

Innovations in Rural Land Policy and Tenure in Southeast Asia

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Key words: tenure practices, land administration, rural poverty.

SUMMARY

Since the early 1980s land administration system projects have revolved around delivering and formalizing “old type” tenures derived from stable legal orders and institutional recognition. Land administration designs and conventional tenure typologies are often engineered to suit assimilation of land arrangements into formal property markets. However, in developing countries in Southeast Asia the majority of the rural poor rely on systems of access to land sourced in social practice not law or government. Formalising these socially derived access modes by using familiar land administration tools of security of tenure, land rights, spatial identification and institutionalisation of credit systems is now seen as problematic, especially in the context of deeply entrenched poverty. Innovations in project designs are slowly responding to research results emerging from sustainable development objectives and changes to land policy.

The first section of this paper reviews land policy and land administration theories in the context of providing a primary poverty reduction strategy over the past three decades. It is then argued that land administration reform for the rural poor must be designed in the context of the totality of arrangements and social practices relating to local land, labour and product markets. To redress the narrow focus on ‘titling’ conventional tenure typologies, land administration, management or reform project designs should include:

- reappraisal of rural tenures to focus on local tenure practices relating to use of resources (not merely land), and
- a methodology for integrating accepted and useful tenure practices into formal structures, principally by cataloguing and understanding the existing systems, creating formal systems with inherent flexibility, and allowing access to formalisation according to local demands through staged processes.

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1. INTRODUCTION

75% of an estimated 1.2 billion people suffer poverty in rural areas around the globe (IFAD 2001) and land-based activities are increasingly considered an underlying factor in poverty reduction strategies (Deininger 2003). Recent international development work demonstrates a more flexible approach to project designs using land to deliver prosperity, peace and poverty alleviation.

Research over the past few decades has revealed important relationships existing between people and their land through various economic, environmental and socio-cultural factors (Ting and Williamson 2001). In rural areas these relationships are exaggerated by an intrinsic reliance on land and natural resources to support their livelihood. Much of their survival is dependent on communal based people to land relationships, with approximately one third of people believed to be living in these interdependent relationships (World Bank 2003). These communal, socially practiced and often informally defined tenure relationships provide security and regularity within the group. Therefore land administration designs employed today, relying on “old type” tenures, private individual ownership and State ownership or control, neglect recognition of alternative tenure arrangements particularly in rural areas.

Building on broad based contributions to modern land policy, this paper argues that if land administration systems are going to contribute to rural poverty reduction, the approach to land tenure arrangements must be redesigned to reflect the dynamic on-ground realities.

2. LAND POLICY

Almost three decades of development have broadened the economically driven philosophy behind the 1975 World Bank Land Policy to a more desirable and comprehensive land policy for poverty reduction. Early land policy promoted individual, family scale farming and market based solutions to encourage more productive users with an emphasis on the importance of egalitarian asset distribution (Deininger and Binswanger 1999). The 1980's period of individualisation and privatisation favoured imperial property rights regimes based on private and state imposed property rights. During this time, State resource management proved unsustainable and was insecure (Schlager and Ostrom 1992). In the 1990's, research and development programs began influencing a new policy direction towards local management, participation and recognition of existing people to land relationships. This paradigm shift was officially recognised with the launch of the World Bank's book on “Land Policies for Growth and Poverty Reduction” (2003).

Setting good policies by influential Government authorities is recognised as an essential development ingredient to ensure visions have operational and technical resources and attract both public and political support. Innovations in policy are required to suit both the changing

local and global climates. Global influences and initiatives with local concerns over the past two decades included: the adoption of the International Labour Organisation Indigenous and Tribal Peoples Convention (No.169) (1989); promotion of sustainable development following the 1987 Brundtland Report, Agenda 21 initiative developed from the 1992 UN Rio Earth Summit; 4th World Conference Women's Rights, Beijing 1995; UN-Habitat Human Settlements campaigns; land administration, rural development and poverty reduction summits held at Bogor 1996, Bathurst 1999, Potsdorm 2000, and Bonn 2001; and most recently the unanimously adopted Millennium Development Goals by United Nation member states for global human development (World Bank 2003) .

Overarching poverty reduction policies maintain strong capitalistic ideals through economic and agricultural productivity growth, market and trade integration, and globalisation participation. In some areas of development, the importance of local level participation and information for long term impact is gaining recognition. The World Bank land policy (Deininger 2003) encourages more collaborative solutions, specifically promoting project equity as well as efficiency, communal not just private formal titling, and participatory and locally conceptualised development approaches.

