State of Land Information in Namibia

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. The Land Portal has published SOLI reports for South Africa, Uganda, South Sudan, Tanzania, Kenya, and Senegal. We aim to develop SOLI reports for a dozen countries in Africa by 2024.

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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Introduction

Why Open Data?

Land, and the governance of land is often a fraught and contested terrain, as land plays a central role in how society perceives itself. In Namibia, land governance challenges are numerous, varied and linked to fundamental aspects of the economy, society, politics and power. The fragmented and overlapping tenure frameworks, including statutory, customary and informal tenure systems, are not fully captured by the land administration systems. These issues merge the contemporary struggle for housing and services with colonial and historical injustices. The outcome is a lack of comprehensive data and information, presenting several challenges for efficient and effective land governance.

It has become an established fact that the pervasive nature of data in society requires that access to findable, accessible, interoperable, and reusable data without discrimination is needed to enhance innovation, improve service delivery and hold government accountable. 123.4 Open data encompasses the placing of data in the public domain so that potential users can have access and ensure transparency. Namibia is taking part in the global effort to set targets to achieve open access to information, promoted by international initiatives such as the Sustainable Development Goals. As Namibia strives to contribute to the SDGs and tackle its historical and current land governance challenges, it needs land information to inform good policy and decision making.

- European Commission Final Report and Action Plan from the Expert Group on FAIR Data: Turning Fair Into Reality, 2018. https://ec.europa.eu/info/sites/default/files/turning_fair_into_reality_0.pdf
- 2 IDC White Paper: Digitization of th eWorld from Edge to Core, 2018
- https://www.seagate.com/files/www-content/our-story/trends/files/idc-seagate-dataage-whitepaper.pdf
- 3 Policy Paper–UK Government National Data Strategy 2020.
 - https://www.gov.uk/government/publications/uk-national-data-strategy/national-data-strategy#fn:2
- 4 Data: A New Direction, 2021. https://www.gov.uk/government/consultations/data-a-new-direction/outcome/data-a-new-direction-government-response-to-consultation
- 5 Dinah, W., Lefika, P. T., & Joseph, B. (2019). The Role of Open Data in Smart Cities: Exploring Status in Resource-Constrained Countries. In M. Bolivar, K. Bwalya, & C. Reddick, Governance Models for Creating Public Value in Open Data Initiatives (Vol. 31). Springer.
- 6 UNESCO. (2019). Access to Information: A New Promise for Sustainable Development. In World Trends in Freedom of Expression and Media Development. Paris.

Global Indices

Despite Namibia's commendable efforts to improve its open data ecosystem, it has had mixed results in ratings of its openness. The 2022 **Global Data Barometer**⁷ survey scored Namibia a 1 (out of 100) for the openness of its land data. In the **2020-2021 Open Data Inventory** (**ODIN**),⁸ which measured how complete Namibia's statistical data is and whether the data meet international standards of openness, Namibia scored 41 (out of 100), showing that the statistical data fulfills some of the ODIN coverage and openness criteria, however some important gaps are still present. Similarly Namibia scored 65% on the openness of its statistical data according to the most recent (2016/2017) **Global Open Data Index**,⁹ with the National Statistics rated at 65%, while the same survey scored land ownership data at 0%. These results show that while Namibia has had some success in opening up statistical data, that has not necessarily translated to open land data. However, according to the Namibia Statistics Agency **media release of 2021**,¹⁰ Namibia was ranked in the highest category for the development and management of spatial data by the United Nations Global Geospatial Information Management.

While useful, the results from these assessment frameworks listed above should be understood and viewed from the perspective of baselines, rather than as an absolute statement of openness. Instead, efforts should be made to review the assessments and focus on addressing data gaps, publishing more gender disaggregated land data, adopting open licenses, publishing more land data in machine readable formats and applying metadata standards.

According to the **Afro Barometer¹¹** survey in 2019, Namibians felt they lacked access to information about the basic workings of government and have limited confidence in being able to access government information. A particular challenge for developing countries such as Namibia is the state of the information infrastructure that forms the backbone for open data concepts. In Namibia, only 51% of the population has access to **internet**, ¹² emphasising the need for digital infrastructures as the basis for improved access to all open data.

- 7 https://globaldatabarometer.org/results/
- 8 https://odin.opendatawatch.com/
- 9 https://index.okfn.org/
- 10 https://d3rp5jatom3eyn.cloudfront.net/cms/assets/documents/Media_Release_-_NSDI_GIS_ACHIEVEMENT_-_19_ November 2021.pdf
- 11 https://www.afrobarometer.org/countries/namibia/
- 12 Kemp, S. (2021). Digital 2021: Namibia. Retrieved April 2022, from DATAREPORTAL: https://datareportal.com/reports/digital-2021-namibia#

Objectives of the Report

The aim of this report is to serve as a diagnostic for the land information ecosystem in Namibia and enable targeted interventions for improved information management at a later stage. The first section describes Namibia's legal framework for data governance and examines Namibia's international and national commitments to access to information, as well as the instruments for data and information governance. This section provides a summary of Namibia's legal framework for opening up information. Good data governance ensures transparency about the purpose for which information is collected, stored and disseminated.

The second section, "Availability of Land Data and Information" examines the available land data and information in Namibia provided by the government organisations responsible for land administration. This overview is organised according to **six key land data categories** (**Table 1**). The third section evaluates the "openness" of this information, by assessing it against **10 criteria for open data**, as used by international best practice (**Table 2**).

Table 1: Land Data Categories

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CATEGORY 1:

LEGAL AND POLICY DATA AND INFORMATION

The availability of data and information on laws, policies, rules, regulations, processes and procedures regarding land and data governance across all data categories.



CATEGORY 2:

LAND TENURE DATA AND INFORMATION

Data and information on the relationships that individuals and groups have with respect to land and related resources and their allocation; cadastral information (formal, informal, customary/indigenous) including the legal survey records to determine parcel boundaries; the creation of new properties or alteration of existing properties; and transfer of properties though sale, lease or mortgaging.



CATEGORY 3:

LAND USE DATA
AND INFORMATION

The available data and information related to control of land use; including zoning, enforcement of land uses, public land use at the national, regional, and local level that is available in the country.



CATEGORY 4:

LAND DEVELOPMENT
DATA AND INFORMATION

An overview of the available land data and information relating to the building of new physical infrastructure and utilities; the implementation of construction planning; public acquisition of land; expropriation; change of land use through granting of planning permissions, and building and landuse permits; and the distribution of development costs.



CATEGORY 5:

LAND VALUE DATA AND INFORMATION

Available land data and information on the assessment of the value of land and properties; the calculation and gathering of revenues through taxation; and the management and adjudication of land valuation and taxation disputes and land markets.



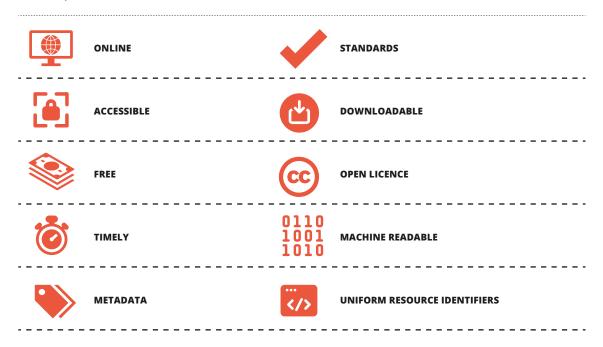
CATEGORY 6:

OTHER LAND DATA
AND INFORMATION

This category may vary according to country specific context, but may include data and information relating to mineral resources, infrastructure, agricultural census data, socio economic census and survey data, public asset data, public procurement data, beneficial ownership data and other key data sets for resilience and climate change.

It is important to note that this research does not attempt to quantify or assess the quality of the data, or make a determination of what constitutes the "best" data, beyond it being open. Data users are best placed to determine what they are looking for in the data, what they wish to use the data for, and make their own determination as to how appropriate the data is for their needs.

Table 2: Open Data Assessment Criteria



Methodology

This SOLI report refers to the **Modern Land Administration Theory** as a conceptual framework. The theory¹³ states that land administration agencies should support sustainable development by contributing to a more integrated information system across government sectors.

It prioritises an information environment that supports managing land and associated resources to respond to national and global imperatives such as poverty reduction, sustainable agriculture, sustainable settlements, economic development and conflict management. Therefore the information needed for the good governance of land must include data on the core land administration functions: land tenure, land use, land value, and land development. Legal and policy information on land governance as well as other relevant land data and information are also considered. For each of the six categories, this report identifies key information sources and assesses whether the land-related data and information were readily available, timely, standardised, and openly licensed. Inputs on this categorization and methodology are welcomed to continuously improve the process.

The report prioritises government data and the public sector as the primary producers of land data, while recognising that many other actors may play a role in the production of data. It has become clear that, in terms of land governance, the government is the primary custodian of land data. This assessment is based on the typical land administration functions of a well-operating system, and presupposes that government departments are able to function as an integrated whole for the purposes of planning and sustainable development.

Williamson, I., Enemark, S., Wallace, J., & Rajabifard, A. (2010). Land Administration for Sustainable Development. Redlands: ESRI. https://cepa.rmportal.net/Library/natural-resources/Land%20Administration%20for%20Sustainable%20 Development.pdf

The SOLI research team comprised local and international researchers. Additional stakeholder interviews were conducted to complement and validate the desktop research. However, the data landscape is not static and is constantly in flux. This document must be understood as providing a unique temporal baseline.

Dataset as the Unit of Analysis

The "dataset" is the primary unit of analysis. It is a structured collection of information, including statistical data, bibliographic data, spatial data and multimedia contents.

