



**WORLD WIDE WEB
FOUNDATION**

IS OPEN DATA WORKING FOR WOMEN IN AFRICA?

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EXECUTIVE SUMMARY

Open data has the potential to change politics, economies and societies for the better. Yet, open data initiatives supported by governments, civil society and funders have largely overlooked how open data can be used to meet the needs of women specifically.

To realise the full potential of open data, data must be accessible to and used by all. In Africa, however, there is a significant gender gap in data equity.

Our findings reveal that while open data has the potential to radically change and empower women in Africa, the reality is that:

- 1. There is little in the way of open data in Africa** due to the lack of an open culture, insufficient legislation and processes that are not gender-responsive
- 2. Cultural and social realities constrain women** from using the open data that is available
- 3. Key datasets to support the advocacy objectives of women's groups** (e.g., data on budget, health and crime) are largely absent as open data
- 4. There is no strong base of research** on women's access and use of open data, due largely to a lack of funding, little collaboration and few open data champions

While gender equality legislation and policies exist, they are also heavily criticised for being incomplete, or not effective enough to reduce gender inequalities. Moreover, open data policies at the national level are largely absent due to the overall institutional resistance to disclosing data.¹ In turn, open data initiatives generally only exist at sub-national levels, if at all.

Furthermore, limited cross-organisational collaboration provides a significant challenge to the strengthening of the open data movement in Africa.² Women's groups, digital rights groups, and gender experts — all of whom have a role to play in championing the accessibility and use of data by women — rarely collaborate on these issues, and though global initiatives and partnerships have been established, they have yet to integrate vertically and horizontally. Multi-stakeholder collaborations are essential to develop effective solutions.

Funding, international partnerships and support are also needed and play a critical role in examining open data through a gender lens. This lens enables stakeholders to start a conversation on the current state of government data (both open and closed), and how it can be improved. One effective and noteworthy case study of using data to empower women is the TechMouso (TechWoman)³ initiative in Côte d'Ivoire, which brought together the data, tech and gender communities, including government, to use public data to develop solutions to local problems around women's health, safety, education, and economic empowerment. Other responses to challenges women face online and offline have emerged, both in terms of the tech and open data sectors, and broader digital rights and economic empowerment movements.

Our findings should act as a wake-up call — for policymakers, the private sector, and civil society alike — to address the opportunities for women to access and use open data for their benefit. How do we achieve data equity, and ensure data is accessible and used by everyone, especially women?

1 Web Foundation. (2014). From open data to a right to data: A response to the UN Data Revolution report. Available at <https://webfoundation.org/2014/12/from-open-data-to-a-right-to-data-a-response-to-the-un-data-revolution-report>

2 Open Data Barometer Global Report, 4th edition (2017). Web Foundation. Available at <https://opendatabarometer.org/4thedition/report>

3 TechMouso (Tech Woman) (2016). Available at <http://techmouso.ci>

01

INTRODUCTION

As our world moves ever more into the digital space, the hype around the benefits of open data has grown as well. Research has shown that open data can boost economic growth⁴, empower citizens⁵, and support government transparency.⁶ Yet, there is very little research or assessment of what impact open data has specifically on women, or how women are using open data.

What is open data?

*Open data is data that is legally and technically open. Open data and content can be **freely used, modified, and shared** by **anyone** for any purpose.⁷*

The areas of open data, access to information, and gender equality all face significant challenges — challenges that are compounded when combined. The open data and civic tech movement in Africa, and the world at-large, is dominated predominately by men.⁸ Perceptions that women do not use tech or that “women can’t code”⁹ result in unequal access to opportunities for women to work in tech. Institutional and cultural challenges persist in the form of poor access to opportunities for upskilling, low levels of literacy, and a society where men traditionally have

4 World Development Report 2016: Digital Dividends. World Bank. Available at <http://www.worldbank.org/en/publication/wdr2016>

5 Ubaldi, B. (2013). Open government data: Towards empirical analysis of open government data initiatives. OECD Working Papers on Public Governance. Available at <https://search.proquest.com/openview/eae0dba100f69321171cd0682e350182/1?pq-origsite=gscholar&cbl=54503>; Huijboom, N. and Van den Broek, T. (2011). Open data: an international comparison of strategies. European Journal of ePractice; Available at <http://unpan1.un.org/intradoc/groups/public/documents/UN-DPADM/UNPAN046727.pdf>;

6 Bell, J. (2009). Government transparency via open data and open source. Technology Innovation Management Review. Available at <https://timreview.ca/article/230>

7 The Open Definition. Open Knowledge International. Available at <https://opendefinition.org>

8 Luxton, E. (2016). Where are the women in tech? 3 charts that reveal the gender gap. World Economic Forum. Available at <https://www.weforum.org/agenda/2016/04/where-are-the-women-in-computing/>; Women in Technology Survey. (2017). ISACA. Available at <http://www.isaca.org/info/2017-women-in-technology-survey/index.html>

9 Oliver, T. An in-depth look at the gender gap in the tech industry. (2017). Technically Compatible. Available at <https://www.technicallycompatible.com/an-in-depth-look-at-the-gender-gap-in-the-tech-industry>

more opportunities for education and employment.¹⁰ These challenges are barriers to entry for women looking to join the technology and open data industries, and also as users of civic tech and open data. As a response to this issue, many initiatives targeting women and girls have emerged (detailed in Section 3 and in the Annex).

With this context, we set out to find out if and how open data is working to benefit women in Africa. We examine open data through a gender lens, as we review the current state of women and open data, address challenges, and provide recommendations to move forward.

The report is based on insights from experienced data and/or gender professionals in four countries: Cameroon, Nigeria, South Africa, and Uganda — countries selected to provide a balanced regional view of the continent.

The report also includes responses from a questionnaire, with contributions from experts in Burkina Faso, Côte d'Ivoire, Ghana, Kenya, Madagascar, Morocco, Senegal, Tanzania, and Uganda. These were received via an online survey taken, in French and in English, over the course of one month.

Patterns of open data access and use often reflect a power and access dynamic found in wider society. So long as these patterns continue, open data will continue to preclude gender balance and equity issues, which deny women the ability to access critical information around issues including health, education, and land ownership. This study serves as a call to the open data community — the organisations, activists, governments and funders engaged in this work — to take action, change its approach, and rethink policies and practices.

