

Land Debate on Open Data and Land Governance

An aerial photograph of a rural landscape. In the center, a small village with a cluster of buildings and a church spire is visible. The surrounding area is a patchwork of green and brown fields, some of which are divided by hedges. A river or stream flows through the landscape, and a bridge crosses it. The overall scene is a typical rural setting with a mix of agriculture and settlement.

A discussion on the Land Portal
facilitated by Cadasta Foundation
and the Land Portal Foundation



The Land Portal aims to improve land governance to benefit those with the most insecure land rights and the greatest vulnerability to landlessness through information and knowledge sharing. The Land Portal values multi-stakeholderism and partnership and works across stakeholder groups to promote participation in land governance. The Land Portal is based on open sources, open data and open content, and promotes open approaches with partners, seeking to catalyze and support greater sharing, collaboration and innovation in the land governance community. The Land Portal believes local ownership and encourages content creation and dissemination to take place through local partners, groups and networks, supported and facilitated by the Land Portal team.

For more information, visit the Land Portal at www.landportal.info



Cadasta Foundation is dedicated to the support, continued development and growth of the Cadasta Platform – an innovative, open source suite of tools for the collection and management of ownership, occupancy, and spatial data that meets the unique challenges of this process in much of the world.

We provide the tools and resources for testing new approaches to capturing land and resource rights data and promoting the adoption of 'fit-for-purpose' technology and processes. Incorporated as a non-profit, federally-recognized 501(c)(3) organization, Cadasta Foundation aims to simplify, modernize, and expedite the documentation of land and resource rights in places where it does not exist today.

For more information, visit Cadasta at cadasta.org



Background

Across most contexts, government data sources on land are largely inaccessible, from land administration data, such as parcel data and ownership information to land investments, contract data and even policy information. In considering data on property ownership specifically, the latest version of the Open Data Barometer shows only two countries, New Zealand and the United Kingdom, obtained a full 100% score on the topic of Land Ownership. When this land administration data is made available, it is commonly made public via a web portal rather than as open data. However, governments are not the sole sources of land data. For example, international organizations such as World Bank, the United Nations and numerous bi-lateral donor organizations publish land related data, while countless NGOs may participate in community mapping and policy analysis. Beyond EU Directives for geospatial datasets, common principles and processes are lacking for determining what data should be open, with often differing interpretations among EU Directives. Finally, questions of how to tackle privacy and security risks to vulnerable populations remain disputed, leading NGOs, governments and international institutions to dismiss open data entirely.

However, with an ambitious 2030 Agenda for Sustainable Development, there is an increasing need to pool data resources toward solving global challenges -- while protecting the rights of vulnerable populations. In September 2016, Cadasta Foundation and the Land Portal Foundation teamed up to facilitate a conversation on these issues. Our aims were to better understand the current landscape, potential impacts as well as illustrate the unique challenges in opening land data in



order to begin figuring out the solutions. Within the Land Portal platform, we heard the points of view of 26 participants from government land agencies, international institutions and NGOs. Throughout this report, we've summarized the main themes that surfaced throughout the three-week Land Debate.

Current Landscape

Demand for open data

"In the context of land governance, moving towards open and transparent data represents a significant opportunity to build systems that engage citizenry and give stakeholders access to the same information, thus leveling the playing field. "

- Iris Krebber, DFID

Participants expressed a general concern regarding a lack of transparency in land, explaining that difficulties arise when information about land rights is difficult

to obtain. In Cambodia, for example, public lands are subject to overlapping claims by government agencies and local, vulnerable communities are often the ones who may be displaced in the process of sorting out claims. As Malcolm Childress of Land Alliance stated: “a lack of coherence in the data in these situations has led to conflict and mismanagement that has real costs for smallholder farmers, indigenous peoples and public forests.”

Most commonly, open data in land was deemed essential for social good efforts, such as monitoring corruption and securing property rights.

“Data on the customary lands of local communities is crucial to advocacy efforts, securing legal recognition of communities’ land and resource rights, and measuring global progress on this critical issue.”

- Jamie Kalliongis & Jenna DiPaolo Colley, Rights and Resources Initiative (RRI)

Land assets are employed to aid in money laundering and governments are often involved in large-scale land deals. Participants called for open data on public land ownership, land contracts and property values to support these efforts. As Annette Jaitner of Transparency International (TI) explained: “open data is an important requisite for transparency, accountability, participation, and integrity.”

Peter Rabley of the Omidyar Network argued that limitations imposed by government on the use of land datasets encourages monopolistic behaviors by limiting the number of businesses that could add additional value to this information and cites the UK Ordnance Survey as an example. In contrast, releasing this data openly allows for maximum re-use and encouragement of the geospatial industry.

Government officials also chimed in to cite the benefits that open land data can have on decreasing duplication efforts by governments and improving service delivery. Elizabeth Stair, CEO of the National Land Agency in Jamaica explained that the environmental and planning agencies need data to inform development policies while the Health Ministry may need to identify landowners during a health or safety emergency.

Finally, participants also expressed a need for national and cross-country datasets to solve global problems. According to participants, successful implementation of the 2030 Agenda for Sustainable Development will require collaborative efforts, data coordination and sharing across the land community.

“The implementation of (the land rights) indicator can and should benefit from new sources of global data. New waves of data will prompt conversations, will create demand for action, will add visibility to land rights related issues, and will hopefully lead to substantial improvements on the ground.”

