OPEN LAND DATA IN THE FIGHT AGAINST CORRUPTION

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INTRODUCTION

From 9th to 29th September 2019, Land Portal, Cadasta and GIZ co-hosted an online discussion focussing on the role of open land data in the fight against corruption. Drawing on over 100 contributions from 48 contributors covering six continents, the dialogue explored the opportunities and challenges for the use of open data as a tool to address land-related corruption.

Through the discussion, contributors sketched out a nuanced picture of how open land data might be approached, and pointed to the need for continued work on both the theory and the practice of land and corruption-focussed open data efforts. The examples and insights shared demonstrated the strong foundations that exist for an inclusive and responsible open land data agenda, yet also noted the research gaps to be filled, and the need for further network-building and outreach to embed open data, not as a magic bullet for anti-corruption, but as an important component of holistic anti-corruption strategies.

DISCUSSION BACKGROUND

The global data revolution has undoubtedly reached the land sector. Land information is increasingly created, stored and shared as data.

The land sector is regularly ranked among the sectors where people are most likely to pay bribes for access to services, according to Transparency International's Global Corruption Barometer. Corrupt government action and the looting of state property are often considered a priority development challenge. Open Data has been put forward as a tool to increase transparency, support innovation and increase civic engagement. Open Data is data that can be freely used, shared and built-on by anyone, anywhere, for any purpose. The argument that open data, as a key public good, empowers citizens to gain more insight on government spendings and decisions and gives them the power to hold their governments accountable for those actions, is one of the main arguments used in support of Open Data.

Still, land ownership data systematically ranks lowest on the Global Open Data Index or the Open Data Barometer: year after year, the land ownership dataset is marked least likely to be open. The Land Portal's State of Land Information reports piloted in four East African countries corroborate these conclusions. The land ownership chapter in the 2019 State of Open Data report also concludes that, when it comes to land ownership data, "*we are confronted by a transparency gap and a messy reality of patchy and overlapping recordkeeping and data systems*".

The question we are faced with is: how can we leverage the Open Data revolution to ensure that data related to land ownership becomes open in ways that can be used to tackle land corruption? In this debate we explored the potential for a step-change in support of and advocacy for open data on land ownership and land governance.

The dialogue was framed by three weekly 'provocations' along with guiding questions:

» **Discussion statement week 1**: "The Land Sector is not there yet. Before we can talk about Open Data, we need to have good data".

» **Discussion statement week 2**: "Open Data is not a magic bullet. It takes more than open data to fight corruption".

» **Discussion statement week 3**: "There is a guidance gap to open land data. Governments are not getting the necessary guidance to take action to open land data responsibly".

DISCUSSION SUMMARY & OUTCOMES

DATA ECOSYSTEMS: THE JOURNEY TOWARDS DATA AVAILABILITY AND USE

Developing an approach to open data for anti-corruption in land must overcome a triple challenge. Firstly, land data availability varies substantially across the world. Second, for the data that is available, gaps in coverage or in what it represents (such as gender bias in the information recorded against land titles), can make its use problematic. Third, whether or not it is appropriate to make data open depends on the social, political and cultural context, and upon the existence of robust institutions that will be able to use data in safe and ethical ways.

"Research on Open Data suggests that the environment is crucial for engagement with and usage of open data. In the case of land data, the political economy seems to be a strong and complicated factor in deciding whether land data can be opened up." - Rob Lokers, GODAN Action.

This complicates the provocation from Week 1 that "The Land Sector is Not There Yet: Before we can talk about open data, we need to have good data." There are places where land data is there, and it can be used against corruption. In others, data exists, but the contexts for use do not. To understand when we should talk about open data, we need to break down the category of land-related data, and to consider the specific dynamics in each territory that might attain to each dataset.

The (non-exhaustive) table below lists a number of the different kinds of dataset that could be deployed in anti-corruption work, as identified during the dialogue. For each one, it considers the government sources that may be involved in providing this data, and other sources that may be available, including crowdsourced data, citizen generated datasets, data from researchers, from remote observation, and from foreign governments. Although there was a clear view in the dialogue that the role of governments as a source of authority over land records cannot be replaced, other sources can play a role in identifying and acting on corruption.

