



Land Administration: Indicators of Success, Future Challenges



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Any errors in the text are the sole responsibility of the authors and the views expressed in this report are those of the authors and do not necessarily reflect those of the sponsoring agencies.

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Abbreviations

A&D	Alienable and disposable land (in the Philippines)
ADB	Asian Development Bank
ALDP	Accelerated Land Distribution Program (Trinidad & Tobago)
ALRO	Agricultural Land Reform Office (Thailand)
AREA	Association of private real estate agents (Trinidad & Tobago)
ASHTA	Agricultural Small Holdings Tenure Act (Trinidad & Tobago)
ASRP	Agricultural Sector Reform Program (IDB funded program in Trinidad & Tobago)
AusAID	Australian Agency for International Development
BAL	Basic Agrarian Law of 1960 (Indonesia)
BOO	Build-Own-Operate
BPN	Badan Pertanahan Nasional (National Land Agency) (Indonesia)
BTI	Bureau of Technical Inventory (ECA countries)
CahT	Ad Hoc Land Commission (Mozambique)
CAN	National Agrarian Commission (Bolivia)
CARL	Comprehensive Agrarian Reform Law of 1987 (Philippines)
CARP	Comprehensive Agrarian Reform Program (Philippines)
CDA; PIDCOTT	Land management agencies in Trinidad & Tobago
CIS	Confederation of Independent States (part of FSU)
CLAR	Centres for Land and Agrarian Reform (Kyrgyzstan)
CMO	Central Mortgage Office (Kyrgyzstan)
CNR	National Registries Center (El Salvador)
CNRA	National Council of Agrarian Reform (Bolivia)
COFOPRI	La Comisión de Formalización de la Propiedad Informal (Commission for the Formalization of Informal Property) - Titling Agency (Peru)
CoSL	Commissioner of State Lands (Trinidad & Tobago)
CPR	Common Property Resources
CRS	Customer Relations and Services/Community Relations and Services
CSUTCB	Confederations of Campesino Workers, Colonizers and Indigenous Settlements (Bolivia)
CVA	Central Valuation Authority (Thailand)

DENR	Department of Environment and Natural Resources (Philippines)
DKI Jakarta	Daerah Khusus Ibukota (Capital City Region of Jakarta)
DINAGECA	National Directorate of Geography and Cadastre (Mozambique)
DITM	Department of Information Technology and Management (New South Wales, Australia)
DMA	U.S. Defence Mapping Agency; now NIMA – National Imagery and Mapping Agency
DOL	Department of Lands (Thailand)
DOS	British Directorate of Overseas Surveys (Trinidad & Tobago)
ECA	Europe and Central Asia
EU	European Union
FIG	International Federation of Surveyors
FSU	Former Soviet Union
GIS	Geographic Information System
GLTN	Global Land Tool Network
GORTT	Government of the Republic of Trinidad & Tobago
GosREGISTER	State land registration system (Kyrgyzstan)
GosCartographia	State service of Geodesy and Cartography (Kyrgyzstan)
GPS	Global Positioning System
ha	Hectare (10,000 square metres)
HM, HGU, HGB, HP	Hak Milik (ownership), Hak Guna Usara (cultivation right), Hak Guna Bangunan (lease right for 20-30 years), Hak Pakai (use right), Hak Pengenolaan (land management), rights recognised under the Indonesian Basic Agrarian Law
HRD	Human Resource Development
IBRD	International Bank for Reconstruction and Development
ICAO	International Civil Aviation Organization (Trinidad & Tobago)
IDA	International Development Agency (World Bank)
IDB	Inter-American Development Bank
IFC	International Finance Corporation
IGN	National Geographic Institute (El Salvador)
ILD	Institute for Liberation and Democracy (Peru)
INCo	National Institute of Colonization (Bolivia)
INC	National Cadastre Institute (Bolivia)
INRA	National Institute for Agrarian Reform (Bolivia)
ILAP	Indonesian Land Administration Project
IPO	Indigenous People's Organisations
IPRA	Indigenous People's Rights Act of 1997 (Philippines)
ISTA	Salvadorian Institute for Agrarian Transformation (El Salvador)
JICA	Japan International Cooperation Agency
LA	Latin America
LA98	Land Act of 1998 (Uganda)
LAC	Latin America and the Caribbean
LAD	Land Administration Division (Trinidad & Tobago)

