State of Land Information in Liberia

An Open Data Assessment



About the State of Land Information (SOLI) reports

The **State of Land Information (SOLI)** research and reports seek to provide an overview of available government data and information on key land issues. The aim of the research is to uncover the many different sources of land data and information at the country-level and help to identify data and information gaps. The research also provides a technical assessment against open data criteria derived from international standards. The reports establish a baseline for targeted interventions to improve the information ecosystem.

Though SOLI reports are independent research products, they may also serve as the first step in the implementation of the Open Up Guide for Land Governance. The Open Up Guide for Land Governance is a tool for national and local government agencies with a mandate for or an interest in making their land governance data open and available for others to re-use. The Open Up Guide is the result of a collaboration between the Land Portal Foundation and Open Data Charter.

About the Land Portal

The Land Portal Foundation was established to create, curate and disseminate land governance information by fostering an inclusive, open, and accessible data ecosystem. Over the last decade, the Land Portal has evolved from a simple information gateway to become a knowledge broker, a resource base, a vibrant online community of users and a trusted voice within global land governance.

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Abbreviations

API	Application Programming Interface
CLIMT	Community Land Intervention Monitoring and Management Tool
CS	Completeness Score
ESRI	Environmental Systems Research Institute
FAO	UN Food and Agriculture Organization
FDA	Forestry Development Authority
FOIA	Freedom of Information Act
GIS	Geographic Information System
GoL	Government of Liberia
GPS	Geographic Positioning System
IATI	International Aid Transparency Initiative
LCCS	Land Cover Classification System
LEITI	Liberia Extractive Industries Transparency Initiative
LISGIS	Liberia Institute of Statistics and Geo-information Services
LLA	Liberia Land Authority
LRA	Liberia Revenue Authority
LRL	Land Rights Law
MFDP	Ministry of Finance and Development Planning
MME	Ministry of Mines and Energy
MoFA	Ministry of Foreign Affairs
MoJ	Ministry of Justice
NBC	National Bureau of Concessions
NSSD	National Statistical and Spatial Database
NSSDS	National Statistical and Spatial Data System
OGP	Open Government Partnership
OS	Openness Score
PAPD	Pro-Poor Agenda for Prosperity and Development
REDD+	Reduced Emissions from Deforestation and Forest Degradation
RRG	Rights and Resources Group
SOLI	State of Land Information
UNEP	UN Environment Program
UNFCCC	UN Framework Convention on Climate Change
URI	Unique Resource Identifier
WRI	World Resources Institute

Introduction

Land rights are fundamental sources of tension in Liberia, so transparency about land information is both essential and highly politicized. The **Truth and Reconciliation Commission**¹ and other scholars² have documented land conflict as one of the major causes of the 14 year civil conflict (1989-2003) in Liberia, rooted in the country's formation in the 19th Century as a land divided by indigenous peoples and freed slaves settling from the United States.

The exploitation of Liberia's natural resources through concession agreements adds an extra layer to these tensions. Current expropriations for mining, logging, and industrial agriculture concessions, plus proposed and formalized protected areas, lay claim to 65% of Liberia's total land area. At the same time 73% of the land is subject to customary land rights. Unless resolved through progressive approaches to land use, such as community forestry and community-based conservation, this sets the stage for further land conflict.

Liberia's 1986 **constitution**³ provides for access to government information, yet, despite having passed a **Freedom of Information Act (FOIA)**⁴ over a decade ago, public access to government information **was generally** poor. Assessments conducted by others can be summarized as follows:

- In the Global Data Barometer Liberia scored seven out of a hundred in the land module (2021). This compares to a global average of 25/100. Liberia scored zero for the openness of its land tenure data, 12 for its land use data and 15 for its gender and inclusion uses of data.⁵
- The Open Data Watch Liberia inventory (2020) gave a score of 39/100, which ranks the country 13th out of 15 countries assessed in West Africa. The inventories assess coverage and openness of official statistics (including two indicators on agricultural land use and the built environment) that may be found on websites such as the Liberia Institute of Statistics and Geo-information Services⁶ (LISGIS, see Land Development Data below) or other websites linked to it.

¹ Truth and Reconciliation Commission, 2009, Consolidated Final Report; retrieved 5 June 2023; **www. trcofliberia.org/resources/reports/final/volume-two_layout-1.pdf**.

² Kieh, G. K., 2009, The Roots of the Second Liberian Civil War. *International Journal on World Peace*, 26(1), pp.7–30; retrieved on 28 August 2023; www.jstor.org/stable/20752871.

³ Constitution of Liberia, 1986, Article 15(c); retrieved 15 May 2023, http://judiciary.gov.lr/wp-content/ uploads/2017/11/CONSTITUTION-OF-THE-REPUBLIC-OF-LIBERIA.pdf.

⁴ GoL, 2010, Freedom of Information Act; retrieved on 15 May 2023; https://lla.gov.lr/index.php/ downloadable-resources/policies-laws-regulations-repository?download=71:freedom-ofinformation-act-of-2010

Global Data Barometer; retrieved on 12 July 2023; https://globaldatabarometer.org/module/land/.
 Open Data Watch, 2023, Open Data Inventory 2022/23; retrieved on 12 July 2023; https://odin.opendatawatch.com/.

 LANDex,⁷ the global land governance index supported by the International Land Coalition and "based on common people-centered indicators"⁸ produced a baseline county assessment for Liberia in 2022. This gives Liberia an overall score of 56.7/100, similar to Senegal, but is only based on six out of a possible 33 indicators (from 2018). Surprisingly, it states "the commitment on secure territorial rights for indigenous people was found not to be relevant in the Liberian context".⁹

There is evidence that data collection and management systems are improving, and digitized, spatial information does exist within some government agencies. The FOIA includes the obligation on public bodies to proactively disseminate information, and some have sought to do this: there is a comprehensive mining cadaster, and the forest authority has in the past had downloadable spatial data and volumes of documents relating to each permit (since removed). Conversely, the **Liberia Land Authority (LLA)**¹⁰ offers very little information, despite high ambitions, and all authorities are subject to financial and political pressure from the central government.

⁷ LANDex; retrieved 12 July 2023; www.landexglobal.org/en/country/430/.

⁸ LANDex; retrieved 12 July 2023; www.landexglobal.org/en/about/.

⁹ LANDex, 2022, Liberia country assessment - LANDex Baseline; p.1; retrieved 3 July 2023; www. landexglobal.org/documents/61/Liberia_Country_Assessment_4.pdf.

¹⁰ LLA; accessed 12 July 2023 from https://lla.gov.lr/.

State of Data Governance in Liberia

Although Liberia signed up to the **Open Government Partnership (OGP)**¹¹ more than ten years ago, progress has been slow and there is little legal basis underpinning data governance, openness, protection or cybercrime.

The **current (2020-22) OGP three-year action plan**¹² includes commitments to a wide range of data elements. Unlike in the previous 2017-2019 action plan, there are no explicit references to land, although beneficial ownership and open contracting have important contributions to make to land information and governance. Both were included in the **previous three-year action plan (2017-2019)**¹³ but negligible progress was made, and the country is considered "exceptionally secretive" by the **Financial Secrecy Index.**¹⁴

Liberia does not have a data protection law. The **International Association of Privacy Professionals** "*is unaware of data protection legislation in Liberia*".¹⁵ Onetrust, a leading provider of advice and information on data protection compliance, also states Liberia does not have a privacy law, even in draft form, and does not list the country in its catalogue of **Data Guidance Notes**.¹⁶

Likewise, there is no cyber security law. The **Council of Europe Octopus Cybercrime Community** reports "Liberia has no legislation on cybercrime... Liberia has no legislation on privacy and data protection".¹⁷

The Ministry of Foreign Affairs (MoFA) is responsible for archiving all new legislation (including regulations), once passed, and for printing it in handbills for distribution. This is backed by Liberia's **Legislative Law**,¹⁸ but the MoFA does not provide any online catalogue of Liberia's laws. Nor do other institutions such as the **office of the president**¹⁹