For each kind of data, three columns exist indicating whether (a) there are potential privacy concerns with open publication of this data [Priv]; (b) whether the data might be used in aggregate to shape anti-corruption policy making and implementation [Pol]; and (c) whether aggregate or individual records from this data might be used in specific actions against corruption [A/C].

Note that some datasets are broken down by category or field, such as the division of land registry data into data describing government owned land, corporate owned land, and individually held land - and the distinction between land data that includes the name of an owner (which has clear privacy issues) vs. data that includes a gender but not a name (which may be relevant for monitoring policy goals). This points to the way in which risks and benefits of opening up certain data can be balanced, with a number of discussion contributions noting that opening up registration and transaction information about publicly owned land may be a good starting point.

	Government sources	Other sources	Priv	Pol	A/C
Cadastre (land parcels)	Land Agency or Ministry.		?	X	
Land registry					
- Public owned land	Sometimes data exists across a range of government departments, agencies or local units, depending on the type of land, and the tenure type.			X	X
- Corporate owned land			?	X	X
- All land ownership		Organisations such as Cadasta and Spatial Collective help communities create their own ownership records.			
Name of owner			X		X
Gender of owner			-	X	
Land transactions	Land Agency or Ministry.				
Public owned		Global observatories such as LandMatrix or OpenLandContracts		X	X
Corporate				X	X
All			X	X	X
Land use data	National Statistical Offices or other agencies	Remote-sensing projects; Private sector		X	
Licenses and permits data	Line ministries			X	X
Justice system data (e.g. court records)	Courts. Ministries of Justice.		X	X	X
Bribery data		Crowdsourcing projects		X	X
Corporate data	National company register	Foreign company registers	X	X	X
Politically Exposed Persons	?	Global projects such as OCCRP Investigative Dashboard.	X		X

An initial model of anti-corruption relevant land data, potential sources, and the presence of privacy concerns [Priv], policy setting uses [Pol] and direct corruption detection or enforcement uses [A/C]. Based on inputs to Land Portal online dialogue on Open Land Data in the Fight Against Corruption.

PATTERNS OF DATA AVAILABILITY

In many countries, land registration remains incomplete, and the digitisation of land records, even more so. Few countries appear to have all property titles in digital systems, and in many, such as South Africa, coverage is very low. New Zealand offered one exception in our dialogue of a country with a comprehensive digital cadastre. Notably, certain types of tenure may be under-represented in digital systems, either because of how digitisation has taken place, or because certain types of land have not historically been subject to registration. Many long-term digitisation programmes, such as Uganda's National Land Information System (UgNLIS), are ongoing, seeking to go beyond the existing 20-27% of land that is registered.

"Uganda's land is mostly customary tenure and not registered. This has created a gap of securing ownership and contributed to limited access of the Land data through UgNLIS" - William Kambugu, Uganda Ministry of Lands, Housing and Urban Development.

Land registration and digitisation projects, supported by donors or by domestic government funds, are seen as *"a necessary though not sufficient condition for conflict prevention and sustainable management [of land]".*[1] Replacing localised registration with centralised digital systems is seen, in itself, as a tool to reduce space for bribery and corruption. Concerns about the integrity of centralised datasets, and the possibility of these being tampered with, can be addressed through a mix of technologies, including regular publication of open data to allow illicit changes to be detected.

"The overwhelming majority of South African citizens face a 'no data' problem. Their rights in land remain largely invisible and at risk of capture. This has to be rectified in such a way that creates a universal, open and accessible system of land rights recordal underpinned by the requisite spatial data infrastructure and open data land administration systems." - Rick de Satge, Phuhlisani NPC.

Digitisation and land registration projects, however, need to be carefully designed so that they don't reproduce historical biases, and to avoid marginalised groups being excluded from the land registration process because of cultural or technical barriers. For example, discussion participants reported on pilot projects that have found conflicts between land ownership information discovered through on the ground surveying, and digitisation of historic records. The debate also described cases where, during digitisation, the exclusion of women from old land titles has been copied into digital systems, failing to capture new legal realities in the digitised dataset.

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1   GIZ Sector Project Land Governance - contribution to online dialogue on 27th September 2019

"To simply digitize existing records without updating them would not help to secure land rights—an inaccurate registry is not useful. The process of digitization without updating records could put women at risk." - Renee Gioveralli, Resource Equity.