A FEW WORDS ON GENDER

- **Gender:** Refers to socially constructed differences in the attributes and opportunities associated with being female or male and to social interactions and relationships between women and men.¹¹
- **Sex-disaggregated data:** Data that is collected and presented by sex as a primary and overall classification.¹²
- **Gender statistics:** Data concepts and definitions that adequately reflect the diversity of women and men and capture all aspects of their lives; collection methods that take into account stereotypes and social and cultural factors that may induce gender bias in the data.¹³
- **Gender-responsive:** The extent to which government policies, actions and expenditure have detracted from or come nearer to the goal of gender equality. A gender-responsive policy, regulation or legislation is not a separate policy, regulation or legislation for women, but rather a tool to better respond to women's priorities as well as men's.¹⁴

10 Gender statistics in South Africa (2011). Statistics South Africa, Government of South Africa. Available at <http://www.statssa.gov.za/publications/Report-03-10-05/Report-03-10-052011.pdf>

11 Gender Statistics Manual: Integrating a gender perspective into statistics (2015). UN Statistics. Available at <https://unstats.un.org/unsd/genderstatmanual/What-are-gender-stats.ashx>

12 ibid

13 ibid

14 Gender Responsive Budgeting. Un Women. Available at <https://unwomen.org.au/our-work/focus-areas/what-is-gender-responsive-budgeting>

02

FINDINGS AND RECOMMENDATIONS

Open data can deliver meaningful benefits for women in Africa. One example of a successful initiative is the TechMouso¹⁵ project in Côte d'Ivoire which convened stakeholders working on gender and data to use data to develop solutions for local problems in areas such as women's health, safety, education, and economic empowerment.

The success of TechMouso created momentum for open data in Côte d'Ivoire where the government is now working on publishing data from these sectors on the national open data platform.¹⁶ In addition, the government has consulted with civil society organisations and is willing to engage them in opening up data they need.

Another initiative is the National Compendium of Women Competencies¹⁷ (Compendium des Compétences Féminines de Côte d'Ivoire (COCOFCI)) which started off as an independent project to raise the profile of women professionals in the country. Over time, its success convinced the government that more collaboration was necessary. COCOFCI is now a full government program. By the end of 2017, more than 14,000 women had been listed. The compendium has become a powerful driver of women's political engagement, political appointments and quest for social and economic equity. Beyond political and economic opportunities, the compendium also serves its members as a professional and career networking platform.

Yet, success stories like these are rare. Findings from across the continent reveal common challenges explaining why open data is not working women in Africa.

¹⁵ TechMouso (Tech Woman) (2016). Available at <http://techmouso.ci>

¹⁶ Open Data Côte d'Ivoire(2018). Government of Côte d'Ivoire. Available at <https://data.gouv.ci>

¹⁷ Compendium des Compétences Féminines de Côte d'Ivoire (2018). Available at <http://www.competencesfeminines.gouv.ci/>

2.1 Enduring gender disparities

In Africa, women still face widespread discrimination when it comes to pay and workplace equality, the impact of culture, and the intersectionality of race and gender. Progress in opening access tends to follow power and structural dynamics. Within government, civil society and business, data users are still disproportionately men. Men typically hold higher positions, are more likely to be data analysts and to lead open data-focused CSOs. Such gender disparities discourage access and use of open data.

There are four broad daily challenges women face that limit their time, access, and use of data:

- 1. The gender pay gap:** Pay disparity is a barrier to women's economic empowerment. Earlier this year, the [World Economic Forum report](#) quantifying gender disparities found that Sub-Saharan Africa is not due to achieve pay parity for another 102 years; 157 years in North Africa. Across Africa, women earn on average two-thirds the salary of men in the formal sector, while only 15 countries have laws against gender-discrimination in the workforce.¹⁸ If women were financially better off, they would be better able to participate online and make use of data and content that would be beneficial for them.
- 2. Women's unpaid labour:** [UN Women](#) estimates that women do nearly three times the amount of unpaid care and domestic work that men do. As this labour is not tracked in any official economic indicator, there is no way to measure changes in a country's economy driven by the work largely done by women, or to understand how time dedicated to this unpaid labour affects women's ability to participate in the digital economy. Enabling women to take full advantage of the opportunities for empowerment provided by data will require us to collect and publish data around the time and economic implications of this unpaid labour.

3. Women's time poverty: With professional and domestic commitments, women often have no other choice than to have a double workday, leaving them little time to invest time in professional growth. As with the gender pay gap and unpaid labour, time poverty needs to be tackled for women to gain economic empowerment.¹⁹

4. Digital inequality and the gender digital divide: The benefits delivered by digital technologies are not evenly distributed, with women and the poor less likely to have access to the internet and less likely to use the web for political and economic empowerment. Once online, women in poor, urban communities are 30-50% less likely than men to use the internet to increase their income or participate in public life. The digital gender gap is largest in Africa. One factor keeping women offline and contributing to the global gender digital divide is cost. Across Africa, the average price of a 1GB (prepaid, mobile) broadband plan is 18% of average monthly income — a cost that is even higher for women who, on average, earn less than men.²⁰

Ultimately, policies and projects to get more people online will fail unless they address the gender digital divide in access to and use of the internet.²¹ In turn, any government commitment on data needs to find ways to reduce this gap.

2.2 A closed information and data culture

In Africa, many countries have a long history of military rule, which, in some cases, has supported censorship and impeded transparency and access to information. Five years ago, it was argued that the lack of right to information (RTI) legislation stifled open data.²² This is because open data tends to be a component of RTI legislation and so a framework for RTI needs to be in place before a government drafts an open data policy. This may still be the case today, even in countries with constitutional provisions for freedom of information.

¹⁸ *ibid.*

¹⁹ Africa Gender Equality Index (2015). African Development Bank Group. Available at https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/African_Gender_Equality_Index_2015-EN.pdf

²⁰ Affordability Report (2017). Alliance for Affordable Internet (A4AI). Available at http://a4ai.org/affordability-report/report/2017/#executive_summary

²¹ REACT with gender-responsive ICT policy (2017). Web Foundation, Alliance for Affordable Internet (A4AI). Available at <https://webfoundation.org/docs/2017/09/REACT-with-Gender-Responsive-ICT-Policy.pdf>

²² Kenyan officials say lack of FOI hampers open data (2013). freedominfo.org. Available at <http://www.freedominfo.org/2013/05/kenyan-officials-say-lack-of-foi-hampers-open-data>

In most African countries, public data is not open in the first place and so we are yet to realise the potential of open data to address socio-economic problems. Currently, some access to information mechanisms allow citizens to request government information and require governments to respond to citizen requests. Yet, these regulations often provide only costly, difficult access to data. As a result, these provisions may not be in the spirit of RTI provisions outlined in the constitutions of some countries.