11 12	OGP; retrieved on 2 May 2023 from www.opengovpartnership.org/ . OGP, 2021, Liberia 4 th OGP National Action Plan, December 2020 – December 2022; retrieved on 2 May, 2023 from www.opengovpartnership.org/documents/liberia-action-plan-2020-2022/ .
13	OGP, 2017, Liberia's Open Government Partnership National Action Plan III, July 2017 – June 2019; retrieved on 15 May, 2023 from www.opengovpartnership.org/wp-content/uploads/2018/06/
	Liberia_Action-Plan_2017-2019.doc.
14	OGP, 2021, Independent Reporting Mechanism Action Plan Review: Liberia 2020-2022, p.6; retrieved on
	15 May, 2023 from www.opengovpartnership.org/wp-content/uploads/2021/06/Liberia_Action-
	Plan-Review_2020-2022.pdf
15	International Association of Privacy Professionals; last updated in December 201, retrieved on 12 July
	2023; https://iapp.org/resources/global-privacy-directory/
16	Onetrust; retrieved on 12 July 2023; www.dataguidance.com/search/notes/country/africa.
17	Council of Europe Octopus Cybercrime Community; retrieved on 12 July 2023; www.coe.int/en/web/
	octopus/country-wiki-ap/-/asset_publisher/CmDb7M4RGb4Z/content/liberia
18	GoL, 2000, Legislative Law – Title 19 – Liberian Code of Laws Revised, Clause 60; retrieved on 3 July 2023;
	www.liberlii.org/lr/legis/codes/llt19lcolr434/
19	Executive Mansion; retrieved on 12 July 2023; www.emansion.gov.lr/.

or the legislature, whose website appears to have been defunct since 2016 but prior to that did list legislation.²⁰ The US Library of Congress's Guide to Law Online: Liberia links to international non-government websites which list free online legal resources related to the legislative branch of Liberia's government.

Legal Framework on Access to Information

Liberia passed the **FOIA** on 16 September 2010,²¹ significantly earlier than many other countries in Africa. However, according to **local media** as of January 2022 the Independent Information Commission was barely functioning, and its website had closed.²² The Act can be found on the websites of the Ministry of Justice (MoJ) and the Liberia Land Authority (LLA) as well as many international websites. It makes provision for the *"right of access to information include[ing] both (1) a right to request and receive information, and (2) an obligation on the part of public bodies and officials to disseminate essential information that the public would generally want to know".²³*

Legal Framework on Access to Land Information

Land issues in Liberia are overseen by the LLA, established in 2016 and mandated to "create and administer, or cause to be created and administered, an accurate and complete database of all landholdings and rights in land in Liberia" and to "provide to the public on request information on land holdings and interests in land, which shall be public information under the Freedom of Information Act".²⁴

The Land Rights Law (LRL),²⁵ passed in 2018, is the single-most important piece of legislation in Liberia concerning land governance, land administration and land use and management. These functions include the registration of deeds in the deed's registry, surveying and the national cadaster, land valuation and the adjudication of disputes. In a move regarded as highly progressive for the region, the Act codifies the customary right

- 20 The Liberia Senate Facebook page, www.facebook.com/people/The-Liberian-Senate/100070844540320/, retrieved on 12 July 2023, provides http://legislature.gov.lr as the website of the legislature, but this is only available from the Wayback Machine https://web.archive.org/ web/20111228012749/http://legislature.gov.lr/, which since 2016 reports a 404 error, "site does not exist".
- 21 GoL, 2010, Freedom of Information Act; retrieved on 15 May 2023; https://lla.gov.lr/index.php/ downloadable-resources/policies-laws-regulations-repository?download=71:freedomof-information-act-of-2010
- 22 Front Page Africa, 28 January 2022, Independent Information Commission is on "Life Support' says Maureen Sieh, Liberia's Leading Media Development Expert; retrieved on 12 July 2023; https:// frontpageafricaonline.com/news/independent-information-commission-is-on-life-support-saysmaureen-sieh-liberias-leading-media-development-expert%EF%BF%BC/.
- 23 GoL, 2010, Freedom of Information Act; Clause 1.4(c); retrieved on 15 May 2023; https://lla.gov.lr/i ndex.php/downloadable-resources/policies-laws-regulations-repository?download=71:freedomof-information-act-of-2010
- 24 GoL, 2016, An Act to Amend Title 12, Executive Law of the Liberian Codes of Law Revised and to Add Thereto a New Chapter Creating the Liberia Land Authority Clause 8.1.i; retrieved on 15 May 2023; https://lla.gov.lr/index.php/downloadable-resources/policies-laws-regulationsrepository?download=77:land-authority-act-2016.
- 25 GoL, 2018, An Act to Establish the Land Rights Law of 2018, Republic of Liberia; retrieved 29 April 2023; https://lla.gov.lr/index.php/downloadable-resources/policies-laws-regulationsrepository?download=79:land-rights-act.

of communities to own land collectively. The Act includes provisions for land transactions to be published, along with an inventory of all public land. It also requires community land committees to be accountable to and report to the wider community, including on decisions on the allocation of land and residential plots within community held land.²⁶ Since the passage of the law, considerable investment has been made to support the formalization of community title deeds, although progress is slow.

Prior to the passage of the LRL, the previous (2017-19) **OGP Action Plan** included a specific commitment to "*improve transparency in the Land Authority*", including making publicly available data on land rights, land deeds and certificates, and geographic positioning system (GPS) coordinates of indigenous and community land ownership information.²⁷ The subsequent end of term **assessment**, however, concluded "*this commitment failed to meaningfully change Liberians*" access to land information" as land rights data is not yet publicly available online.²⁸ The current OGP Action Plan has not continued this commitment.

The Local Government Act,²⁹ which was passed on the same day in 2018 as the LRL, has a chapter on land governance that devolves two functions from the LLA to local government – survey services and land registration services, including updating and storage of land records – provided it is trained to do so by the LLA. A **simplified guide** to the act states the local government provides zoning and land use permits and land deed registration, and can also collect land taxes. However, it also states land governance and administration is "*exclusively reserved for the central government to ensure the continuous existence of the unitary form of governance and to protect the sovereignty of the state"*.³⁰

GoL, 2018, An Act to Establish the Land Rights Law of 2018, Republic of Liberia; Clauses 19.2.b, 52.5, 36.4 and 36.5; retrieved 29 April 2023; https://lla.gov.lr/index.php/downloadable-resources/policies-laws-regulations-repository?download=79:land-rights-act.
 OGP, 2017, Liberia's Open Government Partnership National Action Plan III, July 2017 – June 2019, Commitment 7, p.16; retrieved on 15 May, 2023 from www.opengovpartnership.org/wp-content/uploads/2018/06/Liberia_Action-Plan_2017-2019.doc.
 OGP, Transparency in the Land Authority; retrieved on 12 July, 2023 from www.opengovpartnership.org/members/liberia/commitments/lr0033/.
 GoL, 2018, An Act to Repeal the Local Government Law Title 20, Liberian Codes of Law Revised and to Establish in its Stead, a New Title 20 to be known as the Local Government Act of 2018, Chapter 8; retrieved on 5 June 2023; https://erc.undp.org/api/download?filePath=/documents/7220/

mgmtresponse/keyaction/doc_5637925619645526305SignedLocalGovernmentAct.pdf.
 Naymote Partners for Democratic Development, 2021, Power to the people – Towards an effective and efficient local government administration in Liberia, p.3; retrieved on 29 April 2023; https://naymote.com/wp-content/uploads/2021/01/Simplified-Version-of-LGA-2018-.pdf.

State of Land Data and Information in Liberia

This section assesses the completeness of land data and information in Liberia across five categories: legal framework, land tenure, use, development, and value. It assesses the completeness of the information and scores the data as being fully, partially, little, or not complete.

The LLA is primarily responsible for administration of land management functions including the cadaster, land records, geodetic reference network and an integrated land information framework, including customary land. The Liberia Land Administration Project sought to support an inventory and analysis of Tribal Land Certificates and develop a Land Administration System but with limited progress. The Forestry Development Authority (FDA) is responsible for forest management data and information while spatial and attribute data on mining concessions is managed by the Ministry of Mines and Energy (MME). The National Bureau of Concessions (NBC) publishes data for agricultural plantations as well as logging, mining, and protected areas.

