THE NEED TO GRASP CHANCE FROM CHANGE

Building upon Traditional Skills

Land surveyors are experts in designing, building and managing the spatial component of land administration systems. In these times of fast changing and complex commodities markets, economic growth is driven in part by land changing hands. The author discusses this dynamic humankind to land relationship. Surveyors can keep pace by capitalising on traditional skills.

Land surveyors are experts in designing, building and managing the spatial component of our land administration systems. They are experienced in creating, describing and defining land parcels and associated rights and restrictions. One of the primary reasons that society requires these skills is to support an efficient and effective land market that increasingly includes complex commodities. Economic development is promoted as land rights and other commodities are bought, sold, mortgaged and leased. Growth in complex commodities offers many opportunities for surveyors. However, although we as professionals, along with land administration officials and associated legal professionals, assume that we understand land markets and have developed appropriate professional skills to serve their needs, unfortunately this is often not the case. There is little documentation on how to design and build a land market or on their development and growth. It is ironic that surveyors pride themselves on working from â€˜the whole to the partâ€™ whilst in the case of land markets little effort is spent on designing land markets and the land administration systems and supporting spatial skills to support them.

Skill Capitalisation

Our current cadastral skills are appropriate for simple land markets where the focus is on traditional land development and simple land trading. However, land markets have evolved dramatically in the last fifty years. They have become very complex, with the major wealth-creation mechanism focused on the trading of complex commodities. As with simple commodities such as land parcels, all commodities require quantification and precise definition. While only very few land surveyors have to any significant extent embraced the administration of complex commodities, these modern land markets offer many opportunities if they are prepared to capitalise upon their traditional measurement and land skills.

Evolving Systems

The cadastral concept shown in Figure 1 is simple. It clearly shows the textual and spatial components that provide the focus for land surveyors and land registry officials. However, implementation is difficult and complex. While this model is still a useful depiction of a cadastre, it does not show the evolving and complex rights, restrictions and responsibilities that a modern society demands in order to deliver sustainable development objectives. To understand this evolution it is worth considering the changing humankind to land relationship over the centuries. Figure 2 depicts a western example of this evolving relationship, but a similar one might be plotted for all societies. Historically, an economic paradigm drove land markets. But this has now been significantly tempered by environmental and, more recently, a social paradigm. The simple fact is that the humankind to land relationship in any society is not stable but is continually evolving. Most civilisations have in turn developed a land administration response to this evolving relationship.

In western countries the original focus on land taxation expanded to include support for land markets, then land-use planning, and over the last decade or so to providing multipurpose cover for the support of sustainable development objectives. Current land administration systems originate from mid-nineteenth century attempts to define simple land commodities and to support simple trading patterns: buying, selling, leasing and mortgaging. This could be implemented by providing a remarkably secure parcel titling system, an easy and relatively cheap conveyancing system, and reliable parcel definition through attainable land surveying standards.

Adapting Administration

Countries such as Australia and European counterparts have, arguably, led the world in adapting their Land Administration Systems (LAS) to support land-parcel marketing. Major innovations are copied in many other countries. However, the pace of change has meant a decreasing capacity on the part of LAS to meet market needs. The land market of, say, 1940, is unrecognisable today. New trading opportunities and new products have arrived on the modern post-second world war market. Vertical villages, time shares, mortgage-backed certificates used in the secondary mortgage market, insurance-based products (including deposit bonds), land information, property and unit trusts are among the many commodities now offering investment and participation opportunities to millions, either directly or through investment, pension and superannuating schemes. Land controls and restrictions have become multipurpose, aiming at ensuring safety standards, durable building structures, adequate service provision, business standards, social and land-use planning, in addition to sustainable development. The replication of land-related systems in resource and water contexts is demanding new flexibility in our approach to the administration of these commodities.

Australian Moves

Australian LAS that service parcel-based trading and related market activities were overhauled in the thirty years commencing in 1970 to:

- comply with National Competition Policy

- reorganise nineteenth-century legislative structures establishing single-office/single-function administrations (Surveyor General, Registrar General, Valuer General) with modern management and performance-enhanced organisational structures
- provide opportunities for more competitive professional services and private sector involvement
- capitalise on opportunities available from digital and web technologies.

The combination of new management styles, computerisation of activities, creation of databanks containing a wealth of land information, and improved interoperability of valuation, planning, address, spatial and registration information allowed much more flexibility. However, Australian LAS do not service national-level trading, and are especially inept in servicing trading in new commodities. The result is that modern societies responding to the needs of sustainable development are now required to administer a complex system of overlapping rights, restrictions and responsibilities relating to land. Modern societies are also now recognising many existing land-related rights, restrictions and responsibilities that have not been government formalised. This, however, does not mean that they do not exist. A good example here is recognition of indigenous aboriginal rights to land in Australia in the 1980s. Prior to the Mabo and Wik decisions of the High Court and resulting legislation in Australia, indigenous rights had no formal existence. They did exist, however, albeit informally.

Complex Commodities

An understanding of both formal and informal rights is important as we move to develop land administration systems sensitive to sustainable development objectives. A model for a modern land administration system that draws on the above principles is shown in Figure 3. Land markets have also evolved from systems for simple land trading to trading complex commodities such as mortgage-backed certificates and water rights, whilst our understanding of this evolutionary process is limited. But an appreciation is necessary if we are to maximise the potential of trading in complex commodities by developing appropriate land administration systems to support it. Figure 4 shows the various stages in the evolution of land markets described here. The growth of a complex commodities market, with examples of commodities, is diagrammatically presented in Figure 5.

Business Opportunities

This brief review shows how the traditional concept of cadastral parcels representing the built environmental landscape is being replaced by a complex arrangement of overlapping tenures reflecting a wide range of rights, restrictions and responsibilities. And how a new range of complex commodities has emerged, building on this trend. These developments have been mainly driven by societal desire to better meet sustainable development objectives. There is no reason to believe that this trend will not continue as all societies better appreciate the need to manage the environment for future generations.

Many surveyors are highly skilled in accommodating environmental considerations in land development. But how many have moved outside their comfort zone of focusing on the boundaries of individual cadastral parcels?

And while future markets for complex commodities will continue to rely on the underlying cadastre and land administration system, how many surveyors will be willing to embrace definition and management of complex commodities not reliant upon traditional cadastral boundaries?

Concluding Remarks

I have attempted to show that the humankind to land relationship is dynamic, requiring a similarly dynamic and continually evolving land administration response to managing it. A central objective of any resultant land administration system is to serve efficient and effective land markets. Sustainable development and technology drivers demand a focal shift from traditional processes supporting simple land trading to coping with modern land markets trading in complex commodities. I donâ€™t have all the answers or a road map for surveyors. But I do believe that if they can capitalise on their traditional skills to play a greater role in the management of complex commodities markets, many new opportunities will come their way. What is involved is a logical extension of traditional measurement and land management skills. The challenge not only to surveyors but also land registry, land administration and land information officials is to design and build modern land administration systems that will better support the creation, administration and trading of complex commodities. The unfortunate fact must be faced that without such systems modern economies will have difficulty meeting sustain-able development objectives and achieving their economic potential.

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Further Reading

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