LAO PDR	Lao People's Democratic Republic
LAMP	Land Administration and Management Project (Philippines)
LGU	Local Government Unit (Philippines)
LTC	Wisconsin Land Tenure Center
LTP	Land Titling Project
LUPAP	Land Use Policy and Administration Project (Trinidad & Tobago)
L&SD	Lands and Survey Division (Trinidad & Tobago)
NCIP	National Commission on Indigenous People (Philippines)
NSL	Certificate for public land issued under the Land Code (Thailand)
NS2, NS3, NS4	Private tenure rights recognised under the Thailand Land Code. NS2 rights are pre-emptive and not transferable; NS3/3K are certificates of utilisation and NS4 are titles. NS3/3K & NS4 are transferable.
NGO	Non-governmental organisation
NORAD	Norwegian Agency for Development Co-operation
OECD	Organisation for Economic Cooperation and Development
OMO	Organisation and Management Operations
PADL	Planning and Development of Land Bill (Trinidad & Tobago)
PDR	People's Democratic Republic
PETT	Special Project for Land Titling and Rural Cadastre (Peru)
PHARE	Pologne, Hongrie Assistance à la Reconstruction Economique
PTO	Permission to Occupy (Namibia)
PPR	Project Preparation Report
PRDSA	Agriculture Services Rehabilitation and Development Project (Mozambique)
PROAGRI	Programa de Investimentos Publicos na Agricultura (Agricultural Reform Program) (Mozambique)
PRSP	Poverty Reduction Strategy Paper (World Bank)
RFD	Royal Forest Department (Thailand)
RPI	Immovable Property Registry (Peru)
RPU	Urban Property Registry (Peru)
RPO	Real Property Ordinance (Trinidad & Tobago)
RRP	Rural Rehabilitation Project (Mozambique)
RTC	Rights, Tenancy and Crop Inspection; record for taxation purposes (Karnataka)
SAL	Standard Agricultural Lease (Trinidad & Tobago)
SALIS	State Agricultural Land Information System
SC	Scheduled Castes (Karnataka)
SDI	Spatial Data Infrastructure
SEPR	Special Section of Rural Parcels
SNRA	National Agrarian Reform Service (Bolivia)
ST	Scheduled Tribes (Karnataka)
STK	5 year usufruct license (Thailand)

SPGC	Surveying office at provincial government level within the Provincial Office of Agriculture and Rural Development (Mozambique)
SUNARP	National Superintendency of Public Registries (Peru)
SWAPO	South-West Africa People's Organization
TAN	National Agrarian Tribunal (Bolivia)
TCO	Tierras Comunitarias de Origen (Traditional Indigenous Communities - Bolivia)
TCP	Technical Cooperation Program
TLTP	Thailand Land Titling Project
T&CPD	Town and Country Planning Division (Trinidad & Tobago)
UNDP	United Nations Development Program
UN FAO	Food and Agriculture Organisation of the United Nations
USAID	United States Agency for International Development
UTM	Universal Transverse Mercator projection

1 Introduction

1.1 Background

In most countries land¹ accounts for between half and three quarters of national wealth.² Land is a fundamental input into agriculture production and is directly linked to food security.³ Land is also a primary source of collateral for obtaining credit from institutional and informal providers of credit and security of tenure⁴ provides a foundation for economic development. Fees and taxes on land are often a significant source of government revenue, particularly at the local level. Formalising rights is often vital in ensuring indigenous and other vulnerable groups have access to land.

There are many demands on land resources; agriculture, pasture, forestry, industry, infrastructure and urbanisation, as well as claims by indigenous groups and those campaigning for ecological and environmental protection. Not surprisingly, most societies cannot balance these often conflicting demands. Land has therefore frequently been the basis of social upheaval and much effort was devoted to developing systems to administer land rights, **land administration systems**.⁵ A land administration system may include processes to manage state land, record and register private interests in land, assess land value and determine tax, define land use and support the development application and approval process.

