

Changing the Focus: Moving Beyond Siloed Monitoring of Progress Towards Inclusive Action to Achieve the SDGs

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SUMMARY

In September 2015, world leaders unanimously approved the Sustainable Development Goals (SDGs), a comprehensive set of 17 goals and 169 targets, referred to together as the 2030 agenda. Land rights were prominently included in the targets and thus finally acknowledged by the wider development community as an essential element to achieving sustainable development.

The land sector now has the responsibility to bring this forward and to ensure that data collection and data monitoring are carried out, and that required and specific action is being taken to get close to these targets. However, the broad range of land-related data and information needed to effectively monitor the land-related indicators in the SDGs has thus far been largely inaccessible, unavailable, or dispersed across various websites and databases. A *data revolution* is necessary for the success of the SDGs, but while we tend to focus on data availability, data availability is only truly powerful if data is presented in a way that is easy to use and interact with. A significant question moving forward is how does one ensure competing efforts are harmonized to monitor progress against the SDGs for the various land indicators? And further to this question, once progress against these targets has been assessed how can collective efforts focus on their achievement?

In order to achieve the SDGs land-targets by 2020, there is a need to build capacities of more actors to engage with and take action based on monitoring data. While engaging in monitoring initiatives is the primary responsibility of National Statistical Offices, this is something that should not be left solely to NSOs or data scientists. To achieve the SDGs, we need a much broader community working and contributing towards these goals. In this paper, we want to explore how we can harmonize the ongoing monitoring initiatives and, most importantly, present this monitoring data in a way that a large community, with various levels of expertise, can all contribute their part in achieving the SDGs.

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1. INTRODUCTION

The “Data Revolution” is such a well-established and widely recognized concept within the sustainable development sphere now, that it is hard to believe it has only been an integral part of the development agenda for the past few years. With the development of the post-2015 agenda, the High Level Panel appointed by UN Secretary General Ban-Ki Moon expressed a need for such a “Data Revolution” to enable the transformative action necessary to respond to the demands of an incredibly complex development agenda. The High Level Panel recognized that better data and statistics will help governments to track progress and make sure decisions are evidence-based, as well as strengthen accountability. Most importantly, the High Level Panel acknowledges the need for a multi-stakeholder approach to such a data revolution: “This is not just about governments. International agencies, CSOs and the private sector should be involved.”

With the inclusion of several land indicators in the post-2015 agenda - the Sustainable Development Goals - the data revolution has very noticeably also reached the land sector. Data collection, analytics and monitoring have been hot topics of discussion within the land community. New technologies and innovations to capture, monitor or analyze land data are increasingly being developed and presented, for improved public service provision but also beyond that, almost offering to be a panacea to achieving land tenure security. These innovations could very well be the catalyzing factor that is necessary to bring this data to a level where it can be put to good use to instate the change we are all working towards, at a speed and at a scale that would otherwise not be possible.

However, one critical element of this data revolution as highlighted by the High Level Panel in 2015, is at risk to be overlooked: the multi-stakeholder, inclusive approach. In this paper, we aim to investigate how we can collectively ensure that we have harmonizing - instead of competing - efforts to monitor progress against the SDGs for the various land indicators? And furthering this question, once we know where we stand in terms of progress against these targets, how can we ensure that we can move past siloes, to collectively work towards achieving them?

In order to achieve the SDGs land-targets by 2020, there is a need to build capacities of a larger variety of actors to engage with and take action based on monitoring data. To achieve the SDGs, we need a much broader community working and contributing towards these goals. In this paper, we want to explore how we can harmonize the ongoing monitoring initiatives and, most importantly, present this monitoring data in a way that a large community, with various levels of

expertise, can all contribute their part in achieving the SDGs. In short, we want to explore how we can close the gaps at all levels of the data cycle.

2. THE DATA REVOLUTION AND THE SDGs: HOW DO THEY FIT TOGETHER?

Having and using information has always been a powerful force for change, helping to fight corruption, enabling citizens to participate more fully in public life and allowing people from all walks of life to exercise their fundamental human rights. Considering data is now often referred to as the “lifeblood of decision-making” or part of the “fabric of today’s societies and economies”, it is hard to imagine that less than two decades ago, there was hardly any data flows happening online.

