Land Administration in the Asian Region – Challenges and Opportunities

Chris LUNNAY, Australia

Key words: land administration, land tenure, gender, technology, forest boundaries

SUMMARY

Land Administration projects developed in the Asian region have had varying degrees of success and lessons can be learnt from each of these projects. It is reasonable to say that all lessons can be positive if they are utilised in an appropriate manner. It is beneficial to take activities that have worked in one project and build them, where appropriate, into other projects. Likewise it should be just as beneficial to take activities that have not worked, assess them and determine what benefits there would be if they could be made to work in another project.

This paper looks at some of the key characteristics of land administration projects in the Asian region in countries such as Thailand, Lao PDR, the Philippines, Indonesia, and India (Karnataka). The characteristics that have been selected for analysis are those where there may have been less success on the majority of projects and where there is an opportunity to learn valuable lessons for the development of future land administration projects. The characteristics compared include land tenure systems, with a specific focus on forest lands and customary tenure, technical activities, institutional arrangements and property valuation and land tax.
Land Administration in the Asian Region – Challenges and Opportunities

Chris LUNNAY, Australia

1. INTRODUCTION

Conventional approaches to land administration have been criticized and often characterized as inefficient and ineffective. This has been largely attributed to *inter alia* rigid and costly regulatory frameworks, poor land recording systems, overly complex legislation and multiple regulatory agencies. These factors in turn exacerbate the problems of informal settlements and land markets, lack of tenure security and public confidence, social disputes over land as well as unsustainable land resource use. It is also claimed that conventional approaches are unable to effectively deal with the complexities presented by land administration systems that incorporate the country’s socio-cultural, political, economic and historical fabric.

Innovative approaches to the implementation of land administration systems, such as actively utilizing land administration systems as a tool for improved land policy development as well as linkages with broader socio-economic benefits, are needed and are currently receiving positive recognition. Although any application of land administration systems should be country-specific (as the stage of development, level of capacity and legislative framework varies) case studies from the Asian region (Thailand, Lao PDR, the Philippines, Indonesia, India (Karnataka)) will be used to highlight underlying and guiding principles for effective and efficient land administration systems: what works and what doesn’t. The selected case studies have vastly different geographical and socio-economic characteristics and therefore represent a broad-spectrum of the challenges and opportunities experienced in implementing innovative land administration techniques.

The countries case studied have recently introduced (or are preparing to introduce) New Land Laws. These attempts to redress the inadequacies of existing legal frameworks comprise positive steps directed at improving levels of transparency, efficiency and equity with which individuals and societies have access to land as well as governance with respect to land. Generating and sustaining support and commitment of key stakeholders to these new legal frameworks is required to ensure the desired aims of improved security, taxation, access and use in land administration reform are met. The purpose of a well-functioning land administration system is to guide land policy in relation to the ownership, use and valuation of land. Innovative land administration approaches place greater emphasis on drawing the connections between the benefits of an efficient and effective system with improvements in social welfare and increased economic development.

1.1 Characteristics of Land Administration in the Asian Region

Land resources in developing countries of the Asian region are under increasing pressure. A number of factors characterise land administration in developing Asian countries.

- **Colonial administration** has had a major influence in Asia. Under colonial administration, it was common for two land administration systems to apply, a western
system, usually restricted to urban areas and areas under commercial agriculture, and locally borne systems that were often left under customary tenure arrangements. In Indonesia there was also a third system, one administered by a range of overlords, such as the Sultan of Solo in Jogyakarta. In India, land was a major source of colonial revenue and the colonial systems of land administration had a significant impact on current land administration systems and access to land throughout the country.

- With rising population, land and natural resources in Asia have come under significantly increased pressure, as evidenced by increasing deforestation, land degradation and landlessness. Most larger countries have gone through this full cycle – including Thailand, the Philippines and the major islands in Indonesia. Other less-developed parts of Asia, such as Lao PDR and the outer islands in Indonesia are still going through the cycle.

- Land classification is a major factor in land administration systems in Asia where many countries restrict private rights to non-forest land. Uncertainty of forest boundaries is a significant factor causing tenure insecurity.

