

IMPROVING TRANSPARENCY IN INTERNATIONAL PROPERTY MARKETS

# The Global Cadastre

**In our highly connected world, land has become a global commodity. However, systems that support land transactions at a global level are incomplete, lack transparency and remain largely disconnected. As part of the continuing dialogue on Cadastre 2034, the authors ask the question: Is a globally connected cadastre possible?**

The term 'land' has global resonance; however, agreement on what constitutes 'land' is far less certain. Are buildings included? What about the water, carbon, and minerals? Who can 'own' it? Can I mortgage

my land? Different countries devise different answers to these questions. To operationalise the answers, many make use of land markets – although others do not, and many cannot. Nevertheless, markets are seen as a way of creating more stable and viable communities by enabling the efficient transfer of 'land' from one party to another.

Most land transactions occur in domestic, national land markets. However, many parties are now looking beyond their borders. Indeed, international land trading is burgeoning: governments, businesses

and citizens from various countries, whether rich or poor, are now actively engaged as buyers and sellers in global land deals. Figures on the number and size of international land transactions are difficult to find and vary greatly; for example, estimates of international land deals over the last decade include 47 million ha (World Bank), 63 million ha (The Global Land Project – in Africa alone), 80 million ha (The Land Deal Politics Initiative) and possibly up to 227 million ha in deals completed or under negotiation according to Oxfam based on the Land Matrix data.



**Kevin McDougall** (51) is a visiting scientist at University of Twente, ITC Faculty, The Netherlands, and associate professor at the University of Southern Queensland, Australia. There, he held the position as head

of the Department of Surveying and Spatial Science from 1995 to 2002 and from 2008 to 2012.

✉ [kevin.mcdougall@usq.edu.au](mailto:kevin.mcdougall@usq.edu.au)



**Rohan Bennett** (32) is an assistant professor at University Twente, ITC Faculty, The Netherlands, and UNU School for Land Administration Studies. He is also an honorary fellow with the Centre for

SDIs and Land Administration at the University of Melbourne Australia.

✉ [bennett@itc.nl](mailto:bennett@itc.nl)



**Paul van der Molen** (63) is professor at University of Twente, ITC Faculty, The Netherlands, and former head of Kadaster International. He served as chairman

of the FIG Commission 7 from 2002 to 2006 and FIG vice president from 2007 to 2008.

✉ [molen@itc.nl](mailto:molen@itc.nl)





36895 Residential Listings

4950 Commercial Listings

70 Vacation Listings

41947 Total Global Listings



▲ International land trading is burgeoning. (<http://www.worldpropertychannel.com/listings/>)

the unrecognised interests of weaker parties.

Perhaps the most important issue from a land information manager's perspective is the lack of data that is available on international land transactions, and hence the transparency of these transactions. Many global land transactions are undertaken directly between foreign investors and individual land owners or governments, often with requests for secrecy by both the foreign investor and the vendor. This is not uncommon in property transactions. However, restrictive practices can lead to fraudulent and corrupt behaviours. Disclosure of the location, spatial extents, terms of contract and tenure is often not readily available at the country level, so aggregation to the global level is problematic.

The incomplete and often unclear system of rights with regard to property is also a major obstacle in building an efficient global land market. The lack of clarity or formal recognition of rights can lead to the dispossession of land often

occupied by the most vulnerable. Conversely, buyers can also suffer from insecure dealings and fraud. Cadastres can provide a strong foundation for providing clarity in terms of identifying owners, spatial extents and rights. In this discussion, the term 'cadastre' is regarded as synonymous with 'land registry' and 'land administration system', since the converging power of technology means that the distinction between these concepts is becoming increasingly blurred. Hence, cadastre is used to mean any up-to-date spatial and textual record of owners, parcels, interests and transactions.

As identified by Peter Dale in his Land Market Model, effective land markets usually require supporting infrastructure. Foundational land policies and laws are needed to facilitate the three pillars of 1) financial services, 2) valuation services, and 3) the land registry or cadastre. Each pillar establishes processes and information that protect the transacting parties and the community. All tend to operate at a national or state level, but what are the implications when land markets

operate globally? From a land administration perspective, it seems that at least one of the three pillars is missing. Whilst global financial services might be well established, globalised valuation services or globally connected cadastral networks are not evident. If this is the case, are there problems with dealing in the global land market?

#### MISSING PILLARS

The problem of the missing pillars is not unique to the global land market; many developing land markets experience similar deficiencies, usually to their detriment. In these cases attempts are made to establish and institutionalise the missing pillars. These processes can take decades or even centuries to mature. For example, to ensure transacting parties remain true to their word, procedures have developed from 1) mere symbolic gestures in customary settings, to 2) private deed conveyancing, to 3) more contemporary deed registration systems, and where appropriate, 4) full title registration systems. The latter two approaches can be found supporting the domestic land



▲ The Land Matrix (version 1) provided a glimpse of the international land transactions...but is quite weak on detailed spatial identification. (<http://landportal.info/landmatrix/get-the-detail>)

markets of most nations that are classed as 'developed countries'.

However, these market management tools are less developed for the global land market. There are no internationally connected cadastres ensuring that transactions are authoritative, assured and accurate. There is no system to ensure the unambiguous identification of transacting parties and the land in question. For many of the larger deals, there is no requirement to make the transacting information accessible to the public. In the land sector, the Land Matrix portal [41] provides a glimpse of international land transactions but relies on notifications from the public or volunteers and is quite weak on spatial identification. It should be noted that an updated version of the Land Matrix was released in June 2013 and plans to circumvent some of these challenges. Although lacking 'authoritative data', the role of volunteers and local communities in providing data should not be underestimated, as the growing recognition by cadastral agencies of the potential utility of

crowdsourced land information demonstrates.