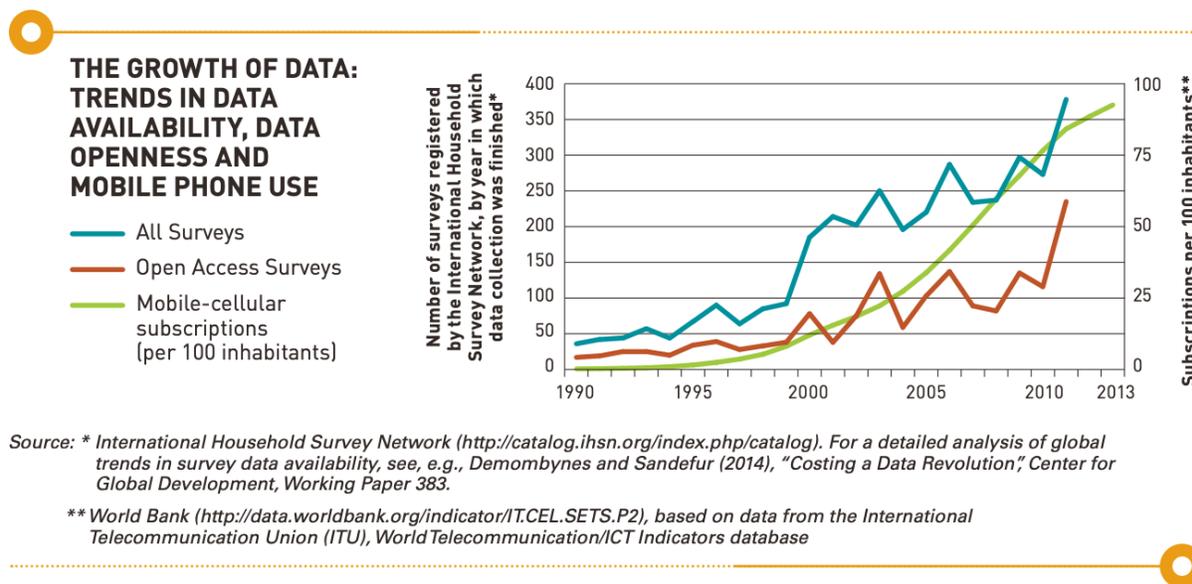


Figure 1: Exponential growth in availability & volumes of data

In 2013, it was estimated that 90% of the data in the world was created in the last two years. The graph above from the UN’s Independent Expert Advisory Group on a Data Revolution for Sustainable Development (IEAG) shows that not just the ‘traditional’ sources of data, such as the household surveys, have increased, but there has also been an exponential increase in new sources of data, such as mobile-cellular subscriptions.

This trend is also noticeable in the land sector. Where comparable land tenure data between countries was traditionally derived from National Agricultural Censuses, we have seen an exponential growth in apps and technologies to map plot boundaries and land tenure systems within communities. The result of such innovations is that the number and types of data

producers are increasing - anyone can be part of the data-discussions - and thus an enormous wealth of data is becoming available.

This continuously growing body of data as well as increasing demand for data is what we call the Data Revolution. How does this fit together with the Sustainable Development Goals? It is collective knowledge that the SDGs contain certain targets, and indicators have been established to measure these targets. Data is needed to measure progress and whether, ultimately, we will have reached these targets come 2030.

The presence of the Data Revolution makes the SDGs process considerably different than when the development sector was following the Millennium Development Goals. If we are open, we do not have to wait on strenuous processes and bureaucratic organizations to know where we are globally and how much work needs to be done to achieve our common goals of the SDGs. The Data Revolution should be seen as a vehicle, a catalyzer that can enable the development sector to know and act faster.

Better yet, integrating different types of data, from different sources, and showing differences in numbers between traditional data sources with these new sources, enables the development sector to get a more holistic view at the current situation, resulting in high quality *information* as opposed to raw *data*.

