



THE UNITED REPUBLIC
OF TANZANIA

CONFERENCE REPORT



AFRICA OPEN DATA CONFERENCE

DAR ES SALAAM • 4-5 SEPTEMBER 2015

DEVELOPING AFRICA THROUGH OPEN DATA



WORLD BANK GROUP

FOREWORD

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Chair of the AODC Organizing Committee



In September 2015, the Government of Tanzania and the World Bank co-hosted the first Africa Open Data Conference in Dar es Salaam, Tanzania. The Conference brought together over 450 participants from governments, private sector, civil society and media from 39 countries. In his opening remarks the then President of the United Republic of Tanzania, Dr. Jakaya Mrisho Kikwete re-confirmed Tanzania's and Africa's commitment to open data: *"There is no doubt that Africa needs to embrace open data in her development agenda. It is an idea whose time has come. (...) It is the best way forward to a better Africa. Africa where democracy, good governments and development reign."*

The outcomes of the Conference, which are summarized in this report, exceeded our expectations. Due to unfortunate events, it took almost a year to produce the final report of the AODC 2015. This, on the other hand, gives us a chance to let you know what has happened since:

Across Africa, new open data initiatives which span civil society, business and government were started with the help of the African Open Data Collaboration Fund and the \$1.1 million pledge of by Code for Africa. Three regional follow-up Africa Open Data events took place in Sierra Leone, South Africa and Kenya this year, and several countries have offered to host the next big AODC in 2017.

Tanzania's Open Data Portal has launched three online dashboards, which make water, education and health data easily accessible. Tanzania has drafted an Open Data policy, which suggests that government data should be "open by default", and adopts the principles of the international Open Data Charter. The draft Policy will soon be submitted to Government for approval.

As a member of the Open Government Partnership Initiative, Tanzania is about to submit its 3rd National Action Plan, which renews its commitment to make Government data open to its citizens in the interest of improving public service delivery and Government accountability. This includes formulation of Open Data Policy, Implementation Strategy and Guidelines on how data is made public. The intention is to expand publication of approved data sets from the current three (3) Sectors of Education, Health and Water to include the Agriculture and Transport Sectors as well as the National Bureau of Statistics Data.

An Open Data Secretariat was established to support both the Open Data Initiative and the monitoring of global and national goals with open data. Tanzania is now part of the Global Partnership for Sustainable Development Data and the National Bureau of Statistics has requested World Bank support for establishing the first country-owned, interactive open data portal for monitoring the Sustainable Development Goals.

The Government of Tanzania will continue to release and actively use data as a resource for sustainable development and encourages fellow African countries to jointly "Develop Africa through Open Data".



AFRICA OPEN DATA CONFERENCE

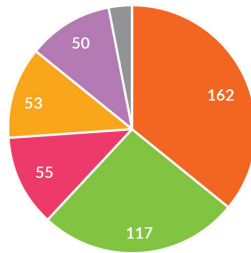
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451
TOTAL
PARTICIPANTS

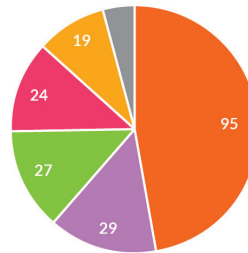
202
TANZANIAN
PARTICIPANTS



ALL PARTICIPANTS



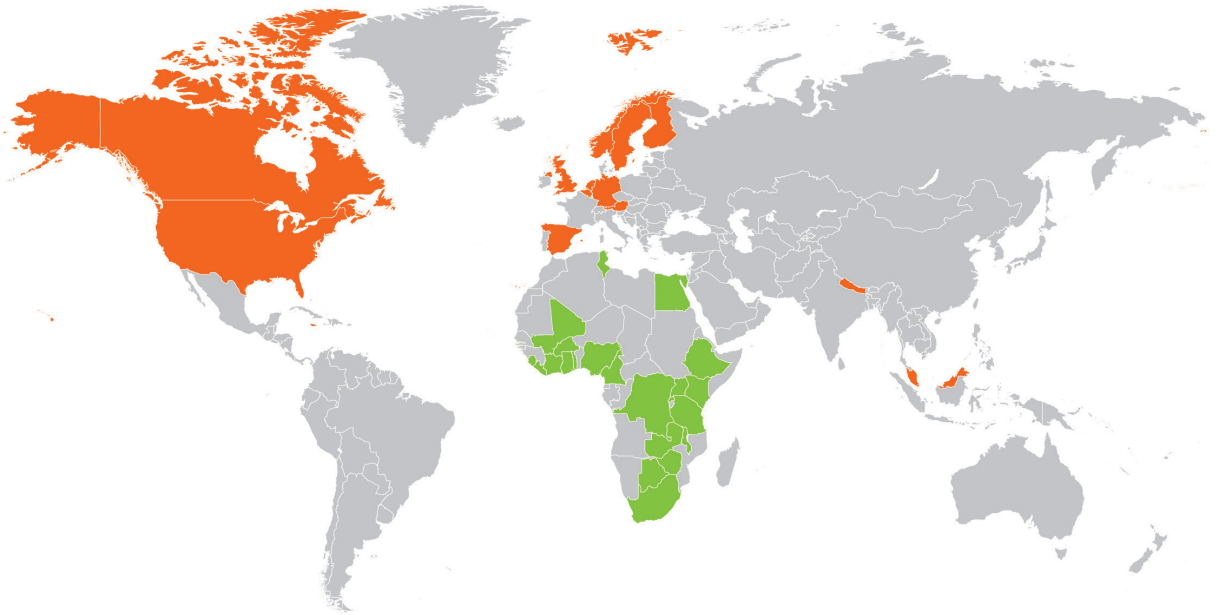
TANZANIAN PARTICIPANTS



- GOVERNMENT
- CIVIL SOCIETY
- ACADEMIA
- PRIVATE SECTOR
- DEVELOPMENT ORG.
- OTHER

39
TOTAL
COUNTRIES
REPRESENTED

24
AFRICAN
COUNTRIES
REPRESENTED



135
TALKS



89
SPEAKERS



16
COUNTRIES



8,000
TWEETS



REACHING

5,000,000
IMPRESSIONS



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Africa Open Data Conference: Developing Africa through Open Data