However, it is also wrong to say in a global context that there is no cadastre in place. Disaggregated national and state systems play their role in securing transactions in the global land market. In those countries with functioning pillars, with a little legal advice and the right finance, non-nationals can participate quite easily in the local land market. In other places, where the pillars are incomplete or dysfunctional, the situation is more precarious. Is your land transaction legal? Is the land subject to competing claims? Is the nation or the business you are investing in engaging in unethical land deals? The lack of a complete or globally connected cadastre means such questions are not easily answered.

#### PLAN OF ACTION

The move towards a globally connected cadastre could be seen as an extension of the well-documented Land Administration Paradigm (Stig Enemark, Ian Williamson, et al). When recasting the paradigm in a

global rather than national context, the elements and principles are similar although arguably potentially much more complex. Like other global markets, land administration systems must look to have greater visibility and connectedness in the global marketplace. The focus and principles of such a vision should be to protect all stakeholders in land transactions by providing greater transparency and promoting responsible governance. So, how could this vision be achieved? Whilst global in nature, developments will still be needed at multiple levels.

First, the unregistered land interests found in many countries need better visibility in the immediate term – regardless of whether they represent full ownership or not. Experience shows best results can be achieved by utilising the knowledge and authority held at local or community levels. Use can be made of emerging spatial tools to capture information cheaper, faster and in more fit-for-purpose ways. This work, already ongoing in many contexts, will be an essential foundation for the establishment of any effective local and national



cadastre, let alone a global one. Second, at the national or state level, those countries without complete coverage must work towards it, preferably and where appropriate using agreed international norms relating to responsible governance and transparency in land management. The FAO's recently agreed voluntary guidelines on land tenure management provide a recent example [42]. These voluntary guidelines place strong emphasis on the need for land tenure and recording systems to be transparent and accountable.

However, at the global level we need to understand what might motivate states to share cadastral and land transaction information through a connected global network, and what might be the benefits? Given the recent contagion across the global financial markets, a more transparent global land market could benefit many institutions, such as mortgage markets, by providing greater confidence and hence stability. Investors and consumers of large multi-national corporations are now also demanding greater transparency in the company's investment decisions, including encouraging sustainable and ethical outcomes in international operations. The benefits from more ethical decisions flow to all parties and can provide some degree of protection to the most vulnerable people who are often those most severely affected in international land deals.

#### IN PROGRESS

Of course, a globally connected cadastre implies that information must also be shared beyond state borders. This is already happening with a range of initiatives seeking to make global or regional information on land and geographic data more accessible. For example, the OneGeology initiative [43] provides a portal for sharing geological data across 97 countries, the UN Secondary Level Administrative

Boundaries (UNSLAB) facilitates the sharing of state administrative boundaries, whilst the UN Global Geospatial Information Management (UN-GGIM) promotes the wider sharing and dissemination of geographic data to address key global challenges. Over time, voluntary sharing may progress to more formal arrangements such as protocols.

Beyond this, exploration of the available tools for enabling data sharing is also needed. Here, ISO19152 or the Land Administration Domain Model (LADM) might provide a relevant starting point. Some countries will adopt the standard for development of cadastres. Indeed, numerous country profiles have been constructed and are being piloted. Those with functioning cadastres will at least understand where they deviate from the standard. Evidence suggests that major software and technologies vendors are also assessing the impact of the LADM on product offerings. These activities create dialogue and enable the possibility of data sharing in the longer term. In an operational sense, it could be that regional hubs are the most realistic starting point. The EU has already moved down the path towards seamless land transacting within its constituent countries through its European Union Land Information Service (EULIS) project, the Cross Border e-Conveyancing (CROBECO) initiative and the INSPIRE legislative framework, amongst others. In practical terms, with EuroTitle, Loenen and others provided a standard for enabling land transactions across European borders.

#### A BIGGER WHEEL

Summarising, global land trading is a reality; however, the supporting information infrastructure or cadastre needed to help protect all parties seems to be lacking. The good news: the wheel does not need to be

reinvented – it just needs to be made a little bigger. Like any cadastre, the underlying motivation for recording information is the same: to ensure the fair treatment of transacting parties and the community, wherever they are from, whatever they are transacting, and wherever they might be transacting. ◀

#### WEBSITES

1. <http://landportal.info/landmatrix>
2. <http://bit.ly/T1NE7s>
3. [www.onegeology.org](http://www.onegeology.org)

#### FURTHER READING

Anseeuw W., Wily L, Cotula L, and Taylor M., 2011, Land Rights and the Rush for Land: Findings of the Global Commercial Pressures on Land Research Project, [www.landcoalition.org/cpl/CPL-synthesis-report](http://www.landcoalition.org/cpl/CPL-synthesis-report)

Dale, P., (2000), The importance of land administration in the development of land markets – a global perspective, *Land markets and land consolidation in central Europe*, TU Delft – UDMS, pp31-42.

Global Land Project International Project Office, 2010. Land Grab in Africa: Emerging land system drivers in a teleconnected world, [www.globallandproject.org/arquivos/GLP\\_report\\_01.pdf](http://www.globallandproject.org/arquivos/GLP_report_01.pdf)

Loenen, Bastiaan van, Sergio Nassarre-Aznar, Hendrik Ploeger, 2005, EuroTitle: a standard for European Land Registry Paving the road to a common real estate market. *GIM International* Volume 18, ISSN 1566 9076.

Oxfam, 2012, Our Land, Our Lives Time Out on the Global Land Rush, Oxfam Briefing Note, [www.oxfam.org/en/grow/policy/%27our-land-our-lives%27](http://www.oxfam.org/en/grow/policy/%27our-land-our-lives%27)

Pearce, F., 2012, *The Land Grabbers – The New Fight over Who Owns the Planet*. Transworld Publishers, London.