Thus, the Data Revolution can benefit the process of achieving the Sustainable Development Agenda immensely, not only by creating a momentum for data comparison and bringing various rich sources of data together in order to increase its collective quality, but also by enabling this discourse to become more inclusive. However, there are a few critical caveats that need to be considered for the Data Revolution to be able to reach this potential that we would like to discuss in this paper: inclusivity, collaboration and ultimately, universal data use that can inform the change we seek.

3. THE DATA REVOLUTION: PROMOTING INCLUSIVITY OR POLARIZATION?

The Data Revolution in its ideal form brings different perspectives together and allows anyone and everyone to benefit from the richness of data available. However, we still have a long way to go before the Data Revolution reaches its ideal form. We talked about the exponential growth in number of apps and technologies that can integrate interoperable data and thus make it more useful for a wider audience. This is a great development, but triggers an important question: what and whose data is suitable for such an application?

It is an illusion to think that if there is data and there is a certain technology or app, the two can automatically be combined and miraculously invoke positive impact at the local level. The word “data” is often loosely used to indicate any kind of information, knowledge or perspectives; this

way, data can exist in many ways, shapes or forms. In order for “data” to be adapted and used in new technologies and apps however, it needs to be highly curated, adopted to international standards and published in a format, which altogether makes the data interoperable. This interoperability is exactly where the *exclusiveness* of these technology and innovation trends lies. Because the datasets that are interoperable are those published by governments in the global North and large international agencies such as the World Bank and United Nations agencies. But are grassroots or government data and perspectives from the Global South interoperable and therefore suitable to use in such technologies? According to our research, almost never.

The Land Portal has conducted a rigorous interoperability-compliance of datasets and databases that cover critical topics of land governance in four countries in Eastern Africa as well as South Africa. The critical topics have been identified through careful analysis of indicators in several global and regional monitoring initiatives, including the SDGs but also the Voluntary Guidelines on the Responsible Governance of Tenure, Monitoring & Evaluation of Land in Africa (MELA) and the Africa Data Revolution report, among others. An ambitious scoping study, involving desk top research, stakeholder surveys as well as peer review by multi-stakeholder platform, provides the basis of our data interoperability assessment. This assessment is based on internationally recognized criteria, such as those developed by the World Web Foundation, Open Knowledge International as well as Open Data Watch, the European Union and OECD. This research will be followed by capacity building efforts in-country, specifically targeted to the identified data holders and the gaps in interoperability-compliance in their own datasets, ultimately aimed at strengthening the local data ecosystem in the country.

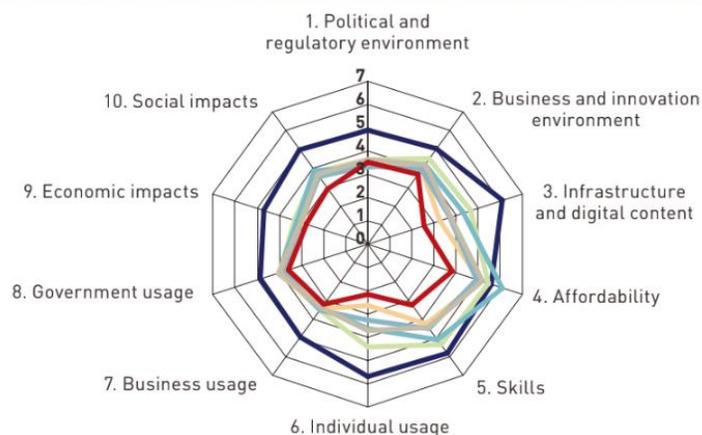
The Land Portal has completed the interoperability-assessment of one of four pilot countries in East Africa and the results are staggering. Next to none of the local sources studied thus far comply with the internationally recognized principles of open data and interoperability. While at the global level, we keep talking of ‘data’, our research shows that 80% of key land information from local sources is actually to be found in *documents*. Actual raw data comes largely from international organizations, often from the United Nations or large research institutions, and the government. Though the latter category can hardly be called consistent in opening up its data, especially when it comes to land data.