Numerous projects to improve land administration systems were undertaken over the past half century or so primarily to provide formal recognition of rights in land and to facilitate the trading in these rights. Typical project objectives include one or more of the following: reforming and strengthening policy, legal and institutional frameworks; introducing formal land titling systems or other forms of secure tenure; improving registration practices; upgrading survey and record keeping technologies; capacity building; all in an attempt to develop more efficient and effective land administration services. The political spectrum of countries introducing projects from one party States in Lao PDR, Cuba, Tanzania and Mexico, military regimes in countries such as Peru and Argentina, to capitalist states such as Taiwan and Thailand. Many former socialist countries have also implemented projects as part of a move from command to market economies (Barnes 2006). Countries also cover the full economic spectrum, from the poorest countries such as Malawi to developed countries such as Japan and Taiwan. Projects have had varying emphases on social equity and economic development with no consistent set of objectives and policies. As a result it was very difficult to compare and evaluate the collective experience. Project outcomes have also been mixed.⁶ Projects to strengthen land administration are often long term and usually require significant resources and funding.⁷ These characteristics are a disincentive for governments to clarify rights in land. It has been suggested that the key reasons China did not introduce systems to recognise private rights in rural areas following the decollectivization of farms in 1980s were the cost of implementation and the unknown social implications of introducing private land ownership (Kai-sing Kunk 2003:60).

The World Bank, with support from a number of donors, has prepared a Policy Research Report on access to land and governance with respect to land (Deininger, 2003). In the context of preparing a Policy Research Report on land issues, the World Bank commissioned background papers to assess and compare the context,

cost and effectiveness of land administration systems in Asia, Latin America and the Caribbean, Africa, and Europe and East Asia. Drawing upon the extensive research and experience from the preparation of this report, this publication provides a practical approach of ways to effectively and efficiently manage land administration issues. The publication was commissioned to provide a global synthesis of background papers in the form of a Comparative Study of Land Administration Systems. Indicators were developed to assist the comparative analysis and are dealt with in Chapter 4, while additional issues and challenges are examined together with recommendations in Chapter 5 and 6.

1.2 Study Objectives

In preparing the terms of reference for this comparative study it was noted that *'...despite the significant resources being invested by the donor community for modernizing land administration infrastructure, there is little systematic discussion of the key elements of such a system and of what constitutes effectiveness within particular socioeconomic, cultural and temporal contexts.'* (Lavadenz et al 2002).

This comparative study of land administration systems provides a basis for an informed assessment by systematically reviewing the characteristics, accessibility, costs, and sustainability of different land titling and registration options. Importantly this text sets out with the intention of describing what to do and not why to do land administration reform. The economic and social rationale for undertaking land administration reform is discussed at length by a number of authors including Feder (1988), de Soto (2000) and Deininger (2003). This report is based on information compiled in a number of case study countries that are characterised by the presence of either project interventions or specific innovative approaches and aims to identify those parameters critical for policy development and operational efficiency.

The comparative study was undertaken as follows:

1. Detailed country case studies, based on specific terms of reference, were prepared to explore the individual cost elements for providing secure and transferable property rights and how they change with the requirements of formalisation, the institutions involved and the available technical options (see Appendices 9 – 12);
2. The country case studies were synthesised into four regional papers which were presented at regional workshops in Budapest, Kampala, Pachuca (Mexico) and Phnom Penh (see Appendices 5 – 8);
3. A global synthesis was undertaken of critical issues with comparisons drawn from within the regions as well as across the regions. A set of indicators were used to compare case studies and the results are tabulated in Appendices 1-4.

This global synthesis provides the main analysis of the studies conducted. Chapters 1 to 3 provide introductory and overview information of the Comparative Study. Chapter 4 describes the land administration indicators of efficiency and Chapter 5 discusses future challenges. Chapter 4 provides practical indicators and approaches for land administration practitioners to assess systems comparable to a wide range of social and economic climates. One of the potential shortcomings of describing past experience is that critical issues may be systematically overlooked. To remedy this, the Chapter 5 delivers a systematic discussion of future challenges in the

development of more efficient and effective land administration systems. This discussion is based on topics identified as potential “blind spots”. Conclusions and recommendations are presented in Chapter 6.