When data is made public, government officials often refuse to release critical information as open data. Various restrictions and requirements create barriers to accessing information including, for example, application fees and requirements for requesters to provide personal information and details about how they will use data. Such restrictions hamper efforts for greater government transparency and accountability.

Web Foundation research has shown that many of the datasets people need, such as data on land ownership, education, health, contracting, spending, are not open. The Open Data Barometer — a global measure of how governments are publishing and using data — finds that globally, sex-disaggregated data is often available for sectors such as national statistics, health, and education, but for other critical datasets like crime statistics, data disaggregated by sex is only available in 32% of the 115 countries covered. Of the 28 African countries assessed in the Open Data Barometer, the percentages are similar to the global average. For example, Nigeria and Uganda have sex-disaggregated data available for all four sectors — national statistics, health, education and crime. Cameroon has sex-disaggregated data for all sectors except for crime. South Africa lacks both education and crime statistics disaggregated by sex.

Open Data Barometer findings from four key sectors

SECTOR	AVAILABILITY OF SEX-DISAGGREGATED DATA ONLINE ACROSS 28 AFRICAN COUNTRIES
National statistics	21 (75%)*
Health	19 (68%)*
Education	23 (82%)*
Crime	10 (36%)*

*Percentage is representative of 28 countries studied.

Furthermore, the Open Data Barometer shows that 373 out of 375 datasets in sub-Saharan Africa are closed. In sub-Saharan Africa, only two countries, Kenya and South Africa, feature in the top 50 of the Open Data Barometer ranking (of 115 countries). On average, countries assessed for open government data across Africa score 27 out of 100 for readiness (based on government policies, government action, citizen and civil rights, entrepreneurs and business), 12 out of 100 for implementation (datasets from 15 sectors including land ownership data, budget, health, education, etc) and 10 out of 100 for impact (political, social and economic).

This lack of openness may diminish as African governments join the Open Government Partnership (OGP). Across Africa, there are ten active OGP members: Burkina Faso, Côte d'Ivoire, Ghana, Kenya, Liberia, Malawi, Nigeria, Sierra Leone, South Africa, and Tunisia. The majority of these, namely Côte d'Ivoire, Ghana, Kenya, Liberia, Sierra Leone, South Africa, and Tunisia, have National Action Plans (NAPs) which include commitments to open data, including setting up national open data portals.²³ However, there are only a few commitments that intersect open data and gender. This is the case not only on the continent, but worldwide. One noteworthy commitment — from Côte d'Ivoire — is promoting participatory budgeting which includes building the capacities of local authorities in gender planning and budgeting performance.

23 National Action Plan Commitments (2018). Open Government Partnership. Available at <http://www.opengovpartnership.org/explorer/all-data.html>

BACKSLIDING

In 2017, Tanzania suspended its activities within the Open Government Partnership (OGP), calling the partnership a foreign intervention, and now looks to the African Peer Review Mechanism (APRM)²⁴ to monitor government transparency and accountability efforts. Tanzania's rejection of OGP, after hosting the continent's first ever Open Data Conference (Africa Open Data Conference) in 2015, suggests that 'openness' may be becoming less attractive and that some places where progress on openness had been made may be backsliding.

In countries where open data policies exist, they largely remain in draft form (e.g., [Uganda](#), [Tanzania](#)). In other countries, such as Nigeria, Mozambique and Mauritius, efforts to fund open data initiatives, establish good data management practices and implement RTI reforms remain stagnant.²⁵ Even when countries have constitutional guarantees for freedom of information and freedom of expression, these rights are often not protected in practice. For example, in Senegal and Ghana, draft laws have been under discussion for years in Parliament, with little sign of being adopted.

A way forward would be to establish a specific RTI Act or specific policy on open data at the national level (e.g. sector ministries and ethics committees). Furthermore, governmental departments and agencies should simplify the language used for data-related terms so that non-experts can more easily engage in the sector. Governments and other stakeholders could also use offline channels such as newspaper and radio to communicate new insights from government open data analysis with those not yet online.

“Sensitization and greater advocacy need to come from both genders! Legislation, great accountability and openness in the management of public affairs is also key,”

– James Akaba, Open Dreams, Cameroon

It is paramount that government employees are made to understand their responsibility towards ensuring that public open data practices apply a gender lens. This includes promoting educational programs on data formatting, analysis, and visualisations while understanding and applying concepts of inclusion. For example, governments can support external actors from different stakeholder groups — especially women and digital rights groups — to engage with and analyse data. Advocacy efforts can help raise awareness to open up and link disaggregated data in different sectors, while simultaneously supporting the transparency and accountability process.²⁶

2.3 The data available is not the data needed

In the few initiatives where efforts are made to open up data, the datasets available, whether they are found on the open data portal or on the web site of the statistical agency, do not respond effectively to the needs of women, especially rural women. For example, even though Kenya's national open data portal has been running for a few years²⁷, the data published are not representative enough to address issues that affect women. The portal does not publish key data on reproductive health, AIDS, antenatal and postnatal care, violence against women or women's legal rights. Information on voting, land ownership, marriage, divorce and child custody is also missing.²⁸

²⁴ Dimba, M. and Gruz, S. (2017). OGP in Africa: Another sharp tool in the governance toolbox. Open Government Partnership (OGP). Available at <https://www.opengovpartnership.org/stories/ogp-africa-another-sharp-tool-governance-toolbox>

²⁵ Open Data Barometer Regional Snapshot: Sub-Saharan Africa, 4th edition (2017). Web Foundation. Available at <https://opendatabarometer.org/4thedition/regional-snapshot/sub-saharan-africa>

²⁶ For example, if budget data is available without spending data, there is a high risk of open washing.

