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# FIG WORKING WEEK 2023

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Protecting  
Our World,  
Conquering  
New Frontiers

## Re-Imagining Comparative Land Administration Data for the Next Decade



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## Structure of Presentation

1. Introduction
2. Description of Cadastral Template
3. Challenges & Opportunities
4. Relevance
5. Synergies and Opportunities
6. Re-Imagining Cadastral Data

## Introduction

Great focus is posed by the land professionals on land administration and land data.

- Land Administration - plays a crucial role in supporting sustainable development,
- Land Data - more recently has been the subject of developmental initiatives contributing to development and innovation in the land sector

Less attention has been paid to the contribution that core cadastral data can offer to the broader land community.



## Introduction

**Since 2003, the state of land data has significantly evolved**

- New land data indexes & initiatives tracking the state of land data.
- Important to develop stronger links between the broader land data community and the land administration sector.
- Cadastral Template remains core (re-enforced at the UN-GGIM expert meeting in New York (2018), resolution to track progress on achieving the SDG's).

**The Land Portal Foundation, Cadasta Foundation & University of Otago**

- Cadastral information is moving out of the sphere of the specialised land administrators into domain of general sustainable development practitioners and advocates.
- increasing interest in data and on the opening up of data is interconnected with a shift to focus on the services and products that can be delivered

## Cadastral Template

2003 - Resolution 4 of the 16th UNRCC-AP in Okinawa, Japan, Commission 7

Melbourne University has developed and FIG maintains a repository of information about cadastral systems globally:

Cadastral Template (CT) (Steudler et al., 2003).

- designed as an easy-to-use tool to collect core cadastral information
- aimed at providing an information base for country profiles on the cadastre
- to serve as a diagnostic tool to support Spatial Data Infrastructures (SDI) and to develop indicators.

### Cadastral Template 2.0

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#### Home Page

The "Cadastral Template 2.0" has been developed by a research group at the Centre for SDIs and Land administration, Department of Infrastructure Engineering of the University of Melbourne and it was established under UN mandate by Resolution 4 of the 16th UNRCC-AP in Okinawa, Japan in July 2003. It consisted of Professor Abbas Rajabifard, Dr. Daniel Steudler, and Professor Ian Williamson, supported by Professor Stig Eneemark from Aalborg University, Denmark. PCGIAP-Working Group 3 "Cadastral" cooperates with FIG-Commission 7 to place the country information jointly on this website and to maintain the information during its 2003-2006 Work Plan.

Participating countries



## Cadastral: Relevance

The CT remains a unique and relevant data set:

- descriptive information on land administration systems
- core qualitative and quantitative data on LA

Not easily found elsewhere in a similar collection.

Important resource for the data & development community working to improve availability of land data and information.

CT introduces a broader range of land development actors to core cadastral information, definitions and concepts.

Supports ongoing initiatives on open data.

Has an educational purpose (comparative land administration

## Cadastral: Challenges

The FIG relies on its members to provide information on a voluntary basis. While the CT is a valuable source of cadastral data, it is not without some possible areas of improvement.

- a) *Timeliness of Data (some aspects do not change much)*
- b) *Coverage of Data*
- c) *Descriptive Data*
- d) *Open and Interoperability of Data*
- e) *Data Collection*
- f) *Resources to Maintain Country Information*
- g) *Visualization of Data*