On September 2-5, the first Africa Open Data Conference was held in Dar es Salaam, Tanzania. The Conference was hosted by the Government of Tanzania and supported by the World Bank. More than 450 participants from 39 nations gathered and celebrated, shared, and learned from each other's work in using open data in Africa.

Momentum for and engagement with open data initiatives has grown significantly in countries across Africa. As these initiatives grow in magnitude, participation, and complexity, new opportunities are arising for cross-border collaboration and dialogue around economic development, industry use cases, best practices and opportunities to progress the regional discourse about and sophistication of open data.

In recognition of the need for a regional dialogue, the Government of Tanzania and the World Bank agreed to organize an Open Data Conference for African countries, and the Government volunteered to host it. This Conference was held on September 4 and 5, 2015 at the Julius Nyerere International Convention Centre in Dar es Salaam and featured a diverse group of participants, including government representatives, private industry, civil society, the development community, and international organizations committed to promoting or supporting open data and open government.

The events around the Conference included a number of pre-conference workshops and sessions, among them activities for technical training, sessions on open innovation to promote the production and consumption of open data in Africa, and thematic and sector tracks. A world-class roster of speakers and leading open data experts contributed to a meaningful transfer of knowledge and helped catalyze a productive conversation about opportunities to extend the potential of open data in the region. Stakeholder deliberations were underlined by the Tanzania government's statement reaffirming the country's continued support and practice of open up data.

Objectives

In designing this first AODC, the organizers wanted to recognize and further grow access to and use of open data throughout Africa, and to help develop the open data community. This open data *ecosystem* includes people and organizations that together share and use open data to provide social and economic benefits, as well as data and technologies that enable this work. This leads to a set of objectives that are relevant at the national level in Tanzania, and more broadly for the entire African open data movement.

The objectives are noted below, along with the milestones necessary for the completion of each.

AODC Objectives

1. Create regional attention on open data
2. Establish the Africa Open Data Conference
3. Launch an international open data community in Africa
4. Develop international collaborations in open data focused on African areas of interest such as education, agriculture, economic growth, and internal government and public service efficiency
5. Catalyze open data initiatives in African countries
6. Understand the role of non-government data (crowdsourcing, civil society, university etc.)
7. Build on Open Data Consensus and Data Revolution work already underway

Objective 1. Create regional attention on open data

1. Dr. Jakaya Mrisho Kikwete, the fourth President of Tanzania officially opened the conference and spent two hours speaking with participants and attending the Expo
2. Journalists from many media outlets were present, and the story made the front page in two newspapers. Links to the articles are provided in Appendix A.
3. Social media:
 - a. On Twitter, 1,400,000 people were reached with tweets directly, and our tweets were re-posted on 5,000,000 timelines
 - b. #Africaopendata hashtag was created for this conference and continues to be used today. During the conference, this was one of the top 10 trending hashtags in Kenya
 - c. 8000+ tweets from the conference. See the list of related tweets at <https://twitter.com/search?vertical=default&q=%23africaopendata>.
 - d. Blog by Al Kags discussing the conference: <http://www.openinstitute.com/from-the-africa-open-data-conference-lets-go-back-to-the-basics/> "Our Kudos to the organizers of the Africa Open Data Conference in conceptualizing that first session and inviting us over to facilitate it. I think they should be emulated at all future Open Data events, because even among the Choir, there are those who will be left behind because "Aah! no one wants to look stupid!"

Objective 2. Establish the Africa Open Data Conference

1. First Africa Open Data Conference was held on September 2-5, 2015 in Dar es Salaam, Tanzania. More than 450 participants from 39 nations attended. Many local and even national events dedicated to data were held in Africa, but none have focused on open data on a continent-wide level.
2. The first Africa Open Data conference was established as a combination of training, seminars, and interactive panels and workshops. Participants expect that this will be an ongoing series of Africa Open Data events. This first event included:

- a. 135 talks
 - b. 89 speakers
 - c. Case studies and reports from 16 countries (12 from Africa): Burkina Faso, Cote d'Ivoire, Ethiopia, Ghana, Kenya, Liberia, Nigeria, Rwanda, Senegal, Sierra Leone, South Africa, and Tanzania
3. The groundwork was laid for this conference to become an annual regional event. Several countries' representatives, including Ghana, Kenya, and South Africa, expressed their interest in hosting the next AODC.