Completeness of Legal and Policy Data and Information on Land

A national Land Rights Policy,³¹ which covers public, government, private land as well as formally recognizing community ownership of land and forests, was finalized in 2013, and formed the basis for the substantive LRL, passed in 2018.³² This, for the first time in Liberia's history, legally protects community land rights. Both these documents are available on the LLA website,³³ as is the key implementation text, the Land Rights Regulations, approved in 2022.³⁴ The LLA website also provides a collection of policy briefs and consultation process reports that informed the development of the LRL, and a collection of laws for related sectors such as freedom of information, forest, mining, and environmental protection. There are also a range of guides and codes, as well as some land-related laws in force before the LRL was passed, and likely, therefore, to be obsolete. While the LLA has some county (subnational) offices, and its website includes a 'one-stop shop' page,³⁵ neither detailed policies, procedures, guides or templates, nor contact details and locations of county offices, could be found online. Liberia scores 83 out of 100 for the completeness of its legal and policy data and information on land.

31 Land Commission, 2013, Land Rights Policy; retrieved 29 April 2023; https://lla.gov.lr/index.php/ downloadable-resources/policies-laws-regulations-repository?download=80:land-rightspolicy.

³² GoL, 2018, An Act to Establish the Land Rights Law of 2018, Republic of Liberia; retrieved 29 April 2023; https://lla.gov.lr/index.php/downloadable-resources/policies-laws-regulations-r epository?download=79:land-rights-act.

³³ LLA; accessed 29 April 2023; https://lla.gov.lr/index.php/downloadable-resources/policies-lawsregulations-repository.

³⁴ LLA, 2022, Liberia Land Rights Act Regulations 2022; retrieved 29 April 2023; https://lla.gov.lr/ index.php/downloadable-resources/policies-laws-regulations-repository?download=202:lraregulations-2022.

³⁵ LLA Services; accessed 29 April 2023; https://lla.gov.lr/index.php/services#.

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Legal and Policy Data and Information on Land: Fully Complete (83)



Completeness of Land Tenure Data

Digital tenure data for Liberia is very incomplete and little is available on public websites. What there is tends to be as visual map representations, not downloadable datasets, for example, the **Community Land Intervention Monitoring and Management Tool (CLIMT)**³⁶ map of customary land formalization, the FDA map of forest management permits, and the NBC map of extractive industries concessions. It is dispersed across a number of government and other websites. There are no publicly available deeds register or land register. LLA has key responsibility for this, but "*remember it has just begun the process of going digital*" according to a civil society actor supporting communities to formalize their tenure rights.³⁷ Liberia scores 30 out of 100 for the completeness of its digital land tenure data.

Land Tenure Data: Slightly Complete (30)



The LLA brought together the functions of a number of other agencies, and has **responsibility for the national cadaster**.³⁸ Specific tasks **include**, *inter alia*: custody and preservation of records relating to the survey of any parcel of land, developing and maintaining the national geodetic reference network, establishing and maintaining an integrated land information system, facilitating activities for recognition of the land rights of communities, and developing and managing a customary land information database.³⁹ The only online spatial data available from LLA is the CLIMT, which tracks progress in the roll-out of customary land formalization. It provides a visualization of spatial data and some attributes for each parcel, but the site is copyrighted to the Cadasta Foundation and the data is not downloadable for unregistered users. The **dashboard** page indicates 19 out of the 146 parcels monitored have had their borders officially approved.⁴⁰ A civil society actor supporting communities to formalize their tenure rights made the personal comment, "*remember it has just begun the process of going digital*".⁴¹

Documents on the LLA website include nine Tribal Certificate Reports⁴² from 2013-15,

37 Pers. Comm, May 2023.

41 Pers. Comm, May 2023.

³⁶ LLA, Lantmäteriet and Cadasta Foundation; accessed 12 July 2023; https://lla-climt-cadasta.hub. arcgis.com/.

³⁸ LLA Overview; accessed 12 July 2023; https://lla.gov.lr/index.php/about-us/overview.

³⁹ LLA Land Administration Department; accessed 12 July 2023; https://lla.gov.lr/index.php/about-us/ organizational-arrangements/land-administration-department.

⁴⁰ LLA, Lantmäteriet and Cadasta Foundation; accessed 12 July 2023; https://lla-climt-cadasta.hub. arcgis.com/pages/dashboards.

⁴² LLA; retrieved 3 July 2023; https://lla.gov.lr/index.php/downloadable-resources/knowledgeproducts.

prior to the passing of the LRL. Tribal Certificates are a step towards obtaining a Public Land Sale Deed, a private title deed on a parcel of public land in rural areas.⁴³ They now require re-validation under the LRL.⁴⁴ The data is far from complete and available only in text documents: the nine reports inventory over a thousand certificates from just 18 traditional clan areas in two of Liberia's 15 counties. The average area of each is relatively small, at 122 hectares. Reports on two clans are dedicated to inventorying women title holders.

The LRL provides equal tenure rights for men and women and promotes a gender balance in local land governance institutions. Yet, deep-rooted patriarchal norms have evolved over many generations and will take time to change. As gendered responsibilities and low education impede women's representation, women often lack time, knowledge, or confidence to join committees or speak up in public meetings.⁴⁵

Liberia has a significant proportion of land under concession, including for logging, agricultural plantations, and mining. It also has a number of large, protected areas, and more are proposed. In 2013 **Rights and Resources Group** (RRG) estimated 5.1 million hectares were under concession.⁴⁶ In addition, 1.2 million hectares are gazetted or proposed **protected areas**.⁴⁷ Together these represent over 65% of the country's total land area. More recently, RRG estimated 7 million hectares, or 73% of Liberia's land area is already "owned by Indigenous Peoples, Afro-descendant Peoples, and local communities".⁴⁸ Furthermore, the LRL makes it clear that community land ownership is valid and enforceable without registration or completion of a survey.⁴⁹

The FDA in partnership with the World resources Institute (WRI) has, since at least 2016,
 provided spatial and attribute data on forest management permits in a Forest Atlas.⁵⁰
 Since about 2020 this has been locked behind a login requirement to ArcGIS Online.
 Some on-screen maps and downloadable tabular data on community forestry permits⁵¹ can be accessed without a login, but the equivalent webpage for larger concessions is not functioning.⁵² In the case of community forests, some 60 permit areas are included, ten more than had actually been approved at the time, suggesting some (but not all) applicant permits

⁴³ Alden Wily, L., 2007, 'So who owns the forest?' An investigation into forest ownership and customary land rights in Liberia; p.141; https://sdiliberia.org/sites/default/files/publications/2008_So_Who_Owns_ the_Forest%20%28FullReport%29.pdf.

GoL, 2018, An Act to Establish the Land Rights Law of 2018, Republic of Liberia, Article 47; retrieved
 29 April 2023; https://lla.gov.lr/index.php/downloadable-resources/policies-laws-regulations-repository?download=79:land-rights-act. LLA, 2022, Liberia Land Rights Act Regulations 2022,
 Section 14; retrieved 29 April 2023; https://lla.gov.lr/index.php/downloadable-resources/policies-laws-regulations-repository?download=202:lra-regulations-2022.

⁴⁵ Land Portal, 2021, The root of inequality? Customary Tenure and Women's Rights to Land in West Africa – Webinar Report; https://landportal.org/file/58568/download.

⁴⁶ RRG, 2013, Investments into the Agribusiness, Extractive, and Infrastructure Sectors of Liberia: An Overview, p.11; retrieved 15 May 2023; https://rightsandresources.org/wp-content/exported-pdf/ countryreportliberiafinal.pdf.

⁴⁷ Environmental Protection Agency, 2018, Overview of Spatial Dataset for Liberia's 6th National Report, prepared by J.S. Datuama Cammue, Liberia National Focal Point, United Nations Convention on Biological Diversity, slide 16; retrieved 15 May 2023; https://ekmsliberia.info/wp-content/uploads/2022/08/ CBD-LIBERIA-map.pdf.

⁴⁸ RRG, 2023, Who Owns the World's Land? Global State of Indigenous, Afro-Descendant, and Local Community Land Rights Recognition from 2015–2020, p.15; https://rightsandresources.org/wpcontent/uploads/Who-Owns-the-Worlds-Land_Final-EN.pdf.

⁴⁹ GoL, 2018, An Act to Establish the Land Rights Law of 2018, Republic of Liberia, Article 11.3; retrieved 29 April 2023; https://lla.gov.lr/index.php/downloadable-resources/policies-laws-regulationsrepository?download=79:land-rights-act.

⁵⁰ FDA & WRI; retrieved 17 July 2023 from https://lbr.forest-atlas.org/map.

⁵¹ FDA & WRI; retrieved 17 July 2023 from https://lbr.forest-atlas.org/dashboard/ communityforestsstatistics.