²⁷ Open Data Portal. Government of Kenya. Available at opendata.go.ke

²⁸ REACT with gender-responsive ICT policy (2017). Web Foundation, Alliance for Affordable Internet (A4AI). Available at <https://webfoundation.org/docs/2017/09/REACT-with-Gender-Responsive-ICT-Policy.pdf>

During the National Data Forum of TechMouso²⁹ in Côte d'Ivoire in April 2016, there was a clear disconnect between data that CSOs needed and the data that the national statistical agency had.

The greatest data demands were around:

- Women's economic capacity and opportunities
- Political participation
- Financial and budget data
- Health data
- Data on gender-based violence
- National expenditure data

The INS (Institut National de la Statistique) was frank in stating that its data follows that provided by the national statistics authority and that it may not be able to provide updated data. The major datasets published continue to be mainly demographic.

While there are legitimate efforts by African governments, ministries, departments and agencies to provide reports, these are generally geared towards development reporting and international accountability.³⁰ Data2x has identified key gender data gaps in at least 27 key areas of critical interest to women.³¹ International development agencies can, by specifically funding sex-disaggregated data collection, play an instrumental role in minimising data gaps.

Government agencies generate and hold significant volumes of data. Therefore, access to information laws, open government initiatives and open data policies — all designed with gender-responsiveness in mind — are key to holding governments to account and making open data work for women.

“Empowering women with knowledge on the power of open data and building the capacity of women with data skills is key.”

– Winnie Kamau, Association of Freelance Journalists, Kenya

Advocacy is key to promoting the use of open data by women and women-focused programs. One key area that should be prioritised is gender statistics. For example, disaggregated data on health (maternal health, HIV), crime (domestic violence), education (primary and secondary school enrollment), legislation (UN CEDAW³²), and finance (budget, contracting, and spending) needs to be available, accessible and usable for everyone, especially women, so that they can use these datasets to address their needs and see how they are affected by broader public policy decisions.

In turn, governments need to raise awareness among citizens that they have a right to access public information. This is an important first step to create an ecosystem in which the open government movement can flourish and where civil society can use public information to hold government accountable. Targeted campaigns can help to drive demand for data from all sections of the population. The Tracka initiative in Nigeria, for example, helped citizens use open data to track the implementation of government projects in their communities to ensure services were delivered.

KEY DATASETS STILL NOT OPEN

The quality of government data is often poor because most large statistical offices lack capacity. There are limited resources available for surveys and so they are rarely conducted. As a result, most data that is published is out of date. Therefore, it is no surprise that poor implementation of open data persists.

While working on the implementation of an open data initiative for the six southwestern states in Nigeria³³, Development Agenda for Western Nigeria Commission (DAWN) and BudgIT Foundation discovered that data is most often published in non machine-readable formats, and maintained in a variety of database packages that require extra tools to conduct data analysis.

29 Nwakanma, N. (2016). TechMouso Côte d'Ivoire. Available at <https://www.youtube.com/watch?v=soHdlRizcCY&t=10s>

30 Open Data for Africa (2018). African Development Bank Group. Available at <http://dataportal.opendataforafrica.org>

31 Data2x: Gender Data Gaps (2017). UN Foundation. Available at <http://www.data2x.org/what-is-gender-data/gender-data-gaps>

32 The Convention on the Elimination of All Forms of Discrimination against Women (2007). UN Women. Available at <http://www.un.org/womenwatch/daw/cedaw>

33 Ade, W. (2017). DAWN Commission charges South West states to key into Open Government Partnership. Prompt News Online. Available at <http://www.promptnewsonline.com/dawn-commission-charges-south-west-states-key-open-govt-partnership>; Osogbo, H.O. (2017). South West states synergise to achieve Fiscal Sustainability Plan. Daily Trust. Available at <https://www.dailytrust.com.ng/south-west-states-synergise-to-achieve-fiscal-sustainability-plan.html>

2.4 Countries lack legislative, citizen rights, and gender-responsive frameworks

Throughout Africa, there is an absence of legislation requiring countries to make data available to the public. In the worst cases, governments' attempts to control the flow of information extends to full or partial internet shutdowns, denying citizens access not only to public data, but to the web itself. At the same time, few countries have robust regulations for privacy and data protection, even when these protections are defined as constitutional rights — as in the case of Nigeria. This leaves citizens more vulnerable to their data being used in ways they cannot anticipate or consent to, and which may ultimately cause them harm. If citizens are to be empowered by data, governments must develop policies and regulations on data protection and privacy, while also doing more to facilitate access to information processes for citizens, including legal frameworks for a right to data.³⁴

While gender-responsive legislation is also scant, there has been some progress, as in the case of South Africa, where there are a number of bills, acts and other constitutional rights that focus on access to education, business financing, and economic and professional development services for women. For example, the Women Empowerment and Gender Equality Bill was passed in 2014, calling for “progressive realisation of at least 50% representation of women in decision making structures...improving access to education, training and skills development”. The bill included the need to eradicate gender-based violence and discrimination against women and prioritise women’s reproductive rights and health.

In Nigeria, high-level gender-responsive policy commitments need to be met. The National Assembly, in particular, is yet to pass the Gender and Equal Opportunities (GEO) Bill, which seeks to achieve equal opportunities for men and women and boys and girls in the fields of health, education, governance, employment, as well as in the social and economic fields. The bill — which seeks to eliminate discrimination of the grounds of gender, age or disability — has recently been reintroduced to the Nigerian Senate. The National Assembly should use the bill when proposing commitments in shaping public access to information and open data policies.

2.5 Data policy processes are not gender-responsive

Overall, research findings show there is a lack of government commitment to pursuing policies that bring together data, access to information and gender. Based on a questionnaire of experts conducted in 12 African countries, we found that only 33% of countries included gender equality and access to information in their constitutions; 50% of countries did not have legislation addressing these points.

The majority of documents reflecting national development priorities include gender statistics. However, these statistics tend not to be used effectively to inform policy-making because they lack granularity. In Cameroon, for example, the government is committed to producing statistics on gender, but not very effective in using this data to inform and influence policies and plans.³⁵ According to AfroLeadership, open data initiatives in Cameroon currently lack key performance indicators (KPIs) on gender statistics and gender-responsive policies do not exist. Until these KPIs are created, governments are not likely to focus on the issue or invest in tracking progress.

“Government officials needs to be educated on the role of open data in advancing economic development. Trainings and seminars at a local and international level can be used to address the role of open data, access to information and gender equality.”