Not only is there an inequality when it comes to data provision between global and local sources, but there are also significant gaps in access and use of data between users in the global North and the global South. Many people, and a majority of those people are based in the global South, are excluded becoming part of the Data Revolution because of issues related to language, poverty, lack of capacity (in skills to use data but also lack of technological capacities to build and work with data infrastructures), remoteness, prejudice and discrimination. Take the example of Nicaragua, where the price of a mobile broadband subscription exceeds 10% of the average monthly GDP per capita, compared to France where this is only 0.1%.



INEQUALITIES IN ACCESS TO AND USE OF ICT SERVICES*

- Advanced economies
- Southern, Central and Eastern European Countries
- Commonwealth of Independent States and Mongolia
- Developing Asia
- Latin America and the Caribbean
- Middle East and North Africa
- Sub-Saharan Africa



* Regional score averages based on the Global Information Technology Report 2013, by the World Economic Forum



Figure 2: Inequalities in access and use of ICT Services across the world

4. THE DATA REVOLUTION: COLLABORATION IN THE LAND SECTOR

A “Data Revolution” is indeed necessary for the success of the SDGs, but while we tend to focus on data availability, data availability is only truly powerful if the data at hand is presented in a way that is easy to use and interact with. How do we ensure that we have harmonizing - instead of competing - efforts to monitor progress against the SDGs for the various land indicators? And furthering this question, once we know where we stand in terms of progress against these targets, how can we ensure that we can collectively work towards achieving them?

The broad range of land-related data and information needed to effectively monitor the land indicators in the SDGs has been inaccessible, unavailable, or dispersed across various websites and databases. In many parts of the world, there continues to be a general lack of understanding and awareness of the land indicators in the SDGs, the framework for monitoring and reporting at the country level and the roles of various actors involved in the SDG process. Numerous monitoring initiatives have been established that aim to track tenure security, including customary tenure rights provided for by indicator 1.4.2 and in support of continuum of land rights, and secure women’s land rights as key components of achieving SDGs indicators 1, 2, 5 and 10, among other goals. In addition, related and complementary initiatives are engaged in land monitoring. The multiplication of initiatives shows a great need to consolidate and harmonize approaches in a coherent way that is useful for decision makers, and in particular for the National Statistical Offices (NSOs) throughout the world who are responsible within governments for the long-term implementation of monitoring systems for the SDGs. Some of these monitoring initiatives include Monitoring and

Evaluation of Land in Africa (MELA), the Global Property Rights Index (PRIndex), the Global Donor Working Group on Land Platform on SDG Indicator 1.4.2 and Friends of the Custodians Committee, the Global Land Indicators Initiative (GLII) and Landex.

Having identified that the broad range of land-related data and information needed to effectively monitor the Sustainable Development Goal (SDG) land indicators were inaccessible, unavailable, or dispersed across various websites and databases, and taking into consideration that there was a general lack of understanding and awareness of the land indicators in the SDGs, the framework for monitoring and reporting at the country level and the roles of various actors involved in the SDG process, the Land Portal Foundation and the Global Land Tool Network (GLTN) in September 2017 launched the [Land and the SDGs Platform](#), to make information related to the land indicators in the SDGs widely available. The objectives of this platform are to enhance understanding and awareness of SDG processes, while mobilizing the land communities' to support efforts by the custodian agencies to achieve reclassification of land indicators through strategic promotion, campaign and advocacy efforts, to develop and make available communication materials and information that is interoperable and follows consistent, harmonized metadata standards for the SDG land indicators and increasing access and use of relevant data and information on SDG land indicators and Global Property Rights Index indicators by aggregating them into a free, user-friendly, visible, and accessible section of the Land Portal.