1.3 Country Case Studies

By applying a consistent methodology across different countries, the case studies provide a framework for decision-makers to assess options for implementing or modernising land administration systems.

A detailed Concept Paper and Annexes were prepared in early 2002 to support the preparation of country case studies, (Lavadenz et al 2002). The concept paper contained a checklist of contextual information seeking specific land-related information about: (1) the country (in brief); (2) the land tenure system; (3) institutional arrangements; (4) the legal framework; (5) the technology used; (6) the administrative process for registration; (7) land and immovable property market information.

Each case study used a framework to draw out costing information of the primary registration function of the country’s land administration system. Data was collected for each country case study to assess the following costs of activities:

- General Project Dimensions – overall project costs of land administration as they typically require several interventions, including legal framework development, equipment, technical assistance, etc. all costs were taken into account. These were then broken up into smaller divisions in subsequent tables;
- Project Component Costs – takes the figures from Table I and divides the various expenditure items into categories;
- Regularization Activity Costs – considers the costs of *first registration (or converting land from informal to formal)* and how the costs are broken up into various categories to achieve that first registration;
- Property Market and Maintenance Details – considers the ongoing costs of running the registration system, and the volume of transactions; and
- Checklist for Technical Work – provides a simple checklist of some of the major activities and costs for ease of reference.

Country case studies were prepared for the following countries/jurisdictions.

Table 1 List of Country Case Studies.

Africa	Asia	Europe and Central Asia (ECA)	Latin America and the Caribbean (LAC)
Ghana Mozambique Namibia South Africa Uganda	Indonesia Karnataka (state in India) Philippines Thailand	Armenia Kyrgyzstan Latvia Moldova	Bolivia El Salvador Peru Trinidad & Tobago

The Asian country case studies were all prepared in a consistent format by Land Equity International, although not all have the same level of information. The country case studies for ECA and LAC were prepared by different individuals so there is

some variation in the content of these reports. The country case studies for Africa were commissioned late (December 2002) and were prepared by Clarissa Augustinus as office studies. For this reason the Africa country studies do not have the same level of information prepared for the other regions.

The country case studies have had vastly different historical influences on their present-day political, economic, judicial, social and cultural environments, which is reflected in their land administration systems. The prominent country characteristics are summarised below.

1.3.1 Africa Country Case Studies

Ghana. Ghana is a West African country, which gained independence from the British in 1957 – the first sub-Saharan country to do so. Ruled by successive military dictatorships and democratic systems, in 1992, with the introduction of the 4th Republic Constitution, democracy was re-established.

Ghana has a total land area of about 230,000 square kilometres, with approximately 95% of this is cultivable. The country's population was estimated at 17 million in 2000 and is rapidly urbanizing and continually expanding due the high fertility rate and low infant mortality rates. Ghana's economy and labour force remain dependent on agriculture.

In West Africa generally, land belongs to a community respecting both a physical and spiritual relationship with the dead, living and unborn. With the advent of colonialism and European acculturation strains have appeared in the hitherto stable traditional land holding regime. Transition from traditional land ownership structures to bring them in line with modern economic and social conditions has not been smooth. About 80% of Ghana is administered under customary tenure regimes.

An Urban V Project was planned for 2001–2006 to include photo-mapping at 1:2,500 scale over 25 larger towns. This is to be followed in the second phase with registration and issue of title. A second major project is the World Bank-funded Land Administration Project which seeks to achieve fundamental re-structuring of land administration in the country.

Mozambique. Notwithstanding considerable political and economic change during the last decade, Mozambique is one of the poorest countries not only in Africa but the world. Present-day land tenure was heavily influenced by the adoption of a socialist policy following independence in 1975 from Portugal. During the socialist period (1975-1990) the focus of land administration was on the allocation of land use rights and although the new 1990 Constitution now allows all forms of private property, land remains in State ownership and cannot be sold, alienated or mortgaged.