⁵² FDA & WRI; retrieved 17 July 2023 from https://lbr.forest-atlas.org/dashboard/fmc-statistics.

have been included. A interactive map published by **Global Forest Watch** includes five community forests,⁵³ and an **ArcGIS version** has 20.⁵⁴ The Global Forest Watch interactive map includes six of the seven larger concessions and the ArcGIS **version has 12**,⁵⁵ including a set of proposed permit areas.

Spatial and attribute data on **mining concessions** is available online through a dedicated portal held by the MME.⁵⁶ It covers all of Liberia and lists over 7,000 permits (of which some 900 are active) for mining the full range of minerals, and all the steps involved from exploration to trading. It appears to offer downloads of spatial and attribute data, but only through a login. **Revenue Development Foundation**, the organization providing technical assistance for the portal, states the "*design is refining a standard set*".⁵⁷

The NBC in partnership with Trimble, a private spatial data provider, have developed a **Liberia National Concession Portal**,⁵⁸ a map visualization and attribute data in pop-ups for agricultural plantations as well as logging, mining, and protected areas, but none of the information is downloadable. The website states that it pulls live data from other NBC and/or GoL sources, but there is no evidence it has done this since 2016 and **OGP reported in 2017** that "information has not been uploaded to the website due to the delay in the passage of the Land Rights Act".⁵⁹

The World Bank supported a Liberia Land Administration Project between 2018 and January 2023 that sought to support development of an inventory and analysis of Tribal Land Certificates and development of a Land Administration System.⁶⁰ A supporting document notes maps would appear to exist only in paper form.⁶¹ A report near the end of the project notes limited progress on customary land formalization and while the national geodetic reference network has been established there is no evidence of any current digital maps.⁶²

No online data could be found on smaller parcels such as farms, households, businesses, industry, or government property. Metria and Geoville (see next section) produced a roads map in 2016 but this is not available online.

53	GFW; retrieved 17 July 2023 from https://globalforestwatch.org/map/.
54	ArcGIS; retrieved 17 July 2023 from www.arcgis.com/home/webmap/viewer.
	html?useExisting=1&layers=28f8f523aa594da2914d1b3392843634
55	ArcGIS; retrieved 17 July 2023 from www.arcgis.com/apps/mapviewer/index.
	html?layers=5611560f91274715859c4b05b58fbbbc
56	MME; accessed 17 July 2023 from https://portal.mme.gov.lr/dashboard.
57	Andersen, Aasmund, Revenue Development Foundation; 22 February 2018, EITI Mainstreaming
	and Government Online Repository Portals; retrieved 17 July 2023 from https://eiti.org/blog-post/eiti-
50	mainstreaming-and-government-online-repository-portals.
58 59	NBC; retrieved 17 July 2023 from https://portals.landfolio.com/Liberia/ .
59	OGP, 2017, Liberia: Commercial Land Use Rights Information; retrieved 17 July 2023 from www. opengovpartnership.org/members/liberia/commitments/LR0011/
60	WB, 2018, Liberia Land Administration Project: Implementation Status & Results Report (3), p.1; retrieved
00	15 May 2023; https://documents.worldbank.org/curated/en/803981543941178720/pdf/
	Disclosable-Version-of-the-ISR-Liberia-Land-Administration-Project-P162893-Sequence-No-03.
	pdf.
61	LLA, 15 December 2021, Request for Expression of Interest: Consultancy for the Assessment of Cadaster
	Paper Maps for the Liberia Land Authority, under the Liberia Land Administration Project; retrieved 5 May
	2023; https://emansion.gov.lr/doc/REOI%20-%20Consultancy%20for%20the%20Assessment%20
	of%20Cadastre%20Paper%20Maps-Graceinput%20-%202Dec2021.pdf
62	WB, 2023, Liberia Land Administration Project: Implementation Status & Results Report (13), pp.3 &
	6; retrieved 15 May 2023; https://documents.worldbank.org/en/publication/documents-reports/
	documentdetail/099071101312318653/n1628930d6c9ef02d085ee023h8dc66cac8

Completeness of Land Use Data

Although the Government of Liberia has invested donor funds into high-quality and detailed land cover and land use mapping the digital maps do not appear to be openly available. The mapping exercise, originally in 2014 and updated in 2019, was driven by Liberia's commitment to Reduced Emissions from Deforestation and Forest Degradation (REDD+) and concentrates on forest and other large land cover and land uses. It is not accompanied by any land use zoning, enforcement, or public land inventory data. Liberia scores 17 for the completeness of its land use data.

Land Use Data: Not Complete (17)



Metria AB and GeoVille GmbH were commissioned⁶³ by the FDA in 2014-15 to produce a high-resolution land and forest cover and use map and subsequently to **update it in 2016** with newly available imagery for REDD+ stock taking and for future monitoring of carbon sequestration.⁶⁴ They **updated it a second time** in 2019, to be consistent with Liberia's **National Forest Definition** established in 2018 as part of Liberia's commitment to mitigating climate change.⁶⁵ Their report of this work states *"in this new definition, Liberia recognizes the contribution of industrial agricultural plantations to national economy"*,⁶⁶ but chose to exclude them from its forest definition. The reports contain some maps and tables to give a visual impression of the digital spatial data generated.

Metria and GeoVille's 2019 report states "All datasets are delivered in digital GIS-ready format (GeoTiff for raster, shp, kml, kmz for vector) with ISO conform [sic] metadata for the map product",⁶⁷ but this means delivered to the Government of Liberia only, as the datasets are not available online and no link or other information about how to access them is included in their reports. This differs from the 2016 publication by Metria and GeoVille: when asked, an independent researcher working on land rights issues in Liberia said, "I have a copy of the 2016 map and, from memory, it used to be downloadable [but is no longer] but that doesn't seem to be the case for the updated map".⁶⁸

GeoVille, 18 May 2018, REDD+ Forest and Plantation Mapping in Liberia; retrieved 15 May 2023
 from www.geoville.com/news/newsdetail/redd-forest-and-plantation-mapping-in-liberia/.
 Metria and GeoVille. 2016, Final Report: Liberia Land Cover and Forest Mapping for the

Readiness Preparation Activities of the Forestry Development Authority; retrieved 27 June 2020; www.forestcarbonpartnership.org/system/files/documents/Liberia%20Land%20 Cover%20and%20Forest%20Mapping%20report.pdf.

⁶⁵ GoL, 2019, Liberia's forest reference emission level submission to the UNFCCC, p.13; retrieved on 28 July 2023; https://redd.unfccc.int/files/liberia_frel_submission_december_2019.pdf.

⁶⁶ GeoVille. 2019, D3 Final Report, p.6; retrieved 22 May 2023; www.fda.gov.lr/sites/default/files/ documents/LCF_2015_Final_Report.pdf.

⁶⁷ GeoVille. 2019, D3 Final Report, p.34; retrieved 22 May 2023; www.fda.gov.lr/sites/default/files/ documents/LCF_2015_Final_Report.pdf.

⁶⁸ Pers. comm. 15 May 2023.

15

There is no evidence of a definitive set of land use classes for Liberia. One set can be found alongside its National Forest Definition in Liberia's 2019 forest emissions baseline submission to UNFCCC.⁶⁹ This may not constitute a full set of land use classes, however, as it uses the blanket term "*non-forest*" land use for croplands, grasslands, wetlands and settlements. It provides: four types of forest cover (but none on forest or conservation management); nine croplands and grasslands; three wetlands; and two 'settlements' (comprising settlements and mining areas). Alternatively, the Metria and GeoVille reports have: five classes of forest cover; ten classes of "*rural and agriculture*", differentiating between smallholder and industrial scales; and four classes of infrastructure: settlements, roads, tracks, and railways. It states this has been "*oriented at the global LCCS (Land Cover Classification System) standard, originally adopted by FAO/UNEP*" but points out the emphasis is on *cover* as distinct from use.⁷⁰

The LLA has the **mandate**⁷¹ to "promote, support and ensure the development of land use plans, and zoning schemes and their implementation through municipalities, towns, and other local government structures" but there is no evidence it has so far produced open digital data from this work.

