all types of public data. (S)	S	Review of institutional policies	Kenya National Bureau of Statistics Some county governments Public Participation Laws	Policies have explicit commitment to open data
1e. There are existing mechanisms available for citizens, infomediaries or business to access the information related to the a. planning; b. implementation and all types of public data. Either centralized entity or individual agencies are responsible for the functioning of these mechanisms.	S	Review of websites, policies	Kenya Open Data Portal, KNBS, PPDP Selected County governments Open data portals	Existence of such mechanisms
<b>Legal Framework</b>				
2a. The law/regulations recognize the right of the public to access data and information related to the: a. planning; b. implementation of development projects and of all types of public data sets.	S	Review of laws/regulations	Access to Information; PPDP To be filled	The laws enable release and access to open data and information
2b. The laws and regulations governing access to open data and information are easily accessed by the public including requirements related to disclosure of open data, information and participations of stakeholders.	S	Review of laws/regulations	The constitution – Article 35, Access to Information Act (2016), Media Council Act (2013) Section 96 of the County Government Act (2016) Kenya Information and Communication Act Public Finance Management Act (2012)	The relevant laws are accessible and clear
2c. The law requires proactive publication of data on the following: <ul style="list-style-type: none"> <li>National and local budget</li> <li>Development plans</li> <li>Social service delivery</li> <li>Issues affecting women, children and people with disabilities and other vulnerable groups</li> </ul>	S	Review of laws/regulations	Access to Information Act	The law requires publication of the relevant information
2d. The law or relevant policy enables citizen participation, in terms of consultation, observation, and monitoring, in the collection of data related to development plans, national and local budgets, social services, Malawi Police Service, etc.	S	Review of laws/regulations	To be filled	The laws enable participation
<b>Institutions</b>				

3a. There is a responsible agency with sufficient political weight and competency currently leading on open data issues. If not, existence of an agency with demonstrated potential to lead on matters of open data.	P	Review of laws / institutional practices	To be filled	There is responsible agency to lead on open data
3b. There is a demonstrated track-record of inter-agency mechanisms coordinating open data related processes.	P	Review of institutional practices	To be filled	Established track-record of mechanisms
3c. Overall government's ICT skill base among senior government leaders and civil servants is sufficient to implement open data initiatives.	P	Interviews, review of institutional evaluation documents	To be filled	ICT skill base is sufficient for data release and reuse capacity
<b>Technical context</b>				
4a. Information or data related to the planning, implementation of development projects, social services, government surveys is being published proactively in a timely manner and in a useful format.	P	Review of websites, cases	To be filled	Information is published timely and in useful formats
4b. The data or information in indicator 2c is being collected and published online or offline in a timely manner.	P	Review of websites	To be filled	Information is published timely and in useful formats
4c. The published data or information is being published online in an open and structured machine-readable format, using unique identifiers and classifications.	P	Review of websites, cases	To be filled	Information is published in open formats, using identifiers and classifications
<b>User Engagement</b>				
5a. There is a clear guidance of program being implemented by data and information holders and oversight authorities to engage with citizens and the private sector in matters of open data.	P	Review of practices, interviews	To be filled	The program is being implemented clearly and in open
5b. There is evidence of disclosed data and information being used by the government, private sector, and civil society for policy making, business development, and advocacy, etc.	P	Review of websites, interviews	To be filled	Information is being reused by stakeholders
5c. There is a feedback redress mechanism in place for matters related to evidence supported by open data. (P)	P	Review of institutional procedures, interviews	To be filled	There is functioning feedback mechanism
<b>Advocacy</b>				
8e. Characteristics of the general public (attitudes, perceptions, civic empowerment levels, use of social media skills etc.) enable / hinder promotion of open data issues	P	Review of sociological surveys, media tendencies, interviews	To be filled	General public supports open data
8f. Existing L&A targets (government agencies) supports open data.	P	Review of public statement, institutional policies, interviews	To be filled	Agencies support open data
8g. International, national, local channels and mechanisms (fora, platforms, committees etc.) for L&A around open data (on an international level, this can be offered by country's participation at the OGP, CSTI, EITI or any other relevant international platform);	P/S	Review of agendas	To be filled	International mechanisms related to each country have open data in their agenda