For example, a dataset can list property ownership and boundaries details, or contain statistical information about the number of women land owners. It can also be a bibliographic database of publications on a certain topic of land governance. The focus is on government datasets produced as part of ongoing functions, not project data, which entities (donor, private, NGO) might create using data about a specific issue for single use, but which might not be supported on an ongoing basis.

As not all information about the information landscape is measurable in numbers or captured in a dataset, other types of data are included, such as individual publications, websites, or a specific law or legislation (or even certain aspects within those documents).

Usefulness of the Report

This SOLI Report is intended as a tool for any party that is interested in land data governance work that requires access to data and information. Researchers may use this report to identify gaps in information and identify research priorities accordingly. A land practitioner working at the global level may use the information sources as a basis to monitor land governance performance against international indicators.

Data Governance in Namibia

This report defines land data governance as the legal, policy and management principles that inform the equitable and ethical collection, use and dissemination of data. This section focuses primarily on the collection, use and dissemination of land data and information at the national level.

Significantly, Namibia passed an access to information (ATI) law in 2022. Additionally, the principles for access to information have been enshrined in the constitution as well as in a number of international instruments to which Namibia is a signatory.

Legal Framework on Access to Information

The journey for increased access to information from public institutions in Namibia has been long and arduous¹⁴. The strongest provision to date is the Access to Information bill that was approved in July 2022¹⁵. The Bill is set to provide for the right to access information held by public and private institutions and aims to encourage good governance in the creation, management, and dissemination of information.

In Namibia, the promotion of access to information is embedded in various state organisations' strategies. The National Anti-Corruption Strategy and Action Plan for 2017-2019¹⁶ highlights access to information and protection of information. Access to information is promoted within the National Development Plan 5 (NDP5)¹⁷ which states that "universal access to information, affordable communication and technology infrastructure and services" should be available for all Namibians. The Ministry of Information and Communication Technology (MICT) in its Strategic Plan for 2017/2022¹⁸ aims to "enhance unhindered access to information for an informed Nation".

- 14 Timeline: Namibia's journey to an access to information law,
- https://namibiafactcheck.org.na/news-item/timeline-namibias-journey-to-an-access-to-information-law/
- 15 The Namibian Newspaper, 21 June 2022:
 - https://www.namibian.com.na/6221491/archive-read/Access-to-information-law-sails-through-National-Assembly
- https://acc.gov.na/documents/31390/31536/National-Anti-Corruption-Strategy-and-Action-Plan-2016-2019.pdf/fe2ddc71-da48-e9b3-66df-ed942947701fhttps://acc.gov.na/documents/31390/31536/National-Anti-Corruption-Strategy-and-Action-Plan-2016-2019.pdf/fe2ddc71-da48-e9b3-66df-ed942947701f
- 17 https://www.npc.gov.na/wp-content/uploads/2021/11/NDP5.pdf
- 18 https://mict.gov.na/documents/32978/266786/MICT+STRATEGIC+PLAN+2017-2022/3596bd32-0aa5-498a-b4c9-b396af9e8c1a

While much has been done to improve access to information in Namibia, there is also cause for concern. Journalists have raised the chilling effect of legislation on media freedom and access to information under the guise of national security. ¹⁹ ²⁰ ²¹ However the courts have taken up a fairly robust defence for the right to access information, even when national security has been invoked as the reasons for restricting access. ²²

Work is also under way to increase protections for data privacy in Namibia. The right to privacy in Namibia is provided for under Article 13 of the Namibian Constitution. A data protection draft bill is currently under development by the Ministry of Information Communication and Technology.

A data protection act and an access to information law together with the sectoral policies on access to information will provide Namibia with a comprehensive legal environment for the systematic opening up of data and information.

Legal Framework on Land Data

Data and information held by the government of Namibia is by default meant to be accessible to the public – but primarily for physical inspection. The legislation has not been updated across all sectors to enable digital access to data, notably in the land survey and tenure registries, which are the primary repositories documenting land ownership.

The adoption of the 2022 Access to Information law provides a unique opportunity to consolidate rules and regulation on access to land information. Currently access to land information is described in a piecemeal fashion in a variety of laws and policies dealing with specific tenure or land administration functions, under the custodianship of various government agencies.

One of the primary land data and information providers is the Namibia Statistics Agency (NSA)²³, which hosts and manages the National Spatial Data Infrastructure (NSDI).²⁴ Key thematic data sets are collected from other government agencies and provided to the NSA for cleaning, standardising, formatting, storing and online release.

Land Tenure Data

Land tenure data is created and managed under three different tenure systems (Freehold, Customary, Informal) resulting in three distinct and separate data and information systems. The Ministry of Agriculture Water and Land Reform is the main institution managing land tenure information.

- 19 https://neweralive.na/posts/opinion-access-to-info-bill-not-yet-a-priority-for-journalists
- $20 \quad https://gazettes.africa/archive/na/1990/na-government-gazette-dated-1990-12-04-no-114.pdf$
- 21 https://www.lac.org.na/laws/2012/5008.pdf
- 22 As demonstrated in Director General of the Namibia Central Intelligence Service and Another v Haufiku and Others ([2018] NAHCMD 174). https://namibili.org/na/judgment/high-court-main-division/2018/174
- 23 https://nsa.org.na/
- 24 Digital Namibia, National Geographic Portal. https://digitalnamibia.nsa.org.na/

Freehold Tenure Data

Cadastral data is collected according to the Land Survey Act 33 of 1993.²⁵ Section 3 (J, (i)) provides for the inspection of documents by the public in the Surveyor General's Office upon the payment of prescribed fees. The scale of fees to be charged in the office of Surveyor General is regularly published and gazetted.

The **Deeds Registries Act 47 of 1937**²⁶ provides specifications on public access to information in **Section 91**.²⁷ Section 7 prescribes access to and payment for registry information. Data on government owned land can be obtained from the Deeds registry.

Customary Tenure Data

Customary/Communal land information on the land register can be made available via radio and newspaper. Information on the allotment of farming units and infrastructure development is required to be made available to the public No mention is made regarding access to customary land data from the Land Boards (who ratify the land rights). The Ministry of Agriculture, Water and Land Reform (MAWLR) does not have an access to data and information policy. The Communal Land Reform Act No 5 of 2002 and the Agricultural Commercial Land Reform Act 1995 are in the process of being combined into one act, ostensibly to unify the land tenure system. This proposed Land Bill (2018) does not contain any new provisions related to the access of land information, and has been criticised for a number of other reasons. Access to the suppose of the reasons.

Informal Tenure Data

The Flexible Land Tenure Act No. 4 of 2012³¹ creates alternative forms of title for immovable property with a focus on informal settlements. Section 3(3) of the Flexible Land Tenure Regulations (2018)³² makes provision for the public to access documents filed in the land rights office and may "inspect and copy any documents filed on record" as long as it is "under the supervision of staff members" and upon payment of the required fee.

The Shack Dwellers Federation of Namibia also manages data on informal households as part of the Community Land Information System (CLIP).³³ Some local authorities store data on households in informal settlements in Microsoft Excel format. The data is collected by local authorities themselves and at times in partnership with the Shack Dwellers Federation. Data can be accessed upon written request.

- $25 \quad https://www.lac.org.na/laws/annoSTAT/Land \% 20 Survey \% 20 Act \% 2033 \% 20 of \% 201993.pdf$
- 26 https://www.lac.org.na/laws/annoSTAT/Deeds%20Registries%20Act%2047%20of%201937.pdf
- 27 The 2015 revision of the Act was recalled in June 2021 following a court case. https://www.wkh-law.com/post/bank-windhoek-limited-and-minister-of-agriculture-water-and-land-reform-registrar-of-deeds-the-attorney-general
- 28 According to section 3(4) of the Regulations of Communal Land Reform Act 5 of 2002. http://www.lac.org.na/laws/annoREG/Communal%20Land%20Reform%20Act%205%20of%202002%20-%20Regulations%202003-037.pdf
- 29 Section 23 A & E of the Regulations of Communal Land Reform Act 5
- 30 The Land Bill. What is it All About and Is it Needed? by Wolfgang Werner 2020. Accessed in October 2022. http://www.lac.org.na/news/probono/Probono_73-Land_Bill.pdf
- 31 https://www.lac.org.na/laws/2012/4963.pdf
- 32 http://www.lac.org.na/laws/annoREG/Flexible%20Land%20Tenure%20Act%204%20of%202012-Regulations%20 2018-101.pdf
- 33 https://www.citiesalliance.org/sites/default/files/NamibiaCLIP092.pdf

In addition to the three tenure systems, it is appropriate to consider state-owned land on its own. State land may be either land registered in the Deeds Office, or may be any land not registered to an individual or corporation. The **State Finance Act 31 of 1991 as amended by Public Service Act 13 of 1995**³⁴ prescribes the state to keep a register of immovable property owned and leased by the state. Land reform and expropriation is guided under Section 20 of the **Agricultural Commercial Land Reform Act 1995**. There are no references as to how information on reform and resettlement may be obtained nor is there a reference to a database. It prohibits disclosure of any information pertaining to the activities of the Land Reform and Advisory Commission, ranging from information on farms accessed, compensation and expropriation. Information may be periodically made available by means of instruments such the **Namibia Land Statistics Booklet of 2018**, 6 but this is not openly made available.

Land Use Data

Land use information is generally under the custodian of the Ministry of Urban and Rural Development (MURD). The **Urban and Regional Planning Act 5 (2018)** ³⁸ makes provisions for inspection and commentary of the National Development Framework which guides land use planning and development in the country. Section 28 states that the data, including information on applications to make adjustments to approved urban structure plans, such as rezoning, township establishment and consolidation, can only be accessed in person during office hours. This information is usually available in hard copy at the offices of the local authority and the consulting town planner.