The UN Food and Agriculture Organization (FAO) global land cover data includes a **specific dataset** for Liberia and appears to be the only such dataset that is openly available.⁷² It is based on a **Globcover** database of 2005 and has not been updated since.⁷³

Completeness of Land Development Data

The available data on land development, enforcement, expropriation, and conflict is hidden in reports. It tends to be in text (not tables), out of date, and/or incomplete (focused only on certain aspects of the elements above). Liberia does have a national development planning system, currently termed the **Pro-Poor Agenda for Prosperity and Development (PAPD)**,⁷⁴ and this commits to spatially integrated multi sectoral planning but there is no evidence on public websites to show progress towards this. Data on expropriations for extractive industry concessions and protected areas is partially available – see Land Tenure section above. It is widely known that land rights were a major underlying cause for Liberia's civil conflict between 1989 and 2003. Some data on land disputes is available from 2006, and although Supreme Court rulings up to 2017 are online there does not appear to be a way to filter for rulings regarding land issues. **Liberia scores 15 for the completeness of its land development data**.



Land Development Data: Not Complete (15)

prosperity-and-development-papd/download.

Development of and progress in national development plans is the responsibility of the Ministry of Finance and Development Planning (MFDP) in collaboration with other government institutions. The plans and reports are **available** and although they contain a lot of data it is not presented as datasets.⁷⁵ The current (2018-23) plan, the **PAPD** states implementation "*will mark a paradigm shift from sectoral based national development planning to a spatial [sic] integrated multi sectoral planning*",⁷⁶ but no progress reports are available and there is no evidence this is being done. The Monrovia City Corporation responsible for Liberia's capital city, has no reports or data on its website.⁷⁷

In support of the PAPD, the LISGIS has as its goals:

Establish, develop, and maintain a holistic National Statistical and Spatial Data System (NSSDS) and an integrated National Statistical and Spatial Database (NSSD); and

Coordinate, monitor and supervise the NSSDS and NSSD to allow for the provision of holistic gender and geographic sensitive analysis for timely, relevant, and acceptable standards of information to institutions of the Government, the business, and the wider national and international communities.⁷⁸

LISGIS also has a mandate to collect data on "*land tenure and the occupation and use of land*"⁷⁹ but it provides very little information online. It has an online **information request form** that requires the applicant to state why they need the information.⁸⁰ It is hard to know what information it holds in order to then ask for it. This also appears to undermine the FOIA, which states "*there is no need whatsoever for a person requesting information to provide a reason or justification*".⁸¹

The MFDP is also responsible for the **annual budget**, which includes a line for PAPD (national development plan) implementation; in budget year 2023 this was US\$ 422,564, or 0.05% of the country's budget.⁸²

The Liberia Bank for Development and Investment describes itself as a Development Finance Institution (alongside being a commercial and retail bank) but its website provides no further information or data on its non-commercial development services or investments.⁸³

The International Aid Transparency Initiative (IATI) lists 3,759 projects in Liberia since

- 76 MFDP, 2018, Pro-Poor Agenda for Prosperity and Development, p.2; retrieved 22 May 2023; www. mfdp.gov.lr/index.php/docs/national-development-plan/pro-poor-agenda-for-prosperity-anddevelopment-papd/download.
- 77 Monrovia City Corporation retrieved 17 July 2023 from https://monrovia.gov.lr/.
- 78 LISGIS, retrieved 17 July 2023 from **www.lisgis.gov.lr/goals.php**.
- 79 GoL, 2004, An Act to Further Amend the New Executive Law, Title 12, of the Liberian Code of Laws Revised, as Amended, by Adding Thereto a New Chapter 5OA: Liberia Institute of Statistics and Geo- Information Services (LISGIS); Annex 1; www.lisgis.gov.lr/document/lisgisact.pdf.
- 80 LISGIS, retrieved 17 July 2023 from http://www.lisgis.gov.lr/datarequest.php.
- GoL, 2010, Freedom of Information Act; Clause 1.4(e); retrieved 15 May 2023; https://lla.

⁷⁵ MFDP, retrieved 17 July 2023 from **www.mfdp.gov.lr/index.php/docs/national-development-plan**. Retrieved on 17 July 2023.

gov.lr/index.php/downloadable-resources/policies-laws-regulationsrepository?download=71:fre edom-of-information-act-of-201

⁸² National Budget 2023: PAPD Implementation (budget code 264308, p.68) is US\$ 422,564, compared to total budget (p.xxxv) of US\$ 782,942,779. Retrieved 5 July 2023; www.mfdp.gov.lr/index.php/mainmenu-reports/mm-bdp/mm-bd-nb/national-budget-fy2023/download.

Liberia Bank for Development and Investment retrieved 17 July 2023 from http://www.lbdi.net/.

1969 funded by a range of overseas development assistance agencies.⁸⁴ Data is uploaded to IATI by individual providers of overseas development assistance. It offers tools to gather indicators, analyze them, and export them into multiple formats, including via an application programming interface (API), but it has a limited ability to filter only those projects related to land development.

Within the LLA, the **Program Planning Division**⁸⁵ is responsible for development planning and the **Land Valuation Division**⁸⁶ is responsible for assessing the compensation payable upon the acquisition of land by the Government. Neither offer any online data. Where land is expropriated for extractive industry concessions or protected areas the 2022 **Land Rights Regulations** lay out the procedure for assessing compensation to and resettlement of affected people.⁸⁷ Given that most of the current concessions were allocated many years before the passing of these regulations it is unclear how compensation or resettlement following land expropriation has been dealt with and no data has been found to support this. The Government of Liberia has recently increased its appetite for expropriation of land for protected areas and **sought carbon finance** to support this, highlighting the need for reliable data on land rights.⁸⁸ Maps from the **Environmental Protection Agency** indicate five designated protected areas, and another 12 proposed,⁸⁹ and equivalent data is available in spreadsheet and shapefile downloads from the **World Database of Protected Areas**.⁹⁰

The Ministry of Justice does not currently provide data on land conflicts in court rulings, although it has a **holding page**⁹¹ for this. The International Legal Information Institute provides a database of **Liberia Supreme Court rulings** and is currently uploading data for 2017, but there does not appear to be a way to filter for rulings regarding land issues.⁹² Tabular data on property and land disputes, from 2006, is **published in a book** on forest and land rights.⁹³ In a study of over 10,000 communities across the whole country, more than 2,000 conflicts were identified, of which 13% were land or property-related (75% concerned assault). The report explains that cases are predominantly resolved through local customary means due to the high cost of going to court and the weak position community members feel if the dispute is with the government, political-business elites, or companies. The report states, "*A high proportion of cases remain on court books for years and even decades*".⁹⁴

34	IATI, accessed 17 July 2023 from https://datastore.iatistandard.org/advanced.
35	LLA, retrieved 17 July 2023 from https://lla.gov.lr/index.php/about-us/organizational-
	arrangements/land-policy-and-planning-department.
36	LLA, retrieved 17 July 2023 from https://lla.gov.lr/index.php/about-us/organizational-
	arrangements/land-administration-department.
37	LLA, 2022, Liberia Land Rights Act Regulations 2022, Section 20.16; retrieved 29 April 2023;
	https://lla.gov.lr/index.php/downloadable-resources/policies-laws-regulations-
	repository?download=202:lra-regulations-2022.
38	The Daily Observer, 17 April 2023, Did Liberia Sign a US\$50bn Carbon Deal?; retrieved 5 August 2023;
	www.liberianobserver.com/liberia-did-liberia-sign-us50bn-carbon-deal.
39	Environmental Protection Agency, 2018, Overview of Spatial Dataset for Liberia's 6 th National Report,
	prepared by J.S. Datuama Cammue, Liberia National Focal Point, United Nations Convention on Biological
	Diversity, slide 13; retrieved 15 May 2023; https://ekmsliberia.info/wp-content/uploads/2022/08/
	CBD-LIBERIA-map.pdf.
90	UNEP-WCMC and IUCN (2023), Protected Planet: The World Database on Protected Areas (WDPA) and
	World Database on Other Effective Area-based Conservation Measures (WD-OECM); retrieved 8 August
	2023 from https://www.protectedplanet.net/country/LBR
91	MoJ, retrieved 17 July 2023 from http://moj.gov.lr/unit/court-ruling/.
92	Legal Information Institute retrieved 17 July 2023 from www.liberlii.org/lr/cases/LRSC/ .
93	Alden Wily, L, 2007, So Who Owns the Forest: An investigation into forest ownership and customary
	land rights in Liberia, p.203; retrieved 6 June 2020; https://sdiliberia.org/sites/default/files/
	publications/2008_So_Who_Owns_the_Forest%20%28FullReport%29.pdf
94	Alden Wily, L, 2007, So Who Owns the Forest: An investigation into forest ownership and customary
	land rights in Liberia, p.204; retrieved 6 June 2020; https://sdiliberia.org/sites/default/files/

Land disputes have **reportedly** increased since the passage of the LRL.⁹⁵ As explained in the Land Tenure section above, concessions and protected areas lay claim to 65% of Liberia, while 73% is subject to customary land rights. Unless resolved through progressive approaches to land use, such as community forestry and community-based conservation this sets the stage for further land conflict.