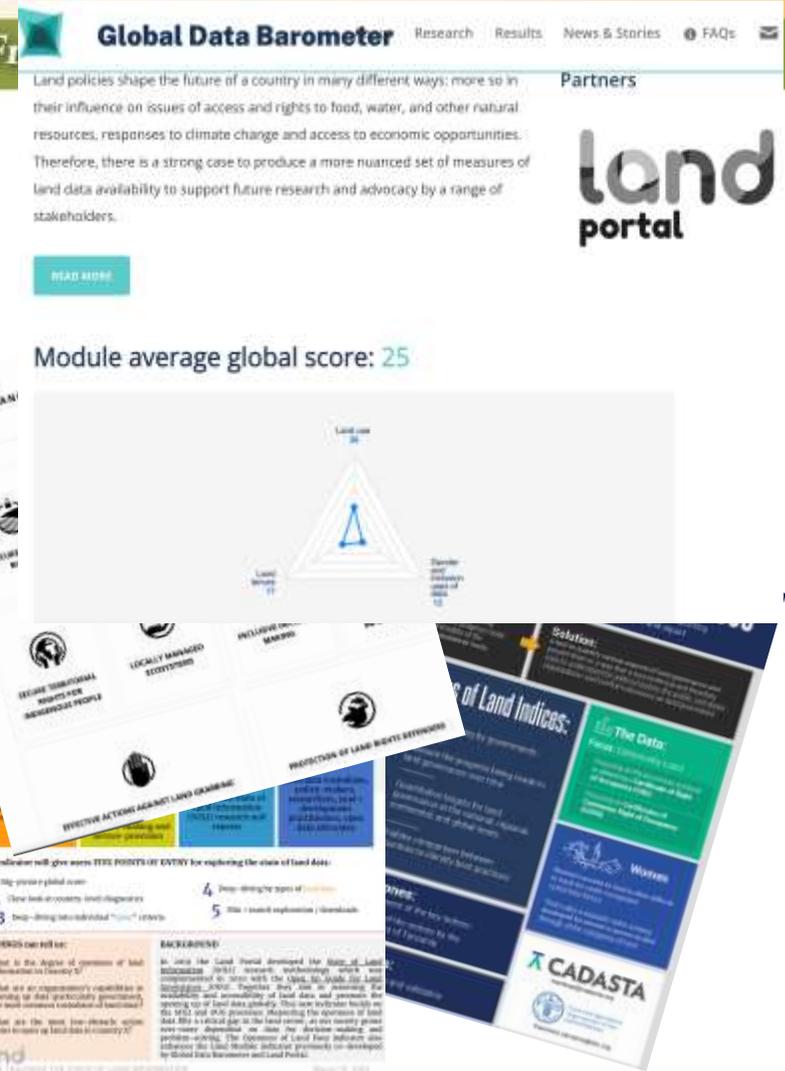
## Cadastral: Synergies and Opportunities

Partnership between FIG and other land & data actors can help to increase the visibility of the CT and its core cadastral data to increase impacts and use of the data.

Such a partnership between FIG and other actors in the land and data sector can collectively harness and multiply the value of the cadastral data set.

Enable the CT data to be integrated & interoperable with data from other global initiatives.





## Cadastral: Opportunities

- a) *Integrate and Align with other Global Initiatives*
- b) *Open and Interoperable*
- c) *Standards and Frameworks for Reuse*
- d) *Create Country Portfolios*
- e) *Use and Uptake of Cadastral Data*
- f) *Integrate with Land Administration/Governance Indices*
- g) *Integrate with the State of Land Information*

Indices

## Re-Imagining Cadastral Data

Identify the opportunities on how best to **revise, integrate and display** cadastral data in order to improve access to land information and stimulate new dialogues around land governance worldwide.

Requires core cadastral data that is **accessible, interoperable and reusable** so that it can be freely shared and used by other land governance stakeholders

Reviewing the development of open land ownership data over the last five years, (Bayer & Meggiolaro 2023) identified several key areas of work that will be central to the future of open land data.

The 7 opportunities identified here can contribute to addressing **three key challenges** and are an interesting waypoint for reflection on the possible role of cadastral data going forward.

## Re-Imagining Cadastral Data

**Data Management Capacity** - Making the CT more open and interoperable to more easily allow for its integration and alignment with other global initiatives is a critical feature.

**Inclusive Data Ecosystems** - Develop inclusive data ecosystems that deliver value for all data stakeholders. Cadastral data should be core to the development of innovations and services, especially in developing countries, that underpin long term data investments and returns for society.

**Improving Baselines and Indices for Land Governance** - Measuring and understanding the indicators for land and data governance can be improved with the inclusion of core cadastral data and concepts. Integrating cadastral data into thematic country portfolios and as part of governance and data indices, can play a key role in measuring land governance progress.

## In Conclusion

- Through opportunities for partnership across different sectors, can we improve the land data ecosystems at local, national and global level?
- As advocates for improved land and data governance we therefore have an opportunity to reflect on the role that cadastral data can play in enabling the complex analysis required for improved decision making.
- A future information ecosystem in which trust between citizens and government can be restored, and where the interests of all stakeholders is protected while promoting transparency in land and data governance.
- Give the necessary prominence to land data in support of land administration and the role of national government, while ensuring space for all other data stakeholders.

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## Any Questions?

## Thanks You!

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