PATTERNS OF OPENNESS

Through the discussion, a number of approaches were explored to manage tensions between openness and privacy. All recognised the importance of context, with one contribution putting the succinct question: *"What is the greater danger: data secrecy or openness?"*[2] - a question that will have different answers by country, context and stakeholder group. Discussions also explored on ongoing work to develop a responsible data policy that also takes account of Indigenous Data Sovereignty, and approaches to take steps towards transparency by starting with open data on state lands, only later thinking about individual property titles.

"People need some say over their data in places where protections are not in place. This empowers people in their own contexts to decide what open data means to them." - Amy Coughenor Betancourt, Cadasta Foundation

CONDITIONS AND CAPACITY FOR USE

There are few, if any, magic bullets to address complex challenges of corruption in the land sector. Use of open data, in particular, relies upon:

» having **usable and reliable data**;

» **hardware and software** to access the specialist file formats it is encoded in, or having **access to platforms** built by intermediaries;

» **an understanding of land governance**, and the cultural context of data about particular land;

» **Institutional frameworks** that protect privacy and allow anti-corruption action to take place;

» And having *"the **contacts** needed to gain a public voice and influence a debate, or the **political skill** to take on a well-resourced and savvy opponent".*[3]

As one contribution noted, this is often not just a question of capacity, but also of employment: are enough people in roles that afford them the time and resources to do the hard work of turning land data into advocacy and impact?

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2   Rami Sarayrekh - online dialogue contribution on 19th September 2019
3   Rebecca Ochong - online dialogue contribution on 16th September 2019

Getting all the 'inputs', 'processes' and 'outputs' of an open data theory of change to work together to produce outcomes and impacts is undoubtedly tricky, yet we saw at least one example in the dialogue of where, through interventions to provide training and build community, open data is being put to use. One post described training for journalists and activists to dig into large land deals data, resulting in *"breaking of stories that has held leaders accountable in Nigeria and Liberia".*[4]

"Journalists and activists sometimes are not well tooled to lead proper investigations on land. To enable them to develop better skills to fight land corruption, ILC launched an initiative in 2018 that trained journalists and frontline land activists on how to lead investigative reporting on land." - Juliet Tsuma, International Land Coalition Africa.

Ultimately, an ecosystem for effective use of land data in anti-corruption has to involve a wide range of stakeholders, including public sector, private sector and civil society. A combination of technical expertise, legal knowledge, and cultural awareness is critical. In cases where this capacity, and institutional frameworks for safe data use are lacking, then a large scale focus on opening up datasets may be premature.

The main enabling factor for open data to work well is the government's willingness to make data accessible and to embrace and act on issues disclosed by the data. It is however, important not to generalize the issue of political will. We have to unpack the various components of power and influence and analyse the implications of these for open land data initiatives." - Monica Kirya, U4 Anti-Corruption Resource Centre

This can turn the idea that, when it comes to open data, 'The Land Sector is Not There Yet' on its head. Instead, we can see that, with ongoing digitisation work and capacity building, the land sector is getting there, and strategic steps to open up datasets, build institutions, and to build capacity for data use, can contribute to improvements in open and accountable land governance. However, to accelerate progress, and make sure data supply and demand are kept in balance, there needs to be continued focus.

DATA IN ACTION

When we understand open data as a tool in the fight against land-related corruption, then we do not start from data, but instead start by looking at the problems it can help solve. There was clear consensus in the debate that future work on open data in anti-corruption needs to have a **bottom-up, user-need and demand-driven approach.** This needs to complement infrastructural work taking place to build standards and systems for interoperable data exchange.

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4   Juliet Tsuma - online dialogue contribution on 18th September 2019

"While open data provides an opportunity for improved transparency and accountability in the land sector, it is not a panacea for all the forms of corruption and malaise in the sector. The proliferation of open data must go in tandem with advocacy and capacity, as a way of creating awareness on land related issues and sharpening the technical skills among citizens to access, use and improve the data on land. Security and confidentiality of sensitive land-related data must also be ensured." - Francis Oloo, Technical University of Kenya

Being driven by user needs involves a recognition that the creation and use of land data is rarely politically neutral. Whilst in some other sectors, such as agriculture and aid, different stakeholders may have been able to find a reasonably settled consensus about what to open up and how, in land, there is likely to be ongoing contestation. By starting from defining specific 'user needs' for data it becomes possible to find a better balance between openness and privacy. For example, in some instances, giving civil society activists ability to search and discover where records exist, without disclosing full title details, may be enough to support anti-corruption efforts. In such cases, it may also be possible to apply cryptographic tools to provide a space between open and closed, where claims can be verified without their content being fully revealed.