- Most Asian countries have a complex legal and policy environment. The land administration systems can be generalized as over-regulated and under-enforced and therefore systems inadequately accommodate the changing needs of society and the changing situation regarding land resources. In most countries there is a complex and inconsistent web of laws and regulations. In the Philippines, for example, 19 different agencies each have some role in the administration of land.

Given that land administration projects have been or are in the process of being undertaken in a number of Asian countries with the above characteristics, what were the challenges and what can we learn that is relevant for applying to future land administration projects?

2. CHALLENGES AND OPPORTUNITIES

2.1 Land Tenure Systems

Forest/non-Forest Classification. In land administration projects in the Asian region, recognition of rights is confined to non-forest land, thereby excluding in many countries a significant proportion of indigenous populations who, in many cases, have lived on and cultivated the land for many generations. The Asian geographic region has large and diverse forest areas and includes one quarter of the world’s tropical forests. In case study countries of Thailand, the Philippines, Indonesia and Lao PDR, land is classified into forest and non-forest land. This classification system has implications regarding the definition of forest boundaries. Logging, plantations and agribusiness have resulted in deforestation and degradation as forests are encroached upon. Furthermore rights of indigenous communities (forest dwellers) are uncertain and or unrecognized, intensifying pressure over the definition of forest boundaries.

The growing conflict between indigenous communities and mainstream societies are a major issue. Most countries only recognize private rights over non-forest land. Indigenous or community-based land administration systems are generally not recognised in the national or
statutory framework. Indefinite forest boundaries are often a major factor of tenure insecurity in Asia.

Defining forest boundaries and usage rights of forest-dwellers is a complex issue in most countries and one which has yet to be satisfactorily addressed on any land administration project in the Asian region. The existing policy, institutional and legal frameworks regarding forest protection remain far removed from reality on the ground. The complexities of defining forest boundaries and also usage rights have been highlighted in a study undertaken in Laos on ‘Existing Land Tenure and Forest Land Study’. There are competing interests at national, provincial and village level, compounded by conflicting political interests and those with vested financial interest in forest lands. In Lao PDR the customary use of forests is recognised, subject to regulations formulated by Village Administrative Authorities that give the right to the village to manage and use categories of village forest. An initial step in the land use planning process defines village management areas. Traditional village boundaries are identified using inter-village discussions and formalised by way of an Inter-Village Boundary Agreement and a Boundary Map that are officially recognised at the District Office. The challenge for land administration projects is to integrate solutions to these complex issues within the project designs; however competing political interest over forest land will make integration extremely difficult.

All countries have systems in place to license forest concessions, but there is much illegal logging. In addition, in most countries there are indigenous groups living in the forest whose rights are not well defined in law. Forest laws in India have evolved over the past 150 years. A major issue related to forest land is that large numbers of tribal people (officially categorized as ‘Scheduled Tribes’) and disadvantaged groups continue to live in the forests on communal land with no clear procedure of acknowledging their rights to the land. In recent years, the Philippines have passed an Indigenous Peoples Rights Act (IPRA), in an attempt to address similar issues. However, IPRA was subject to a Constitutional challenge and has not yet been implemented. IPRA also adds to the already significant complexity and inconsistency in the land administration system in the Philippines (Brits, Grant, Burns 2002).

**Customary Tenure.** Land administration systems in the Asian region bear the hallmarks of colonial influences. Some countries have a dualism in Land Laws between colonial and customary rights. In Indonesia, non-forest land is further classified into state land and adat (customary) land and administered according to the Basic Agrarian Law (UUPA – 1960). However, the communal rights of traditional societies (hak ulayat) were excluded from formal policy until 1998. The Basic Forestry Law (UUPK – 1967) governs Forest Land and overlaps with laws concerning customary land rights.

Generally customary tenure is not recognized. In Thailand the Hill Tribes are not classed as ‘Thai’ and are therefore not protected by Thai statutory law. In Laos there is no legislative support under the Land Law for customary rights and generally, customary land use rights are recognized as valid by the state only over forest land, under Ministerial Order on Customary Rights and Use of Forest Resources, 1996 (0054/MAF).

