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Open Data in Developing Countries

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1 Executive Summary

Open Data seems to be high on the agenda not only in Western countries, but also in developing countries. This report finds that until now the number of open data initiatives in developing countries is still limited, but the coming years will probably see a large increase of open data initiatives in developing countries. Both civil society organisations and external partners of developing country governments are encouraging the use of open data to increase transparency, accountability and citizen participation. Particularly the Open Government Partnership is promoting open data initiatives in developing countries.

2 Introduction

In Europe, open data has been on the agenda for some years and is continuing to gain ground. Starting with the EU Directive 2003/98/EC the efforts to create a common framework for the re-use of public data by governments, private companies and others has evolved into a strong movement by the European Commission, EU member states and civil society for open government data. Outside of Europe, the USA, Canada and Australia are making significant progress in providing open data to entrepreneurs and citizens. But open data is not limited to so called developed countries. To the contrary, in the last few years there have been numerous initiatives in developing countries in Africa, Asia and particularly in South America. This topic report will provide an overview of open data initiatives in developing countries. In addition, the report will analyse the link between such initiatives on the one hand and the Open Government Partnership (OGP) on the other hand.

The distinction between “developing” and “developed” countries is controversial and this controversy cannot be resolved here. In this report a country is defined as a developing country, if it is eligible for official development aid as defined by the OECD-Development Assistance Committee.

3 Overview of existing Open Data Initiatives in developing countries

It is early days for Open Data in developing countries: Even if there is sometimes a lot of enthusiasm about the potential of open data to promote development, the truth is that it is still early days for open data in developing countries. Like in Europe, the number of open data sites in developing countries, the quality of data they hold and their use is still very limited. Among the 41 countries around the world that have set up national open data

platforms, there are currently 12 developing countries, all of which have been created in the last three years.¹

The first Open Data platform Africa was launched in 2011 in Kenya² and until now there are only three more open data initiatives in Africa in Tunisia, Morocco and Ghana.³ The African Development Bank is the first regional organisation in Africa to have adopted an open data approach and offering a large number of datasets.⁴ In Europe Moldova is the only developing country with an open data initiative.⁵ In Asia and the Pacific there are twelve national open data sites, of which three are in developing countries, namely in China, India and Timor Leste.⁶ In Latin America there are five national open data sites in Chile, Peru, Uruguay, Brazil and Mexico.⁷ However in addition to the national platforms there is a growing number of open data initiatives at municipal level, for example in Montevideo and Buenos Aires. Among these open data sites, several are still in their beta version, like in Ghana or India. Others hold only a very limited number of data sets until now like Ghana or Uruguay. Again others are only partially open, like the Transparency Site of Timor-Leste, which does not allow data re-use for commercial purposes.

An overview of current and planned government open data initiatives in developing countries is presented below.⁸

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- 1 Source <http://www.data.gov/opendatasites>
 - 2 Kenya Open Government Initiative <http://opendata.go.ke/>
 - 3 Morocco Open Data Site: <http://data.gov.ma/Pages/Home.aspx>, Tunisia Open Data Site: <http://platform.opendata.tn/index.php?id=4> , Ghana Open Data Site: <http://data.gov.gh/>
 - 4 Open Data Platform of the African Development Bank: <http://opendataforafrica.org/>
 - 5 Moldova: <http://data.gov.md/>
 - 6 India: <http://data.gov.in/>, China: <http://govinfo.nlc.gov.cn/> and Timor-Leste: <http://www.transparency.gov.tl/>
 - 7 Brazil: <http://dados.gov.br/>, Chile: <http://datos.gob.cl/>, Mexico: <http://mapas.gob.mx/>, Uruguay: <http://datos.gub.uy/> and Peru: <http://www.datosperu.org/>
 - 8 Blue markers are existing national open data initiatives, yellow markers are sub-national initiatives, red markers are planned national open data initiatives (not comprehensive) and pink markers indicate membership in the Open Government Partnership. The green marker is the only supra-national open data platform in developing countries. Link to Google Map: <https://maps.google.de/maps/ms?msid=214949500913461139756.0004d6af336a205394ed1&msa=0>

Open Data and Civil Society in developing countries: Many civil society organisations in developing countries are directly or indirectly advocates for open data, providers of open data and users of open data.