Land Valuation and Taxation Data

In the Namibian constitution, Articles 16, 23, and 53 provide a basis for valuation and taxation of agricultural land. Land valuation and taxation of agricultural land is the responsibility of the Ministry of Agriculture Water and Land Reform. The Agricultural (Commercial) Land Reform Act 6 (1995)³⁹ (ACLRA) provides the legislative direction on how commercial agricultural land will be valued and taxed. Valuations for all other land under the jurisdiction of local authorities (residential, business, institutional) are assessed in terms of the Local Authorities Act 23 (1992).⁴⁰ Local authorities set tax rates and levy annual taxes on owners of immovable properties located within their boundaries.

The valuation roll and iso-value map are available at government offices advertised in the Government Gazette (Section 7). The main and interim valuation roll should be available for inspection during office hours at the relevant ministerial offices. The Agricultural (Commercial) Land Reform Act 6 (1995) sets out the approach for dealing with the acquisition of agricultural land for land reform and provides approaches for the collection of land tax based on the valuation roll.

- 34 https://www.lac.org.na/laws/annoSTAT/State%20Finance%20Act%2031%20of%201991.pdf
- 35 https://namiblii.org/akn/na/act/1995/6/eng%402014-03-17
- 36 https://d3rp5jatom3eyn.cloudfront.net/cms/assets/documents/Namibia_Land_Statistics_2018.pdf
- 37 https://neweralive.na/posts/ombudsman-finally-gets-land-resettlement-list
- 38 https://www.lac.org.na/laws/2018/6631.pdf
- 39 https://www.lac.org.na/laws/annoSTAT/Agricultural%20(Commercial)%20Land%20Reform%20Act%206%200f%201995.pdf
- 40 https://namiblii.org/akn/na/act/1992/23/eng%402018-04-24

Land Development Data

Land development is managed according to the Local Authorities Act 23 (1992),⁴¹ while planning is guided by the Urban and Regional Planning Act 5 (2018).⁴² All key development processes are subject to public notice and public access to the planning information (including specific provisions for other interested and affected parties). In total there are ten provisions for giving notice of land development to the public.

Other Land Data

- The Soil Conservation Act No 76 (1969)⁴³ makes no reference to public access to any information or documents except upon request and only in relation to disputes.
- Public Asset Declaration by Members of Parliament is required by the Powers Privileges and Immunities of Parliament Act 17 (1996)⁴⁴ and section 205 of the Electoral Act No. 5 (2014).⁴⁵ In 2015 Namibian President Hage Geingob⁴⁶ became the first president who made a public asset declaration, but despite this example, the Institute for Public Policy Research reported that the declarations from parliamentarians were incomplete.⁴⁷
- Public procurement data is governed by the Public Procurement Act 2015 Act No. 15 of 2015⁴⁸, and seeks to make the procurement of goods and services transparent by public entities. The Central Procurement Board of Namibia publishes tenders and contracts awarded online.⁴⁹
- The National Policy on Climate Change⁵⁰ and the Disaster Risk Management Act 10 of 2012,⁵¹ propose to "establish a climate change management information system to provide accurate and timely information for informed decision-making as well as to ensure public access to climate change information."

- 41 https://www.lac.org.na/laws/annoSTAT/Local%20Authorities%20Act%2023%20of%201992.pdf
- 42 https://www.lac.org.na/laws/2018/6631.pdf
- 43 https://namiblii.org/akn/na/act/1969/76/eng%402002-08-15#:~:text=2.-,Objects%20of%20Act,water%20supplies%20 of%20the%20Republic.
- 44 https://www.lac.org.na/laws/annoSTAT/Powers%20Privileges%20and%20Immunities%20of%20Parliament%20 Act%2017%20of%201996.pdf
- 45 https://www.lac.org.na/laws/annoSTAT/Electoral%20Act%205%20of%202014.pdf
- 46 https://www.gov.na/documents/10181/22710/STATE+OF+THE+NATION+ADDRESS+2015+BY+HIS+EXCELLENCY+DR.+H AGE+G.+GEINGOB+PRESIDENT+OF+THE+REPUBLIC+OF+NAMIBIA/5d50418d-7b14-434c-9257-02db06945f58
- 47 Institute for Public Policy Research, 2016), Briefing Paper Asset Declarations in Namibia: an Overview. Retrieved from https://ippr.org.na/wp-content/uploads/2016/08/BP2_Declarations%20(1)%20(2).pdf
- $48 \quad https://www.lac.org.na/laws/annoSTAT/Public\%20Procurement\%20Act\%2015\%20of\%202015.pdf$
- 49 https://www.lac.org.na/laws/annoSTAT/Public%20Procurement%20Act%2015%20of%202015.pdf
- 50 http://www.un-gsp.org/sites/default/files/documents/national_policy_on_climate_change_for_namibia_20111.pdf
- 51 https://www.lac.org.na/laws/annoSTAT/Disaster%20Risk%20Management%20Act%2010%20of%202012.pdf

Availability of Land Data and Information

This section describes six categories of land data and information⁵² discovered in Namibia. These categories represent data that are the most relevant to the primary functions of government in administering land, and that need to be readily available, timely, and standardised to increase public impact. Modern land administration theory, which prioritises the management of land in support of sustainable social, economic and environmental development, provides four categories: land tenure, use, value, and development. Additional categories are the enabling legislative framework for land governance within which these functions operate and "other land data" depending on the country context.

Most land data and information is under the custodianship of the government agencies responsible for urban and rural development, environment, agriculture, mines, plus a central planning function for the National Planning Commission, as shown in Figure 1. Responsibility for distribution and production of open information at the national level lies with the Namibia Statistics Agency.

Figure 1: Government Custodians of Land Data and Information in Namibia





Category 1: Legal, Institutional and Policy Data

All relevant policies, acts and regulations relating to land governance were found to be online and freely available. The main sources of this data and information are primarily from the national government bodies and Namibian non-governmental organisations such as the Legal Assistance Centre,⁵³ which maintains a comprehensive database of all laws. In addition to the Parliament of Namibia,⁵⁴ the Ministry of Justice through the Namibia Legal Information Institute (NamibLII)⁵⁵ provides an online searchable database of all legislation and judgments in Namibia.

Information about ministerial policies, rules and procedures can be improved by setting more consistent practices and using standards to ensure information is made available more reliably and is more interoperable.

The **types of data** were mostly bibliographic ranging from proprietary formats (MS Word or Adobe Acrobat PDF) to non-proprietary formats such as hypertext markup language (html) on the **NamibLII**. The use of html allows the user to search the contents of all the documents for a specific term such as "land" and returns a list of all legislation and judgements that contain that word, making for a rich experience. The data is generally timely and regularly updated, including legislative amendments.



Category 2: Land Tenure Data

Government institutions are the only source of land tenure data and information in Namibia. The exception is the Community Land Information Programme, managed by the National Housing Action Group (NHAG) and the **Shack Dwellers Federation of Namibia (SDFN)**,⁵⁶ which contains unofficial data on informal settlements but is not an online dataset.

The Namibia Statistics Agency (NSA), which hosts and manages the **Digital Namibia National Spatial Data Infrastructure (NSDI) Portal**,⁵⁷ is a key land tenure data and information provider of spatial data. The portal aims to enable "basic spatial analysis on fundamental datasets held by different government bodies online. In addition, the system allows for a quick view of metadata on a selected dataset and downloads such selected areas". ⁵⁸ However more advanced functionality such as data editing and integration of own data is only available after registration and signing in.

The types of NSA data and information are typically spatial and statistical data. The data sets include commercial and resettlement farms, all urban parcels as well as communal/customary land boundaries and the usual administrative and political boundaries. The NSA coordinates the importing of data from all government agencies including the tenure related datasets listed in Table 3.

- 53 https://www.lac.org.na/
- 54 https://www.parliament.na/
- 55 https://namiblii.org/
- 56 https://www.shackdwellersnamibia.com/
- 57 https://digitalnamibia.nsa.org.na/
- 58 See Information box at https://digitalnamibia.nsa.org.na/

Table 3: Land Tenure Data Provided by the National Statistics Agency (NSA)

TYPE OF DATA & INFO	DESCRIPTION
Addresses	Dwelling Units
Administrative Boundaries	National, constituency, magisterial, farm registration divisions, customary and regional boundaries
Cadastral	Town suburbs, communal land boundaries, town cadastre, municipal cadastre, farms, resettlement farms
Deeds Registry	Owners ID, parcel/erf number, date of birth, boundaries, coordinates and dimensions, diagrams
Geodetic Network	Survey landmarks
Transportation Networks	Roads, railways, airports, harbour, tracks (servitudes)
Utilities	Water pipelines, 4G LTE coverage, powerlines (servitudes)

The **Deeds Office**⁵⁹ makes provision for information on registration and transfer of land rights, alienation of land by the state and related leasehold rights. Any person may inspect the records of the deed's registry, "*upon payment of a prescribed fee*" for inspecting, making copies, extracts or images of records and obtaining information from the deed's registry. Information can only be printed, and no digital copies are available. For a fee, local authorities receive monthly copies in PDF format of all transactions within their boundaries.

The Computerised Deeds Registration System (CDRS)⁶⁰ limits access to staff members within the deeds registry only. As part of a trial, the Deeds Office hosted a public information kiosk but halted the program due to a problem with access control, which allowed data tampering as everyone had equal access.

Land rights and tenure security are directed by national policies, but they are implemented at local levels. The capital city of Windhoek is only one of three cities in Namibia designated as a "*Tier 1*" municipality, and it provides the best example of local land information access. Primarily, Windhoek has an online browser Map Guide accessible via the **city's website**⁶¹ that shows the map of the city including the parcels, roads, water and electricity. Windhoek shares town planning information in an ad hoc manner with a variety of stakeholders. Smaller towns and settlements, which comprise the majority in Namibia, have less capacity to manage land tenure and general land information. In the absence of centralized data sharing guidance, they may make land information available, but not in any consistent manner or format. This situation has led to the phenomenon of private town planning professionals – local government contractors – to act as de facto data custodians of public data. As part of their work, they collect or maintain digital data records, which they may then make available at their own discretion, usually not for free.