The Liberia Extractive Industries Transparency Initiative (LEITI), established through a **2009 law**, has as one of its objectives the promotion of "*public disclosure of contracts and concessions bearing relationship with the extraction of forest and mineral resources*".⁹⁶ Since 2009 its **annual report** of the payments by concession-holders to the state⁹⁷ provides a company-by-company register of licenses, concession area, information on fees and taxes to various state authorities, beneficial ownership, and exports.

The **most recent** report covers the financial year 2020-21 and is not available from LEITI but is from the **EITI International Secretariat.**⁹⁸ Both sites also offer data in open formats. The most recent data available from LEITI is the 2018-19 user-friendly **spreadsheet submission to EITI**, which includes the instruction "*Filling in this summary data template* with EITI Report data will make your EITI Report data accessible in a machine-readable format (requirement 7.2.d). 'Make the EITI Report available in an open data format (xlsx or csv) online and publicize its availability' – EITI Requirement 7.1.c ."⁹⁹ The EITI International Secretariat offers more recent (2019-20) and multi-year data on revenues reported by **government** and by **company**, albeit in a more machine-readable and less user-friendly spreadsheet format.¹⁰⁰

LEITI's 2019-20 report indicates that the industries contributed over US\$ 70 million in revenue, split between the mining (64%), agricultural commodities (25%), logging (10%) and oil & gas (1%) sectors.¹⁰¹ This is dependent on the companies self-reporting (subsequently reconciled with government data and audited) so is often incomplete. For example, between 70 - 90% of companies (depending on the sector) did not provide information on the ultimate – beneficial – company owners.¹⁰²

	publications/2008_So_Who_Owns_the_Forest%20%28FullReport%29.pdf
95	Front Page Africa, 15 July 21, Land Title Authorities Overwhelmed by Disputes following Land Rights
	Act; retrieved 17 July 2023; https://frontpageafricaonline.com/front-slider/liberia-land-title-
	authorities-overwhelmed-by-disputes-following-land-rights-act/
96	GoL, 2009, An Act Establishing the Liberia Extractive Industries Transparency Initiative (LEITI); Clause 3.2.f;
	retrieved 10 July 2023, www.leiti.org.lr/sites/default/files/documents/act.pdf.
97	LEITI retrieved 17 July 2023 from www.leiti.org.lr/index.php/publications/document-type/leiti-
	reports.
98	EITI Liberia; accessed 20 September 2023; https://eiti.org/countries/liberia.
99	LEITI, 2021, 12th Report Consolidated Data Sheet; retrieved 20 September 2023; www.leiti.org.lr/sites/
	default/files/documents/FY2019-2020%20Liberia%20Summary%20Data%202.0.xlsx
100	EITI Liberia, 2022, Government revenues; retrieved 20 September 2023; https://eiti.org/sites/default/
	files/bulk-export/government_revenue_streams-LR.csv and Revenues by company; https://eiti.
	org/sites/default/files/bulk-export/companies revenue streams-LR.csv
101	LEITI, 2022, 13th Report, 2019-2020; p.72; retrieved 9 July 2023; www.leiti.org.lr/sites/default/files/
	documents/LEITI%2013th%20Report%20final.pdf
	· ·

¹⁰² LEITI, 2022, 13th Report, 2019-2020; pp.62-63; retrieved 9 July 2023; www.leiti.org.lr/sites/default/ files/documents/LEITI%2013th%20Report%20final.pdf.

Completeness of Land Value Data

There is almost no transparency around land or property valuation data. The Liberia Revenue Authority (LRA) advises that properties are self-assessed on an as needed basis and no regular land value assessments are collected or published. In contrast, responsibility for valuing land and buildings for taxation and other purposes lies with the LLA. Liberia scores 14 for the completeness of its land value data.

Land Value Data: Not Complete (14)



The LLA Act 2016¹⁰³ mandates the LLA to "value land and buildings for the Authority's land registry systems, in collaboration with the relevant agencies of Government and which valuation may be used for taxation and other purposes". Within the Authority, the Land Valuation Division¹⁰⁴ is responsible for valuing land and buildings for taxation and other purposes and for determining the value of properties rented, purchased, sold by or to the government.

Alongside this, the LRA provides guidelines for valuation for the self-assessment of property taxes regarding buildings and farmland,¹⁰⁵ along with a **Real Property Tax Estimator**.¹⁰⁶ The guidelines state the annual taxes rates are 0.25% of the property value for residential property or 1.5% for income producing property. The LRA further **advises** that properties are self-assessed on an as needed basis and no regular land value assessments are collected or published.¹⁰⁷ Neither of these agencies provide data on land valuations. The LRA also advertises a **smartphone app** for property tax payments,¹⁰⁸ but at the time of research this could not be found on the **Google Play** website.¹⁰⁹

The MFDP's **annual budgets** include data on the actual revenue generated from property tax in the previous year, and forecast for the current and future years but only as bibliographic information. The 2023 budget provides an estimated US\$5.1 million for 2022 and an actual US\$5.6 million in the previous year. The estimate for 2023 is US\$ 5.2 million.¹¹⁰

	ents/
repository?download=77:land-authority-act-2016.	ents/
104 LLA; retrieved 12 July 2023; https://lla.gov.lr/index.php/about-us/organizational-arrangem	
land-administration-department.	
105 LRA, retrieved 17 July 2023 from https://revenue.lra.gov.lr/guideline-for-valuation-and-pay	ment-
of-real-property-taxes/.	
106 LRA, retrieved 17 July 2023 from https://revenue.lra.gov.lr/real-property-tax-calculator/.	
107 LRA Frequently Asked Questions, retrieved on 7 July 2023; https://revenue.lra.gov.lr/frequent	ly-
asked-guestions/	-
108 LRA, retrieved 17 July 2023 from https://revenue.lra.gov.lr/lra-applications/.	
109 Google Play retrieved 17 July 2023 from https://play.google.com/store/	
search?g=lra+app&hl=en&c=apps&pli=1	
110 MFDP, 2023, National Budget for Fiscal Year 2023 – Section 1.4, Revenue Table, p. xxxii; retrieved	5 July
2023; www.mfdp.gov.lr/index.php/main-menu-reports/mm-bdp/mm-bd-nb/national-bud	
fy2023/download	0

The **LEITI reports** include a section on revenue allocation which only summarizes the law that "all public funds, in the form of taxes, grants, loans and other finances are required to be deposited into the consolidated fund or government treasury".¹¹¹

The **Criminal Land Conveyance Act** 2014 protects against the sale of land by those not holding title to it, concurrent sale to more than one person, and sale of land to non-Liberians.¹¹²

Liberian private real-estate agents such as Kaikana provide some data on sales and rental values, although the listings are not dated and land area is variously described in acres or in 'lots', so it is difficult to obtain a clear picture of values or trends.¹¹³

Other Relevant Land Data Types¹¹⁴

A number of the websites described above offer map visualizations of administrative boundaries, for example the **CLIMT**, **Forest Atlas** and **Liberia National Concession Portal**. None offer downloadable spatial data. The **Electoral Commission** provides a one-page downloadable pdf of each electoral district, along with county and administrative boundaries (which may differ from electoral ones).¹¹⁵ Downloadable spatial data for administrative boundaries, roads, rivers etc. is available for registered ArcGIS users from international sources through ArcHub.¹¹⁶

LISGIS, the national statistics agency, conducted a national census in November 2022, and announced provisional results in February 2023, although it is yet to make these or other results available online.¹¹⁷ As this is an election year, however, the announcement has provoked some controversy over the relationship between population and constituency boundaries. The constituencies were last demarcated in 2010 and there are **calls** for reviewing them prior to the general election in October 2023 in order to reflect the current spatial distribution of population as this has implications for the vote as well as for subsequent subventions of state funds to local administrations.¹¹⁸ This further demonstrates the political sensitivity and contested nature of land data.