3. LAND ADMINISTRATION THEORY AND PRACTICE

On the assumption that a formal property system of recording land arrangements is necessary to provide sufficient tenure security to support a land market, experts remain convinced of the wealth potential of land in both developed and developing countries (Wallace and Williamson 2004, De Soto 2000). A comprehensive land administration infrastructure underpins these and more functions by dealing with elements of the social, legal, economic and technical fabric which land managers and administrators must manage (UNECE 1996). This infrastructure also facilitates the implementation of land policies in both developed and developing countries concerned with the administration of land as a natural resource to ensure sustainable development (Enemark 2003, UN-FIG 1999). Economic prosperity, environmental sustainability, livelihood security and alleged poverty reduction is delivered through land administration systems (UN-FIG 1999) and are significant reason why international donors and Governments commit substantial finances, research resources and expertise on land-based activities.

Formalisation of the humankind to land relationship, in terms of use, ownership, distribution and valuation through land administration infrastructures are common project response. The aim is to improve efficiency in processes of: regulating land and property development; land use and conservation; revenue gathering through land sales, leasing and taxation; and resolving conflicts concerning the ownership and use of land (Dale and McLaughlin 1999). Old land administration strategies tended to apply identical remedies as doctrine irrespective of country's circumstances (UN-FIG 1999). This view is now challenged, and the stage of development and capacity of a country is used to determine the country's limitations in undertaking projects (UN-FIG 1999).

Sustainable development, globalisation, urbanisation, technology and micro-economic reform are global drivers re-engineering the land administration model in our dynamic and modern societies (Ting and Williamson 2001). Re-engineered land administration project approaches are largely influenced by the “sustainability” factor. This focus has introduced more accountability and long term planning in designs, which were integral factors in the successful 20 year, four-phase, Thailand Land Titling Project that commenced in 1984 (Rattanabirabongse and others 1998). The land administration ‘toolbox’ concept by Williamson (2002) responded to new demands on land administration system deliverables and provided the central framework of cadastral tools through appropriate land policies, legal concepts, tenure and institutional arrangements and technical solutions.

Populations already working within a functioning formal sector dealing with rights based systems bring order and efficiency in the business of land management, particularly ownership registration, through modern land administration systems. These models are appealing and easily transferred across capitalist societies where entrepreneurial skills and trade activities associate with commodified goods and representative fiscal values. Often there are assumed levels of capacity required in terms of human, technical, legal and institutional resources to reap the benefits of activities such as planning, taxation and resource management.

However, a disconcerting rate of failure implementing land administration systems using this economic driven top-down approach spurred much discussion in the mid to late 1990’s on system delivery (Williamson and Ting 2001). Designs need to be sensitive of the dynamic humankind to land relationships in which they are implemented and the stage and capacity for development (Williamson and Ting 2001, UN-FIG 1999). Success impinges on the confidence and participation of people in the system especially when implemented as a ‘trickle down’ and holistic approach to poverty alleviation. This requires strong political will to drive the implementation and operational processes both of government agencies and secondary stakeholders. Land administration projects were also overly concerned with the technical delivery and functioning of a system that would produce efficient, secure and up-to-date land registries and cadastral maps for planning, land use and resource management, and establishment of land markets and credit facilities. In many cases however the required human and resource capacity to deliver these technically demanding systems is seriously lacking and inappropriate.

4. DESIGN AND BUILD WITH LAND TENURES

Focus on land policy development and institutional strengthening has improved land administration model designs. In the past, policy tools were rights centric and relied heavily on instrumental legal order, delivering selective registration and issuing formal individually recognised land ownership titles. Land policy now is more reflective of existing land arrangements, provides more sustainable direction and should steer towards formalisation strategies rather than impose them (Figure 1). Land tenure, a component of the land administration toolbox, can respond to a more comprehensive understanding of land tenure arrangements in the social context of informal and formal arrangements. Issues with a social component are most difficult to accommodate because of diverse and dynamic arrangements,

biased interpretations and limited innovative tools available which help to avoid crude assimilation of cultures.