Objective 3. Launch an international open data community in Africa

1. In preparation for the AODC, the World Bank launched a Facebook group, Africa Open Data (<https://www.facebook.com/groups/africaopendata/>). This group has 310 members today and frequent posts and conversations about open data work in Africa.
2. A Twitter account (@Data4Africa) and hashtag #africaopendata were created for the conference and they continue to be active.
3. An international Meet Up group, Africa Open Data, has connected more closely with the needs of the AODC participants and it serves as an outlet for a monthly teleconference where participants share ongoing news and events (<http://www.meetup.com/Africa-Open-Data/>).
4. Capacity building sessions for developers from many countries, including:
 - a. Technical training with Code for Africa and School of Data
 - b. Mapping training with Humanitarian Open Street Map
 - c. Informal training in Survey Summit, Open Data for Development (OD4D), and GODAN

Objective 4. Develop international collaborations in open data focused on African areas of interest such as education, agriculture, economic growth, and internal government and public service efficiency

1. The Africa Open Data Collaboration Fund: <http://od4d.com/innovation/aodcfund/> will award \$100,000 to new projects that carry on the work of the Africa Open Data Conference in building the open data ecosystem. As of October 2015, proposals were submitted and the selection is underway. Participants of the AODC were given priority for this Fund. The fund was established by the Open Data for Development consortium and is led by the International Development Research Centre.
2. Partnerships for agriculture were formed on mapping data in Africa, with a particular focus on farmer data in Tanzania. This project is championed by the Global Open Data for Agriculture and Nutrition (GODAN) initiative. These partnerships grew out of the GODAN global partner meeting, which was held in conjunction with the AODC. As one participant noted, "This has been a great seed that was planted in the last four days."
3. Data Ventures, a new global education startup, grew out of the AODC. The startup is led by Dr. Umaru Bah from Sierra Leone who is currently a Fulbright professor at Morgan State University in the United States, with Dr. Bitange Ndemo of the University of Nairobi serving as its adviser. Data Ventures seeks to integrate innovation and entrepreneurship, primarily in the area of data management and open data for civic engagement and sustainable development, into the curriculum in higher education institutions in historically black colleges and universities in the United States, colleges and universities in Africa, and throughout the rest of the Black Diaspora. This activity is a finalist for a Venture Well grant.
4. The business community developed at the AODC will collaborate with the open data event in Nairobi, Kenya in February 2016 (sponsored by IBM) that will focus on the economic benefits of open data for industry.
5. A public-private partnership for an information technology company was proposed that would provide a data validation tool for government data in order to increase accuracy.

6. An improved information technology curriculum for schools was proposed and a partnership between universities in Kenya and the United States is underway to build capacity in students today and in the coming generation.

Objective 5. Catalyze open data initiatives in African countries

1. In addition to the above collaborations, new work was done in creating sustainable solutions for building capacity, including: Code for Africa allocated \$1,100,000 for new fellowships across Africa to help local and national governments, data journalists, and civic organizations increase the availability and use of open data
2. 12 African countries that have initiated work in open data presented at this conference. This represents 22% of African nations, and provides a starting point and a large growth opportunity to encourage the remaining 42 countries. Some countries, such as Mali, expressed a new interest in starting open data programs based on their participation at the conference.

Objective 6. Understand the role of non-government data (crowdsourcing, civil society, university etc.)

1. Specific to this, a one-day Survey Summit was held during the pre-conference to access the use of non-governmental data in large, statistical surveys. Participants were statisticians from academia and civil society who manage large surveys.
2. Going forward, the African Development Bank will increase the number of data sets available and also improve their quality, so that these data can be picked up by app developers.

Objective 7. Build on Open Data Consensus and Data Revolution work already underway

1. The Advisory Board members intentionally included the leaders of both the Consensus and the Data Revolution in several sessions, which were focused on the task of grounding new ideas and discussions in the work already completed. Both leaders felt this was accomplished.
2. The African Data Consensus was a critical step forward to support the data revolution, especially in Africa, but it needs to be sustainable. Resources need to come not just from donors, but also from African countries themselves to support the commitments to openness and greater open data productions

Some of the other outcomes of the conference included new datasets being published, informal collaborations established, new jobs and opportunities in open data announced, and new commitments made by governments and civil society to open data activities.

Lessons Learned

During the Africa Open Data Conference, 16 case studies of open data programs at the national level were presented. Twelve of those cases were from African nations. The lessons involved different aspect of creating an open data program, such as political sponsorship, technical management, interaction with data users, and projects using open data.

Some clear lessons emerged that cut across geographic boundaries and were noted by several nations. The top lessons provide a roadmap for many nations in Africa to consider when developing an open data service and community. These lessons fall in four categories: political, technical, legal, and community.

The key lesson that cuts across every single country presenting was to share and learn from others implementing open data initiatives.

Political	<ul style="list-style-type: none">• Identify Champions• Conduct a readiness assessment
Technical	<ul style="list-style-type: none">• Create a strong technical team and guidelines• Create an open data portal
Legal	<ul style="list-style-type: none">• Develop policies that promote open data• Ensure access for everyone• Measure the impact of open data
Community	<ul style="list-style-type: none">• Provide training to civil servants and the community• Create communities of practice• Develop pilot projects

Top 10 Open Data Lessons from African Nations

1. Identify influential champions of open data inside and outside of government and connect them, perhaps through an Open Data Council
2. Conduct an open data readiness assessment and develop recommendations
3. Ensure open access to data for everyone across technical, cultural, educational, and economic barriers (include wifi to universities and research institutions)
4. Create an open data portal to help organize, access, and promote the release of accurate, open, and timely data needed for national and citizen priorities (this may include non-government data from local government, civil society, donors, or academia)
5. Develop policies and laws that promote the publication and use of open data
6. Create a strong technical team and guidelines on gathering, managing, and publishing data using standards
7. Provide training to civil servants who need to collect, manage, and share data and to the open data community (businesses, civil society, academia, data journalists, and developers) in how to access and use data
8. Create communities of practice for the types of data that are critical, bringing together people from inside government and the public—hold events, meetings, and create projects together
9. Develop small pilot projects that can demonstrate how better data helps government and private citizens achieve their goals (better service delivery, better decisions)
10. Understand and measure the impact of open data, using infographics, meetings, radio, and visualizations to communicate with policy makers and the public

The notes below highlight the key lessons for each country's implementation, as framed by that country's representatives at the Conference and in context with the work currently underway in each country.