The multiplication of monitoring initiatives is also true of the Voluntary Guidelines on the Responsible Governance of Tenure (VGGT). The VGGT calls upon States to recognize and protect the legitimate tenure rights of indigenous peoples and to consider adapting their policies and legal and organizational frameworks to indigenous peoples' tenure systems. Some of the VGGT monitoring initiatives include the Land Governance Assessment Framework (LGAF), the VGGT Assessment Toolkit and the Legal Assessment Tool (LAT), to name but a few. Despite all of these initiatives, key information about if and how countries are adopting the VGGT remains fragmented, difficult to locate, and/or not easily accessible or usable, which has made it challenging to track and monitor who is doing what in terms of VGGT implementation.

In order to achieve the SDGs land-targets by 2020, there is a need to build capacities of more actors to engage with and take action based on monitoring data. Engaging with the monitoring of data is not something that should simply be left to National Statistical Offices or data scientists. To achieve the SDGs, we need a much broader community working and contributing towards these goals.

5. THE DATA REVOLUTION IN THE LAND COMMUNITY: PROMOTING UNIVERSAL DATA ACCESS AND USE?

Globally and across the entire development sector, we see the potential of the Data Revolution but recognize that we are not quite there yet. The Data Revolution poses several risks, including that of having a polarizing effect on inequalities, particularly between the global North and

South, but also opportunities to bridge those gaps and enabling more inclusive discussions. What does this mean for the land sector?

We have seen how the amounts of innovations and applications to capture and collect one's own land data have increased enormously over the last years. The inclusion of land indicators in the Sustainable Development Goals has created an unprecedented momentum for data collection and monitoring within the land community. The Data Revolution has clearly extended to the land sector, yet renowned data initiatives such as the Open Data Barometer and the Open Data Index systematically rank land ownership data as the most closed and inaccessible dataset by governments worldwide. Unfortunately, this trend is not only occurring within government; the entire land sector is lagging behind in talking about and dealing with data.

The discussion around data in the land sector often does not focus on openness or interoperability, but a cry for high quality and up-to-date data. This cry is shared across all land stakeholders, though very likely the interpretation of what makes data of 'high quality' differs per stakeholder group. Doubt about reliability of data and distrust among actors are significant themes in the discourse on land data. Therefore the Data Revolution in the land sector probably is more behind than other communities within the development sector.

We need to overcome distrust between actors, competition over funding and fear of misuse of data. Sharing data and information should become a common practice by all stakeholders, accompanied by a standard set of metadata that includes the date of publication, the source of the data and methodologies. This way, when the data moves outside a particular database or website and into applications or other repositories, users can still determine whether this data is of value for them or not.

Then intermediaries and other stakeholders have a responsibility to ensure that this data is not only valuable to specialized data analysts and scientists. People require certain skills and know-how to be able to digest the data and assess their trustworthiness or quality. Being able to assess quality and reliability of data is a level of data literacy that is, in our opinion, critical to achieve meaningful results in the sustainable development agenda and making the Data Revolution more inclusive.

While we believe that data analysis is an expert skill and should not be considered as something anyone can or should be able to do, we do not believe it is useful or effective to keep this type of discourse between experts exclusively. We may be skeptical of the notion that an inclusive data revolution entails training any- and everyone to be a skilled data analyst, but we are in complete agreement with the driving factor behind this notion: citizens and communities should be included and empowered to have a voice in the debate that ultimately aims to improve their daily lives and livelihoods.

Different methods can be applied to include citizens and communities in the debate. Not only should everyone be educated to be data literate to the extent where individuals become critical thinkers and learn to assess reliability of data, experts that possess the analytical skills have a societal responsibility to make data understandable to a wider, non-expert audience. Such efforts focused on data inclusion provide a basis for collective understanding, interpreting and managing data-driven decisions and discussions among all people. Including and empowering (vulnerable) citizens and communities in such a way has the potential to increase their resilience in solving local problems and equips them with the necessary tools and skills to keep their governments accountable and transparent.

The natural next question is, how do we make the data understandable for a non-expert audience? Bhargava et al phrase this in a very fitting way: “by making big data smaller”. “Small data” distinguishes itself from big data through one fundamental difference: unlike big data, the context about which the data tells a story plays a vital role. It means bringing the big data back to a scale and in a format where more people are able to digest, understand and engage with it.