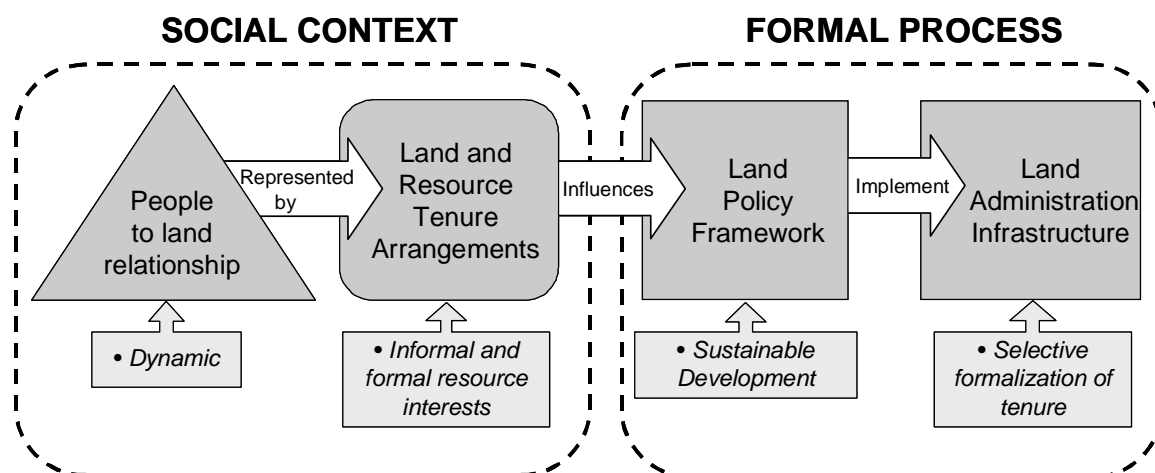


Figure 1. Tenure Approach to Land Administration

Identification, classification and securitisation of tenure are necessary if access to land and investment incentives for the poor, as a poverty reduction strategy, are to be achieved through land administration tools. Secure tenure in land and resources is achieved if a persons' interest in land can be successfully defended when challenged. This includes protection against risks, particularly eviction, and not living in fear or threat of having claims denied (Augustinus 2003). In terms of a sustainable future, evidence shows that long-term tenure security encourages better resource management decisions (Feder 1988, Otsuka and Place 2001) and is imperative for civil peace, equity and food security (De Soto 2000, Lavigne Delville 2002). *Secure tenure* is an essential condition; however it is not sufficient to achieve broad policy objectives and ensure the poor have access to affordable shelter and reasonable livelihood conditions (De Soto 2000, Payne 2002). Taxing land at market value, stabilising the legal framework, simplifying building and planning regulations, mandating utility services, better spatial and social planning, and public sector agency strengthening are also required to improve conditions for the poor (Payne 2002).

Most commonly in the western world formal land tenure arrangements describe *legal* interests between people and natural resources. Systematic and unambiguous organisation and identification of people to land relationships are then easily integrated within government administration and market based activities. Formal records of tenure are required for taxation, compensation, administration of transactions, land use planning, natural resource management, risk assessment and valuation purposes.

Four common tenure types in western influenced property regimes categorise how people own, use, access and transfer land within a formal system. The main tenure classifications are private (individual), state (public), communal and open access (FAO 2002, GTZ 1998). The key characteristics for tenure classification are the type of stakeholder, individual, group, or government based; and secondly, the constraints imposed on the set of ownership rights. Classification of common tenure types of developed systems are illustrated in a truncated

tenure diagram to show a number of tenure relationships to be acknowledged within a country's land administration system (figure 2). Tenure classifications are often modified within societies to reflect different demands on the land and resources.