Mozambique has a strong system of customary tenure, which accounts for about 90 percent of land in the country. This causes a set of land administration problems common to African countries. Customary land tenure regimes differ markedly from location to location, depending on population density, kinship organisation, inheritance patterns, land quality, markets, and historical experience. Customary tenure is also the framework for the vast majority of every day land-related transactions and was given formal recognition in the 1997 Land Law.

Law reform aimed at introducing new forms of evidence and approaches was undertaken, but implementation will require significant effort.

Namibia. As a former German colony and administered by South Africa it was not until 1988 when the South-West Africa People's Organization (SWAPO) guerrilla group launched a war of independence that the country gained independence. Independence was formalised in 1990 in accordance with a UN peace plan for the entire region. The 825,418 square kilometres of land on the south western coast is largely desert and high plateaus.

The majority of the population of 1.8 million people lives in the north under customary tenure. The majority of the rest of the land in the country is registered in full ownership (freehold) in a deeds registry system that is too expensive for the poor to access. An inferior colonial-apartheid relic system termed Permission to Occupy also exists in the north of the country where it is the only tenure available aside from customary tenure. In the case of township proclamation (process of urban formalization), the current delay is three years. The government is attempting to address the system's limitations through the Flexible Land Tenure System, while at the same time not displacing the existing system.

The total number of families living in informal settlements without secure tenure is estimated at 30,000 (1994), mostly in towns in the north. Approximately 10 percent of the Namibian population lives in urban areas on land to which they have no formal legal rights.

South Africa. At the southern tip of the continent of Africa, the semi-arid climate and 1.2 million square kilometres of land is host to a population of over 44 million people. The Union of South Africa operated as a British colony under a policy of apartheid from 1902 to the 1990s. The 1990s brought an end to apartheid politically and ushered in black majority rule. The apartheid policies skewed South Africa's tenure systems and land distribution. Blacks could only own 13 percent of the land and even then, these were held under inferior titles and not full ownership (freehold) as held by Whites. The upgrading of inferior titles, such as Permissions to Occupy, Customary Tenure (which occurs in less than 13 percent of the country in the former homelands), and informal settlement tenures (gained through adverse possession after 5 years) is still ongoing.

The conventional land administration system operates under a deeds system of Roman-Dutch law with a Deeds registry where the state has no liability. There are nearly 7 million registered parcels, about 8 million surveyed parcels, about 1.25 million registered transactions per year, and about 0.38 million registered transfers a year. A modern mortgage system is in place and the registry deals with 40,000 requests for information daily through a digital medium.

While about 80 to 90 percent of the national land surface is covered by registered rights and up-to-date cadastral data, about 25 to 30 percent of the country's population live in about 10 percent of the land in the former homelands, on rural land often held under customary tenure.

Uganda. Uganda is an East African country of 236,040 square kilometres sharing its water boundaries of Lake Victoria with its Kenyan and Tanzanian neighbours. The population of over 28 million has a high growth rate of 3.3 percent.

Independence from being a part the British colony was achieved in 1962. However mixed ethnic grouping and varying political systems and cultures that were a result of boundary demarcations during colonization have made peace and working political

communities difficult to achieve. Since 1986 there has been some stability restored and a period of economic growth.

There is a pre-dominance of customary tenure, at an estimated 62 percent of the land and involving an estimated 68 percent of the population. This accounts for approximately 8 million customary landholders throughout Uganda. Freehold and leasehold exist, including a local form of freehold called mailo, and covers about 12 to 15 percent of the country with about 700,000 titles (about 40 percent of which are current). Perhaps only 5 or 6 percent of the country has current titles mostly concentrated in urban areas and in Buganda (mailo). The conventional titling system has not been modernized and the regulatory framework is largely a colonial relic. There is a serious lack of financial and human resource capacity in the central state to implement even a scaled down version of a titling system. The Land Act of 1998 is still being piloted and a technical process is under development. According to the Act, land is vested in the people and not the government. Among a number of developments such as creating a Land Fund facility and Communal Land Associations, and processes to decentralize land administration and land disputes resolution functions, the Act provides for the formalisation of customary tenure through certification of customary rights.