**– Hilda Jacob Mwakatumbula, PhD/
ICT Policy Researcher, Tanzania**

While open data policies do not mention gender or women, existing ICT laws, policies and strategies often do. For example, one of the key first-year milestones for Uganda’s open data policy is the development and implementation of a stakeholder engagement plan. This represents an opportunity to create a gender-

34 Gurumurthy, A., and Chami, N. (2018). Data Frameworks for a Right to Development. Available at <http://www.unrisd.org/TechAndHumanRights-Gurumurthy-Chami>

35 UN Women Making Every Woman and Girl Count (MEWGC) Cameroon Survey conducted in June 2017.

responsive policy implementation strategy. However, no official documents mention access to data or more specifically, women's empowerment with open data.

The need for integrated, gender-responsive policies holds true at the regional level. Concerted efforts should be made by regional bodies (e.g., ECOWAS the African Union (AU)) to encourage member states to create gender and open data policies and platforms, and to develop policies and strategies for data protection, privacy, and improved access to information. Similar measures could also be taken by the Southern African Development Community (SADC), which has protocols relating to information and communication, as well as a science and technology protocol that specifically mentions improved opportunities for women and gender equity in education. However, none of these specifically mention open data and women. SADC could also encourage member states to participate in the OGP.

GENDERED DATA SERVICES FOR WATER ACCESS

Cape Town, South Africa is currently undergoing a water crisis. Open Data Durban recommends that the national government could work across agencies and ministries and engage in a transparent and inclusive approach to release public data on water resource allocation, access to water and sanitation. Authorities should assess what populations and groups the crisis will hit hardest and ensure marginalised communities are not left out in the planning of resource allocation — specifically women, people with disabilities, older people, and those living in poverty. This is an opportunity for the national government to collaborate with the municipality to develop strategies for lasting solutions to the crisis, involving residents at every step of the way.³⁶

Gender-responsive open data policies can provide both policy and technical frameworks that could support and monitor government performance for improved service delivery. This may be prioritised based on priority sectors, but should ideally be dispersed throughout all departments of government.

2.6 There are too few open data champions

Open data still remains a distant construct for many Africans. There are few high-level advocates, official regional bodies or governments championing the cause — although a few exceptions do exist (e.g., Dr Bitange Ndemo as a champion of Kenya's open data movement, Sierra Leone's adoption of the International Open Data Charter, and Morocco's national open data initiative).

If there are too few open data champions, there are fewer still focused on gender-responsive open data. To address this concern, regional bodies should encourage members to adopt and implement gender and open data policies in their countries. These policies should promote data generation to improve transparency, participation and accountability in governance. The ripple effect of this would help the continent compete and collaborate with the rest of world.

Beyond regional bodies, individual countries and civil society at-large also lack advocates who could lead the way on open data. We need trailblazers who will collaborate with traditional gender champions and provide frameworks, technology, policy, collaboration and infrastructure, in order to make progress on open data and gender in Africa.

2.7 Multi-stakeholder collaborations are needed

We need partnerships and collaboration to make gender-responsive open data a reality. Media outlets should partner with media monitoring organisations and advocacy organisations to develop storytelling campaigns around women and open data. Such campaigns can also call attention to the commitments made by governments to the OGP and their overall performance on gender equality legislation.

³⁶ See Gevers, R. (2017). Lessons learned from talking #OpenData with our Municipality. Open Data Durban. Available at <https://medium.com/open-data-durban/lessons-learned-from-talking-opendata-with-our-municipality-bebe94510df9>

If we want true participation in multi-stakeholder collaborations, we need to build platforms that are safe environments for people, especially women, to participate and voice their opinions. Currently online platforms do not provide safe environments³⁷.

Moreover, municipalities and CSOs should work together on data openness issues, as this provides for a powerful dynamic and an opportunity to have impact at the local level. This means localising programmes, policies and initiatives that specifically target women, their access and use of data and information. For example, local government and CSOs could run a project to address information needs and remove barriers for women trying to access grants. The project would identify areas where technology and open data can play a role in empowering women to better participate in decision-making processes and to make more informed decisions that can support their economic empowerment.

Another example comes from Indonesia, where the Web Foundation's Open Data Lab partnered with CSO Perkumpulan IDEA Yogyakarta to use open data to promote gender-responsive development by helping women in the villages of Wonolelo and Girisuko engage with budgetary decisions.³⁸

At the regional level, coalitions of CSOs and media organisations should be built to facilitate the exchange of experiences and enhance networking at the intersection of gender data issues, open data and data statistics.

2.8 Funding, international partnerships and support are needed

The data ecosystem in Africa needs to be developed. Even when government officials are willing to follow through with an open data initiative, a lack of funding could impede the process. For example, according to BudgIT, the state government of Kano in Nigeria was willing to develop an open Kano project to open up its datasets to the public, but was prevented due to lack of funds. Without financial support, the project is stalled.

In addition, a review of gender-related policy, legislation and performance of member states is needed to give an overall view of how the region is performing on this specific protocol on the rights of women (Maputo Protocol). For example, the African Peer Review Mechanism (APRM) that most AU member states have subscribed to, plays a vital role in holding governments to account for the progress being made. APRM is essential to the New Partnership for Africa's Development (NEPAD) — the AU's flagship programme for economic development. Assessing the role of initiatives set up by regional and continental bodies — not just international ones — is also important. Tanzania, for example, withdrew from the OGP in 2017, citing the partnership as a foreign intervention, and giving preference instead to the APRM.