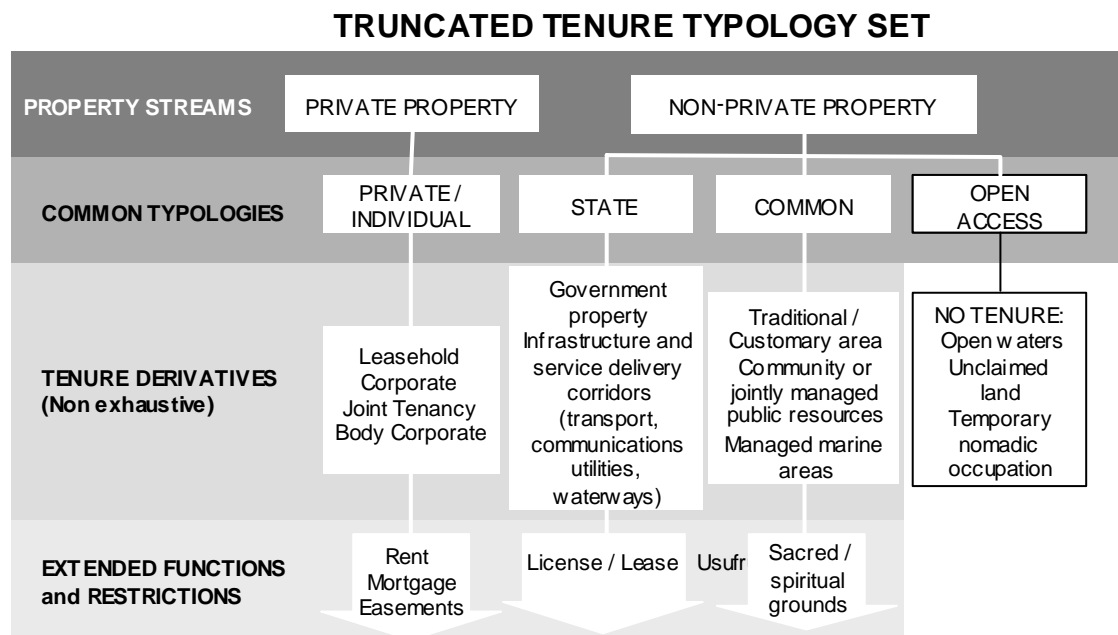


Figure 2 – Truncated Tenure Typologies

Land administration projects in Southeast Asia primarily concentrate on delivering security of tenure to privately held land for fast, simple and unambiguous title registration. To secure large areas of rural land for communally settled groups and sustainable local resource management has been overlooked in land administration designs in Asia. Often the problem lies in the formal classification of 'indigenous' groups. However, land and resource use, livelihood security, and social institutions of the humankind to land relationship are also identifiable alternatives to help classify tenure arrangement that realize sustainable resource management. A number of African nations are well advanced in identifying communal type tenure registration solutions in rural communities (van der Molen 2003). Due to various environmental and social variables which make these societies, unique solutions cannot simply be reassigned into Asian scenarios; however, aspects of the formalisation and institution building process could possibly be applied.

5. COMPLEXITY OF TENURE SOLUTIONS

Typological tenure analyses are appropriate in developed systems, however they do not capture all observable people and resource relationships, and overlook arrangements such as contract labour, nomadic pastoral allocations, share cropping and tenure systems of religious or de facto arrangements. Various forms of tenures create a complex pattern of rights and other interests. This leads to de jure (existing because of the formal law) and de facto (existing in reality) rights often clashing in resource scarce, conflict and post-conflict areas and between state and customary users (FAO 2002).

Common property, informal communal and customary tenures are land arrangements which lack clear registration procedures as compared with private or State land tenure. Hardin's (1968) long since disproved 'Tragedy of the Commons' theory opposed the use and management of resources in common. Hardin argued that resources used in common would be overused and degraded because of individuals' desires to extract the greatest self-benefit when in competition with other users of a resource. This hypothesis influenced land administration models toward secure private property solutions under increasing commodification and resource scarcity pressures in the 70's and 80's. However, extensive research in different regions of the world demonstrated longevity and sustainability of resources in communal arrangements. This concept rests largely on the community collectively acting for the greater good rather than individual benefit. Recent research by Mienzen-Dick and Di Gregorio (2004) resolve that collective action combined with secured property rights arrangements leads to efficient and sustainable use and management of common property natural resources. Common property resource management should be reconsidered a sustainable tenure option, however more attention on practical methods of integrating these within a land administration system is required.

Formal typologies of tenure exist in rural and urban environments. Focus on informal tenure reveals differences between urban and rural poverty and consequently in tenure arrangements. Poverty predicaments of both urban and rural societies are a function of prioritising immediate needs. Satisfying basic security and livelihood requirements are associated with different economic, social and environmental circumstances and therefore independent investigation of urban and rural settlements is essential. People suffering poverty in *urban* areas are more likely to live among dense populations and in a more progressive economic environment, based on manufacturing, trade and services (World Bank 2003). Urban areas have tenure interests stemming from an economic paradigm and are concerned primarily with shelter and financial security. Urban best practice solutions typically assimilate informal practices to formal systems using incremental steps of regularisation and formalisation. Capacity to recognise flexible urban tenure arrangements in a dynamic and progressive environment is being sought through global campaigns and research in developing nations to improve urban informal settlements¹. Secured and formal urban tenure arrangements attempt to alleviate poverty by providing and protecting access to land and shelter, and mainstreaming social, economic and civic opportunities for the urban poor (Augustinus 2003).