Indigenous rights are often very different from “western” private or individual rights. Typically they cannot be adjudicated and mapped using the same approaches and techniques.
Indigenous peoples often have different spatial concepts from Western society. It is inappropriate to assume contemporary cartographic knowledge by indigenous peoples. The key is to develop a land administration infrastructure that accommodates both tenure forms. Just as there are many different forms of “western” land tenures, there are equally many different forms of indigenous tenures.

Although constitutionally, most countries acknowledge all ethnic groups as being equal before the law, legislation protecting minority groups from exploitation is not always enforced convincingly (as is the case in Karnataka, India). In practice, not all minority groups have equal access to production factors such as land, nor do they have equal representation in official institutional structures.

Unfortunately many land administration projects fail to address the issue of communal rights adequately if at all. On the Lao land Titling Project the issue of communal and customary rights in Lao PDR still is unaddressed. A communal rights study was proposed in Phase I of the project but never eventuated. The study was proposed for the first year of Phase II but has been delayed. As the project expands beyond urban and peri urban areas, communal rights issues are increasingly important and must be addressed. Without clear policy direction, the handling of communal rights is haphazard and often inequitable decisions are made.

**Gender Equity.** Women’ access to land is a major issue that needs to be addressed in any land administration project. In many cases women’s rights to land are protected through customary law and religious beliefs and laws. However, changes in socio-economic conditions and the introduction of legislation that provides formal legal rules and legitimacy to land administration activities can create conflict between the old and new, between the customary and legislative systems.

Gender issues have not been assigned a high priority on many of the land administration projects and if anything were included more as an after thought. It is important that attention is paid in ensuring that women’s rights are protected not only through legislation but also through appropriate education and information dissemination programs. Preferably these programs need to be developed at the commencement of any project and supported through local women’s groups. In most countries there are no restrictions on women having equal access to land rights, however it is important that this information is conveyed to women through specific project activities aimed at providing clear messages to women.

Hernando De Soto highlighted the importance of communication in the land registration process. He said that:

*The goal of property reform is to award property rights for millions of assets to millions of people in a short time. This means that at least half the job is about communications. The leaders of property reform need to describe how popular capitalism will affect many different interest groups, show them the benefits they will*
derive from it, and persuade them that it is a win-win exercise for all segments of society. ¹

In Thailand there are no restrictions on land ownership by women. A restriction on the ability of Thai women married to foreigners in owning land was removed in 1996. The Civil and Commercial Code protects women from their husband’s selling property without their consent. Registration also enhances protection of spousal rights as the Department of Lands registration processes require spousal consent to a transfer of rights regardless of who is registered on the title.

In Karnataka the National Agricultural Policy (GOI 2001) as part of its rural development and land reform notes the importance of recognising women’s rights in land. Although legally there are no specific limitations on land ownership by women, there are significant cultural restrictions. Also, there is no protection against the husband selling property without the consent of the wife. By law, women are granted rights concerning land. However, it was established in the state of Orissa in India that although women appear to enjoy certain land rights by law, it seldom translates into effective control over land in practice. This is the direct result of deeply embedded gender-biased social norms and customs of society. To enhance the position of women, it has been suggested that more attention should be given to encouraging joint land titling. Joint titling is accepted by the Government of India in principle, however, it is not realised in practice in many Indian states.

In Indonesia also, there are no specific limits on land ownership by women. Joint registration of property acquired during marriage is allowed and even encouraged, and property may also be registered solely in the name of a women. Some parts of Indonesia have matrilineal societies and inheritance strongly favours women family members. Property brought to a union by the woman can be registered solely in her name but in many cases this is not understood by the women themselves.

In the Lao PDR, men and women are equally entitled to hold and register land. Land registered in the name of a woman prior to her marriage remains her individual property and is not included in the joint property acquired during marriage. Research undertaken by advisers, and also the World Bank’s Social Assessment Survey (SAS), indicates that this entitlement is being upheld.

An early report on gender, funded by AusAID, indicated deficiencies in Customer Relations and Services (CRS) effectiveness and women’s awareness of their land registration rights. As a result, a formal link was developed with the Lao Women’s Union (LWU) to assist in conducting meetings at the village level, and providing better information on gender issues. Gender disaggregated data for the project shows that 28% of all land parcels are registered in the name of a female only, 41% in joint names, and 20% in the name of a male. The remaining 11% is mainly State land.