In many cases, civil society advocates are not specifically focused on open data, but have their roots in the movement for freedom of information or in anti-corruption activism. This type of civil society advocacy creates incentives for governments to become more open and provide easily accessible information about government activities. For example in Latin America the Alianza Regional por la libre Expresión e Información is a network of civil rights movements across Latin America. This network has existed for several decades and is now strongly involved in debates on Open Government in Latin America.¹³ Civil society organisations are also often potential users of data like the budget-monitoring project BudgIT in Nigeria, the West African NGO network WANGONET or the municipal e-participation projects CiudadNuestra in Peru and TransparentChennai in India.¹⁴ Local and regional initiatives are strongly supported by international networks of civil society from developed and developing countries like the International Budget Initiative and the Global Movement for Budget Transparency, Accountability and Participation with 74 member organisations in developing countries.¹⁵

More and more civil society organisations explicitly promote open data like the organisation DATA in Uruguay, Datos Publicos in Argentina or Open Development in Cambodia, which collects and shares open data sets.¹⁶ In addition to such open data advocates there is a fast growing number of technology hubs around the world, where programmers and entrepreneurs create applications based on data.¹⁷ Finally, there are many initiatives that are not only using open data, but also combining official data with crowd-sourced data. For example, there are many mapping projects like OpenStreetMapping in Nepal, Map Kibera in Kenya and Ramani Tanzania Tandale in Tanzania where geographic data is combined with crowd-sourced data of importance to the local community.¹⁸ Other projects collect and share crowd-sourced data in their advocacy for land rights such as the International Land Coalition, the Moabi project in the Republic of Congo, Cambodia Open Development, MappingforRights in the Congo Basin or

13 Alianza Regional: <http://www.alianza regional.net/>

14 BudgIT: <http://yourbudgit.com/>, WANGONET: <http://wangonet.org/>, Transparent Chennai: <http://www.transparentchennai.com/>, Ciudad Nuestra: <http://www.ciudadnuestra.org/>

15 International Budget Initiative: <http://internationalbudget.org/> Transparency and Accountability Initiative: www.globalbtap.org/members/

16 DATA Uruguay: <http://www.datauy.org/gobierno-abierto-en-uruguay/>, DATOS PUBLICOS, Argentina: <http://datospublicos.org/about>, <http://www.opendevdevelopmentcambodia.net/>

17 Overview of technology hubs in Africa: <https://africahubs.crowdmap.com/reports/>

18 OpenStreetMap Community Nepal: <http://www.osmnepal.org/>, <http://tandale.ramanitanzania.org/>, Map Kibera: <http://www.mapkibera.org/>

La Cuidadora in Peru.¹⁹ Many of these projects are supported and in some cases created by international organisations or NGOs from developed countries.

4 What is driving the open data movement in developing countries.

Open data has become an important topic in many developing countries and its relevance is very likely to increase in the coming years. The question is why that is the case. What are the key drivers of the trend?

In Europe, proponents of open data often stress the economic value of open data. In developing countries, this argument for open data is not very prominent. The reasons given for open data initiatives by governments themselves are very strongly focused on transparency, accountability and citizen participation. For example the Timor-Leste Transparency site highlights the need for fiscal information for the government to be credible, the democratisation of government decisions through participation and the promotion of a general culture of transparency which will also curb corruption. The government of Chile cites very similar reasons for their open data sites and stresses the importance of government accountability towards its citizens and the strengthening of democracy through improved transparency. On the Kenyan open data site, the stated objectives of publishing data are a bit broader: social and economic innovation and data driven decision making but also improved transparency and accountability. Finally, the goals of the open data initiative in Moldova are to enhance transparency, government performance and the responsiveness of public institutions. Only a few government data portals mention the potential economic potential of open data for creating business opportunities.