Burkina Faso

- Learn from other countries that implemented open data initiatives
- Publish key data such as school performance, agriculture, water, and education
- Conduct sensitization trainings across government and with civil society
- Engage civil society to ensure there is an uptake of the data released
- Address non-governmental organizations as providers and users of open data
- Fill data gaps by using third party data sets to extrapolate missing data. Burkina Faso's national portal allows third parties to submit their data to fill in missing sections.
- Target quick wins where the data already exists and is easy to get
- The Burkina Faso 2014 revolution occurred due to lack of transparency. Since the revolution, new legislation has supported open government and open data. In the future, open data will accompany the new elections.

Cote d'Ivoire

- Encourage the discussion of open data. In Cote d'Ivoire, even without a format charter and portal, people still talk about open data if they (1) are able to understand the data and (2) the data concerns their daily lives. These are the most important characteristics of communicating to the public.

Ethiopia

- Conduct an Open Data Readiness Assessment (the Ethiopia one took place in 2014).
- Develop an action plan to implement key recommendations and to accommodate challenges with respect to the Access to the Information Act.
- Divide data into different categories and assign technical working groups to process and organize each type of data.
- Increase incentives to use open data

Ghana

- Provide training on open data, data usage, infographics, and storytelling to government, developers, civil society, educators, and journalists
- Work with each agency individually to address concerns about opening data, and then bring them together
- Show the government that open data can be secure and allay fears of data manipulation
- Create standard ways of publishing data across a sector
- Create forums to bring CSOs together and share experiences and skills. Can be organized in meetings, online, hackathons, or with town councils.
- Build deep connections with data journalists to understand and communicate concepts and results of open data through radio, newspapers, and television. Call press conferences when releasing new data.
- Note that increased transparency does not always equal increased accountability, even when Acts are also passed (for example, extractives in Ghana)

Kenya

- Make open data accessible to widen fundamental rights
- Provide accessible, discoverable, and mobile data for location of voting centers, doctor registration (Star Health), and services
- Keep data files small to allow for accessibility and download
- Encourage citizens to contribute to discussions around open data and help government make better decisions (example of ring road being built in Kenya)
- Integrate data from government, civil society, and citizens to increase usability and accuracy of data in applications

- Use maps to make data understandable (example to overlay poverty statistics with government spending)
- Provide incentives for using open data: in one university in Kenya, if research is commercialized, 40% goes to researcher and 60% to university
- Create free public wifi in rural areas and provide free public information services
- Give broadband to universities at a highly subsidized rate (within 30 days had 200 applications)
- Examine the impact of open data, such as the move of procurement to an online system that saved \$1 billion annually in Kenya

Liberia

- Develop an open data action plan
- Understand and accommodate limited availability of Internet and continue to manage paper-based freedom of information requests

Nigeria

- Recognize that open data will help to define future strategies for nations and decisions for citizens (for example, voters asked for data in advance of Nigerian elections)
- Use infographics and booklets to help communicate data
- Train information officers to put information online in machine-readable formats
- Understand that online courses may not be accessible, sustainable, or accepted
- Allow local governments or ministries to aggregate data important to them and to share data back to the national portal
- Create communities of practice to develop apps, maps, data, and testimonials and offer training; meet monthly to share ideas in person and regularly through social media
- Develop small projects and sequence reforms to build on each other, create quick wins
- Optimize the digital interface between government and citizens through simple tools and apps that can help digitize data, like allowing data questions via SMS
- Work with NGOs, activists, and journalists to crowdsource data that might be otherwise hard to collect
- Prepare for companies to guard information or move content out of country to avoid compliance
- Do not publish data where it is not useful, such as data tables in the newspaper

Rwanda

- Start with understanding institutional interest and capacity, not just what data is available and what technical capabilities are in place.
- Perform an Open Data Readiness Assessment, because it informs you about the government's capabilities to supply data and the demand side for government data
- Understand that the motivation for sharing data is started for different reasons: citizen participation, economic growth, accountability, and efficiency. Success in open data often happens because it is tied to one of these objectives.
- Start with low hanging fruit and data sets that do not require permission to disclose.

Sierra Leone

- Form a Data Council comprising diverse stakeholders (working the Right to Access Information Commission) to provide the right support to various parts of the data value chain
- Connect the Right To Access Information Commission to the open data portal and related work
- Coordinate and recruit support from civil society. One example connected International Open Data Day and a virtual Meet Up for the Africa Open Data community that held two Ebola data jams to identify, gather, and validate health care data and posted to <http://eboladata.org>

South Africa

- Consolidate data in one place and present to decision makers to give insights
- Create jobs with open data and link back to the Sustainable Development Goals, Vision 2063, and the National Development Plan

- Use data visualizations to allow for a better understanding of issues at the municipal level, including the where new construction is taking place, where the most VAT is paid, census, and the types of business that exist.
- Spatial visualizations make it possible to rapidly identify key changes across the country, to see where work remains to be done, and to tailor public policy accordingly.
- Hold data journalism boot camps (which were pioneered in South Africa)
- Create training for students and citizens showing “evidence is power” on how to get information to inform decision making