Using appropriate software tools to visualize data, for example, can be a highly effective way to communicate data and get the message across in a way that is understandable to the general public. Visual information is said to be processed 600,000 times faster than text and consumers of information are said to retain 80 percent of what they see, while only paying attention to 20 percent of what they read. In a world bombarded with information, clear and concise visuals are what can grab a person’s attention. In our case, without engaging visuals that depict the physical land we are talking about, we are only telling half of the story.

Furthermore, research has shown that a big portion of the global “big data” is actually geospatial data, and the size of this data is growing rapidly at least by 20% every year. Being able to analyze spatial data requires a unique skill set that only a minority of people in the land sector possess. As a result, geospatial data and analytics often do not leave the specialized networks of GIS experts, which leaves a major gap for the rest of the land sector. While we encourage the spreading of skills and attitudes for data use to an audience beyond data experts, the fine line which we are treading is the following: any small error in interpretation of this type of information, such as incorrect application of dataset comparisons, for example, can lead to an inaccurate presentations of land tenure situations on the ground. This, evidently, can lead to major mishaps, possibly having very real effects on lives and livelihoods. We know that data literacy is essential to the current ‘Data Revolution’, but how do we do this in ways that are effective, safe and responsible?

The answer that we propose lies in scaling back, as opposed to scaling up. Making data understandable for non-expert audiences requires us to go from big data, to smaller data. With smaller data, the context about which the data tells a story plays a vital role. This is where general audiences can get involved in the telling of stories around the data itself, or by providing context.

The Land Portal Foundation, together with the University of Twente and Plan B, with Kadaster International in an advisory role, is by establishing a [GeoPortal](#) specifically tailored to non-GIS-experts, through which these types of initiatives could be facilitated.

Democratizing the Data Revolution in the global ecosystem of land data requires efforts from all stakeholders in the land community. We all have a collective responsibility to share our knowledge, enable others to use it and to utilize our individual expertise in a way that brings value for our respective target audiences. It requires a shift in culture of dealing with data to look beyond our usual networks and collaborate with and involve other people.

6. CONCLUSION

The inclusion of several land-related indicators in the Sustainable Development Goals has brought the Data Revolution to the land sector and created an unprecedented momentum for land data collection, analytics and monitoring. The Data Revolution brings an incredible opportunity to the sustainable development sector as a whole. It is the vehicle that, in its ideal form, leads to more empowered people, better informed and therefore higher quality policies and decisions and a greater participation from all parts of the population and increased accountability.

However, we still have a long way to go before the Data Revolution reaches its ideal form. We talk about ‘data’ as if everybody has it and has the ability to use it, but there are clear gaps between those “who know” and those “who do not know”. Particularly in the global South, perspectives are shared not in the form of raw data, but predominantly in the form of documents. Access to and capacities to use data are also significantly lower in the global South as opposed to the global North.

The reality is that in the global South, the “Data Revolution” debate focuses on the availability of data, the reliability of data and the question whether or not data is up to date. One can hardly be surprised that ‘openness’ of data or its ‘interoperability’ are not high on the priority list of data holders in the global South. However, this ongoing discourse provides us with an important opportunity to include data management, accessibility and interoperability into this debate in the global South. After all, openly accessible and interoperable data is - as mentioned - suitable to be put to great use through new technology and innovations. Immediate and large-scale proof of impact of the available data has proven to be a major incentive in the past for more actors to participate in the data revolution. Hopefully, this will lead to more actors willing to open up their data and share it in a way that it can also create impact we all seek to achieve.

There is a critical need to democratize the data revolution worldwide and not let the big international actors dominate the Data Revolution as they have done over the past years. Accuracy of data or reliability of it should be determined by bringing different perspectives

together. If change is sought to be invoked at the local level, surely those perspectives are essential and we should not leave them behind.

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FIG Working Week 2020

Smart surveyors for land and water management

Amsterdam, the Netherlands, 10-14 May 2020

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