The data on informal settlements recorded under the flexible land tenure system includes the names of associations, size and location of parcels, name and ID of beneficiaries and parcel/dwelling numbers. Spatial data on access to services such as water points, toilets and streetlights are captured and analysed to show community service level access.

⁵⁹ https://mawf.gov.na/directorate-deeds-registration

⁶⁰ Confirmation from respondents in the deed's office.

⁶¹ http://www.windhoekcc.org.na/

Community data on informal settlements is collected through the Community Land Information Programme (CLIP) and is updated on demand in partnership with the local authorities and the ministry. CLIP data on individual households is stored in a Microsoft Access database, with spatial data managed with the use of Quantum GIS (QGIS) application.

The customary/communal land registration system includes data on new and existing customary land rights, leaseholds, and occupational rights. Information is indexed by location (village name, region) or by name of the rights holder and gender. However this data on customary land rights, which are housed in the Namibian Communal Land Administration Systems (NCLAS), is not openly available. The NCLAS database server is kept and managed by the Ministry of Agriculture, Water and Land Reform. The data is captured and stored through a decentralised regional database that is updated monthly to the central database at the head office in Windhoek. However, **two regions refused**⁶² to register their rights leaving the register incomplete and raising questions about how communities view their sovereignty about data as well as their land rights.

The Directorate of Survey and Mapping (DSM)⁶³ within the Ministry of Agriculture, Water and Forestry (MAWLR) is responsible for defining Namibia's internal boundaries and national borders; developing the related topographical information and generating spatial records on land ownership; and capturing access rights, licenses and concessions. The Land Information System (LIS) is used to examine and record cadastral surveys performed by private professional land surveyors. The LIS contains farm and parcel boundaries for the entire country. Recorded cadastral data carries the survey record, parcel number, diagram number, noting sheet number and size of the erf.

Timeliness of the data and information depends on how regularly the National Spatial Data Infrastructure (NSDI) data is updated by data custodians. The cadastre, which includes information on roads, land zoning, digital terrain models and digital evaluation models, is updated daily by the officials of the Division of Survey and Mapping. The Computerized Deeds Registry is updated daily, although some challenges are experienced with the system.

Despite the relative richness of the information available, some gaps in data and information need to be addressed. Data across the different tenure systems should be improved to better enable data integration across the discrete tenure databases. Currently the government's three major tenure databases all operate in isolation: the Computerized Deeds Registry, the Flexible Land Tenure Systems operating using the Social Tenure Domain Model and the Namibia Communal Land Administration System. The NSDI does not have an updated record of all the cadastres of local authorities. To access the latest information, a request must be made to both the local authorities and the specific town planning consultant dealing with the development. There are some encouraging discussions taking place in the Ministry of Agriculture, Water and Land Reform about developing an **Integrated Namibian Land Information System**.

Little housing information is available, but that is expected to change with the launch of the **National Housing Information System (NHIS)** on 12 October 2022.⁶⁴ The NHIS, hosted by the Ministry of Urban and Rural Development (MURD), will provide data on housing needs, housing stock, land use, and informal settlements.

⁶² https://neweralive.na/posts/kavango-regions-advised-to-register-for-customary-land-rights

⁶³ https://mlr.gov.na/survey-and-mapping

⁶⁴ Ministry, NSA Launch National Housing Information System, October 2022. Namibian Broadcasting Corporation. https://www.facebook.com/NBCDigitalNews/videos/5350087645107592/



Category 3: Land Use Data

Land use data and information is available from the National Spatial Data Infrastructure (NSDI) and other online geo-data portals that store data on agricultural land use. Data on land use is hosted by the Ministry of Urban and Rural Development, Division of Urban and Regional Planning. Basic land use classification information can be downloaded from the NSDI website as a PDF report. An **analysis**⁶⁵ carried out by the Namibia Statistics Agency on urban land indicates a need to harmonize local authorities' zoning schemes to ensure ease of data integration into the NSDI and enable countrywide statistical analysis.

Other important sources of land use data include private consulting firms who are contracted to provide the land use planning and development functions for the government. The Shack Dwellers Federation of Namibia provides data on the growth of informal settlements (number of shacks, infrastructure, population growth) on an annual basis. No other online data is available for informal areas. Some local authorities only provide the contact details for acquiring Town Planning Schemes information and Zoning Maps, without actual access to the material online.

The capital city of Windhoek has an **online Map Guide**⁶⁶ that displays settlements and parcels, while other large municipalities such as the Walvis Bay Municipality and Keetmanshoop Municipality have zoning maps on their **website**.⁶⁷

There are however some **gaps in opening up land use data** and information and how it is used. Local land development plans are not regularly updated with limited online data on infrastructure and land use, including public land. As a result, spatial data is not regularly used to monitor land use and development, especially at the local level. Despite this gap, land use data is generally captured from submissions made by Town Planning consultants appointed by local authorities and exists digitally. There is a lack of data sharing policies in place regulating or governing interagency data sharing. Internal arrangements between MURD and NSA allows for data sharing between each other either via file transfer or use of USB devices. Data is stored in a proprietary **DWG format**⁶⁸ and is available on an intranet server in the MURD.

The **data and information types** typically include PDFs for land use zoning and maps and schemes. Development applications and notices are made available as paper reports, despite the fact that the reports and pdfs are being derived from digital spatial data sources produced by private contractors. Tracking of development applications is only made through on-site visits and reporting from implementing partners to the National Planning Commission.

The **timeliness of land use data and information** is predicated upon demand and the conduct of land use planning processes. These are generally in the order of several years. Zoning schemes are updated on a 5-year basis. The planned land uses are not subject to rapid changes although changes in zoning happen, and in the absence of online systems, these changes in use will not be reflected until the next update cycle.



⁶⁶ http://197.188.238.37/Enlighten_ext/homepage/login.aspx

⁶⁷ https://www.walvisbaycc.org.na/wp-content/uploads/2019/03/WALVIS-WALL-MAP.pdf

⁶⁸ https://www.adobe.com/creativecloud/file-types/image/vector/dwg-file.html



Category 4: Land Development Data

A wide range of land development data and information exists in Namibia, the main sources of which tend towards government sources such as the Ministry of Urban and Rural Development⁶⁹ and local authorities.

At the national level, land development data and information includes the development budget, annual expenditure reports and progress on the implementation of National Development Plans. 70 The National Planning Commission 11 maintains and updates the development budget in collaboration with other government institutions and shares publications on the development budgets, annual reports and progress on National Development Plans on its website. Data on land use permits, land consolidation, land exchanges are stored by the office of the surveyor general. The Ministry of Urban and Rural Development (MURB) also stores this data as they are the first national level institution to approve any land consolidation plans. The Development Bank of Namibia (DBN) funds public infrastructure development, but updates on infrastructure investments are made available only in its annual report, found on the DBN website. The AfDB Statistical Data Portal 73 provides multiple customised tools to gather indicators, analyze them, and export them into multiple formats, including via an API. The Ministry of Agriculture, Water and Land Reform is a major source of bibliographic data development data on land reform, tenure, and development in Namibia.

The different legal recognitions (regulations) and registration systems can result in land development conflicts, records of which are available at the Magistrates Court or High Court of Namibia. All court records are public, but not as open data.

There are several gaps found in the land development data and information. Online statistics on expropriation are not published, even though the policies and compensation guidelines are available. Data on land conflicts that reach the court system are public record, but not published as open data. Disputes concerning customary land attended to by the Traditional Authority or a Communal Land Board and appeals to the Land Tribunal are not systematically published or made available. Spatial attributes of data are often missing. The program for **Communal Land Development (PCLD)**⁷⁴ provides data on development infrastructure on an adhoc basis, and no determination could be made with regards to their systematic updating of data. Information on enforcement (penalties and remedies for non-adherence) of land development contrary to the requirements of a **zoning scheme**⁷⁵ is not available online. No information is available online about a national framework or guideline in terms of compliance with land use.

When development plans are published, they are generally available only as paper documents, and the data is not consistently available or formatted. The conclusion is that there is no standardised and automated system for the collection, sharing and re-use of land development data.

- 69 https://murd.gov.na
- 70 Current National Development Plan NDP 5, https://www.npc.gov.na/national-plans/national-plans-ndp-5/
- 71 National Planning Commission, https://www.npc.gov.na/
- 72 https://www.dbn.com.na/phocadownload/annual-report-dbn-2020-21-b.pdf
- 73 https://projectsportal.afdb.org/dataportal/VTopCountry/show/NA
- 74 https://mawf.gov.na/program-for-communal-land-development-pcld-
- 75 https://www.lac.org.na/laws/2018/6631.pdf



Category 5: Land Value Data

The Property Valuers Profession Act 7 of 2012,⁷⁶ currently under review, directs and sets the standard for the profession. The Directorate of Valuation and Estate Management⁷⁷ is built upon the cadastral system and deeds registry, supported by a CAMA (Computer Aided Mass Appraisal) system, to manage the land taxation system.⁷⁸ The Land Valuation and Taxation regulations of 2002 and 2007 provide guidance on commercial farm valuations.

Available data and information on land values can be obtained from the Deeds Registry as well as from financial institutions, real estate agents, and property sale websites in Namibia. Land value information from the Deeds Registry must be merged from deed of sale documents, which is publicly available but is not published online. As such there is no comprehensive list of property values. Information on land transfers and mortgages at the Deeds office are updated in real time as transactions are processed. Information on rates for all local authorities are published in the **Government Gazette**. Some local authorities, such as the **City of Windhoek**, provide updated information on rates and taxes on their websites.