Tanzania

- Find a champion at a high place in the government—either one official, a Ministry, or other institution with influence.
- Promote open access to data for everyone across technical, cultural, educational, and economic barriers.
- Carry out an open data readiness assessment to establish the level of stakeholder readiness for open data practices as part of an initiative under the Open Government Partnership
- Build data capacity in the government through group trainings, exposing people to key skills, and mentoring, and place talented people into new jobs in the technology sector and in the government.
- Ensure that policies are in place along with technology to ensure open data practice.
- Note that the private sector, donors, and civil society, not just the government, are important sources of data.
- Publish data that citizens care about (budgets, economic data, laws, license allocation, state participation in investment projects, revenue collected including at the district level, and expenditure outcomes) in Swahili and make them understandable so that citizens may use the data to demand accountability and ask the right questions. For example, citizen’s budgets are short, easy to understand versions of Tanzania’s national budget that explain simply what the Government is committed to do.
- Leverage opportunities, like elections, to team government and NGOs on important issues, and promote open data initiatives as an opportunity to consolidate and entrench democracy, accountability and good governance.
- Prepare guidelines for open data access and usage, such as how to publish, upload, and modify data to the national portal and systems.
- Encourage publication of machine readable and linked data (“5 star”) format, not just in CSV or Excel.
- Use open standards for data within a sector so people can analyze related data easily.
- Expand connectivity for the public to ensure broad public interest and participation in data usage.
- Measure the impact of open data by seeing how timely, accurate, and reliable data improves planning and implementation
- Become part of the Africa Peer Review System, which provides a way for self-assessment, then with African peers, and presented to the African Union.
- His Excellency Dr. Jakaya Kikwete, the fourth President of the United Republic of Tanzania, opened the Conference by stating, “Data doesn’t change the world, but it makes change possible.”

Uganda

- Work with technical incubators and collaboration spaces in the public and together offer open data days, data boot camps, and training to the public
- Understand data demand and who is using or wants to use data, then provide data in ways that are usable beyond just documents
- Communicate important information in context with data. For example, a Know Your Budget site provides detailed data on budgets, but the average citizen wants this in addition to the speech explaining the budget.
- Make complex data simple so that people can understand and make data-informed decisions.
- Be open about the data to increase trust and for citizens to become more involved in the outcomes being measured (such as maternal health)

Participants

The participants themselves were predominately from government and civil society (based on survey responses):

Sector	Participants
Government	36%
Civil society	26%
Academia	12%
Private sector	12%
Development organization	11%
Other	3%

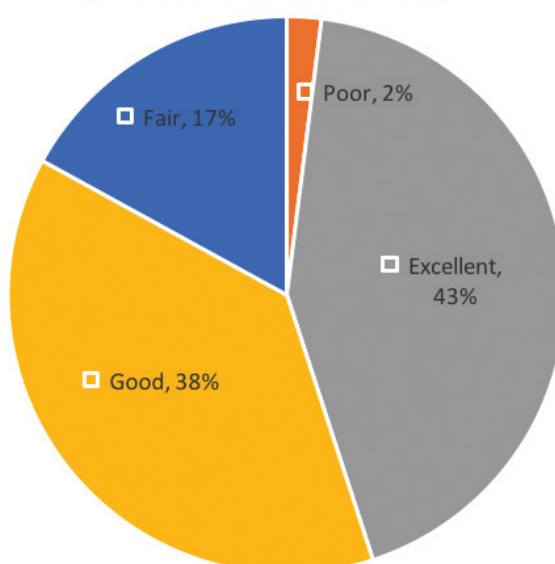
For more details on participants, see p. ii

In addition to the numeric ratings, participants were vocal about their support of the conference and the benefits they received.

The collaboration and learning that occurred during and around the conference was excellent according to participants.

Evaluations were passed out each day, and participants were asked to rate each session and provide some additional information. Sessions were generally rated favorably, with 81% getting excellent or good marks. Participants rated the sessions as: 43% excellent, 38% good, 17% fair, and 2% poor (based on 508 ratings).

**Conference Ratings
(all sessions combined)**



Committee, Sponsors, and Partners

The core team for organizing the conference comprised government officials from the United Republic of Tanzania and supporting staff from the World Bank. This global team met monthly and eventually daily to plan the activities, program, logistics, budget, and balance the views of multiple stakeholders.

Additional open data partners provided sponsorship, including:

- World Wide Web Foundation
- Code for Africa
- USAID
- Global Open Data for Agriculture and Nutrition (GODAN)
- Twaweza
- Open Data for Development (OD4D)

The support of these partners was essential to the success of the conference. Some provided travel support for speakers and participants, funding for activities or workshops, and/or personnel to manage a session or serve on the advisory board. One lesson learned was to have started forming the partnerships and sponsor relationships much earlier, perhaps 9-12 months in advance.

In addition to the support of these sponsors and partners, the AODC has benefited from the contributions of the following Advisory Board members. One excellent lesson learned was to gather an Advisory Board early and to hold regular meetings to ask for advice and to guide the development of the event, program, and objectives. The Advisory Board included:

- Justin Arenstein, Founder, Code for Africa
- Dozie Ezigbalike, Chief, Data Technology Section, United Nations Economic Commission for Africa
- Aidan Eyakuze, Executive Director, Twaweza East Africa
- Al Kags, Founder Trustee, The Open Institute
- Beejaye Kokil, Division Manager, African Development Bank
- Bitange Ndemo, Senior Lecturer, University of Nairobi
- Nnenna Nwakanma, Africa Regional Coordinator, Web Foundation
- Khadija Sesay, Director, Open Government Initiative, Sierra Leone
- Flora Tibazarwa, Director of Life Science, COSTECH, Government of Tanzania

Events

Pre-Conference

The AODC had two 2-day activities: a pre-conference and a conference. The pre-conference created a learning space for people new to open data who needed more information and a place to ask questions. It also provided hands-on training in mapping, visualization, and data management practices. This pre-conference was very well received and attendance was nearly the same as at the main conference.