37 Women's Rights Online (2015). Web Foundation. Available at <https://webfoundation.org/2015/10/new-report-womens-rights-online/>; Baseline Report Women's Rights Online Issues in Ghana. Media Foundation for West Africa (MFWA) and Web Foundation. Available at <http://www.mfwa.org/wp-content/uploads/2018/02/Baseline-Report-WRO-Issues-in-Ghana.pdf>; Amnesty reveals alarming impact of online abuse against women (2017). Amnesty International. Available at <https://www.amnesty.org/en/latest/news/2017/11/amnesty-reveals-alarming-impact-of-online-abuse-against-women>

38 Terkini, A. (2017). Open Data for Gender Inclusive Development. Desa Wonolelo. Available at <http://wonolelo.bantulkab.go.id/index.php/first>

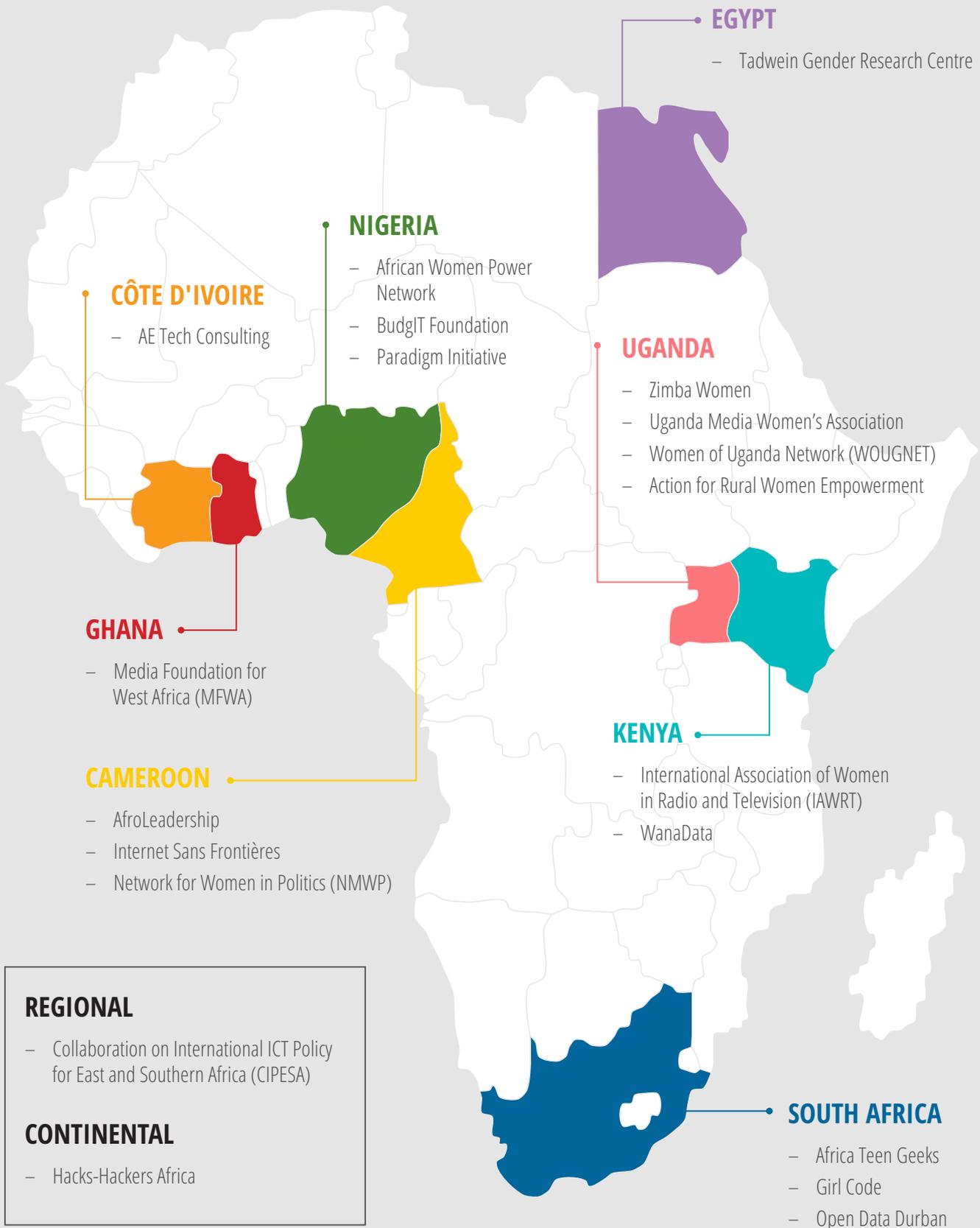
03

MAPPING THE ACTORS

While our findings reveal that open data (where it does exist) is not working for women in Africa, there are a number of organisations on the continent working on women's rights, digital rights, open data and other data projects. There are many technology programmes that center on women learning technology and how to code, and on increasing their participation in the creation of emerging technologies. However, there is less focus on providing access to data that is specifically relevant to women, trying to improve access to services for women, or attempting to engage women in local government and decision making.

This map highlights gender and open data experts working on women's issues and is meant as a resource for other groups working in the space and for the development community at-large. The organisations identified work on open data, civic tech, ICT or women's rights in Cameroon, Nigeria, South Africa, and Uganda. Some organisations listed work at a regional or pan-African level. A more comprehensive list of organisations is available in the Appendix.

Gender and open data experts working on women's issues in Africa



04

LOOKING FORWARD: REVERSING POLICY FAILURE

Women's exclusion from the digital and the data revolution is primarily due to policy failure. The good news is that policy failure can be reversed. The right policies can go a long way toward enabling women's access to and empowerment through the web.

Progress toward gender equality online must be grounded in solutions that are led and owned by local actors and respond to local realities.

There is a need to create more awareness to fully implement access to information and RTI policies across local, regional and national government bodies. Countries must REACT — focusing on Rights, Education, Access, Content, and Targets — to close the gender digital divide in access and use. Improving ICT literacy and lowering the cost of internet access is key. The need for greater financial inclusion opportunities for women is also clear. More open data on budget, spending and contracting will help to provide further evidence of these needs.

The advantage of the 'open' movement is that it can be guided by a legal and regulatory framework that supports the implementation of open data systems (from collection to publication of data), access to information, the protection of individual and personal data by regulatory frameworks, and the security of electronic transactions and information systems.

Governments, therefore, should adopt gender-responsive open data policies that:

- **Link national gender policies** to the use of data and make open data policies gender-responsive
- **Publish data online in a machine readable format** for easy use and reuse
- **Publish relevant and timely datasets** to drive government transparency and accountability and improve public trust in their leaders
- **Publish comprehensive datasets**, giving users — including civil society, students, researchers and journalists — a granular view of public information
- **Ensure available statistics are sex-disaggregated**, and of high quality
- Encourage or mandate the use of public funds to **expand opportunities for women's internet access and use**³⁹
- **Engage data specialists to re-package open data** in compelling formats (e.g., infographics, charts) in order to strengthen advocacy efforts and support public outreach

As more data is generated and demand for access to data continues to increase rapidly, it is essential that governments open up data to ensure that the power of data to create social and economic opportunities is realised for all.