Market transactions information is available online via the **First National Bank in Namibia (FNB Namibia)**⁸¹ website. Information on property values is also accessible via private websites.⁸² Valuations rolls are public and often displayed at local authority offices for inspection, but are not published digitally and are not available as open data.

Sources of land value data and information include the Ministry of Agriculture Water and Land Reform, the Ministry of Finance, and organizations such as quantity surveyors, estate agents and banks. The Ministry of Agriculture Water and Land Reform is responsible for valuations of agricultural land for the purposes of administering land tax. Farm valuations are hosted by the Directorate of Valuations on a central server which is not publicly available. The Ministry of Finance⁸³ publishes data on repo-rate and prime rate for investment methods as well as data on the medium-term expenditure frameworks,⁸⁴ which include services for housing, local authority and rural development. Government income and expenditure is updated annually and available on the Ministry of Finance website.⁸⁵ Private actors such as estate agents and banks collect their own data and sometimes publish it in a variety of formats.

- $76 \quad https://www.lac.org.na/laws/annoSTAT/Property\%20Valuers\%20Profession\%20Act\%207\%20of\%202012.pdf$
- 77 https://mawf.gov.na/directorate-valuation-and-estate-management
- 78 http://dna.nust.na/landconference/submissions_2018/Land_Taxation_Presentation_01_05_October_2018_ Kabisa.pdf
- 79 Government Gazette of the Republic of Namibia, General Notices amendment of charges, fees, rates https://www.lac.org.na/laws/2019/6985.pdf
- 80 City of Windhoek, Property Rates http://www.windhoekcc.org.na/faq_property_rates.php
- 81 https://www.fnbnamibia.com.na/downloads/namibia/housingIndex/2021/HousingIndexMarch2021.pdf
- 82 https://www.yellowprop.co/Property-For-Sale
- 83 Ministry of Finance, https://mof.gov.na
- 84 Medium Term Expenditure Framework 2022-20225, https://mof.gov.na/documents/35641/36556/ ESTIMATES+2022_23.pdf/eadb299c-5d81-69c9-4a77-a85c1f682c25
- 85 https://mof.gov.na/documents/35641/36553/ACCOUNTABILITY+REPORT+2019_20.pdf/622d4d84-df1e-53b5-54bd-40c4790e2288

Gaps in land value data and information vary. Land valuers rely on mutual professional courtesy in the sharing of current valuation data from institutions, but this data is not generally made available to the public. Valuation rolls are updated every 5 years and local authorities carry out interim valuations to support tax collection. However, none of the local authorities provide the valuation rolls online.

The budget information on urban and rural development from the Ministry of Finance is only published as downloadable PDF reports. Information and data on the revenue generated and use and allocation of property taxes is not available online.

Large scale land acquisitions of communal areas of the country⁸⁶ are a common practice among the elite, but there is no existing database on large scale land acquisitions in Namibia.⁸⁷ ⁸⁸ ⁸⁹

⁸⁶ https://www.oicrf.org/documents/40950/43224/
Land+grabbing+in+Namibia+a+case+study+from+the+Omusati+Region+northern+Namibia.pdf/
ab81e657-cf16-760c-3d57-2182bb5297ae?t=1510224777027

⁸⁷ https://www.namibian.com.na/6215270/archive-read/Communal-Land-in-Kavango-Most-Vulnerable-to-Landgrabbing

⁸⁸ https://media.africaportal.org/documents/PLAAS_ADC_policy_brief_42.pdf

⁸⁹ https://www.lac.org.na/projects/lead/Pdf/landgrabbing.pdf



There are numerous sources of other land data available in Namibia. This includes data on the environment, mining, and natural resources.

Data and information on regional and local administrative boundaries, and national and maritime boundaries is available from the Directorate of Survey and Mapping and the NSDI. The Ministry of Agriculture, Water and Land Reform (MAWLR) provides occasional land reform updates on the number and size of farms acquired through the willing seller-willing buyer principle, including aggregated data and statistics on the total costs as well as the number of beneficiaries. ⁹⁰ Data on the identity of beneficiaries is much in demand, both from the public and the Ombudsman, ⁹¹ but this has not been availed to the public. Data on resettlement is not open to the public.

The Namibia Statistics Agency (NSA)⁹² provides information and indicators of social-economic data related to land.⁹³ The NSA makes agricultural census data available as PDF reports,⁹⁴ including data on land use and the means of land acquisition and production.

The Ministry of Environment and Tourism made available for download the **Atlas of Namibia**, 95 one of the earliest and most comprehensive freely downloadable digital land and climate change data sets in the country. Unfortunately, this project has been discontinued but the University of Koln has proceeded to make the data freely available for download.

Mineral and mining information is maintained by the Ministry of Mines and Energy. Information on minerals is made available on the Namibia Mining Cadastre Portal⁹⁶ and via the Earth Data Namibia Information System⁹⁷ of the Geological Survey of Namibia. These portals contain information on the geology of Namibia as well as cadastral boundaries. This information is overlaid with information about the following rights: mining licenses, mining claims, mineral deposit retention claim, exclusive prospecting licenses, and exclusive reconnaissance licenses.

Typical information provided for each of the above includes the licence holder, application data, expiry date, the type of commodity and the size and location of the right. The information is typically updated daily. A data sharing policy is currently under development.

⁹⁰ https://mlr.gov.na/documents/20541/283371/Minister+Report.pdf/a23d7eff-526d-4847-ae18a2a38f845fbd

⁹¹ S. likela (2018) Land reform releases resettlement list https://www.namibian.com.na/182373/archive-read/ Land-reform-releases-resettlement-list

⁹² https://www.nsa.org.na

⁹³ https://d3rp5jatom3eyn.cloudfront.net/cms/assets/documents/NHIES_2015-16.pdf

⁹⁴ https://d3rp5jatom3eyn.cloudfront.net/cms/assets/documents/Namibia_Census_of_ Agriculture 2013 14 Revised Report.pdf

⁹⁵ Atlas of Namibia, https://www.uni-koeln.de/sfb389/e/e1/download/atlas_namibia/index_e.htm

⁹⁶ https://maps.landfolio.com/Namibia/

⁹⁷ https://mme.gov.na/edn/

The Namibia Power Corporation Ltd provides data updates to the NSDI on an annual basis. 98 GIS downloads 99 in the form of shapefiles and Google Earth files of power lines, substations and renewable energy installations are available from its website.

Gaps in land data and information include information on the Programme for Communal Development (PCLD). Access to data on the progress of communal land development requires a letter to the Executive Director of the Ministry of Agriculture Water and Land Reform which is then forwarded to the Director of Resettlement and Regional Programme Implementation (RRPI). A local geodatabase is used to track progress of project implementation but this information is only sporadically updated. It details the number of communal land rights mapped and provides a summary on all investments made. There is no existing policy on data sharing within the organization or release to the public. Roads, utilities and corresponding information is available only as pdf reports from the Road Management Systems (RMS).¹⁰⁰ The Business and Intellectual Property Authority (BIPA)¹⁰¹ makes available online a searchable database of registered businesses.¹⁰² Downloads from the database on registered businesses are only available upon request to the Executive Director of BIPA.

⁹⁸ https://www.nampower.com.na/

⁹⁹ https://www.nampower.com.na/Page.aspx?p=192

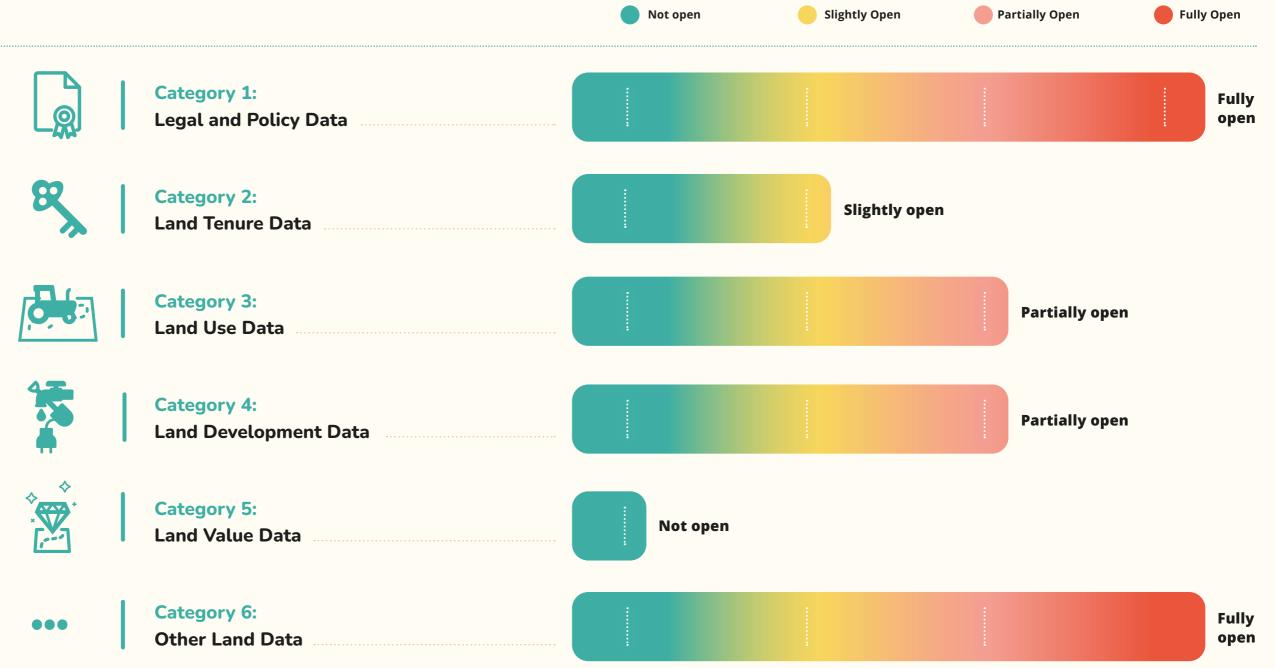
¹⁰⁰ https://www.ra.org.na/Pages/network.aspx

¹⁰¹ https://www.bipa.na/

¹⁰² Business and Intellectual Property Authority search https://www.bipa.na/search/

How Open is Land Data and Information in Namibia?