While these official arguments seem to be important drivers of open data initiatives in developing countries, it is likely that there are also other important drivers, that are not officially stated. Following Tim Davies' analysis on the incentives of open data initiatives in developing countries it is suggested here, that the growing number of open data initiatives in developing countries can be explained by five main drivers: political will to improve government effectiveness as well as the interest of government to increase accountability, internal pressure, external pressure and reputation gain.²⁰ These five incentives are not mutually exclusive, they can work in combination and people within the same government will often have different incentives.

Political will to improve government effectiveness and information flows: An open data initiative can be motivated by a political will to improve the information flow within

19 Mapping for Rights: <http://www.mappingforrights.org/>, Moabi: <http://rdc.moabi.org/>, Land Portal: <http://landportal.info/>, Cuidadora: <http://cuidadora.ourproject.org/>

20 Tim Davis: <http://www.opendataimpacts.net/2013/01/what-are-the-incentives-for-transparency-in-developing-countries/>

government and to other stakeholders and thus reducing a lot of administrative burden, costs and inefficiencies. More ambitious initiatives may include e-government projects like e-procurement to curb the risk of corruption or reforms of government processes so as to facilitate citizens' involvement and increase the responsiveness of public services.

Political will to increase accountability: A second important driver for open data initiative in developing countries is the genuine political will to increase accountability. An increase in accountability may strengthen central government by providing better information on local, regional or sectoral government activities, but it may also strengthen citizens by allowing them to hold the government to account on its policies. If increased accountability is the main driver of an open data initiative the expected impact is an effective implementation of existing policies.

Internal pressure: Pressure from civil society, from media, from parliamentarians or from private companies is another important incentive for open data initiatives. Many examples for civil society activism have been cited above. Civil society priorities differ from one country to another. Demands for more transparency may focus on budget and expenditure, on services delivery, on the political process (for example elections, party financing and parliamentary work) or on a specific sector like extractive industries. Pressure may also come from opposition parties. For example in El Salvador it is civil society, the opposition party and private companies who are advocating for more transparency of the government in the context of the Open Government Partnership.

External pressure: Many open data initiatives in developing countries are supported by international donors. Negotiations about joint activities between developing country governments and international donors are often influenced by donor priorities, which in recent years often included good governance, accountability and transparency. The World Bank and also bilateral donors are actively supporting the creation of open data platforms in their partner countries. International ratings by the Open Budgets Initiative, Global Integrity, Transparency International and the Open Data Census are likely to increase this pressure.²¹ Some governments and civil-society organisations may choose open data projects because of funding opportunities arising. Donors may also increase interest in open data in developing countries by providing themselves open data relevant for developing countries as it is done through the International Aid Transparency Initiative and the Open Data Initiative of the World Bank, the FAO and the African Development Bank.²²

21 Open Budget Initiative: <http://internationalbudget.org/>, Open Budget Survey 2012: <http://internationalbudget.org/what-we-do/open-budget-survey/>, Transparency International Corruption Perception Index: <http://www.transparency.org/cpi2012/results>, Global Integrity Report: <http://www.globalintegrity.org/report>, Open Data Census: <http://census.okfn.org/>, WWW Foundation Web Index: <http://thewebindex.org/data/all/webindex/>

22 International Aid Transparency Initiative: <http://www.aidtransparency.net/>, Worldbank Open Data Initiative: <http://data.worldbank.org/>, FAO Open Data: <http://aims.fao.org/standards/agrovoc/linked-open-data>, Another example for external influence is the collaboration of the US Government with developing country governments on

One important external driver is the Open Government Partnership, which will be described in more detail below.

Reputation gain: Governments that take measures to increase transparency will in most cases gain in reputation. This is particularly true, if transparency measures are very visible and innovative and if the political costs of these measures are low. So, there is a risk, not only in developing countries, that open data initiatives are adopted for political reasons without delivering the promises of open data: comprehensive, relevant and up-to-date information, high accessibility and a more responsive government. Government that do not accompany open data platforms with wider public-sector reform or that provide low quality data may be motivated primarily by reputation gains.