Training courses included beginners and advanced master classes in mapping skills, surveys and statistics, and agriculture data.

The activities at the pre-conference were focused on educating and building the open data community. There were sessions on the data revolution, regional open data communities, and breakout sessions on government policy and innovation, civic innovation, education and research, and business. A set of selected highlights from these sessions is below:

- Civic innovation
 - o Need to shift the African conversation from open data for transparency to open data for economic growth
 - o Key learning is that no data is clean enough, everything needs to be validated or cleaned before use
 - o Focus on the most important 10-20% of data, rather than trying to put everything online
- Business
 - o New ideas on how to engage and train youth
 - o Specific business interest exists in open datasets around tenders, geospatial data, demographics, agriculture, and extractives
 - o An idea was brought up for an awareness campaign on national radio related to where data can be found and what data is available
- Education
 - o Gaps exist in open education in research demonstrations; data in higher education; ICT infrastructure to leverage online curriculum; sharing of data across departments, retention and completion of primary school; and commercialization of research outputs
 - o Desire to celebrate Tanzania's leadership in open data
 - o Need to create regional, sector, and international partnerships

- o Want to encourage all players that government and universities need to put more investments into education, especially in the ICT for content delivery, greater collaborations with different stakeholders, and improving local conditions
- o Tanzania National Bureau of Statistics should increase collaboration with stakeholders in civic innovation



Africa Open Data Expo

At the main conference, there was an Africa Open Data Expo, which showcased local and global examples of open data being produced, published, visualized, and captured in creative ways across Africa. This Expo was very successful and highly rated by participants. When President Kikwete visited, he spent an hour touring the Expo and speaking to the exhibitors. There were more organizations that wanted to participate than there were spaces, and in the future, perhaps having a larger area would be useful. The exhibitors were:

1. CartoDB—Diamond Expo Sponsor
2. Ally App—Gold Expo Sponsor
3. IBM Research Africa—Gold Expo Sponsor
4. TMF (Tanzania Media Fund)—Gold Expo Sponsor
5. Development Gateway
6. Open Data for Development
7. Palladium
8. TERNET (The Tanzania Research and Education Network)
9. GODAN (Global Open Data on Agriculture and Nutrition)
10. Bongo Live
11. University of Dar es Salaam
12. FHI360
13. Edo State Open Data Initiative
14. TODI - Tanzania Open Data Initiative
15. Ramani Huria
16. Center for Open Data Enterprise
17. Buni Innovation Hub
18. Code For Africa
19. School of Data
20. Twaweza
21. AODC Lightning Talks—Prerecorded talks about African open data projects
22. Open Aid Partnership



Conference

The conference was more formal than the pre-conference, and provided a more structured way to communicate the activities going on in the Africa open data community. Highlights included President Kikwete's opening remarks, a welcome by World Bank Country Director Bella Bird, and an extended panel on lessons learned from Africa open data initiatives. There were breakout sessions on agriculture and nutrition, education, health, sub-national data, city and urban data, business, and energy and extractives.

Presentations can be accessed online: www.africaopendata.net

One of the outcomes was the identification of benefits in using open data. These included:

- "Making data accessible frees us up to do other things rather than spend a lot of time fulfilling data requests," noted the Tanzania National Bureau of Statistics
- Open data actually increases security as shared by the National CF of Tanzania, which gave an example where previously 103 cases of website hacking occurred, but now with sharing of data, it's down to 3 cases. If you open up data, skills from across the continent and the world can help you solve your problems.

Lessons for Conference Organizers

In planning for future events, there were key lessons learned that should be carried forward. Important to the success were a broad support and participation from government, connecting with and incorporating local businesses, ensuring geographic and gender diversity of speakers, and having a strong central team to organize the conference. A strong central team was critical to the success, with frequent communications and daily meetings.

In particular, this conference used multiple methods for interaction during sessions. These ranged from traditional keynote presentations to interactive community-led sessions. This variety was well received, provided lots of learning opportunities, and kept people's interests over both the pre-conference and conference. Participants clearly preferred the interactive round table discussions and hands-on training sessions. Sessions worked best when people got to speak to each other and interact, provided opportunities for learning, and allowed many people to speak.

Participants were just as clear that they found the long panels much less interesting. One option suggested was to set up the table so that the panelists could look at and interact with each other, rather than lecturing the audience. Slides should be required of any more formal presentation to help the audience follow along.

All in all, participants were happy and grateful that so many open data enthusiasts were brought together to focus on issues important to African nations. Many participants from the Government of Tanzania mentioned they were very happy with the result. The involvement of local businesses was very popular and led to the Expo mentioned earlier. This was actually an important venue for the media reporting.