Poverty conditions exist through all stages of the urban to rural landscape continuum; from urban waste slum settlements to drought stricken farmers on daily salt and water rations. Therefore investigations need to also extend to include the improvement of land arrangements, settlements and livelihoods of the rural poor. At present tenure options for rural land arrangements do not fit the urban tenure formalisation strategies or offer equivalent flexible opportunities.

¹ This refers to the UN-Habitat, Global Campaign for Secure Tenure (date), and the innovative work by Augustinus 2003, de Soto 2000 and Payne 2002.

6. RURAL LAND TENURE DIFFICULTIES

Rural areas typically support primary producing societies reliant on land and other natural resources, and dispersed populations with low quality and accessibility to infrastructure and services. Rural interests are closely aligned to socially-derived agrarian systems and livelihood security. Land is not seen in isolation from other features of the natural environment, for example soil, water, trees or topography. Rural landscapes nurture a variety of relationship values between humankind, land and other resources especially among traditional and customary groups. Rural people and their resources are vulnerable to environmental risks directly related to production and resource degradation. Therefore there is profound interest in land and resource tenure security as it also secures entitlements to additional benefit streams, such as food security, through continued access to resources for food production, and social security, from inheritance patterns and collective arrangements (Maxwell and Wiebe 1998). Most of the challenges are closely associated with characteristics of the physical environment in terms of self-provision dependency (World Bank 2003). Threatening widespread conditions of land degradation, expropriation, population pressures, ethnic conflicts, privatisation of common property, tenure insecurities, and the expansion of commercial agriculture, give rise to an intense demand on natural resources. These factors directly impinge on land use and access for food and livelihood requirements of the rural poor (Moore 2002).

While numerous factors contribute to rural poverty, understanding the role of land requires emphasis on factors that effect the protection and sustainability of people's interests in natural resources to meet their daily livelihood needs. Identification and securitisation of land and natural resources is imperative for survival of the rural poor and the human population at large. Understanding land arrangements practiced by the rural poor and providing security for continuation of these practices are an incentive for sustainable and best use development. However in reality security conditions are inadequately met in rural regions (Rauch et al. 2001).

The greater need to provide equitable access and tenure security to land, particularly for the poor and marginalised in society, is due to intensified competition on diminishing and degrading resources. Ambiguous, unclear and challengeable tenures in these circumstances lead to resource disputes among all levels of society, particularly: small farming families; private and state-owned enterprises; state departments and multinational investors². Communal areas such as forests and coastal zones are prime examples because of their highly marketable potential yet often sacred and preserved resources. The type of tenure and security instruments applied to areas must consider incentives for users to invest in sustainable and productive management practices. Many correlated factors affect rural tenure security and consequently engender rural poverty as described below.

² Kate Dalrymple made observations of these during empirical field studies in rural Cambodia, November 2003 – February 2004.

6.1 Intractable Difficulties of Rural Tenures

6.1.1 Livelihood and Tenure Security

Rural tenure arrangements are vulnerable and continually challenged by external forces. The rural poor benefit from tenure security in the use of land and other natural resources through: village level assurance in access to use, production and extraction of resources; security of investment in land both of labour and capital; and, security in lineage entitlements, often a high priority in agrarian societies. Problems in these socially derived systems most often arise from a lack of defence and acknowledgement of informal methods when challenged by claims outside the local system. This also undermines traditional authority and social cohesiveness. Rural land tenure security in agrarian society is analogous to livelihood security because both are intrinsically dependent on the right of access to, and use of, land and natural resources. This is precariously balanced by food security, which is a function of food availability, access and utilization (Maxwell and Wiebe 1998). Significantly for the rural poor, secure tenure entails secured access to land and resources that may not be held privately or accessible via public property. Access to agricultural land and common property resources provides crucial benefit flows to rural societies from increased food security, income, shelter, and credit opportunities, especially in times of crisis (World Bank 2001). The rights of rural people to graze animals on crop residues, take fallen branches for firewood, or collect medicinal plants from hedgerows are also critical for livelihood survival of the poor (Weibe and Meinzen-Dick 1998).

6.1.2 Land in Post Conflict Zones

Land administration as an operational and institutional tool in post conflict societies is considered a major component in reconstruction and underpins human settlement and home security; resource and infrastructure planning; market development; and eventually government capacity for revenue raising (van der Molen 2004). Restoring secure property rights through land registration is a conventional recommendation. However, under post conflict circumstances classic property rights systems are not necessarily desirable because of limitations and rigidity of conventional methods often thought to trigger further discord (Augustinus and Barry 2004).

