

Open Data Barometer African Edition

IDRC Project Number 108347-001

Final Technical Report

July 2018 - December 2018

Date: 20 December 2018





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1. Executive summary

The IDRC – long-time strategic partner and user of the Open Data Barometer (ODB) – was interested in supporting the regional expansion of the Barometer, with a special focus on the interaction with the second African Data Revolution Report (ADRR) and coverage of particular data openness issues in the African continent. For that to be possible the Web Foundation has built different collaborations through this project with the three new OD4D regional hubs in Africa:

- The OD4D MENA node, managed by the Access to Knowledge for Development Center in Egypt;
- 2. The African Open Data Network (AODN), managed by the Local Research Development Institute in Kenya and Nairobi; and
- 3. The Centre d'Afrique Francophone pour les Donnees Ouvertes (CAFDO), managed by Open Burkina in Burkina Faso.

These partners were not only contributing to the research process, but also building their own capacity while learning all along the project. Other key strategic synergies were also enabled in order to make the project successful, including:

- 1. Our work with UNECA and the UNDP in the adaptation of the methodology for this African Barometer in order to provide more useful inputs into the next African Data Revolution Report (ADRR), with a focus on the state of Open Data in the continent.
- 2. Our work with Open Knowledge International on the open data implementation research component for this African Open Data Barometer in order to have a complete state of the play analysis in the region.

The final output of these collaborations was an African ODB edition for a total of 29¹ countries in the continent, along with a specific methodological extension prepared to provide the necessary input and background information to the second African Data Revolution Report (ADRR).

As main project conclusion we can say that progress in the African continent is slow overall. While some governments are advancing towards data openness, that remains the exception, not the rule. East and West regions in the African Union are most advanced, followed closely by the South. Many countries in North Africa have fairly strong commitments but are lacking almost all other elements necessary for success. Lastly, the Central region is clearly falling behind all others on almost every single indicator in our analysis. Open data is not yet entrenched in law in the continent, and the legal frameworks supporting it are either incomplete or directly absent. Implementation and resourcing are also very weak.

¹ The initial objective was set to a total of 30 countries but one of the project partners failed to deliver their full assignments, even after several country replacement attempts.

2. The research problem

The overall research objective of the project was to:

 Provide comparative data and insights on the state of the play for African countries and African Union regions via an adapted methodology combining contextual data and technical assessments.

This was achieved through the following specific objectives:

- Work with the OD4D regional nodes, UNECA and the UNDP on the adaptation of the methodology to the specific African context, ensuring also a proper coordination with the general objectives of the second African Data Revolution Report (ADRR).
- 2. Build capacity at the regional level working closely with the three new OD4D nodes in the continent, as well as providing training and support to the different local researchers all during the research process.
- 3. Coordinate with Open Knowledge International for a first truly collaborative attempt of the research production process, looking for more efficiency and better synergies between the Barometer and the Open Data Index products.

3. Progress towards milestones

Milestone 1: First technical progress report (July 2017 - December 2017)

Even before the grant extension was officially approved in late September 2017 the Web Foundation has been participating in conversations with several of the final project partners, particularly with UNECA-UNDP. The objective was to gather feedback on how better adapt the current methodology to this specific use case, and also on how to make from the Barometer a more useful tool in the African Data Revolution roadmap.

A full 4-hours session on project planning and scoping was held in late November 2017 in parallel to the OGP regional summit in Buenos Aires, although not all the project partners were finally able to make it. An inception meeting was finally held with all project partners and collaborators in mid-December 2017. The meeting objective was to refine the project plan and search for agreement on the different project roles, activities and responsibilities.

The following activities were completed during this phase:

- 1. Preparation of administrative and supporting documentation, including discussions on roles and responsibilities for the different project partners; elaboration of a production plan; preparation of MoUs for the partnerships with the OD4D nodes; and setup of an advisory group including representatives from all project partners.
- 2. **Methodological adaptations**, including the selection of the country sample reaching consensus between all project contributors; simplification of the core Barometer

methodology; incorporation of new indicators that address the regional context; and preparation of research documentation and supporting materials.

- Setup and deployment of the supporting technical infrastructure, including
 upgrades and adaptations of our usual home-made online survey tool; deployment of the
 updated survey; setup of team collaborative tools; and preparation of the project
 management dashboard.
- **4. Selection and setting-up of the research team**, including guidance on pre-requisites; assistance to the regional partners during the selection process; and planning the training sessions for the final research team.

Milestone 2: Second technical progress report (January 2018 - June 2018)

In order to follow-up more closely with the different regional project partners – as well as to provide them with the required additional support to foster project advance – <u>regular weekly project teleconferences</u> were held from February to June. The project management team was also participating in other frequent internal meetings in order to coordinate work with the other project collaborators, namely Open Knowledge International and UNECA-UNDP.