Ways to improve future conferences include:

1. Starting the planning early, especially in recruiting partners and sponsors (at least 9-12 months in advance).
2. More time was needed to develop new opportunities and collaborations. Although a large percentage of time was provided for networking, participants wanted more. Having the pre-conference event provided a venue for them to start understanding what others were doing and to begin discussions from this. More thematic pre-event events would be desired in future conferences.
3. Multiple plans were created to ensure Internet access at the event, and all options were used.
4. For an event focusing on data exchange, internet infrastructure is critical, to allow participants practice data exchanges as they talk about it.
5. Resolving the entire budget plan well in advance (note the need to find early sponsors), would have enabled the team to move faster on some decisions.

In summary, the Conference attracted a great deal of attention from political, media, business, and civil society sectors. The participants very much enjoyed the variety of activities, the information shared, and the networking opportunities.

Appendix A: Highlights Online

The materials presented at and related to the conference have been largely put online. They are linked from the web site for the conference at <http://africaopendata.net>. Of note are the following:

- Opening speech by H.E. Dr. Jakaya Mrisho Kikwete, President of the United Republic of Tanzania (<http://www.africaopendata.net/s/PRESIDENT-SPEECH-DURING-OPENING-OF-AFRICA-OPEN-DATA-CONFERENCE-00000002.pdf>)
- Presentations from the event are also available online. To view and download presentations delivered at the AODC, go to https://drive.google.com/folderview?id=0B6tLgpQ5nS_wMTM2TDdjS3VydUE&usp=sharing.

Continue to follow the conversation at Twitter by following @Data4Africa (<https://twitter.com/Data4Africa>) and #africaopendata (<https://twitter.com/hashtag/africaopendata?f=tweets&vertical=default&src=hash>).

Media coverage included:

1. "Kikwete advocates for open data use," DailyNews.co.tz, <http://allafrica.com/stories/201509070264.html>
2. "Africa: Conference places open data at center of development agenda, September 3, 2015, All Africa, <http://allafrica.com/stories/201509040434.html>.
3. "Tanzania moves to make it easy to access official data," The Citizen (<http://www.thecitizen.co.tz/News/Tanzania-moves-to-make-it-easy-to-access-official-data/-/1840340/2859148/-/oxc0noz/-/index.html>).



Appendix B: List of Speakers

Speaker	Title	Organization	Country
AlidaYonli	Computer Engineer	Open Data Initiative, National Agency for the Promotion of ICT	Burkina Faso
MalickTapsoba	Project Manager	Burkina Open Data Initiative	Burkina Faso
Teg-Wendeldriss Tinto	Open Knowledge Ambassador	Open Knowledge Foundation	Burkina Faso
Fernando Perini	Senior Program Officer, Information and Networks	IDRC	Canada
Nnenna Nwakanma	Africa Regional Coordinator	Web Foundation	Cote d'Ivoire
Dr. Abiyot Bayou	Director of e-Government Directorate	Ministry of Communication and Information Technology	Ethiopia
Dr. DozieEzigbalike	Chief of Data Technology Section	UNECA	Ethiopia
Solomon Mekonnen	Lecturer University of Addis Ababa	Co-Founder Code for Ethiopia	Ethiopia
David Opoku	Fellow	School of Data	Ghana
Francisca Darfour	Political and Governance Analyst	New Media Hub	Ghana
Wisdom Donkor	National Information Technology Agency, Ghana Open Data Initiative	Government of Ghana	Ghana
Mhairi O'Hara	Technical Project Manager	Humanitarian Open Street Map	Indonesia
Dr. Alex Awiti	Director	East African Institute at Aga Khan University	Kenya
Al Kags	Founder	Open Institute	Kenya
Dr. BitangeNdemo	Senior Lecturer	School of Business at University of Nairobi	Kenya
Christine Mungai	Senior Columnist	Mail and Guardian Africa	Kenya
David Lemayian	Lead Technologist	Code for Africa	Kenya
Davis Adieno	Capacity Development Manager: The Africa Hub	Development Initiatives	Kenya
Declan Ottaro	South to South Lab Manager	Ushahidi	Kenya
Kwame Owino	Executive Director	Institute of Economic Affairs	Kenya
Maureen Kariuki	Civil Society Regional Coordinator for Africa and the Middle East	Open Government Partnership	Kenya
Monica Nthinga	Programme Officer	Ushahidi	Kenya
Moses Sitati	Lead, Data Lab Nairobi	Humanitarian Data Exchange	Kenya
NdiranguwaMaina	Group Managing Director	Consumer Insight	Kenya
Dr. Peter da Costa	Technical Advisor, Global Development and Population Program	Hewlett Foundation	Kenya
SerahNjambi-Rono	Code For Africa Developer Advocate	Code for Africa	Kenya
Robert Hunja	Director for Public Integrity and Openness, Governance Global Practice	World Bank	Kenya, USA
Andrew Tehmeh	Deputy Information Minister	Government of Liberia	Liberia