6.1.3 Production, Labour and Food Security

Production, labour and food security are three important themes that directly address poverty reduction and are intrinsically linked to land tenure access and security for rural societies. Feder's (1988) observations demonstrated an increase in productivity from increased agricultural investments directly associated to secure land tenure. These may be investment inputs through increased labour, technology improvements, intensified or modified cropping, fertiliser inputs or other forms of agricultural improvements.

In the absence of tenure security, off farm and secondary employment are difficult to pursue because of constant efforts to protect unoccupied land from adverse possession. Secured tenure through increased labour opportunities can increase livelihoods of the poor. Production

and farming techniques, labour and employment opportunities, and access to natural resources as food security buffers, highlight the integrated scenarios of secure rural land tenure arrangements.

6.1.4 Social and Unique Relationships

Customary tenure systems are typically found in communities in rural and remote areas. Pressure on these communities economic, political, social, cultural and environmental arrangements are minimally influenced by external modernities such as commercialization and institutionalization. Groups and individuals exercise varying degrees of social, conventional and prescribed relationships with land. As these tenure practices diverge from normative statutory behaviour they are considered 'informal', and often classically described as traditional, customary or indigenous in origin.

Traditional tenures ever present in rural and remote areas are defined by long term practices that transcend generations, while customary tenures rely on similarly inherited tenure practices and are shaped in a history of cultural or religious beliefs identifiable to particular groups, tribes, or clans (Brazenor et al. 1999). Social, spiritual and stewardship responsibilities form complex and unique humankind to land relationships among indigenous communities (Crowley 2003). Tenure ideologies and practices of traditional and indigenous communities diverge quite dramatically from western concepts causing misinterpretations of tenure and cultural systems (Crowley 2003). Studies of indigenous Australians by Brazenor et al. (1999) identified tenure practices differing in terms of ownership, evidence, conceptualisation of land, boundary delineation, transfer processes, and rights, restrictions and responsibilities. Many anthropological studies of customary cultures³ find culture and land inseparable. A myriad of attributes influence the people to land relationship differentiating customary or indigenous communities, including: landscape; language; law; ceremony; kinship; politics; histories; seasons; geography; human impact; and spiritual integrity (Geisler 2000).

Typically land distribution among indigenous communities is communal and arrangements within the group may be expressed through permission and invitations, self-restraints and implications rather than prescribed and formalised rights, restrictions and responsibilities bounded by legal principals and institutions. Lines on maps often do not define boundary demarcation; instead close connections and boundary demarcations originate from tribal boundaries, geographic or ecological boundaries (Hirsch and O'hanlon 1995). An important element in customary arrangements is the sense of immediate tenure security maintained through respected oral agreements and established or inherited user claims. Security methods of this nature require an in depth level of local knowledge and is often difficult to symbolize alongside tenure claims with western ideologies.

³ References according to Crowley 2003.

7. CONCLUSIONS

To understand entrenched relationships and interactions between communities and their natural environment demands more localised and participatory action, especially for the rural poor. The new land policy theory now recognises that these socially defined relationships (albeit poverty ridden) actually provide security and regularity for individuals and groups. Rural societies with a complex milieu of humankind to land relationships may not necessarily be applicable to conventional tenure systems, let alone be at the stage of development to integrate to a formal property market. Lessons can be learnt from African cases of customary tenure registration and urban informal settlement approaches, on the condition that they are appropriately re-engineered to fit the context of rural poor in Asian landscapes. It is recommended that:

- land administration systems in Southeast Asia, where land of the poor is typified by communal social practice, move the focus away from pushing informal arrangements directly to formal systems and instead build an understanding of local arrangements which can be used to develop solutions from the ground up,
- participation at the local level should be the most important source of initiatives to harness successful and appropriate transition from informal to formal procedures. This involves empowering and facilitating local people and authorities to make sustainable decisions.

Classic typologies of tenure are used to provide some analytical clarity for building our capacity to compare and administer land and humankind arrangements. Innovations in land policy, sustainable development and land administration initiatives broaden our awareness of society's diverse and interdependent relationships between humankind and land. Understanding more complex dimensions of rural land arrangements helps to illustrate misconceptions about the over-simplistic nature of formalisation of land tenures. More utility in the administration and securization of land requires an analysis of tenure practices: methods for the distribution and granting of property rights for access, use and control; spatial and temporal delineation; transfer and inheritance; restrictions and responsibilities. Rural studies and research continue to find practicable solutions moving from social practices to security of tenure, before market reforms are even considered.

REFERENCES

- Augustinus, C., Ed. 2003, Handbook on Best Practices Security of Tenure and Access to Land, pp.110, Nairobi, UN-Habitat.
- Augustinus, C. and M. Barry, 2004, Strategic Action Planning in Post Conflict Societies, Symposium on Land Administration in Post Conflict Areas, Geneva, Switzerland, April 29-30.
- Brazenor, C., C. Ogleby, et al., 1999, The Spatial Dimension of Aboriginal Land Tenure, 6th South East Asian Surveyors Congress, Freemantle, Australia.

- Crowley, T., 2003, Culture and Common Property: Indigenous Tenure Issues within Western Society, The 15th Annual Colloquium of the Spatial Information Research Centre, Dunedin, NZ, 1st - 2nd December, 2003.
- Dale, P. and J. McLaughlin, 1999, Land Administration, pp.169, Oxford, Oxford University Press.
- de Soto, H., 2000, The Mystery of Capital, New York, Basic Books.
- Deininger, K., 2003, Land Policies for Growth and Poverty Reduction, pp.239, Washington, D.C., World Bank and Oxford University Press.
- Deininger, K. and H. Binswanger, 1999, The Evolution of the World Bank's Land Policy: Principles, Experience and Future Challenges, The World Bank Observer, 14(2) pp.247-276.
- Enemark, S., 2003, Underpinning Sustainable Land Administration Systems for Managing the Urban and Rural Environment, 2nd FIG Regional Conference (Plenary Session 3), Marrakech (Morocco), December 2-5, 2003.
- FAO, 2002, Land Tenure and Rural Development, Rome, Food and Agricultural Organisation of the United Nations.
- Feder, G., 1988, Land Policies and Farm Productivity in Thailand, Baltimore, The John Hopkins University Press.
- Geisler, C., 2000, Estates of Mind: Culture's Many Paths to Land, Society & Natural Resources, 13(1) pp.51-60.
- GTZ, 1998, Land Tenure in Development Cooperation: Guiding Principles, pp.252, Weisbaden, Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ).
- Hardin, G., 1968, The Tragedy of the Commons, Science, 162(1243) pp.1243-1248.
- Hirsch, E. and M. O'Hanlon, Eds, 1995, The Anthropology of Landscape: Perspectives on Place and Space, Oxford, Clarendon Press.
- IFAD, 2001, Rural Poverty Report 2001: The Challenge of Ending Rural Poverty, Oxford, Oxford University Press.
- Lavigne Delville, P., 2002, Towards an Articulation of Land Regulation Modes? Recent Progress and Issues at Stake, Regional meeting on land issues, Kampala, April 29th - May 2nd.
- Maxwell, D. and K. Wiebe, 1998, Land Tenure and Food Security: A Review of Concepts, Evidence, and Methods, Research Paper, pp.37, Madison.
- Miengen-Dick, R. and M. Di Gregorio, Eds, 2004, Collective Action and Property Rights for Sustainable Development, Focus, pp.36, International Food and Policy Research Institute.
- Moore, B. H., 2002, In Their Hands: For the Rural Poor Sustainable Development Means Secure Access to Land, FIG XXII International Congress, Technical Session 7.6, Washington D.C., USA.
- Otsuka, K. and F. Place, Eds, 2001, Land Tenure and Natural Resource Management : A Comparative Study of Agrarian Communities in Asia and Africa, pp.389, Baltimore, Johns Hopkins University Press.
- Payne, G., Ed. 2002, Land Rights and Innovation: Improving Tenure Security for the Urban Poor, United Kingdom, ITDG Publishing.
- Rattanabirabongse, V., R. A. Eddington, et al., 1998, The Thailand Land Titling Project - Thirteen Years of Experience, Land Use Policy, 15(1) pp.3-23.

- Rauch, T., M. Bartels, et al., 2001, Regional Rural Development: A Regional Response to Rural Poverty, pp.122, Wiesbaden, Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ).
- Schlager, E. and E. Ostrom, 1992, Property-Rights Regimes and Natural Resources: A Conceptual Analysis, *Land Economics*, 68(3) pp.249 - 253.
- Ting, L. and I. P. Williamson, 2001, Land Administration and Cadastral Trends: The Impact of the Changing Humankind-Land Relationship and Major Global Drivers: The NZ Experience, *Survey Review*, 36(281) pp.154-174.
- UN-ECE, 1996, Land Administration Guidelines, Geneva, UN-ECE.
- UN-FIG, 1999, The Bathurst Declaration on Land Administration for Sustainable Development, Land Tenure and Cadastral Infrastructures for Sustainable Development, 24-27th October, Melbourne, Australia.
- van der Molen, P., 2004, Observations - Conclusions - Recommendations, Land Administration in Post Conflict Areas, Geneva, April 29-30.
- van der Molen, P., 2003, The Future Cadastres – Cadastres after 2014, FIG Working Week 200, Paris, France, April 13-17.
- Wallace, J. and I. P. Williamson, 2004, Building Land Markets, *Land Policy Journal*, pending publication.
- Weibe, K. D. and R. Meinzen-Dick, 1998, Property Rights as Policy Tools for Sustainable Development, *Land Use Policy*, 15(3) pp.203-215.
- Williamson, I. P., 2002, The Cadastral "Tool Box" - a Framework for Reform, Proceedings of XXII FIG International Congress, Washington D.C., U.S.A., April 19-26.
- Williamson, I. P. and L. Ting, 2001, Land Administration and Cadastral Trends - a Framework for Re-Engineering, *Computers, Environment and Urban Systems*, 25 pp.339-366.
- World Bank, 2001, World Development Report 2000/2001: Attacking Poverty, Washington, D.C., The International Bank for Reconstruction and Development.
- World Bank, 2003, [Online], [Accessed 21st August 2003], Millennium Development Goals, <www.developmentgoals.org/About_the_goals.htm>.
- World Bank, 2003, [Online], [Accessed 5th May 2004], Prologue to Rural and Urban Poverty, <www.worldbank.org/poverty/strategies/chapters/prologue.htm>.
- World Bank, 2003, World Development Report 2004: Making Services Work for the Poor, Washington, D.C., The World Bank and Oxford University Press.

BIOGRAPHICAL NOTES

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Kate is undertaking a PhD in the Centre for Spatial Data Infrastructure and Land Administration after completing a Bachelor of Arts (Geography) and Bachelor of Geomatic Engineering (Honours) degree at the University of Melbourne in 2001. During November 2003 – February 2004, she conducted independent empirical research of rural land tenure practices in 3 village communities in Cambodia. Kate's research analyses the formalized response of tenure arrangements in rural areas with a view to incorporating more flexible definitions and betterment paths for secure access to land and natural resources.

Ms Jude Wallace

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Jude is a senior research fellow in the Centre. Jude is a lawyer specializing in land policy and land administration systems. She has worked in academia, the legal profession and government. Previous positions include Deputy Chairperson of the Law Reform Commission of Victoria and the Estate Agents Board. Currently her research is focusing on developing: appropriate legal frameworks for land administration in tenure and titling, land transactions, planning, securities and finance, professional regulation, subdivision and development, and mining; and, integrated advice and reform strategies. Applications of her work have principally been in Australia, Indonesia and East Timor.

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Professor Williamson's teaching and research is concerned with cadastral, land and geographic information systems, land administration and spatial data infrastructures, in both developed and developing countries. He has published extensively on these topics. He has undertaken research or consultancies worldwide including for AusAID, the United Nations and the World Bank. He is a Member of the Order of Australia (AM), a Fellow of the Academy of Technological Sciences and Engineering Australia (FTSE), a Fellow of the Institution of Surveyors Australia Inc., a Fellow of the Institution of Engineers Australia, an Honorary Fellow of The Mapping Sciences Institute and the Spatial Sciences Institute Australia, and an Honorary Member of the International Federation of Surveyors (FIG). He was Chairperson of FIG Commission 7 (Cadastre and Land Management) 1994-98 and Director United Nations Liaison for the FIG from 1998 - 2002. He is currently a member of the Executive of the United Nations sponsored Permanent Committee for GIS Infrastructures for Asia and the Pacific (PCGIAP) and Chair of its Working Group 3 (Cadastre). At Melbourne he has been President of the Academic Board and Pro-Vice-Chancellor, and is currently Head of the Department of Geomatics and Director of the Centre for Spatial Data Infrastructures and Land Administration. Awarded the Centenary Medal by the Prime Minister for service to Australian society in research and geomatics engineering and surveying 2003.

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