111	See for example LEITI, 2022, 13 th Report, 2019-2020; p.78; retrieved 9 July 2023; www.leiti.org.lr/sites/ default/files/documents/LEITI%2013th%20Report%20final.pdf .
112	GoL, 2014, Act Against the Criminal Conveyance of Land; retrieved 29 April 2023; https://lla.gov.lr/ index.php/downloadable-resources/policies-laws-regulations-repository?download=38:an-act-
	against-criminal-conveyance-of-land.
113	Kaikana, retrieved 17 July 2023 from https://kaikana.com/.
114	This section provides a brief overview of related land data uncovered in the course of this research, but it should not be considered as comprehensive, and it is not considered in the data assessment for Liberia.
115	National Electoral Commission retrieved 17 July 2023 from www.necliberia.org/edistrict_20.php.
116	ArcHub, retrieved 17 July 2023 from https://hub.arcgis.com/search?q=Liberia.
117	UN Liberia, 23 February 2023, Liberia announces provisional results of its 5th National Population and
	Housing Census; retrieved on 11 July 2023; https://liberia.un.org/en/220493-liberia-announces-
	provisional-results-its-5th-national-population-and-housing-census
118	The Daily Observer, 28 February 2023, Liberia's 2022 Census: a Recipe of Vote Rigging in 2023; retrieved
	on 11 July 2023; www.liberianobserver.com/liberias-2022-census-recipe-vote-rigging-2023. Front
	Page Africa, 6 July 2023, House of Representatives Demands Population Breakdown by Electoral Districts;
	retrieved on 11 July 2023; https://frontpageafricaonline.com/news/liberia-house-of-

representatives-demands-population-breakdown-by-electoral-districts/.

Open Data Compliance Assessment in Liberia

Liberia's SOLIndex Score

State of Land Information (SOLI) reports assess and score the completeness and openness of the information about a country's legal framework for land governance, its land tenure data, land use data, land development data and its land value data. The report examines each land data type in detail, identifying which elements are available in a digital format, how these comply with international open data criteria and assesses their completeness and openness. From these results a country's SOLIndex score is calculated. Liberia has a **completeness score (CS) of 32** and an **openness score (OS) of 31**. The overall SOLIndex score for Liberia is 9.9 (32CS x 32OS)/100.

Detailed SOLIndex Scoring Results

Completeness Scoring

SCORE	DESCRIPTION
3	All land legislation, tenure, use, development, or value data is digital
2	A substantial amount of land legislation, tenure, use, development, or value data is digital.
1	Little land legislation, tenure, use, development, or value data is digital
0	No land legislation, tenure, use, development, or value data is digital

Completeness Results

COMPLETENESS SCORES FOR EACH LAND DATE TYPE	CS SCORE	CS %
How complete is the digital legal and policy framework?	5/6	83
How complete is digital land tenure data	8/27	30
How complete is digital land use data	2/12	17
How complete is digital land development data	4/27	15
How complete is digital land value data	5/36	14
Total land data completeness score		32%

Openness Scoring

Ten open data criteria are used to assess the openness of land data across each of the five land data types. These criteria are drawn from the methodologies used by the **Open Data Index**¹¹⁹ and the **Open Data Barometer**.¹²⁰ For each criteria and each land data types the following openness scoring system is used:

CRMATION IN LIBERIA

SCORE	DESCRIPTION
3	The digital data meets all or most of the open data criteria
2	The digital data meets more than half of the open data criteria
1	The digital data meets few of the open data criteria or there is digital land governance
0	There is no evidence of digital or open data

Table 1 presents the open data assessment for Liberia.

 ^{2016/2017} Global Open Data Index methodology. https://index.okfn.org/methodology/
 Open Data Barometer: methodology, 4th ed. 2016, retrieved on 17 August 2023 from https://
 opendatabarometer.org/4thedition/methodology/.

Table 1: Data Openness Score for Liberia

		Legal	Land Tenure	Land Use	Land	Land Value	Overall Score	Index Score
	Online	Fully online	Slightly online	Partially online	Slightly online	Not online	Slightly online	47
	Accessible	Partially accessible	Partially accessible	Slightly accessible	Slightly accessible	Slightly accessible	Partially accessible	47
	Free	Fully free	Partially free	Slightly free	Partially free	Slightly free	Partially free	60
Ö	Timely	Partially timely	Slightly timely	Slightly timely	Not timely	Not timely	Slightly timely	27
	Metadata	Partial use of metadata	Partial use of metadata	Partial use of metadata	Partial use of metadata	Slight use of metadata	Partial use of metadata	60
~	Standards	No use of standards	Partial use of standards	No use of standards	No use of standards	No use of standards	No use of standards	13
	Downloadable	Partially downloadable	Not downloadable	Slightly downloadable	Partially downloadable	Slightly downloadable	Slightly downloadable	40
\odot	Open License	Partial use of open license	No use of open license	No use of open license	Slight use of open license	No use of open license	No use of open license	20
0110 1001 1010	Machine Readable	Not machine readable	Not machine readable	Not machine readable	Not machine readable	Not machine readable	Not machine readable	0
 >	Linked Data	No use of URI	No use of URI	No use of URI	No use of URI	No use of URI	No use of URI	0
	Overall	Partially open	Slightly open	Slightly open	Slightly open	Not open	Slightly open	
	Percentage	53	33	27	30	13		31

Online (score 47)

The online availability of land data varies with the type of data. Regarding legislation, regulations, policies, and procedural information, this is almost all available, primarily on the webpages of the LLA. For other categories of information (land tenure, land use, land development or land value) comparatively little information is online. Where resources are available, they are mainly in static bibliographic text formats, including periodic reports, narrative documents, tables presented as text, or library databases holding this sort of information. There is no overall dataset of land tenure, and what information can be found concentrates on large natural resource concessions such as logging and mining. It has not been possible to find an authoritative land use map, and even official schedules of land cover and land use classifications differ (see Land Use section above). For land development and land value the only official information online describes roles, responsibilities, and processes rather than actual data.

Accessible (score 47)

The majority of resources that can be found online are openly accessible without the need for any registration or login credentials. Almost all legislative information is accessible, but in a proprietary format. Three of the four sources of spatial data – the **CLIMT**, **National Concession Portal**, and **mining cadaster** – are accessible to view (but not to download, see below). The fourth, the **Forest Atlas**, is restricted by a registration requirement. Other information, in the form of bibliographic texts, is accessible with one important exception: LISGIS, the national statistics agency, provides very little information online and has an **online information request** form that requires the applicant to state why they need the information.

Free (score 60)

The free (of charge) assessment closely mirrors the accessible criteria above, indicating that in all cases where information is accessible it is at no cost. It is not possible, however, to assess sites that require prior registration, but these sites do not mention costs.

Timely (score 27)

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Most of the available bibliographic documents are legislative texts or one-off reports, which remain static and are less time critical. There are some periodic reports, such as the national **annual budget**, and **LEITI reports** for which new editions are regularly published. Of the online Liberian datasets, the **CLIMT** is actively maintained as it is monitoring a very live situation regarding the formalization of community land rights across the country. Others, particularly those supported under a dedicated development project, tend to fall into neglect once the initial impetus ends (for example the **Liberia Forest Atlas**, and the **National Concession Portal**). Amongst international rather than Liberian agencies, **IATI** data is continuously updated by its contributing development agencies, and **FAO's legislative database**¹²¹ is updated a few times a year.

Metadata (score 60)

Almost every resource that could be found online had the minimum of metadata: author, data and publisher/source and therefore as individual items fully met this criterion. However, as discussed in the Online section above, few datasets were available at all, so overall scores for metadata are marked down to 'partially available'.

Standards (score 13)

Data standards are typically more suited to datasets and spatial information than to bibliographic texts but given the paucity of these types of data covering land issues in Liberia it is not unexpected that almost no information followed a standard format. Amongst the Government of Liberia sources, only land tenure data showed any compliance with standards: the spatial data used the Environmental Systems Research Institute (ESRI) ArcGIS platform, which publishes information on its standards **here**;¹²² and the **mining cadaster** is supported by the Revenue Development Foundation, which **states** the "*design is refining a standard set*".¹²³ Amongst international agencies, global standards have been developed by the institutions themselves, such as **FAO LCCS**¹²⁴ and **IATI**.¹²⁵

Downloadable (score 40)

Most bibliographic data and information are downloadable. The very few datasets that were found either do not offer downloads (for example the National Concession Portal), have restricted access minimizing the downloadable information (Liberia Forest Atlas), or are the product of international agencies (FAO, IATI). The mining cadaster, while a good example of a Liberia-owned interactive and spatial dataset, and is actively maintained, is not downloadable without a login. None of the downloadable information could be captured in bulk or automated through an API.