GbengaSesan	Executive Director	Paradigm Initiative Nigeria	Nigeria
HamzatLawal	Co-Founder	Follow the Money	Nigeria
NkechiOkwuone	Open Data Manager	Edo State	Nigeria
OludotunBabayemi	Fellow	School of Data	Nigeria
TemiAdeoye	Lead Technologist	Code for Nigeria	Nigeria
TojuOnaiwu	Director	Edo State ICT Agency	Nigeria
Rajiv Ranjan	Advisor	National Institute of Statistics UNDP	Rwanda
Stephen Abbott Pugh	ICFJ Knight Fellow	Code for Africa	Rwanda
Edward Kwame Yankson	Executive Secretary	Right to Access Information Commission, Government of Sierra Leone	Sierra Leone
Dr. Umaru Bah	Associate Graduate Fulbright Professor	Morgan State University	Sierra Leone, USA
AdiEyal	Director	Code for South Africa	South Africa
Chris Roper	Senior Knight Fellow	ICFJ	South Africa
François van Schalkwyk	Research Manager: Africa Lab	World Wide Web Foundation	South Africa
Julia Renouprez	Fellow	School of Data	South Africa
Justin Arenstein	Founder	Code for Africa	South Africa
Dr. PaliLehohla	Statistician General of South Africa	Statistics South Africa	South Africa
Richard Gevers	Founder	Open Data Durban	South Africa
Serge Kapto	Policy Specialist	UNDP	South Africa
SharthiLaldaparsad	Executive Manager	Statistics South Africa Policy Research and Analysis	South Africa
His Excellency Dr. Jakaya Mrisho Kikwete	The fourth President of the United Republic of Tanzania	Government of Tanzania	Tanzania
Hon. Capt. (Mst) George Huruma Mkuchika	Minister of State	President Office for Good Governance	Tanzania
Hon. Mathias Meinrad Chikawe	Minister	Ministry of Home Affairs	Tanzania
Prof. Sifuni Mchome	Permanent Secretary	Ministry of Education and Vocational Training	Tanzania
Dr. Ringo Tenga	Lecturer	University of Dar es Salaam	Tanzania
Honest Kullaya	Land Planner	Ministry of Lands, Housing and Human Settlements Development	Tanzania
Dr. Primus D. Nkwera	Executive Secretary	National Council for Technical Education	Tanzania
Innocent Mungu	Head of Corporate Communications	Tanzania Communications Regulatory Authority (TCRA)	Tanzania
Dr. Makarius Mdemu	Lecturer	Ardhi university	Tanzania

Yefred Myenzi	Chief Executive Officer	HakiArdhi	Tanzania
Dr. Abel Kinyondo	Senior Researcher	REPOA	Tanzania
Dr. Albina Chuwa	Director General	National Bureau of Statistics	Tanzania
Aidan Eyakuze	Executive Director	Twaweza	Tanzania
Beejaye Kokil	Manager of Economics and Social Statistics	African Development Bank	Tanzania
Bella Bird	Country Director	World Bank	Tanzania
Daud Fufuji	Open Data Consultant	World Bank	Tanzania
Denis Maro Biseko	Senior Public Sector Specialist	World Bank	Tanzania
Diego Gutierrez	CEO	Tigo	Tanzania
Elvis Mushi	Research Director	Financial Sector Deepening Trust	Tanzania
Emil Kimaryo	Researcher	World Bank	Tanzania
Dr. Flora Tibazarwa	Director	COSTECH	Tanzania
Geoffrey Katerega	Lead Mapping Supervisor	HOT/Open Street Map	Tanzania
George Mulamula	Chief Executive Officer	Dar Teknohama Business Incubator COSTECH	Tanzania
Dr. Hassan Mshinda	Director General	Commission for Science and Technology	Tanzania
Dr. Jabir K. Bakari	CEO	eGovernment Agency, Government of Tanzania	Tanzania
Dr. Adam Nyaruhuma	Land Officer	Ministry of Lands, Housing and Human Settlements Development	Tanzania
Dr. Makarius Mdemu	Lecturer	Ardhi University	Tanzania
Erick Kiali	Director ICT	Predinent's Office – Regioal Administration and Local Government	Tanzania
James Ciera	Senior Data Analyst	Twaweza East Africa	Tanzania
Joachim Mangilima	Fellow	School of Data	Tanzania
Professor Kitila Mkumbo	Professor	University of Dar es Saleem	Tanzania
Maria Sarungi	Director	Compass Communications	Tanzania
Hon. Mathias Meinrad Chikawe(MP)	Minister of Home Affairs	Government of Tanzania	Tanzania
Mwanaidi Mahiza	Director of Information Technology and Marketing	National Bureau of Statistics	Tanzania
Hon. Saada Mkuya Salum (MP)	Minister of Finance	Government of Tanzania	Tanzania
Stephen Mwombela	Assistant National Coordinator	Afrobarometer REPOA	Tanzania

Yusuph Kileo	Cybersecurity and Digital Forensics Investigation Expert MD	National CF	Tanzania
Brig. Gen. Mbazi Msuya	Director General	Prime Minister's Office, Disaster Management Department	Tanzania
Julia Letara	Municipal Town Planner	Kinondoni Municipal Council	Tanzania
Charles Onyango-Obbo	Editor	Mail and Guardian Africa	Uganda
Irene Ikumu	Open Government Fellow	Code for Africa	Uganda
Reinier Battenberg	Founder	Data.ug	Uganda
Richard Zulu	Co-Founder and Lead	Outbox	Uganda
Katelyn Rogers	Project Manager	Open Knowledge	United Kingdom
Liz Carolan	International Development Manager	Open Data Institute	United Kingdom
Audrey Ariss	Research and Design	Center for Open Data Enterprise	United States
Jeanne Holm	Senior Consultant	World Bank	United States
Jeff Kaplan	Director Multilateral and NGO	Socrata	United States
Kat Townsend	Senior Advisor for Open Data and Engagement	USAID	United States
Laura Manley	Co-Founder	Center for Open Data Enterprise	United States
Oleg Petrov	Senior Program Officer ICT Practice	World Bank	United States
Rob Baker	Operations Officer, Open Aid Partnership	World Bank	United States
Tim Herzog	Data Scientist Data Development Group	World Bank	United States
Zach Christensen	Research Associate	Open Data Watch	United States

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