5 The impact of open data initiatives in developing countries

Open data is still a relatively new phenomenon and evidence on its impact is scant. Therefore it is not yet possible to assess the impact of open data in developing countries. However, there are several efforts under way to provide evidence on the added value of transparency and on open data. In particular, the World Wide Web Foundation is currently launching a two year research project “Exploring the Emerging Impacts of Open Data in Developing Countries (ODDC)” funded by the International Development Research Center (IDRC).²³ It will analyse the claims made for open data, identify unintended consequences of open data policies and develop strategies through which open data can be employed as a tool for pro-poor and sustainable development. Related research work on the impact of transparent and accessible information (not necessarily open data) is undertaken by the Sunlight Foundation and by the Transparency and Accountability Initiative.²⁴

Until more evidence is available it is worthwhile to highlight key success factors for open data initiatives. According to José Alonso of the World Wide Web Foundation it is critical for any open data initiative to create a local open data ecosystems of data providers, data users and policy makers and to incorporate technical solutions into a broader reform agenda at the political, legal, organisational, economic and social level.²⁵ In addition to these factors there are challenges that are particularly relevant for the success of open data initiatives in developing countries and that need to be overcome : lack of robust statistical systems, lack of country-wide good internet connection including rural areas (connectivity), high prices of internet access and low literacy levels. Other limitations in

open data: <http://www.whitehouse.gov/blog/2012/06/22/growing-open-government-movement>

23 <http://www.opendataresearch.org/>

24 Research work by Sunlight Foundation:

<http://sunlightfoundation.com/blog/2013/02/12/whytransparencymatters/>; research by the Transparency and Accountability Initiative: <http://www.transparency-initiative.org/>

25 Presentation by José Alonso at Worldbank Event: “Open Government Data in Developing Countries: the Case of Kenya and Moldova” 3.11.2011, <http://bit.ly/oYO96j>

developing countries can be the degree of civil liberties and the capacity of media and civil society to use data effectively.

6 Role of OGP in the Open Data Trend in developing countries

The Open Government Partnership (OGP) was created in September 2011 by eight founding countries: Brazil, Indonesia, Mexico, Norway, the Philippines and South Africa, United Kingdom and the United States of America. Since then the total number of OGP member countries has risen to 58 (February 2013), out of which 30 developing countries (about 51 % of all members). The four key objectives of the OGP are

1. to increase the availability of information about government activities,
2. to support civic participation and feedback processes,
3. to implement the highest standards of professional integrity throughout an administration (including robust anti-corruption policies, whistle-blower protection and rule of law) and
4. to increase access to new technologies for openness and accountability.

These goals demonstrate a close proximity both to the objectives of open data initiatives in developing countries and to their means (provision of information and use of new technology). The question arising is to what extent OGP influences the open data trends in developing countries. To answer this question both the OGP membership among developing countries and their respective commitments made in the OGP framework will be analysed.

OGP Membership among developing countries: At first glance the OGP seems to be a club for the rich and the relatively rich countries. 77 % of all OGP members are either high-income or upper -middle income countries and only 3 OGP members (5%) are low-income countries.

Income Level	WB Classification	ODA Eligible	Former Eastern Bloc. ²⁶	% Countries in that income category	% of all OGP members	% of countries that are OGP eligible
High	21	Non	6	30	36	62% (20 out of 32)
Upper Middle	23	17	10	42	39	85% (24 out of 28)

26 High income countries from the former eastern bloc according to the World Bank: Georgia, Czech republic, Croatia, Estonia, Hungary, Slovak Republic; upper middle income from the former eastern bloc: Azerbaijan, Russia, Bulgaria, Latvia, Lithuania, Macedonia, Romania, Serbia, Albania, Montenegro; lower middle income from the former eastern bloc: Armenia, Mongolia, Moldova, Ukraine.

Lower Middle	11 (1 LLDC)	11	4	20	19	80% (12 out of 15)
Low	3 (2 LLDC)	2	0	8	5	60% (4 out of 6)
Total	58	30	20	100	100	

But the picture changes if eligibility is taken into account. Only countries that meet certain minimum criteria on transparency and accountability can join the OGP. These minimum criteria concern fiscal transparency, access to information, disclosures related to elected or senior public officials and citizen engagement. At the moment 80 countries meet these minimum criteria. And many of these eligible countries have chosen to join OGP (last column in the table). If eligibility is taken into account it is clear that OGP is most successful in middle-income countries, not among high income countries. Nearly half of all eligible high-income countries have chosen not to join the OGP. In contrast, 85% of all upper-middle income and 80% of all lower middle-income who are OGP eligible, have become members. So the proposed reform agenda of OGP is particularly attractive to middle-income countries. The high number of countries from the former Eastern Bloc confirms the reform thrust of the OGP. From a regional perspective, OGP is dominated by Europe and America. This coincides with the distribution of open data initiatives around the world described above. There are 5 OGP members from Africa, 10 countries from Asia and no country from the Pacific region.

OGP Commitments by developing countries: All OGP members are required to develop a plan on how to reach the four overall goals at a national level. These commitments by national governments are published on the OGP website and vary considerably from one member to another. Looking at the analysis of these commitments provided by Global Integrity the OGP seems to have a big impact on promoting open data in OGP member countries generally (not just developing countries).²⁷ Of all activities proposed in the OGP commitments 190 activities are classified as being related to open data. The only other activity type that was more popular was e-government, for which 199 activities were tagged. Third and fourth on the ranking of focus areas are citizens engagement (131 commitments) and access to information (FOIA) (93 commitments). Other priority areas for OGP member countries are budgets and financial planning, sub-national governance, public servants and civil service, anti-corruption, procurement and capacity building /training. Whether or not open data initiatives in OGP countries will actually contribute to more transparency, accountability, participation and professional integrity in government is still to be seen. But the future commitments by OGP members represent an important increase in open data initiatives both in developing countries and in developed countries. Obviously it may be that OGP members would have planned open data portals even without the OGP, but the commitments suggest that the OGP does encourage open data initiatives and accelerates the open data trend in developing countries. In addition, the country

27 Blog post analysing the OGP commitments: <http://globalintegrity.org/blog/whats-in-OGP-action-plans>

consultations and the independent reporting mechanism required by the OGP can help to mitigate the risk of fig leave politics and to achieve transparency, participation and a more accountable government.

So, does the OGP have an impact on the open data trend in developing countries? Looking at the table of who joins the OGP and what the OGP members intend to do suggests, that indeed, the OGP is a big push for open data in developing countries. This analysis is confirmed both by civil society activists and OGP representatives.

7 Relevance for the EU

For governments and administrations in Europe there are two main conclusions to be drawn from the open data trends in developing countries.

Until now, there not many open data initiatives in developing countries. However, the work on open data portals already under way in many countries and the plans made in the context of the OGP indicate, that more and more developing countries will develop open data initiatives. Both internal and external pressure on governments to open their data in open formats will increase and governments will want to benefit from the reputation gains associated with open data. The OGP contributes to this trend and represents a big push for more open data in developing countries. The conclusion to draw from this analysis is that open data is in fact a global trend and not a niche topic. Sooner or later it will be the global norm for governments to provide public data in open formats. This should encourage European governments and institutions to continue to develop their own open data strategies and initiatives.

The second conclusion from the current status of open data in developing countries is, that outside of Europe governments and civil society place a lot of emphasis on transparency as a value in itself, accountability and citizen participation. In fact, open data is regarded by a good number of developing country governments as an important contribution to democratic development. These aspects have been less prominent in the European open data debate. It is true that the emphasis on transparency in developing countries can be partly explained by a reform backlog in these countries. The global open data trend can nevertheless be a reminder, that open data holds more potential than the development of weather and traffic apps. Open data can be part of profound political and administrative reform. The European open data debate should incorporate this important aspect of open data.

8 Conclusion

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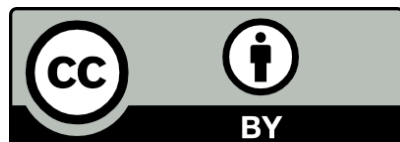
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About the Author

Claudia Schwegmann is a theologian, political scientist and consultant in organisational development and has been working in development cooperation since 1996. In 2009 she founded the OpenAid Project to promote aid transparency and open data in development. Since 2012 OpenAid is a project of the Open Knowledge Foundation Germany and Claudia Schwegmann is a board member of the Open Knowledge Foundation Germany.

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