Open License (Score 20)

Most Liberia government websites do not offer license information beyond a copyright symbol in the footer of each webpage, suggesting the default is to not publish information under an open license. The exception is LEITI, which states "Unless otherwise noted, you may republish our content for free" in the footer of each webpage. The Liberia Forest Atlas, published on a website of the FDA, states this is under an open license, but requires a login and the details of how to obtain one are not provided. All legislation has been considered open by law, so does not need an explicit license.

Machine Readable (Score 0)

Given that bibliographic data is generally more difficult to render machine readable than databases, statistical tables, and spatial data, it follows that none of the land information identified and published by Liberian institutions is machine-readable. The only examples found were from international sources, such as land cover data from FAO and development

122 ESRI ArcGIS Standards; accessed 17 July 2023 from www.esri.com/en-us/arcgis/open-vision/ initiatives/standards-specifications.

¹²³ Revenue Development Foundation; accessed 17 July 2023 from https://eiti.org/blog-post/eitimainstreaming-and-government-online-repository-portals.

¹²⁴ FAO LCCS; accessed 21 August 2023 from www.fao.org/land-water/land/land-governance/land-resources-planning-toolbox/category/details/en/c/1036361/.

¹²⁵ IATI Standard version 1.04; accessed 17 July 2023 from https://iatistandard.org/en/news/iatistandard-version-1-04-goes-live/.

assistance data from IATI. Tables and statistical data, where available at all (such as the national **annual budget**, LEITI reports, and a **land cover / land use study** by Metria AB and GeoVille GmbH on behalf of the FDA) are static "*PDF*" reports rather than in interactive databases and consequently are more difficult to render machine-readable.

Linked Data (URI, Score 0)

For those land data sources found online, none included a URI. Furthermore, for any online downloadable spatial, database or statistical information, i.e. the type of information that might more usually benefit from having a URI, the only sources were international, not Liberian institutions.

Overall (Score 31)

Online availability is the most basic criteria for the assessment of openness, and, reflecting this, land data is only Slightly Open in Liberia as little of it is available online at all. This scarcity is particularly the case for data as distinct from bibliographic descriptive texts – the latter are generally free to access, do not require prior registration, include a minimum of metadata, and are downloadable. Of the few datasets that are available, many present other obstacles to openness and interoperability, such as information being out of date, a lack of standard formats, restrictive user licenses, no ability for bulk downloads, APIs, machine-reading, and no URIs. Furthermore, some key sources, especially of spatial data, require prior registration, if not to view the data, then to download it.

Conclusions

Liberia has a robust legal framework for land governance and for openness, rooted in its constitution. Two key pieces of legislation, the 2018 Land Rights Law and the 2010 Freedom of Information Act, as well as others, commit the state to operate in a transparent and responsive manner with respect to land governance. Early implementation of the FOIA was promising, with an Independent Information Commission established to promote and support the public's right to information. The law requires proactive publication of information as well as providing it in response to requests and is clear that the applicant does not need to provide any reason for their requests.

Like the FOIA, the LRL was a model piece of legislation, highly progressive for the region as it codifies the customary right of communities to own land collectively. These laws, many others, and regulations, policies, procedures etc. have not yet been fully implemented, however. The LLA has demonstrated a willingness to openness, primarily through the CLIMT portal on community land formalization, and there is evidence of efforts to digitize land title deeds. But there is no online land title register and no single online interactive, and up-to-date map that shows all the large natural resources concessions, protected areas, and other expropriated land in one place.

The **mining cadaster** is a good example of open information on permits, both spatial data and key attributes. It serves well as a model for other authorities to make concession and permit information available such as those for logging and large-scale agriculture, although it is unfortunate that a login is required in order to download the information.

In contrast, the lack of openness of information from the **Forest Atlas** and the Independent Information Commission, is of concern. There is strong evidence that spatial land cover/land use data produced under contract for the FDA was once available to all and is no longer. Information on individual forest management permits, and even the forest legal framework was once on the FDA's website and are no longer available.

LISGIS appears to have a wide mandate to lead on a holistic statistical and spatial database system, but its website is sparse on data of any kind. Reports by others,¹²⁶ and citations of LISGIS data, as well as the promised national census results, suggest that agencies such as LISGIS do collect and manage data internally, but they are not yet making it openly available online.

See for example GoL, 2019, Liberia's forest reference emission level submission to the UNFCCC, p.25; retrieved on 28 July 2023; https://redd.unfccc.int/files/liberia_frel_submission_ december_2019.pdf, and UNHabitat, 2017, A National Urban Policy for Liberia: Discussion Paper, p.20; retrieved 30 June 2023; https://unhabitat.org/sites/default/files/2020/07/a_nup_discussion_paper_ for liberia.pdf.

Finally, it is noted that many websites originate as outcomes from projects, which then end, and that more open information sources are produced by international organizations than by Government of Liberia agencies themselves. This suggests inadequate local ownership to drive sustainability of these sites, once external financial and technical support ends.

The reported lack of funding to maintain the Independent Information Commission and the withdrawal of land-related commitments from the latest **OGP** action plan indicates a trajectory of reduced transparency raising concerns that open government is receding in Liberia.

Recommendations

This section makes recommendations to be considered for improving open land data in Liberia and achieving the benefits of open data in the land sector. Implementing these recommendations can allow Liberia to change its open data trajectory and advance using open land data as a lever to create a more enabling environment for innovation.

Legal and Policy Reforms

- **Strengthen** Implementation of the FOIA through establishing frameworks to initiate the publication of land governance data on government websites.
- Develop clear and accessible procedures for government departments and citizens to be able to access public information on land governance.
- Enable the Independent Information Commission to drive these reforms and to track government performance in making data proactively available in compliance with the law.
- Apply the lessons learned (successes and failures) from the implementation and **results** of the OGP action plan ending in 2022 and set clear and achievable goals for land data openness in the next action plan.

Publish Available Land Data

- Publish open land governance data. Many Government of Liberia agencies already
 hold considerable land data, but this is rarely shared through online portals. Learn from
 the registry and map of mining permits hosted by the Ministry of Mines and Energy
 which can serve as an example to include all natural resources concessions given their
 centrality to Liberia's land use and economy and the country's troubled history of civil
 conflict over land rights.
- Clarify whether the authority and responsibility for collecting data and information in support of the delivery of land value functions and land development functions is under the auspices of LISGIS, or the Land Valuation Division of the LLA, and/or the LRA in its supervision of property taxes.
- Collate and make land value and land development data available for other government departments to support decision making and. Providing authoritative information to the public on enforcement of planning rules and conditions, compensation, dispute resolution and revenue generation would also better inform development planning and land transactions

Data Release Frameworks

- Draft frameworks and agreements to coordinate access to land data between government agencies and departments. For example, many of the companies appearing in the list of mining permits are also reporting their financial and beneficial ownership information to LEITI, which publishes it, under an open license, in annual reports. The information LEITI holds could be integrated with that of the MME to provide more complete accountability and transparency for those developing Liberia's natural resources.
- The LISGIS and the LLA have very closely related mandates regarding the administration of data on land tenure, land use plans and related spatial data. These agencies should coordinate, not only internally, but also in the public provision of this information in compliance with the FOIA.

Prioritize Land Data Needs and Objectives

- Key land data custodians should seek out and identify data across diverse public sector entities that could support land governance objectives and ultimately contribute to a more robust and effective open data ecosystem in Liberia.
- Identify and prioritize for publication of a minimum set of open land data and information resources corresponding to governmental and public needs for data.
- Liberia was an early adopter in Africa of legislation to open up access to information as a
 matter of legal right. However, this leading role is at risk and progress in opening up data and information in Liberia has not been assured. Implementing these recommendations will allow Liberia to drive forward sustainable social and economic development founded upon readily available land data and information. Land data and information that meets the requirements for completeness and openness can support land management and the provision of land related services in Liberia.





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