- Diana Fletschner, Sr. Director of Research and Evaluation, Landesa

Existing Use-Cases

Throughout the debate, participants shared compelling open data use-cases implemented by themselves and others toward the aims of securing land rights and enhancing accountability in land investments. The Rights and Resources Initiative has been tracking forest tenure rights and the amount of forestland legally owned by or designated for Indigenous Peoples and local communities since 2002 relying heavily on government data. Open Data Myanmar shares



unbiased and verified data on land conflicts in Myanmar associated with investment projects to shine a light on the detail of land conflicts and aid in resolving disputes. Openlandcontracts.org is a searchable repository of publicly available investor-state contracts for agriculture and forestry used by the Centre pour l'Environnement et le Développement (CED) in Cameroon to monitor land-based investments and to hold parties accountable to their investment-related commitments. Governments also use this platform to gain a better understanding of commitments used in comparable contexts to improve their future negotiations. Often these examples combined government data sources with datasets held by civil society organizations (CSOs), either crowd-sourced and verified or collected through community mapping exercises. CSOs currently play a crucial role in displaying realities on the ground.

We were surprised to see use-cases for land data that demonstrate the need for land data outside these traditional uses. For example, in Kyrgyzstan, the government wanted to register everyone in elections, but needed addresses. The elections agency looked toward the land agencies to provide this information. This use is a demonstration of the alignment of technology with political incentives toward the aim of reducing inefficiencies within government with land agencies defaulting as the easy and cheap place to find this information.

Barriers to Openness

A couple major themes were cited as challenges in the move toward greater openness in land data: privacy and concerns about data quality. Several participants believed that there are certain datasets that should be kept closed for privacy and security reasons. For example, in the EU, personal data has a broad scope that includes location data as a possible identifier. Therefore, an address or parcel identifier could be regarded as personal data and therefore be restricted for access.

Occasionally data may be deemed sensitive by the individuals the data is about, particularly when working with indigenous or forest-dwelling communities. Participants cautioned that community mapping may exacerbate local tensions between and within communities regarding land disputes, and some communities may worry about spatial data being shared publicly. Kaitlin Cordes of the Columbia Center on Sustainable Investment (CCSI) explains: "any new transparency or open data intervention should be assessed ex ante to review the possible implications for all stakeholders, and particularly for those who are in the most vulnerable or precarious situations." The sensitivity of certain datasets is dependent on context as well as cultural views of privacy, making it difficult to determine which datasets should be deemed open.

Within contexts with complicated land ownership schemes or where there are few reliable official data sources, creating a unified portal for land information is difficult. For example, approximately 70% of land in Africa is still governed under customary tenure regime, with limited or no data, including cadastre maps. However, some participants explained that, if combined with proper mechanisms for processing feedback from data users, opening data can actually help land administration agencies enhance data quality and support them in the protecting the rights of individuals.

“In the case of data [quality] issues, opening the data can be considered an opportunity instead of a threat”

- Dick Eertink, NL Government



Going Forward

Trend Towards Open

Despite the current closed landscape and perceived challenges, participants acknowledged that land information is becoming more open. Elizabeth Stair, CEO of the National Land Agency in Jamaica anticipates that “more data will become open over time as data on land information is important to sustainable development. Persons are increasingly interested in statistical data, such as, the number of parcels of land with and without registered titles or number of real estate transactions in a given year or number of properties sold under powers contained in a mortgage, to make informed decisions.”

In looking toward the future, we heard recommendations for how practitioners might best implement open data. Accessibility is a key factor to be addressed. While open data has potential uses for a wide range of stakeholders, each audience has specific needs and open data tools should be tailored to the user group. “Accessible data” to a researcher may mean that the data is available as a shapefile. While a shapefile is useless to a smallholder farmer, being able to access data for free may be hugely important.

Members of the open data community even challenged us to think beyond initial conceptions of “datasets” in tackling implementation challenges. Tim Davies explained that while datasets are often very blunt, structured models of displaying information, the reality of what make up land rights are highly complex, layered and overlapping documents. There is a need to take a more sophisticated approach regarding the technical structures for capturing these rights as well as our understanding for what land datasets tell us.

“The mental model that we come with about what land data is from the open data community is an impoverished mental model when it is measured against the reality that is land rights. I hope the future holds more sophisticated thinking around the different layers of rights within land data.”

- Tim Davies, Open Data Consultant

Responsible Data Solutions

Key barriers to opening land data highlighted throughout this debate and reflected in Cadasta's open data project include concerns about personal privacy, power asymmetries and security concerns, frequently referred to as responsible data challenges. Throughout the debate, participants highlighted interesting ways to balance these issues with openness.

In grappling with these issues, Landmark, a global platform of indigenous and community lands, decided to only share information that is already publicly available, or voluntarily provided by communities, organizations, researchers, and other individuals. They also protect data provided by communities under a data-sharing agreement. Namati has been experimenting with a "free, prior and informed" approach to these issues. By confronting these issues at the beginning and then revisiting, they hope to empower communities as data owners and ensure that they have clear permission before sharing or hosting any data that may negatively expose communities.

"Too often, these questions are left until the end of the mapping process (if addressed at all) and by that point the power dynamic is worsened because the organization is often holding the data and the access to the final map products, which the community so badly wants."

- Marena Brinhurst, Namati

With regard to government land data, Jolyne Sanjak at Landesa advocated for a balance between transparency and safeguards, explaining that this data could be stripped of personal information with the same techniques used for survey data.

Finally, participants called for stronger governance structures. Open data cannot replace strong land governance and caution should be taken in opening data when these structures are weak. According to Francois van Schalkwyk of the Web Foundation, simply putting data on a platform isn't enough, "there needs to be the potential to change the behavior of those in positions of power."