1.3.2 Asia Country Case Studies

Indonesia. Indonesia is an archipelago consisting of 13,677 large and small islands. The total land area is 1.9 millions square kilometres. The total population exceeds 200 million, with an average population density of 106 persons per square kilometre. The population spread in Indonesia is very uneven with some 60 percent of the population living on the island of Java which is 6 percent of the land mass. There are about 7,400 urban villages and 60,000 rural villages.

Under the pressure of rapid economic transformation a number of land related problems have become progressively more severe in Indonesia. Not the least of these being social conflicts and disputes over rights to land. Indonesia was under some form of colonial rule for the 350 years before independence in 1945. Land laws became a dualism between western systems and the traditional unwritten land laws, based on the customs of various regions. The Basic Agrarian Law (BAL) was introduced in 1960 to end this situation by creating a national land law based on traditional concepts, principles, systems and institutions.

Recognition of 'adat' or customary land rights and customary systems of tenure is explicitly acknowledged in Article 5 of the BAL. However, most of the existing implementing regulations of the BAL fail to elaborate, and are even contradictory to, the adat principles. There are numerous forms of tenure which are confusing and open opportunities for abuse.

Karnataka (state in India). Karnataka is the eighth largest state in India, with a population of about 53 million. The state covers about 5.8 percent of the country's land mass and about 5.3 percent of the population. Karnataka is one of the fastest growing states. Over the past decade agricultural input has increased based on diversification and increases in productivity, rapid manufacturing expansion has contributed to growth in industrial output and there has been significant growth in services, led by software exports. However despite rapid growth Karnataka is still a very poor state, poorer than the Indian average.

Over the past few decades land records for agricultural land in Karnataka have become increasingly dilapidated. For urban and non-agricultural land in rural areas no system clearly sets out rights over land. This uncertainty in rights in land undermines the objectives of good governance and poses a serious threat to social stability and economic development. There is a weak spatial framework for the land records for agricultural land. The original data has low accuracy, the maps are not up-to-date, there are long delays in sub-division surveys, and changes in land records are being recorded without surveys. There is a lack of both map and textual information in urban areas. Many of the field records for settlement surveys are very old and in fragile form and the records have not been backed-up. The registration of deeds system does not include the adjudication of rights and the resolution of disputes, and does not ensure the validity of a transaction. The system is not map based and there are poor descriptions of property. While the project to computerize land records in Karnataka (Bhoomi) has been successful, it is essentially a computerization of a very old land revenue system. A number of issues arise, including inconclusive records and cumbersome procedures.

Philippines. The Philippines had an estimated 300,000 square kilometres of land. Nearly 53 percent is reserved for forest cover, minerals and national parks while the remaining 47 percent is alienable and disposable (A&D) lands. The population of the Philippines is about 85 million, with about 60 percent of the population living in urban areas.

At least three key issues impact on land markets in the Philippines: (i) a scarcity of land for urban development; (ii) informal occupation of urban lands and an active informal land market; (iii) and a stagnation of formal rural land markets. These three factors combine to undermine the potential contribution of land to economic and social development.

The land classification system has been rigid and not responsive to the evolving needs of agricultural and urban development, and yet has not been effective in promoting sound management of natural resources. There have been procedural barriers to the flow of land from agriculture to non-agricultural use, particularly in urban fringe areas. There has been a fragmentation of responsibilities for land management and administration, without appropriate mechanisms for coordination.

The major land administration laws are outdated and some are not in accord with recent land use legislation. Not all privately claimed A&D land is titled. Existing land record management systems are inefficient and there are limited inventories of land records. A large proportion of the records have been destroyed through war, theft, fire and water damage or simply misplaced. Much of the remaining records are in exceedingly fragile condition and some land records have been illegally altered. The land registry is not easily accessible and there is a high transaction cost which discourages registration and is a disincentive to investment. As a result of all of this, confidence in the entire titling system is being eroded.

Thailand. