Open Data in Developing Countries

Summary of Emerging Insights from Phase I

How can developing countries secure the full benefits of open data? What barriers are blocking greater impacts? And how can open data be implemented in ways that respond to local context, and that build on existing policy and practice foundations. To address questions like these, the Exploring the Emerging Impacts of Open Data in Developing Countries (ODDC) research network has been gathering information on open data activities across 13 different countries on three continents. Using a mixed-methods case study research, 17 local research partners have developed in-depth accounts on the supply, mediation and use of open data in diverse settings: from budget scrutiny to oversight of judicial systems. This briefing offers 15 initial insights generated from a preliminary synthesis of this research, offered as a basis for further conversations.

- (1) There are many gaps to overcome before open data availability, can lead to widespread effective use and impact. Open data can lead to change through a 'domino effect', or by creating ripples of change that gradually spread out. However, often many of the key 'domino pieces' are missing, and local political contexts limit the reach of ripples. Poor data quality, low connectivity, scarce technical skills, weak legal frameworks and political barriers may all prevent open data triggering sustainable change. Attentiveness to all the components of open data impact is needed when designing interventions.
- (2) There is a frequent mismatch between open data supply and demand in developing countries. Counting datasets is a poor way of assessing the

- quality of an open data initiative. The datasets published on portals are often the datasets easiest to publish, not the datasets most in demand. Politically sensitive datasets are particularly unlikely to be published without civil society pressure. Sometimes the gap is on the demand side as potential open data users often do not articulate demands for key datasets.
- (3) Open data initiatives can create new spaces for civil society to pursue government accountability and effectiveness. The conversation around transparency and accountability that ideas of open data can support is as important as the datasets in some developing countries.

- (4) Working on open data projects can change how government creates, prepares and uses its own data. The motivations behind an open data initiative shape how government uses the data itself. Civil society and entrepreneurs interacting with government through open data projects can help shape government data practices. This makes it important to consider which intermediaries gain insider roles shaping data supply.
- (5) Intermediaries are vital to both the supply and the use of open data. Not all data needed for governance in developing countries comes from government. Intermediaries can create data, articulate demands for data, and help translate open data visions from political leaders into effective implementations. Traditional local intermediaries are an important source of information, in particular because they are trusted parties.
- (6) Digital divides create data divides in both the supply and use of data. In some developing countries key data is not digitised, or a lack of technical staff has left data management patchy and inconsistent. Where Internet access is scarce, few citizens can have direct access to data or services built with it. Full access is needed for full empowerment, but offline intermediaries, including journalists and community radio stations, also play a vital role in bridging the gaps between data and citizens.
- (7) Where information is already available and used, the shift to open data involves data evolution rather than data revolution. Many NGOs and intermediaries already access the *information* which is now becoming available as data. Capacity building should start from existing information and data practices in organisations, and should look for the step-by-step gains to be made from a data-driven approach.
- (8) Officials' fears about the integrity of data are a barrier to more machine-readable data being made available. The publication of data as PDF or in scanned copies is often down to a misunderstanding

- of how open data works. Only copies can be changed, and originals can be kept authoritative. Helping officials understand this may help increase the supply of data.
- (9) Very few datasets are clearly openly licensed, and there is low understanding of what open licenses entail. There are mixed opinions on the importance of a focus on licensing in different contexts. Clear licenses are important to building a global commons of interoperable data, but may be less relevant to particular uses of data on the ground. In many countries wider conversation about licensing are yet to take place.
- (10) Privacy issues are not on the radar of most developing country open data projects, although commercial confidentiality does arise as a reason preventing greater data transparency. Much state held data is collected either from citizens or from companies. Few countries in the ODDC study have weak or absent privacy laws and frameworks, yet participants in the studies raised few personal privacy considerations. By contrast, a lack of clarity, and officials' concerns, about potential breaches of commercial confidentiality when sharing data gathered from firms was a barrier to opening data.
- (11) There is more to open data than policies and portals. Whilst central open data portals act as a visible symbol of open data initiatives, a focus on portal building can distract attention from wider reforms. Open data elements can also be built on existing data sharing practices, and data made available through the locations where citizens, NGOs are businesses already go to access information.
- (12) Open data advocacy should be aware of, and build upon, existing policy foundations in specific countries and sectors. Sectoral transparency policies for local government, budget and energy industry regulation, amongst others, could all have open data requirements and standards attached, drawing on existing mechanisms to secure sustainable supplies of relevant open data in developing

countries. In addition, open data conversations could help make existing data collection and disclosure requirements fit better with the information and data demands of citizens.

(13) Open data is not just a central government issue: local government data, city data, and data from the judicial and legislative branches are all important. Many open data projects focus on the national level, and only on the executive branch. However, local government is closer to citizens, urban areas bring together many of the key ingredients for successful open data initiatives, and transparency in other branches of government is important to secure citizens democratic rights.

(14) Flexibility is needed in the application of definitions of open data to allow locally relevant and effective open data debates and advocacy to emerge.

Open data is made up of various elements, including proactive publication, machine-

readability and permissions to re-use. Countries at different stages of open data development may choose to focus on one or more of these, but recognising that adopting all elements at once could hinder progress. It is important to find ways to both define open data clearly, and to avoid a reductive debate that does not recognise progressive steps towards greater openness.

(15) There are many different models for an open data initiative: including topdown, bottom-up and sector-specific. Initiatives may also be state-led, civil society-led and entrepreneur-led in their goals and how they are implemented – with consequences for the resources and models required to make them sustainable. There is no one-size-fits-all approach to open data. More experimentation, evaluation and shared learning on the components, partners and processes for putting open data ideas into practice must be a priority for all who want to see a world where open-by-default data drives real social, political and economic change.

The Exploring the Emerging Impacts of Open Data in Developing Countries is a multi-year research programme coordinated by the World Wide Web Foundation and funded by Canada's International Development Research Center (idrc.ca). In the first phase of the project, 17 developing country based research teams have been funded to carry out case study research. The next phase of the project, starting August 2014, is focussed on further research synthesis and cross-cutting analysis.

A more detailed version of this synthesis, along with available partner case study reports can be found at http://www.opendataresearch.org/emergingimpacts/

To keep in touch with developments from the project, sign up to the Open Data Research Network newsletter at http://www.opendataresearch.org.









Version 1.1.Updated to correct typos 21st July 2014. © The World Wide Web Foundation. This work is licensed under a Creative Commons Attribution 4.0 International License.