³⁹ Web Foundation research shows that an estimated US\$408 million is sitting unspent in Universal Service and Access Funds throughout Africa — money which could be used to increase internet access for all, and especially for women, the poor, and other marginalised populations. See: <https://webfoundation.org/research/closing-gender-digital-divide-in-africa/>

05

APPENDIX

5.1 Collaboration on gender and open data

In 2017, the Web Foundation organised a gender and data workshop in Abidjan, Côte d'Ivoire, hosted by the African Development Bank. The workshop convened 36 organisations to chart a way forward on gender data to foster collaborations.

To learn about the outcomes of this workshop, or for a list of participating organisations, please contact Nnenna Nwakanma at:

nnenna.nwakanma@webfoundation.org

5.2 Organisations working in open data, civic tech, ICT and women's rights

NAME OF ORGANISATION	DESCRIPTION AND ACTIVITIES	COUNTRY / REGION / CONTINENT	TYPE OF WORK
Code for Africa: https://codeforafrica.org	A network of data journalists and open data champions in Africa. Code for Cameroon regularly trains people and journalists in open data and data journalism, with regular open data activities in countries where Code for Africa has affiliates.	Africa	Data journalism, open data
Hacks-Hackers Africa: http://www.hackafrica.org	A global program for gathering journalists and technologists around issues related to data journalism and digital journalism. Hack-Hackers has affiliates in several countries in Africa and in the world.	Africa	Data journalism, digital journalism
Women in Machine Learning and Data Sciences (WiMLDS): http://wimlds.org	WiMLDS supports and promotes women practicing, studying or interested in the fields of machine learning and data science. WiMLDS hosts talks by prominent data scientists, technical workshops, networking events and hackathons.	Kenya, Nigeria	Machine learning, data science
CFI (Canal France International) Open Data Medias: http://www.cfi.fr/en/project/opendata-media	CFI Open Data Medias is a program that aims to train data activists in Francophone Africa, especially journalists and civil society.	Africa, Francophone	Open data, data activism, journalism
Collaboration on International ICT Policy for East and Southern Africa (CIPESA): https://cipesa.org/category/open-data	CIPESA aims to advance policy research in Africa, advocacy for online freedom, open data and e-governance, internet governance, and ICT4Democracy.	Africa, East and South	Policy, research, advocacy, online freedom, open data, e-governance
Internet Sans Frontières: https://www.facebook.com/InternetSansFrontieres	ISF successfully launched a campaign on 'Why digital inclusion of women matters' in Cameroon. Supported by the country Digital Gender Gap Audit, ISF is working with a civil society coalition to lobby Cameroonian officials on the adoption of a gender clause in regulations related to Universal Service obligations and for digital literacy training.	Cameroon	Gender, digital literacy
National Community Driven Development Programme (PNDP)	PNDP aims to foster decentralized participatory development set up by the Government of Cameroon (GoC) under the Ministry of Economy, Programming and Economic Development (MINEPAT) in collaboration with the World Bank and other bilateral organisations.	Cameroon	Governance, participatory development
Network for Women in Politics (NMWP): http://www.observatoireسدugenre.com/observatoire/more-women-in-politics-nmwp	NMWP aims to empower women by increasing the ratio of women elected in Cameroon through trainings in leadership and civic education as well as non-violent communication.	Cameroon	Gender, policy, politics

Section 5: Appendix

NAME OF ORGANISATION	DESCRIPTION AND ACTIVITIES	COUNTRY / REGION / CONTINENT	TYPE OF WORK
Renata: http://www.tantines.org	Renata — Cameroon’s ‘army of aunties’ is a network of young girls and women to help break the silence around sexual abuse in a patriarchal system. Renata has more than 21,000 women volunteers across 350 support groups to help victims of rape and violence.	Cameroon	Gender-based violence
Reach Out Cameroon: https://www.reachoutcameroon.org	Reach Out Cameroon addresses women’s issues and the needs of other vulnerable people — less privileged, children and women.	Cameroon	Gender, youth
The Cameroon African Computing Institute (IAI-Cameroon): http://www.iaicameroun.com	IAI-Cameroon launched the “100,000 women ICT Training Programme”, to train women in the use of computers and usual software.	Cameroon	Gender, ICT training
AfroLeadership: http://www.afroleadership.org	AfroLeadership promotes open data, data journalism, digital rights and civic technology. It incubates and mentors women organisations and networks around open data, data journalism and civic technology issues..	Cameroon	Open data, data journalism, digital rights, civic tech
Center for Youth Education & Economic Development (CYEED): http://www.cyeed.net	CYEED is based in Bamenda as a state of the art, vocational, technical training and entrepreneurship development center for youth. The center provides a unique hands-on training utilizing developer technology.	Cameroon	Youth, ICT training, developer tech
AE Tech Consulting: https://www.facebook.com/AETechConsulting	AE Tech Consulting conducted new research towards a Women’s Rights Online Digital Gender Gap Audit for Côte d’Ivoire, as well as collecting new primary data through focus group discussions and a survey on the status of women and ICT in Côte d’Ivoire.	Côte d’Ivoire	Gender, policy, campaigning
Tadwein Gender Research Centre https://tadwein.org	Tadwein Gender Research Centre works on developing training modules on digital security, spreading awareness on digital security among women and vulnerable groups and advancing skills to prevent and respond to online bullying and sexual harassment.	Egypt	Digital security, gender, gender-based violence
Media Foundation for West Africa (MFWA): http://www.mfwa.org	MFWA is a regional independent media development and freedom of expression advocacy organisation in West Africa with national partner organisations in all 16 countries of the region. MFWA is working with women’s rights groups, digital rights organisations, and the media to ensure implementation of government commitments to digital gender equality.	Ghana	Journalism, digital rights, gender
International Association of Women in Radio and Television (IAWRT) Kenya: http://www.iawrt.org/chapter/kenya	IAWRT-K is a global organization formed by professional women working in media to strengthen initiatives towards ensuring women’s views and values are integral part of programming and to advance the impact of women in media. IAWRT-K convenes regional training events to sensitise women in local government, media and community leaders.	Kenya	Gender, digital media, allied media