¹ The Mystery of Capital – Why Capitalism Triumphs in the West and Fails Everywhere Else; Hernando De Soto, Published by Basic Books, 2000, p 205.
As stated in the FAO approach to land tenure, “Dissemination programmes are needed to complement legal reforms.” On the LLTP, specific women’s only education and information programs were developed that ensure women are provided with accurate, easily understood information on their rights and procedures for ensuring their interests in land are protected. There is an opportunity for improvements to education programs to ensure women’s rights are also protected after first time registration and during derivative registration activities.

2.2 Technical Arrangements

A critical issue in many countries is the relatively low level of technology and the low skill level of staff. Coupled with this is the perception that the lack of access to technology is at the heart of most land administration problems, whereas incorrectly conceived and applied technology is likely to be a problem rather than a solution. The underestimation of human resource training and development programs and the expansion of programs across the private sector is a critical technical issue.

Most of the Asian countries continue to use lower levels of technology, in part because some high technology measures have been tried, tested and failed. The existing systems are mainly paper driven and generally decentralized. An exception is the Land Management and Administration Project (LMAP) in Cambodia where a reasonably high technology approach using digital orthophotography and computer based GIS applications for production of the cadastral index maps and land certificates has been adopted.

In Thailand the level of technology is reasonably high, although the strength of the registration system in Thailand lies in the practicality, flexibility and robustness of the manual records systems. A key feature of the technical systems in Thailand is the flexible approach to the technical aspect of land administration. A range of survey techniques are available, from technically accurate to graphical recognition techniques.

The use of technology in Indonesia and Lao PDR, like a number of countries in the region, is faced with human resource constraints in both operation and technical support. In Indonesia internal reward systems have acted against the introduction of new technology within government. On the Indonesian Land Administration Project (ILAP) all cadastral surveying activities, field survey, cadastral map production and preparation of the parcel diagram (surat ukur) for the land title (buku tanah) were undertaken by the private sector. The private sector developed computer based approaches to introduce efficiencies into the procedures which the government sector had been reluctant to undertake. Private sector avenues for capacity building are an important and often underestimated development strategy.

In Laos a number of cadastral survey approaches have been developed for the collection of survey data for land parcels. This has provided some flexibility for systematic survey staff but low levels of expertise in the use of modern survey technology reduces overall effectiveness.

In the Philippines public sector technology and procedures are very dated hindering the use of new technology – for example, efficient computer-assisted survey techniques have been developed with Swedish support in the Department of Agrarian Reform, but the Land...
Management Services have been reluctant to accept the output of this improved technology. In the Philippines there is a strong private survey sector and survey procedures are over-specified, but under-regulated. The result is a relatively high cost of survey, which is passed on to the public. Participants in a recent social assessment undertaken for the Land Administration and Management Project have voiced strong concerns about the cost of surveys.

While India’s system dates back to the 1860s there is now interest in modernization. The land administration systems in Karnataka are strongly based on the systems implemented by the British and are mainly manual. Survey techniques introduced by the British in the 1860s continue to be used and old paper records are still stored in cloth bundles. Two of the recent initiatives in Karnataka have been pilot projects to computerize the Rights, Tenancy and Crop Inspection (RTC) records and the cadastral maps in some areas. Some headway has also been made in strengthening the technical capability of agencies through equipment such as GPS and total-stations.

The challenge when considering technical solutions or applications to current manual practices is to ensure that what ever approach taken is sustainable. Doing Business in 2005 – Removing Obstacles to Growth, World Bank report, noted that “technology is not a panacea. … In many other countries, particularly poor ones, electronic registration is probably not sustainable yet.” Focus needs to be on improving the efficiency of services and accuracy of the register. The report noted that Thailand which has one of the most efficient registration systems in the world is still a manual registration system.

Technology has a vital role to play, but it has to be looked at within the overall objective of establishing a land administration system. Land administration is strongly influenced by the bureaucratic, social and cultural environment, and overlooking existing practice and capacity often leads to failures in adopting new technology. Of equal significance is the review of existing manual procedures leading to their simplification and stream lining.

2.3 Institutional Arrangements

Agency Arrangements. The core land administration functions that generally apply to most jurisdictions are the registration of rights in land, and the survey and mapping of the extent of boundaries of these rights. A key determinate in the efficiency of a land administration system is the institutional structure that supports these core functions. In many jurisdictions registration and cadastre functions are provided by two different organisations and often in different ministries. Single agency responsibility for land administration activities is a major source of strength in a number of Asian countries including Thailand, Indonesia, Cambodia and Vietnam. In Lao PDR the Department of Lands is responsible for first time land registration and for post registration activities for non-state land. For state land the responsibility for post registration activities rests with the Department of State Assets which is within the same ministry as the Department of Lands.

Institutional complexity in the Philippines is a major source for tenure uncertainty and lack of transparency where there are 162 registries of deeds, one in each province and city but these registries operate without any spatial records. A central office in Manila, the Land
Registration Authority has some of the subdivision plans, and a decentralised agency the land management sector of the Department of Environment and Natural resources (DENR) has many original survey and subdivision records at 171 community offices. Partially as a result of these complicated institutional arrangements, many survey and map records have been lost or destroyed and there are many overlapping and duplicate titles in the registry of deeds. This institutional arrangement is a major impediment to the restructuring of land administration functions in the Philippines.

**Decentralised Systems.** Many of the land administration systems in the developing world operate as decentralised systems (or what is often termed deconcentration). This is certainly the case in Asia. There are a range of reasons for this, but arguably the major reasons are to facilitate access by users, particularly the public to land administration services and to a lesser degree to support the information needs of local authorities. Under a decentralisation model all land records are usually kept at the local land office level including cadastral maps, land registration documentation and land tax records. A decentralised system relies on a central authority to establish policies, ensure quality of products and services, provide or coordinate training and implement personnel policies.

The land administration systems in Thailand, Indonesia, Karnataka, Lao PDR and the Philippines are all decentralized. In Thailand the title register is maintained in the 16 Bangkok Metropolitan, 76 provincial and 272 branch land offices. Registers for the lesser documents in Thailand are maintained in the 758 district land offices. Registration in Indonesia is undertaken in the 273 Municipality/Regency land offices. In Karnataka registration is undertaken in 199 sub-registries at the city/Taluk levels. In the Philippines registration is undertaken in 162 registries of deeds, with a registry in each municipality and province. In Lao PDR registration activities are undertaken in the 18 provincial land offices. Legislation in Laos does permit registration at district level however the immaturity of the registration process means that it will be some time before decentralisation of land registration activities goes as far as district level.

**2.4 Valuation and Land Taxes**

Land titling projects implemented in Asian countries have, to a lesser or greater degree, all experienced problems with property valuation. The very successful project in Thailand experienced great difficulties in introducing a new valuation authority. Although a central valuation function was established it is largely restricted to providing values to support the registration function of the Department of Lands. Attempts through the titling project to pass a new Land Valuation Act proved unsuccessful.

Karnataka continues to use an old, rudimentary system with no clear intention as yet to develop a strengthened valuation system. Valuations undertaken during settlement surveys for the revenue assessment of rural land are only updated every 30 years. Other valuations by local authorities to support tax payment are only updated every 5 years. In urban areas such as Bangalore published market values are readily available, but these values generally significantly lag market prices.
In Indonesia a fairly effective valuation system appears to be in place and serves as the basis for tax collection. In relation to land tax specifically, there are in excess of 70 million land tax parcels and the land tax mapping and tax collection process is very effective, with the owner of the payment of land tax being with the land occupier not the owner of the land. However, the fact that neither private nor public sector valuation skills have been developed has proved to be a drawback.

In Lao PDR a basic and simple property valuation information system (VIS) was developed for land and buildings - the VIS holds extensive details of properties and rate tables to facilitate the calculation of property values. The system records set rates per m² for land that varies according to road class (classification according to various categories: main road, secondary, minor and no road /no formal access), as well as a set rate per m² for buildings according to the type of building material and building age. The main purpose of the VIS system is to provide information which could assist in the calculation of land tax and transfer fees, and to assist in encouraging maximum participation in the registration of land and building transactions by the general public. The main purpose for developing this system was to overcome the significant underdisclosure of sale prices for property.

A recurring problem in many countries when it comes to fees and taxes is that the tax rates are often too high, which leads to problems of under-declaration of property values and non-participation in land registration. These in turn lead to multiple systems of valuation (eg the Philippines with 8 systems) and general uncertainty of property values in the market. In Laos tax rates are fixed by legislation chosen by provincial governors. This decision was based on the success of the land registration system. Used to impose additional taxes to increase revenue, this is discouraging people from registering land transactions.

Several countries have experienced increased revenue by reducing tax rates, such as in India in Maharashtra where there was a significant reduction in the maximum stamp duty from 10% to 5% over 4 years resulting in an increase in revenue of more than 110%. Also in Andra Pradesh where property transfer costs were 14% of the property value, leading to avoidance and under-declaration, the stated government policy is to progressively reduce costs to 4%. In some other countries tax rates are applied on an ‘assessed value’ that is less than market values (eg Vientiane in Lao PDR, the Philippines).

3. LESSONS LEARNT

In 1992 the Policy and Research Division of the Environment Department in the World Bank published a study of then recent Bank experience with rural land titling. In reviewing all Bank funded agriculture and rural development projects, 12 projects were identified as having a substantial emphasis on land titling. In virtually all projects, with the exception of the Thailand Land Titling Project and possibly two projects in Brazil, various problems seriously hampered project performance as identified in the following four main themes:

---

(a) An overall lack of political support;
(b) Conflicting bureaucratic priorities and/or infighting;
(c) Lack of institutional capacity or an unwillingness to commit adequate resources; and
(d) Underestimation of the complexity and/or cost of the tasks to be carried out or other design weaknesses.

Has land administration developed and moved on since 1992? I would argue that we have, and that land administration is now much better prepared to adopt flexible and innovative approaches to problems facing land administration. This means that we are better placed to ensure that the problems identified in 1992 can be addressed. However there remains many opportunities to continue the adoption of innovative approaches to land administration.

We need to continually remind ourselves that land administration is a series of processes and not an end in itself. Land administration must be continually demonstrate support of the fundamental quality of life issues confronting developing nations. An early failing in land titling was that it delivered a series of technical activities aimed at maximising the distribution of title certificates so that the recording of these certificates in a system of registration increased. While these are important, it is simply the means employed to achieve the land administration climate where land resources are more effectively managed, people’s property rights are secure, transactions are economically and fairly recorded, and social conflict over lands minimised.

The ongoing adoption of innovative approaches are key to strengthening of land administration projects and these need to be a major focus. There should be emphasis on reforms through capacity building, institutional strengthening, decentralisation of functions and education and training. Participation needs to be encouraged by generating ongoing commitment and support by making stakeholders aware of the benefits (security, transparency, gender equity, etc). Social issues need to be addressed so as to ensure the whole community are beneficiaries and that specific problems such as forest areas and communal rights are addressed as part of mainstream activities. Technology must be pitched at an appropriate level so that it is sustainable with ongoing in-country support. Finally revenue must be addressed as part of effective, efficient and transparent land administration systems.
REFERENCES

Brits, A; Grant, C; Burns, T; Comparative Study on Land Administration Systems, Regional Workshop on Land Policy Issues, Phnom Penh, 4 – 6 June 2002


FAO, Land Tenure and Rural Development, FAO Land Tenure Studies Number 3, 2002

Lao Land Titling Project; Existing Land Tenure and Forest Boundaries Study; Lao Consulting Group; May 2002


BIOGRAPHICAL NOTES

Chris Lunnay is a director of the consulting company Land Equity International. He was the systematic registration adviser and cadastral surveying adviser on the large technical assistance team on the Indonesian Land Administration Project from project inception and Team Leader from 1998 until the completion of the project in 2001. From October 2001 to December 2005 he has been Team Leader on the Lao Land Titling Project.

CONTACTS

Chris Lunnay
Land Equity International
PO Box 798
Wollongong, NSW
AUSTRALIA  2520
Tel.  + 61 2 4227 6680
Fax.  + 61 2 4228 9944
Email: clunnay@landequity.com.au
Web site: www.landequity.com.au