The graph below shows the openness of each land data category in Namibia. This report concludes that data and information resources in the legal, policy, and other land data, which includes boundaries, land reform, census and mining data, substantially comply with the criteria for open data. Land use and land development data partially comply and a little of Namibia's land tenure data is open. Only land value data is considered to not be open.



Level of Openness

This chapter assesses the six data categories described in the previous section – legal policies, land tenure, land use, land development, land value and other land data types – against ten open data criteria described in *Table 4* below. It scores Namibia's publicly available government databases or datasets against the ten open data criteria.

The open data compliance scores are catalogued in *Table 5*.

 Table 4: Open Data Compliance Criteria

	CRITERIA	DESCRIPTION
	Online	Availability of key land resources and whether or not the data is available online or offline
	Accessible	Describe how accessible the data is to users. Consider whether you are required to register, log in or request access in order to be able to access the resource.
	Free	There is no charge for the data.
Ö	Timely	Data is updated according to an acceptable time frame.
	Metadata	Information that explains the origin of the dataset and how it is maintained. It could be information about the structure of the data, the type of data, the quality of the data or the conditions determining the inclusion/exclusion of data.
~	Standards	Information that describes whether the data conforms to a particular standard if appropriate. Consider whether the data is only available in proprietary formats, or whether open formats are used. It also may includes evidence of standards for a particular type of content domain such as land administration data (Land Administration Domain Model (LADM)-ISO 19152:2012)
4	Downloadable	The data can be downloaded in bulk in open formats.
CCC	Open licence	The data is licensed for legal reuse by anyone, using, for example, a Creative Commons Attribution by 4.0 International licence.
0110 1001 1010	Machine-readable	Presented in open formats which can be read electronically without human intervention, for example, APIs (application programming interfaces.)
···	Uniform Resource Identifiers	A URI may be thought of as a permanent name given to an online information resource so that it can always be identified by search queries.

 Table 5: Namibia's Open Data Compliance scoring categories

	SCORE	DESCRIPTION
	Fully / Very Open	The digital data meets all or most of the open data criteria.
	Partially Open	The digital data meets more than half of the open data criteria.
	Slightly Open	The digital data meets few of the open data criteria or there is digital land governance data but it is not yet online.
•	Not Open	There is no evidence of digital or open data.

28

While a score is provided as part of the assessment, it is important to reflect that the focus of this report is not on the data score or data being "open" as an outcome. Rather, opening up data is a process, and any assessment of openness should be seen as a continuum. The formal features of an open data assessment are important, but not for their own sake. The main purpose of the assessment of "openness" is to provide a baseline for understanding the current state of data and to support usability of data for data-dependent services and public interest.

 Table 6: Overall Results of the Open Data Assessment

















0110 1001 1010



	Online	Accessible	Free	Timely	Metadata	Standards	Downloadable	Open licence	Machine readable	Linked Data (URIs)	TOTAL
Legal	Fully Online	Fully Accessible	Fully Free	Very Timely	Fully Accompanied by Metadata	Partially Uses Standards	Fully Downloadable	Full Use of Open Licenses	Fully Machine Readable	Not Available as Linked Data	Fully Open
Land Tenure	Slightly Online	Slightly Accessible	Partially Free	Partially Timely	Fully Accompanied by Metadata	No Use of Standards	Not Downloadable	No Use of Open Licenses	Not Machine Readable	Not Available as Linked Data	Slightly Open
Land Use	Slightly Online	Slightly Accessible	Not Free	Very Timely	Fully Accompanied by Metadata	Fully Uses Standards	Partially Downloadable	Partial Use of Open Licenses	Partially Machine Readable	Not Available as Linked Data	Partially Open
Land Devpt	Slightly Online	Slightly Accessible	Not Free	Very Timely	Fully Accompanied by Metadata	Fully Uses Standards	Partially Downloadable	Partial Use of Open Licenses	Partially Machine Readable	Not Available as Linked Data	Partially Open
Land Value	Not Online	Not Accessible	Not Free	Not Timely	Fully Accompanied by Metadata	No Use of Standards	Not Downloadable	No Use of Open Licenses	Not Machine Readable	Not Available as Linked Data	Not Open
Other Land Data	Fully Online	Fully Accessible	Partially Free	Very Timely	Fully Accompanied by Metadata	Fully Uses Standards	Partially Downloadable	Partial Use of Open Licenses	Partially Machine Readable	Not Available as Linked Data	Fully Open
OVERALL	Slightly Online	Slightly Accessible	Partially Free	Very Timely	Fully Accompanied by metadata	Fully uses standards	Partially Downloadable	Slight use of Open Licenses	Slightly Machine Readable	Not Available as Linked Data	Partially Open



Criteria 1: Online

Open data is "digital data that is made available with the technical and legal characteristics necessary for it to be freely used, reused, and redistributed by anyone, anytime, anywhere". ¹⁰³ Land governance datasets that are available online, including via tools for mobile and offline use, have the highest score. Datasets that are digital and used online within government and other organisations but which are not yet publicly available online are also noted.

How much of Namibia's land related data is online?



Table 7: How much of Namibia's land data and information is online?

CATEGORY	SCORE	NOTES
Legal, Policy and Institutional Framework Data	Fully Online	Namibian legislation, bills and regulations are available online. Two Namibian databases offer online Namibian legislation that is downloadable and free. NamibIII is a partnership between the Ministry of Justice, the Legal Assistance Centre of Namibia and the Legal Information Institute (LII) with a full text searchable database. NAMlex is the database of the Legal Assistance Centre (LAC) and is a list of the laws in force in Namibia, organised by topic, with brief descriptions of each law.
Land Tenure Data	Slightly Online	Namibia's internal land tenure datasets are not available online. They include the Cadastral Data, the Deeds Registry Data, Namibian Communal Land Administration System (NCLAS) and the Computer-Based Flexible Land Tenure system. Users may request paper copies of deeds. Spatial data is online on the Namibia Geoportal with licensing restrictions.
Land Use Data	Slightly Online	The Namibia Electronic Urban Land Management Information System receives data from local authorities through consultants who submit layout and survey data to the MURD and DSM. This digital data is stored and is available offline. Users can access the data upon written request to the Executive Directors of the government institutions. At the city level, the City of Windhoek Map Guide provides PDF versions of its online spatial data. The Digital Atlas of Namibia provides downloadable land use data, dated 2002.
Land Development Data	Slightly Online	Land development data is not available online. All housing developments by the National Housing Enterprise in Namibia are listed in an offline database. The National Planning Commission's estimates of planned development expenditure (in PDF format) present information in the Medium-term Expenditure Framework (MTEF) of 2021/2022 – 2023/2024 Financial Years.
Land Value Data	Not Online	There is no central data repository on valuation records. Reports from real estate agencies and the banks include data on the land market, property prices and trends. Valuation records are not available online.
Other Land Data	Fully Online	The Africa Portal, the Regional Centre for Mapping of Resources for Development (RCMD) Geoportal, Digital Namibia, Namibia Statistics Agency (NSA)'s Data Portal, the NSA central data catalogue and the Business and Intellectual Property Authority (BIPA) all offer general online digital datasets or documents which are related to land governance. The Climate Change Knowledge Portal provides online historical and projected climate data.
Overall Score	Slightly O	



Criteria 2: Accessibility

This criterion assesses whether the land data is easily discoverable and accessible, and made available without bureaucratic or administrative barriers. These deterrents include new user registration, log in, or a request for access. It is normal for users who wish to download bulk data or use an API to supply an email address in order to receive updates of the data. This criterion also assesses whether access is easy for people with disabilities. In the future, initiatives could be introduced to raise awareness of open data, promote data literacy, build capacity for effective use of open data, and ensure citizens have tools and resources to effectively understand how public resources are used.

How much of Namibia's land related data is accessible?



Table 8: How much of Namibia's land data and information is accessible?

	Table 8:	now much of Namibia's land data and information is accessible?
CATEGORY	SCORE	NOTES
Legal, Policy and Institutional Framework Data	Fully Accessible	The Legal Assistance Centre (LAC) offers full-text online legislation but in proprietary formats: MS Word or Adobe Acrobat PDF. NamibLII legislation is in HTML (non-proprietary) and Adobe Acrobat PDF. FAOLex provides PDF formats.
Land Tenure Data	Slightly Accessible	While the digital datasets cover all forms of land tenure in Namibia, users must access them at physical government offices. ¹⁰⁴ For full functionality, the digital geoportals require online registration.
Land Use Data	Slightly Accessible	The NSA's statistical data and services are available online for public use upon request and completion of an agreement form specifying the user's needs and intended use of the data. End-users and producers can also apply for access to analysed WebGIS geo-statistical data, e.g., 2011 Census highlights, 2011 Census Enumeration Areas and 2011 Census Migration. Users must access the Urban Land Information Management System at the physical government offices. The City of Windhoek Map Guide only presents PDF formats which cannot be easily accessed by users with limited sight. The Digital Atlas of Namibia, the Satellite Monitoring Data and the Land Matrix are available for bulk download in non proprietary formats.
Land Development Data	Slightly Accessible	Data on land use permits, land consolidation and land exchanges are stored by the Office of the Surveyor General. The Ministry of Urban and Rural Development also stores this data as it is the first national level institution to approve any land consolidation plans. There is no automated system for gathering land development data. Users need to sign in to the data portals for full functionality. The Namibian agricultural census data requires paid membership, allowing viewing, comparing and downloading data via a web interface, using the Microsoft Excel add-in or its API. Users can then access the data everywhere online or offline in their computers, tablets or smartphones. The Development Programme's Estimates of Expenditure are in pdf format.
Land Value Data	Not Accessible	There is no central data repository on valuation records.
Other Land Data	Fully Accessible	The Africa Portal, the Regional Centre for Mapping of Resources for Development (Kenya) Geoportal, Digital Namibia, NSA's Data Portal, the NSA central data catalogue and the BIPA information are all accessible. For full functionality, the digital geoportals require online registration.
Overall Score	Slightly Ac	cessible



Criteria 3: Free

This criterion assesses whether the online land data is released free of charge. It excludes bibliographic data such as online articles.