The following activities were completed during this phase:

- 1. Finish preparation, adjusting the initial planning to give room for the continuous adaptation required after multiple delays from the regional partners; completing the research team; and preparing the <u>final version of the African ODB methodology</u> including also <u>a French version</u> to facilitate the research process in francophone countries.
- 2. Research, setting up several <u>training sessions</u> and individual follow-up 1-to-1 sessions for both, researchers and regional coordinators; deploying and configuring the research platform, including preparation for the French internationalisation of the interface; completing the research for all planned countries (except one from the francophone region); and managing the multiple deadline extensions required by the research team.
- Review, not only spot-checking all work at different times during the research process to
 provide early feedback, but also conducting a more detailed general structured review
 on formats, completeness and coherence.
- 4. **Quality assurance**, completing the computation and verification of all the indicators in the assessment, including statistical verifications, calibrations and adjustments of the quantitative and qualitative results.

Milestone 3: Final technical progress report (July 2018 - December 2018)

Once we completed the quality assurance process it was quite evident that there were serious issues with respect to the quality of the research delivered in a big number of cases. As we were already significantly delayed by that time – due to the multiple deadline extensions requested by the majority of the researchers – we had no other chance that taking over on the research process, completing and amending the materials available by then on our own.

The following activities were completed during this phase:

- Research completion, taking over on the work done by the rest of the research and coordination team to be able to fix all existing quality issues, and completing the research with the required quality level on time for the incorporation of the results into the ADRR.
- 2. Analysis of results, computing the final scores for all the Barometer indicators and performing a complete statistical analysis of the results as well as deep quantitative and qualitative expert analysis in order to identify the main outcomes and conclusions coming from all data gathered during the process.
- 3. Reporting, taking also over some of the initial responsibilities of the ADRR production team and writing a <u>full ADRR chapter</u> to present the main findings of our research and our recommendations to keep advancing the regional open data agenda. An explanatory brochure with a summary of the main findings was also prepared for the ADRR prerelease at the UN World Data Forum.
- 4. Dissemination, presenting the preliminary results of the research to an initial reduced group of African stakeholders, as part of the Technical Workshop on the Africa Data Revolution Report 2018 that took place the week before the last International Open Data Conference in Buenos Aires. A more formal presentation of the final results was also held during the past UN World Data Forum in Dubai, back in October.
- **5. Project wrap-up**, not only processing all pending payments and reports, but also discussing future ODB plans and possible scenarios jointly with IDRC, OKI and other Web Foundation usual collaborators and partners.

4. Synthesis of research results and outcomes

The findings from the African edition of the Open Data Barometer show that progress in the African continent is slow overall. While some governments are advancing towards data openness, that remains the exception, not the rule. East and West regions in the African Union are the most advanced, followed closely by the South. Many countries in North Africa have fairly

strong commitments but are lacking almost all other necessary elements for success. Lastly, the Central region is clearly falling behind all others on almost every single indicator in our analysis.

Most governments we have measured still lack any kind of comprehensive guidelines, technical standards, and management procedures for their (open) data. Government-wide strategies or policies are too often only considered once open data initiatives have already been in place for some time. This is not only happening in Africa. It is also a global issue that we also found in all other world regions — including the most advanced countries. Open data is not yet entrenched in law in the continent, and the legal frameworks supporting it are either incomplete or directly absent. Implementation and resourcing are also very weak.

Additionally, we didn't find any stand-out performer in Africa. This makes Africa the only global region without a clear local open data champion. Ghana, Kenya, Nigeria, South Africa, Tanzania and Burkina Faso, all looked ready to assume such role at some point in recent years, but ultimately the data shows that the performance of these countries has been erratic over time. A possible reason for this is that governments in the region usually require external support to start with their open data initiatives, and that support may not be aligned with the needs expressed by African governments in the long term. Governments in the continent are still too technically and financially dependent on third-parties for creating and sustaining open data initiatives.

Finally, very few open data initiatives in the continent actively inclusion and equity actively. Our researchers found some evidence that open data is contributing to government transparency and the creation of new businesses, but little or no evidence that it is contributing to social inclusion — whether by enhancing excluded groups' access to public services or increasing their participation in policy decisions.

All the above, our study found that African governments still have a long way to progress on open data readiness, use and impact. Some specific actions that, according to our research, could contribute to advancing the African open data agenda are:

- Build an open data knowledge network for the continent: A space where governments and all other stakeholders in the data ecosystem could regularly share and exchange experiences and technical expertise between them.
- Ensure sustained, meaningful engagement: Greater levels of cooperation between governments, funders and civil society advocacy groups are required to initiate sustainable, long-term initiatives and projects that deliver on open data promises.
- Let the continent take ownership of their own open data initiatives and projects:

 Donors need to continue providing funding, training and support for African countries in order to build internal capacity and close the data gap, but in that process African governments and citizens should remain in control of their own projects.