"The definition of open data suggests that "anyone, anywhere" can share and contribute to the data set. How do we know the veracity of the data being contributed? And how do we know if the information shared is current?" - Yuliya Panfil, New America's Future of Property Rights program.

Certain common user needs (discovering records related to a given location, or company) might benefit from 'global' tools and platforms that are *"accessible and intuitive, not just to professionals but to the layperson"*.[5] Yet creating such platforms will require considerable work on interoperability and standardisation, as well as on issues of governance, and how to combine state-created data, with data created by communities, including indigenous groups. Contributions to the discussion highlight that there may be more work to be done to articulate a clear vision for the kinds of global tools and services that should exist for open data in the land sector, to develop a technical approach to deliver this, and to link these into anti-corruption efforts.

However, regardless of whether data is attached though local sources or global platforms, data alone is not enough for impact. During our discussion the team from OpenLandContracts.org described how they have paid particular attention to who will access their library of annotated land deals, and have paired provision of a website site with guidance, training modules and even mini-grants for global south-based CSOs who work with project-affected communities

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5   Yuliya Panfil - online dialogue contribution on 18th September 2019

to unlock and operationalize the information they find in relevant investment contracts: often printing out and translating online resources. This approach, linking data with local engagement, offers opportunities to shift power to local communities, and to take action on specific corruption issues.

"Technology and international initiatives can have immense potential for transformative change, but it is important to keep the perspectives and needs of in-country actors foremost in mind." - Sam Szoke-Burke, Columbia Center of Sustainable Investments.

BRIDGING THE GAPS: RESEARCH, KNOWLEDGE, NETWORKS

Given that there are situations in which open data can be a tool of anti-corruption efforts in land why do we not have more case studies and examples to draw upon? There were few concrete case studies of impact shared in our discussion. In part, this may reflect research framing and priorities (such that extant cases have not been documented), but it also appears that the potential data ecosystems and conditions for effective data use described above are rarely aligned in practice. Our discussions pointed at a number of reasons for this:

» **The technical capacity gap.** Many governments remain at low capacity when it comes to managing land data systems. Donor or domestically funded land information systems rarely have in-built features to support the selective opening up of data. Even high capacity governments, like New Zealand, have had to put considerable effort and resources into maintaining a robust open dataset of land registration.

» **The political-economy gap.** Governments may lack the incentives to improve transparency of land records, particularly in cases where data is managed in different institutional silos, and there may be competing interests inside government. In cases where agencies currently generate revenue through selling access to data, this also presents a barrier to opening up.

» **The advocacy gap.** There hasn't been a concerted and focussed campaign on open land data and to date it has not been clear what advocacy should specifically be asking for. Organisations working on land reform often have to work with government and so may be reluctant to push on openness. As one comment noted: *"Misinformation of policy makers and funders has caused an 'over-cautious' approach to the call for open data in the lands sector."*[6]

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6   Clinton Omusula - in online dialogue on 13th September 2019

"Continued advocacy and sensitization are required as a corrective mechanism which sets the stage for engagement to demystify what open data is, its benefits, potential risks and the degree to which data can be made open without compromising privacy and security"
- Clinton Omosula, Global Land Tool Network Secretariat.

Suggested approaches to address these challenges included better indicators of openness in the land sector, better networking of the advocacy community, and more work on the enabling environment for openness of land data. A number of comments also suggest that donor focus on open land data needs to be led by government interest in reform, rather than donors imposing open data projects. To get to this point may require governments to better understand the benefit case for greater openness around land ownership and transactions, including both anti-corruption benefits, and wider benefits for their policy agendas. For example, a number of contributions note that innovation, rather than anti-corruption, may be the more salient policy driver for opening up data in some countries.