How much of Namibia's land related data is available for free?

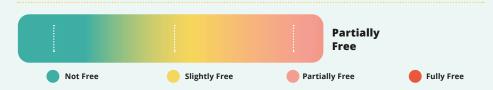


 Table 9: How much of Namibia's land data and information is free of charge?

CATEGORY	SCORE	NOTES
Legal, Policy and Institutional Framework Data	Fully Free	The primary Namibian databases for legal and policy information are all free of charge.
Land Tenure Data	Partially Free	The spatial data on the Namibia Geoportal is free. Online visualisations of minerals data on the Namibia Mining Cadastre Portal and on the Earth Data Namibia Information System of the Geological Survey of Namibia are free.
Land Use Data	Not Free	The data is offline or requires paid membership.
Land Development Data	Not Free	The data is offline or requires paid membership.
Land Value Data	Not Free	There is no central data repository on valuation records.
Other Land Data	Partially Free	Full access to some databases requires paid membership.
Overall Score	Partially Free	<u> </u>



Criteria 4: Timeliness

This criterion assesses whether open data is released in a timely manner without undue delay. Timely data is released in its original, unmodified form, and linked to relevant guidance, documentation, visualisations or analyses.

How timely is Namibia's land related data updated?

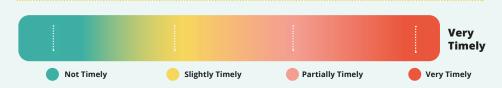


 Table 10: How much of Namibia's land data and information is released and updated timely?

CATEGORY	SCORE	NOTES
Legal, Policy and Institutional Framework Data	Very Timely	All legal databases are updated regularly.
Land Tenure Data	Partially Timely	The Global Data Barometer researcher says it meets legislative requirements, but this cannot be assessed because it is not online.
Land Use Data	Very Timely	The online digital databases are updated regularly.
Land Development Data	Very Timely	The online digital databases are updated regularly.
Land Value Data	Not Timely	There is no central data repository on valuation records.
Other Land Data	Very Timely	The online digital databases are updated regularly.
Overall Score	Very Timely	



Criteria 5: Metadata

This criterion assesses whether the land governance data include consistent core metadata – that the data is fully described, all documentation accompanying the data is written in clear, plain language, and that data users have sufficient information to understand the source, strengths, weaknesses and analytical limitations of the data.

Metadata is the data providing information about one or more aspects of data within a dataset. It is used to summarise basic information about data, which can make it easier to track and work with specific data. Core metadata is a limited set of metadata which provides important, fundamental information about data, and should be defined by a consistent vocabulary across all datasets. Core metadata elements may include the dataset title, source, publication date, and format, as well as other relevant information that describes the dataset and supports discoverability (that is, makes it easier for users to search for and find the dataset). ¹⁰⁵

How much of Namibia's land related data is accompanied by metadata?

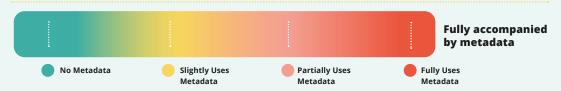


Table 11: How much of Namibia's land data and information is accompanied by metadata?

CATEGORY	SCORE	NOTES
Legal, Policy and Institutional Framework Data	Fully accompanied by metadata	The online digital databases provide metadata.
Land Tenure Data	Fully accompanied by metadata	The online digital databases provide metadata.
Land Use Data	Fully accompanied by metadata	The online digital databases provide metadata.
Land Development Data	Fully accompanied by metadata	The online digital databases provide metadata.
Land Value Data	Not accompanied by metadata	There is no central data repository on valuation records.
Other Land Data	Fully accompanied by metadata	The online digital databases provide metadata.
Overall Score	Fully accompanied by metadata	



Criteria 6: Standards

This criterion assesses whether the organisation releasing the land data implements consistent, open standards covering data formats, interoperability, structure, and common identifiers when collecting and publishing the data. This also considers whether the organisation supports increased interoperability between existing international standards, the creation of common, global data standards where they do not already exist, and whether it ensures that any new data standards created are, to the greatest extent possible, interoperable with existing standards.

How much of Namibia's land related data uses standards?

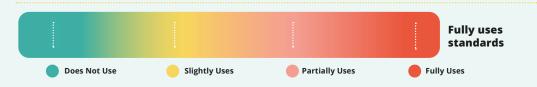


 Table 12: To what extent are appropriate data standards applied to land data in Namibia?

CATEGORY	SCORE	NOTES
Legal, Policy and Institutional Framework Data	Partially uses standards	NAMlex offers full-text online legislation but in proprietary formats: MS Word or Adobe Acrobat PDF. NamibLII information is in HTML (non-proprietary) and Adobe Acrobat PDF.
Land Tenure Data	No use of standards	The datasets are not online.
Land Use Data	Fully uses standards	The online digital databases have followed appropriate standards.
Land Development Data	Fully uses standards	The online digital databases provide metadata.
Land Value Data	No use of standards	There is no central data repository on valuation records.
Other Land Data	Fully uses standards	The online digital databases have followed appropriate standards
Overall Score	Fully uses standards	



Criteria 7: Downloadable

This criterion assesses whether the land governance data are made available for users to download in human-and machine-readable formats, including via Application Programming Interfaces (APIs) (software intermediaries that allow two applications to talk to each other). It does not assess bibliographic articles.

How much of Namibia's land related data is downloadable?



Table 13: How much of Namibia's land data and information is downloadable?

CATEGORY	SCORE	NOTES
Legal, Policy and Institutional Framework Data	Fully Downloadable	While APIs are not available, the data on the major websites is freely downloadable.
Land Tenure Data	Not Downloadable	The dataset is not online.
Land Use Data	Partially Downloadable	Some data portals offer data downloads.
Land Development Data	Partially Downloadable	Some data portals offer data downloads.
Land Value Data	Not Downloadable	There is no central data repository on valuation records.
Other Land Data	Partially Downloadable	Some data portals offer data downloads.
Overall Score	Partially Downloadable	



Criteria 8: Open License

This criterion assesses whether land governance data are released under an open and unrestricted licence that ensures that data users can easily find and understand the conditions of their data access and reuse. The most common open licence government use is the Creative Commons Attribution CC-BY International 4.0 Licence which allows users to copy and redistribute the information provided they attribute the copyright owner.¹⁰⁶

How much of Namibia's land related data makes use of open licenses?



Table 14: Are open licenses used?

CATEGORY	SCORE	NOTES
Legal, Policy and Institutional Framework Data	Full Use of Open Licenses	License information is provided on the websites.
Land Tenure Data	No Use of Open Licenses	This data is not online. Namibia Geoportal requires an ArcGIS licence for full functionality.
Land Use Data	Partial Use of Open Licenses	Some data portals offer open licences. For example, Land Matrix and data produced as part of the Satellite Monitoring Service of Urbanization in Africa project in partnership with the German Aerospace Center (DLR) can be reused under a Creative Commons Attribution 4.0 BY licence.
Land Development Data	Partial Use of Open Licenses	Some data portals offer open licences.
Land Value Data	No Use of Open Licenses	There is no central data repository on valuation records.
Other Land Data	Partial Use of Open Licenses	Some data portals offer open licences.
Overall Score	Slight Use of Open Licenses	

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Criteria 9: Machine Readability

This criterion assesses whether the land governance data is made available in formats that can be read and manipulated by either machines or humans (machine-readable and human-readable). Machine-readable data is "Data in a data format that can be automatically read and processed by a computer." This is needed by analysts downloading data in bulk, for example, for policy development, analysis or visualisation.

How much of Namibia's land related data is machine readable?



 Table 15: How much of Namibia's land data and information is machine readable?

CATEGORY	SCORE	NOTES
Legal, Policy and Institutional Framework Data	Fully Machine Readable	The NamibLII data is machine readable.
Land Tenure Data	Not Machine Readable	This data is not online.
Land Use Data	Partially Machine Readable	Some data portals offer open formats.
Land Development Data	Partially Machine Readable	Some data portals offer open formats.
Land Value Data	Not Machine Readable	There is no central data repository on valuation records.
Other Land Data	Partially Machine Readable	Some data portals offer open formats.
Overall Score	Slightly Machine Readable	



Criteria 10: (Linked) Data URI

This criterion assesses whether land governance data is made available as Linked Data. Linked Data is "structured data which is interlinked with other data so it becomes more useful through semantic queries. It builds upon standard Web technologies such as HTTP, RDF and URIs, but rather than using them to serve web pages only for human readers, it extends them to share information in a way that can be read automatically by computers. Part of the vision of linked data is for the Internet to become a global database". ¹⁰⁸

How much of Namibia's land related data is available as linked data?



Table 16: How much of Namibia's land data and information is available as Linked Data?