5. Methodology

The Open Data Barometer African Edition aims to uncover the true prevalence, use and impact of open data initiatives in the African continent. It provides comparative data on governments and countries using an adapted <u>methodology</u>, covering a total of 29 countries² in this special African Edition for the second Africa Data Revolution Report.

This edition repeats the analysis from <u>previous Barometer editions</u> following the <u>International Open Data Charter Principles</u>, with some methodological revisions in order to adapt it to the specific African context. This revision was made in collaboration with the UNECA-UNDP and OKI teams, as well as with our regional OD4D network partners:

- African Open Data Network (AODN)
- Francophone African Community of Open Data (CAFDO)
- Access to Knowledge for Development (A2K4D).

The Barometer measures open government data readiness through three components: (1) **Government**; (2) **Citizens and Civil Society**; and (3) **Entrepreneurs and Business**. We are not measuring readiness to start an open government data initiative, but rather readiness to secure positive outcomes from such an initiative. Each of these groups are important for a successful OGD initiative. As Tim Berners-Lee has observed, open data "has to start at the top, it has to start in the middle and it has to start at the bottom". On the other hand, measuring open data impact is notoriously difficult. Establishing a solid causal connection between open data and particular social and political changes is clearly beyond the scope of a survey such as the Barometer. However, for the purpose of the Barometer, claims made in credible sources concerning possible **uses and impacts of open data** are an useful proxy indicator for areas in which impact may be occurring

The research was based on peer-reviewed expert survey responses gathered between May and July 2018, asking trained country specialists to respond to a number of detailed questions about the open data situation in their specific countries following the detailed research handbook indications. Each question invited either a yes/no response or a quantitative response on a 0-10 scale, with detailed scoring guidance and thresholds provided. Researchers also provided justifications and citations for all scores. Responses were carefully reviewed, re-scored where required, and cross-checked by the research lead team. Final results were also presented to all project partners for peer review and final feedback, and also shared with the ADRR advisory group for further inputs.

6. Main project outputs

² The countries covered are: Algeria, Angola, Benin, Botswana, Burkina Faso, Cameroon, Chad, Côte d'Ivoire, Congo, Egypt, Ethiopia, Ghana, Kenya, Madagascar, Malawi, Mauritius, Morocco, Mozambique, Namibia, Nigeria, Rwanda, Senegal, Sierra Leone, Somalia, South Africa, Tanzania, Togo, Tunisia and Uganda.

Activities	Outputs
Planning	Project proposal.
	Project budget and timeline.
	Updated survey tool platform.
	French translation of survey platform.
	Setup of coordination tools.
	Inception and regular follow-up team meetings.
	UNECA-UNDP coordination meetings.
	Regular technical and financial reports.
Methodological updates	Updated research handbook.
	French translation of research handbook.
	Updated methodology.
	Update of research guides.
	French translation of the research guides.
	Initial analysis and selection of the research countries.
Setup of research team and training	MoUs for regional partners.
	New deployment of the internationalised version of the survey tool.
	Online training and mentoring sessions with all regional partners.
	Up to 3 different 2-hours online training sessions for local researcher and reviewers.
	Additional online 1-to-1 training sessions with those researchers demanding additional support.
Research and review	Assistance to the 20+ researchers and coordinators in the team.
	Research of more than 1,000 indicators for 29 countries in total.
	Review of all 29 questionnaires with more than 500 amendments.
	Technical support for the survey platform.
	Setup of a peer review team with 11 participants.
	Peer-review and feedback workshop as IODC pre-event.
Quality assurance	Updated results dashboard for data comparability.
	Statistical analysis to detect anomalies in the results.

	Qualitative review of all 29 surveys. Calibration and adjustment of the final results.
Analysis	Computation of all the Barometer indicators. Packaging of all country data - csv and zip versions. Statistical analysis of the results. Qualitative analysis of the evidence provided.
Reporting and launch	Preparation of a chapter with main findings and recommendations as part of the ADRR publication. Preparation of a 4-pager with a summary of main findings for the ADRR pre-release. Presenting the African Barometer preliminary results at the dedicated workshop previous to the International Open Data Conference. Presenting the African Barometer main findings at the UN World Data Forum.
Project wrap-up	Processing of research team payments. Final technical and financial reports. Wrap-up and planning on the future of the ODB, jointly with OKI.

7. Problems and challenges

The shift in responsibilities and roles we have been testing with this new regional approach came with some significant challenges, mainly in the form of communication problems; frequent delays on tasks and deliverables; and serious research quality problems.