The discussions identified a number of areas for intervention:

» **Research**. Improved quantitative and qualitative frameworks for tracking the availability, use and impact of open land data in anti-corruption efforts, and in assessing the readiness of different territories to publish and use open land data, would assist in prioritizing actions and investments, as well as better estimating the return on investment brought by work on openness.

» **Refining implementation models.** Discussions pointed to the many different cultural and contextual considerations that mean there cannot be a one-size-fits-all was to approach open data in the land sector, but that instead it needs to respond to the particular state of land registration and governance in each territory, and the relative balance of power between different actors. However, this does not mean there is no space for global action. A clear shared framework on approaches to open and deploy land data against corruption could address a hierarchy of datasets to publish, the pre-requisites (legal, institutional etc.) for publication, the wider reforms these can form part of, and appropriate capacity building interventions to consider.

» **Building networks.** Most important of all, discussions noted the importance of multi-stakeholder networks, bringing together different groups and professional experiences, to identify, support and enact reforms. National-level multi-stakeholder groups might involve government, civil society and private sector, as well as incorporating technical, land policy, civic engagement and legal experts. Globally and regionally, there is a need for continued knowledge sharing amongst land-governance, anti-corruption and open-data practitioners: both through focussed meetings, and through open-data related activities within wider sectoral conferences.

Multi-stakeholder platforms are essential to bridge the gap between those conducting and contributing to research on land and corruption, to those that will use data to inform policy, such as governments. Bringing these different actors around the table for a common objective is a good way to build these connections." - Land Matrix

Importantly, efforts on open data and anti-corruption should not be seen as separate from wider land-sector reforms. Recognising the considerable donor investments already going into land governance systems, and noting that, unless the frameworks alluded to above show reasons not to embed openness in some particular context, then it should be secrecy rather than openness that requires justification.

DISCUSSION CONCLUSIONS & RECOMMENDATIONS

Open data has been part of the global policy agenda for a decade. A global anti-corruption agenda emerged around two decades ago. Land governance and land registration is a much much older field. This dialogue demonstrated however, that in the last decade, considerable nuance has developed over how principles of 'open by default' might apply in the land sector, and particularly to questions of power and corruption. However, change will not come overnight, and documented examples of data availability, use and impact are scarce. Entrenched political challenges need to be overcome, technical capacity built, and publication of data aligned with the capacity of anti-corruption actors to engage with, and act upon, the data made available. By thinking and working politically, those backing anti-corruption work should be able to identify strategies to integrate open data into their work, and to maximise the chance of positive impacts.

This dialogue began to outline strategic steps, such as an initial focus on public, or corporate, land ownership and transactions, and the articulation of standards that would allow data to be brought together across silos. In looking ahead at next steps, we call on stakeholders to:

» **Supporting baseline and impact research.** To better track of efforts to open up data in the land sector we need more sophisticated indicators. These need to go beyond the Open Data Index and Barometer measures often cited to capture a wider range of land-related datasets, and to better assess country readiness for open data efforts on land. In parallel, there is a need for case study work that can better document cases of land data use within anti-corruption efforts. Given that absence of evidence is not evidence of absence, without targeted research it will remain difficult to identify and quantify the returns on investment in open data strategies for land data.

» **Engage in experimentation and learning.** Recognising the diversity of contexts where land data might be used for anti-corruption work, and the range of levels of readiness to engage with open land data, there is no one-size-fits-all model that can be applied to support data use. Instead, drawing on learning from past projects, stakeholders should identify opportunities to experiment with finding politically-aware best-fit approaches to empower different stakeholders to draw on open data as part of their anti-corruption toolbox.

» **Develop regional and global networking & knowledge-sharing.** Efforts to incorporate an open data track into anti-corruption and land-governance events, and to support the development of a land, open data and anti-corruption community of practice, are needed to deliver ongoing sensitisation to open data concepts, and to help develop the skills needed to translate open data and anti-corruption ideas into practice in the land sector.

In pursuing each of the goals above, we encourage stakeholders to build on this dialogue and to share case studies, good practices and learning through the Land Portal.

You can read all the contributions at https://landportal.org/debates/2019/open-land-data-fight-against-corruption summary posts focussed on the specific questions asked each week are available below.

Week 1: Is the land sector there yet?

Week 2: Designing bottom-up, user-need & demand-driven approaches

Week 3: Moving towards a model for open data in land governance?