CATEGORY	SCORE	NOTES
Legal, Policy and Institutional Framework Data	Not Available as Linked Data	There is no reference to Linked Data.
Land Tenure Data	Not Available as Linked Data	This data is not online.
Land Use Data	Not Available as Linked Data	There is no reference to Linked Data.
Land Development Data	Not Available as Linked Data	There is no reference to Linked Data.
Land Value Data	Not Available as Linked Data	There is no reference to Linked Data.
Other Land Data	Not Available as Linked Data	There is no reference to Linked Data.
Overall Score	Not Available as Linked Data	

Conclusions

This report concludes that land data and information in Namibia is partially open.

This finding does not match the 2022 assessment by the Global Data Barometer (GDB) which scored Namibia at 1 out of a 100 for the openness of its land data. While the GDB considered only land tenure and land use data, this SOLI report has a broader scope. It covers fully open legal and policy data and information sources, partially open land development data, closed land value data and partially other land data, which includes boundaries, land reform, census and mining data. This has resulted in a higher aggregate score than assessed by the GDB.

The SOLI report is an independent research product that serves as a baseline tool to facilitate discussion and design interventions to increase openness and transparency in the land data and information sector. It can be used to improve critical knowledge about the availability of land data and information in Namibia, including about its custodians, licences, timeliness and other open data characteristics.

Strong Policy Framework

Namibia has a strong policy framework and mandate for the provision of information and related services to the public. This tradition of access to information is established in international legal instruments and has been ratified and accepted as a constitutionally protected principle in Namibia. In a further development, the National Parliament and the National Council passed the Access to Information Bill into law on 18 August 2022.¹¹⁰

Land Data and Information is Partially Open

Overall land data and information in Namibia was found to be **partially open**, with legal and policy data and information **fully open**, but needing improved use of standards. Other land data, which includes boundaries, land reform, census and mining data, is also **fully open**. While land tenure data is generally only **a little open**, most of the tenure data is available digitally on closed servers within the government departments. Land use and land development data is **partially open** with some downloadable data, licensing information and metadata. Land value information is **not open**.

Open Data Management

Namibia still lacks a strong implementation framework for data management. There is no evidence of consistent agreements that are generally applied to enable data sharing between agencies and improve public access by stakeholders. None of the government organisations contacted during the research period, including the Namibian Statistics Agency (NSA), has a data sharing policy in place. Land survey data is collected and maintained according to the requirements set out in land survey legislation, but it does not make provision for data sharing between agencies. As such, data sharing between agencies such as the Ministry of Urban and Rural Development (MURD) and NSA is not automated but done manually. Datasets not openly available on the National Spatial Data Infrastructure Portal (NSDI) can only be accessed by means of a written request to the relevant Executive Director.

Good Relations and Cooperation

Due to the absence of formal data sharing agreements, standards and protocols, sharing of data relies on good relationships between government departments. From the analysis it is evident that there is a conducive environment between government institutions. The NSA provides leadership in making data available and encourages other government stakeholders to contribute their data. Despite these efforts, the majority of datasets on land administration functions are not up to date and they are not released publicly as open data. However important good relations are, this approach is not sufficiently durable or sustainable and does not facilitate the development of systematic exchange mechanisms, the consistent use of standards and adoption of open data principles and practices.

Privatization of Local Data

The three Tier 1 local authorities designated as municipalities, such as the capital city of Windhoek, have in-house capacity to manage land data and exert control over land development. However most local authorities use town planning consultants (professional services) to design their land use and town planning processes. The resulting development outcomes (often depicted in the form of plans, maps and reports) are then prepared as hardcopy and PDF documents for local authorities. The result is that the data generated through these professional services generally remains with the local professional firms and is closed to other government agencies and departments as well as to the general public.

Online Systems, Websites and Portals

Namibia is progressing towards improved access to information and e-governance with virtually all government departments and agencies having an online presence. Some of these websites are quite basic and do not provide very rich information environments while some such as those of the NamibLII, NSA and NSDI provide a more extensive information environment.

Capacity

Considering the outcomes and resources devoted to the NSA and NSDI portal, a significant amount of data management capacity is clearly available in Namibia, though currently insufficient for meeting open data requirements. Outside of Tier 1 local authorities', data management capacity is also limited, resulting in an uneven spread of capacity across government agencies. This limited capacity has implications for the design and implementation of open data frameworks, in particular the implementation of the Access to Information legislation that was passed into law in August 2022.

Progress on Open Data

Namibia has endorsed access to data and information as a fundamental right of the citizenry and accepted the obligation of the government to service and enable such rights. 111 Much progress has been made at the level of fully open policy and legislative data in Namibia. Some progress has been made to open all categories of land data in Namibia except land value data through the establishment of open data portals, including one focused on spatial data alone. Namibia continues to make progress to open up data, as evidenced by the recent adoption of the access to information law, the enactment of spatial data infrastructure law, some implementation of more open data systems, and increased digital governance and service delivery.

Recommendations

This section makes recommendations to be considered for improving open land data release in Namibia. The **International Open Data Charter**¹¹² has highlighted the benefits of open data, benefits which can also be attained in the Land sector. With the following recommendations it is anticipated that Namibia can continue to advance the use of open land data to create an enabling environment for innovation.

Access to data that is interoperable, online, accessible, free, timely, downloadable, machine-readable, meets standards and is described by metadata will also support improved governance and promote citizen engagement. Local government and civil society will be in a better position to improve transparency, reduce corruption and increase accountability of public officials. Open data can limit the data and information monopolies of private actors and consultants and empower government agencies and local authorities to improve service delivery. Open valuation data can inform participants in the land market about property values and provide for cross comparisons for buyers and sellers to create value and improve efficiencies in the land market. Timely access to up-to-date information can help develop analysis and insight on patterns in the land market and promote innovative ideas that can generate economic and social benefits. Lastly, open data supports evidence-based policy making and improves government service delivery.

Open Data Capacity

- Local authorities have a primary responsibility to generate and deploy land data and deliver services. Improving data collection, curation and management capacity should be a priority. This can complement efforts by the NSA¹¹³ to support decentralisation.
- These capacity building measures should include training to manage and release structured open data, including using standards and metadata. Capacity building and training measures for data custodians should cover open data awareness and advocacy. Specific attention should also be provided to raise capacity in academic and training institutions to increase uptake and incorporate open data principles within academic curricula.
- For the land agencies, specialised training should be provided on using and applying the Land Administration Domain Model (LADM) Standard ISO 19152. The LADM defines terminology for land administration agencies and provides a conceptual framework on four packages: Parties, Basic Administrative Units, Rights, Responsibilities and Restrictions, as well as Spatial Units, making it easier for national level open data integration and consolidation.

Open Data Portals and Websites

- Support should be provided to national and local authorities to create open data portals and improve existing websites. The websites and portals should enable more open data release in structured and re-usable formats and enable the direct sharing and exchange of information between government agencies and the NSDI. This will provide some data redundancy and improve resilience.
- Effort should also be made to prioritise maintaining and updating the websites and portals on a continuous and ongoing basis as they are often the first step in the public's search for data and information.

Legal and Policy Reforms

- While legal and institutional frameworks are largely in place to support e-governance; e-administration, operational infrastructures and updated digital data are behind. Public and private sector agencies should adopt open data licenses that provide for the legal re-use of land data. With the passing of the 2022 Access to Information Act, land administration organisations and other data custodians will need to draw up guidelines and standards for the public release of data and information. Workshops and discussion for acould draw on available access to data sharing and release frameworks and plans that have already been developed.
- The Government of Namibia may want to consider adopting the Creative Commons Suite of International licences¹¹⁴ in line with other countries, for example, New Zealand¹¹⁵ and Australia.¹¹⁶ An alternative would be to develop its own Open Government Licence, but this approach has long-term update cost and resourcing implications.



¹¹⁴ https://creativecommons.org/

115 https://www.data.govt.nz/toolkit/policies/nzgoal/

¹¹⁶ See example at https://humanrights.gov.au/our-work/commission-general/copyright

An open license would greatly enhance access to and legal re-use of information, provide legal clarity for government agencies with respect to open data and build on Namibia's well-established right to open data and information legal principle.

Land Tenure Data

Government agencies dealing with land tenure data have digital records that are not publicly available online, even though the law makes such data open to public inspection in an analogue format. It is recommended that a multistakeholder discussion is convened to develop a strategy which enables open access to land tenure data while protecting personal privacy and to investigate successful international approaches.¹¹⁷

Land Value Data

 Land value data is regularly published in hardcopy formats and most local authorities, financial institutions and the Ministry of Agriculture Water and Land Reform hold digital land value records. This sets the scene for moving quickly to develop a valuation portal for Namibia.

Land Use and Land Development Data

Local authorities are key custodians and users of land use and land development data. Clearer agreements and terms of authority over data co-produced during the outsourcing of professional services to private entities could provide much needed clarity on data management and access. Local authorities should ensure that they have the rights to use, access and make digital data openly available for their land governance functions and decision making. This should not inhibit private entities and professional firms from innovating, providing services and creating value from land use and land development data.

Research and Development

Namibia has a sufficiently rich open data ecosystem to support in-depth national research on the use, application, benefits and value created through the opening up of data in Namibia. This research could help deepen understanding of how to unlock economic opportunities and spur innovation through the open data systems in Namibia. Research to improve the operational and administrative aspects for open data management and sharing in Namibia is also needed.

Finally, given its relatively well developed open data ecosystem, Namibia is well-positioned to carry out the improvements outlined above. It is recommended that stakeholders in Namibia embark on a process of national consultation and discussion to develop a short and medium term "Open Data Roadmap" which prioritises improvements in the open data ecosystem and consolidates the considerable progress already made.





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