For this edition we were transferring more responsibilities to the regional partners, letting them setup and manage their respective research teams. At the same time, we were collaborating with UNECA-UNDP in the adaptation of the methodology to the African context and with OKI in the first merging test for our two assessment products. While that was initially expected to provide general project improvements in terms of efficiency and accuracy, what was happening at the end was quite the opposite. Thus, we end up facing several serious challenges:

1. **Communication challenges**: On one hand lack, of english capacity from our francophone partner was one of the main unexpected communication barriers we needed to address. On the other, some of our regional partners were also experiencing

- recurrent problems with the communications infrastructures in the continent, as well as with their usually busy agendas. All this was causing several unexpected and frequent project delays.
- 2. Weak commitment from some of our regional OD4D partners: General lack of feedback and unfulfillment of multiple deadlines from some of our partner organisations in the continent particularly CAFDO and the AODN was continuous all along the project. Generally speaking, they were not as responsive as necessary and failed to attend to a big number of project meetings with no prior notice, specially during the first half of the project. This was affecting their performance in their coordination role and, subsequently, the project development.
- 3. Low performance from a group of researchers: A significant number of researchers were showing low engagement and commitment signals since the beginning of the project. These initial concerns were unfortunately finally confirmed during the rest of the research process, with several of them failing to complete (or even start) the process and others just delivering very late even after multiple deadline extensions and/or with serious quality issues. In order to fix the quality issues we were forced to take over their responsibilities towards the last part of the project and conduct additional research on our own (which was not originally contemplated in the project).
- 4. Different expectations: The setup of the project was quite confusing at the beginning, with different expectations among the project partners apparently. While one of our main objectives was building capacity at the regional level, it looks like our regional partners and researcher not only lacked the required open data expertise for a detailed assessment exercise like this, but also the time (and in same cases even the interest) they should have devoted to the capacity building process. Furthermore, our strategic partner for the assessment of the open data implementation component of the research (OKI) was apparently not planning for the research efforts in their own project definition, and thus we needed to cover that research efforts with our own project resources one more time.
- 5. Challenges with ADRR integration: Internal UNDP processes caused a 5+ months delay in the incorporation of their main researcher. That was seriously affecting coordination and integration options between both projects. Discussions on the different roles and responsibilities in such integration process have always been vague, and we ended-up assuming additional relevant tasks that were not our responsibility initially (such as building a full chapter for the final report).

Therefore, while we managed to complete the project production in full, there were also a continuous need of adaptation and redefinition between the different project phases. The multiple challenges above were also requiring not only heavy additional project management and coordination efforts on our side, but also taking over on a number of other relevant tasks that were not our responsibility originally.

8. Overall assessment and recommendations

The Barometer continues to expand its reach with this new regional approach built in close collaboration with different regional and global partners. We feel there is a lot of potential in this

new approach. However, the following recommendations outline some specific actions that, according to our experience, could contribute to make this regionalisation process more reliable and efficient:

- Establish an unique central coordination role that could ensure project coherence among the different regional and multilateral partners involved in the research process. The organisation playing this key role should take care of the global strategy and outcomes in order to make sure that all partners' interests are aligned and safeguard the current rigor, relevance, independency and credibility of the final product.
- 2. Make a more clear and explicit definition of the different responsibilities among the multiple production partners from the very beginning of the project. Ensure that everyone is on the same page and share also the same project objectives and expectations, even when individual motivations may differ from one to another. As responsibilities are now more distributed in this decentralised approach, each individual partner should also be made clearly accountable for their own contract liability.
- 3. Keep a fair balance between the project objectives and the resources available. The continuous expansion of the product in an increasing constrained project resources environment will not only undoubality affect the quality and credibility of the final outcomes, but could also put the full product at risk. For every new edition general scope and objectives should be revised and adapted to the available resources at that time. Different complementary strategies could be followed at the time of maintaining historical product coherence and value (e.g. alternative production of regional research at different editions, topic-specific or sectoral analysis, etc.)
- 4. Increase investment on capacity building at all levels, from the project partners to the full research team. This includes their key role at the time of closing the feedback loop with the respective governments and CSOs, in order to explore the main project findings with them and make sure all them could also benefit from the research outcomes and implement the necessary actions for change. Furthermore, capacity building should scale to a top project priority with specific resources allocated to such efforts. This new regional approach is quite unlikely to success unless we manage to built proper local capacity, starting at the regional nodes.

To sum up, this regional approach makes the project management and coordination more complex and time-demanding. Thus, a solid and appropriate coordinated product planning will be key in order to ensure success and to enable the Barometer as an empowering tool feeding back into the OD4D network.