Section 5: Appendix

NAME OF ORGANISATION	DESCRIPTION AND ACTIVITIES	COUNTRY / REGION / CONTINENT	TYPE OF WORK
WanaData: https://codeforkenya.org/wanadata-ke	WanaData-Ke is a network of women journalists working on changing the digital media landscape by producing and promoting data-driven news and applying digital technologies in their storytelling.	Kenya	Gender, data journalism, digital media
Science Innovation Information and Communication Technology Research Institute (SIITRI)	The National Director for Primary Education at the Ministry of Education and Human Development committed to collaborate with SIITRI to organise seminars on the gender digital divide in secondary schools, as well as to organise an NGO forum with women's organisations on the topic.	Mozambique	Gender, policy
Women Development International Association (WODIA): http://www.thewodia.org	WODIA works to enhance the status of women and promoting accessibility of services without financial, cultural, geographical and other barriers.	Nigeria	Gender, service accessibility
African Women Power Network: https://awpnetwork.com	African Women Power Network is a platform for African women entrepreneurs to get inspired and empowered to turn their ideas into a reality and build successful businesses.	Nigeria	Gender, entrepreneurship
Paradigm Initiative: https://pinigeria.org	Paradigm Initiative is a social enterprise that advocates digital rights in order to improve livelihoods for underserved youth, and is working with the Nigerian Communications Commission and the Ministry of Communications on an action plan to close the ICT gender gap.	Nigeria	Gender, policy, digital rights, digital security, ICT training
Women Aid Collective: http://wacolnigeria.org/wacol	Women Aid Collective supports the educational, social, economic and political development of women and young people through a wide range of services: training, research, advocacy, shelter, legal and financial aid, intrafamilial conflict resolution, information and library services	Nigeria	Gender, gender-based violence, ICT training
Oxfam Nigeria: https://www.oxfam.org/en/countries/nigeria	Oxfam Nigeria works on closing inequality in Nigeria, with a focus on gender inequality and discrimination against women.	Nigeria	Gender, gender-based violence
Fresh and Young Brains Development Initiative (FBIN): https://freshbrainsinitiativeng.com	FBIN promotes gender equality and empower women by advancing attitudes, policies and actions that promote environmental sustainability and meaningful participation for young people.	Nigeria	Gender, youth, ICT training, agriculture
BudgIT Foundation: https://yourbudgit.com	BudgIT Foundation works to close economic inequality and end gender inequality in public policy.	Nigeria	Policy, participatory development, gender, service accessibility

Section 5: Appendix

NAME OF ORGANISATION	DESCRIPTION AND ACTIVITIES	COUNTRY / REGION / CONTINENT	TYPE OF WORK
She Loves Data: http://www.aigs.co.za/events/sponsorships/data-girls	She Loves Data hosts workshops in traditionally male-dominated industries, providing business intelligence and analytics training to women.	South Africa	Gender, business intelligence, data analytics
Code4CapeTown: http://code4ct.com	Code4CT trains women to use code for problem solving and contribute meaningfully to South Africa's innovation system.	South Africa	ICT training, developer tech, entrepreneurship
Girl Code: http://girlcodeza.co.za/africa-tech-girls-lindiwe-mashinini-co-founder-africa-teen-geeks	Girl Code aims to empower women through technology by offering digital skills training and job placement initiatives.	South Africa	Gender, ICT training
Women in Tech: http://womenintech.co.za/blog	Women in Tech is a platform where technology companies can find women to hire.	South Africa	Gender, ICT training, code, entrepreneurship
Girl Hype: http://girlhype.co.za	Girl Hype offers free after-school clubs for 6th-12th-grade girls to explore coding in a fun and friendly environment.	South Africa	Gender, youth, ICT training, developer tech, code
Africa Teen Geeks: http://www.africateengeeks.co.za/blog	Africa Teen Geeks provides computer science training in schools and in underserved communities.	South Africa	Code, youth, ICT training
Open Data Durban: https://opendata.durban	Open Data Durban (ODD) is a civic technology lab focused on participatory democracy and responsive and inclusive cities in South Africa. The Durban Answers project is working with women-led groups and well as mothers reliant on social grants.	South Africa	Open data, gender, ICT training, civic tech, research
Disabled Women in Development (DIWODE): http://diwode.webs.com	DIWODE promotes social and economic self-help initiatives through training in income generating activities, micro-credit facilities, and awareness-raising and advocacy	Uganda	Gender, disability, advocacy
Uganda Media Women's Association: http://www.umwamamafm.co.ug	Runs programs for advocacy and communication, capacity building and training, research and development and rural outreach	Uganda	Gender, media, advocacy, ICT training, research
Action for Rural Women Empowerment: http://aruweug.org	Works on programs that promote women's economic and social wellbeing, sustainable health communities, climate change resilience, and education and lifelong learning.	Uganda	Gender, entrepreneurship, agriculture, ICT training

NAME OF ORGANISATION	DESCRIPTION AND ACTIVITIES	COUNTRY / REGION / CONTINENT	TYPE OF WORK
Women's Health Foundation (WHF): http://whfuganda.org	WHF objectives include civic awareness on pre and post reproductive health, treatment and rehabilitation services, and advocacy.	Uganda	Gender, service accessibility, treatment and rehabilitation services, advocacy
Women of Uganda Network (WOUGNET): http://wougnet.org	WOUGNET is a network of over 100 organisations dedicated to supporting women and women's organisations in the use of ICTs, as well as offline communication. As a result of their engagement with policymakers, WOUGNET joined the Gender Based Violence Reference Group (Ministry of Gender, Labor and Social Development) and lead a team on gender and ICT for women's empowerment.	Uganda	Gender, ICT training, communication, gender-based violence
Zimba Women: https://www.zimbawomen.org	Zimba Women provides tools and technology platforms, business training, mentorship and networks to improve livelihoods for women in sub-Saharan Africa.	Uganda	Gender, ICT training, entrepreneurship training, mentorship

Type of work identified in the organisations in the table above: advocacy, agriculture, allied media, business intelligence, campaigning, civic tech, code, communication, data activism, data analytics, data journalism, data science, developer tech, digital literacy, digital media, digital journalism, digital rights, digital security, disability, e-governance, entrepreneurship training, gender, gender-based violence, governance, ICT training, journalism, machine learning, mentorship, online freedom, open data, participatory development, policy, politics, research, rural, service accessibility, treatment and rehabilitation services, youth.

5.3 Useful links, further resources

This section highlights useful resources, including legal documents, academic papers, websites of relevant initiative, and blog posts.

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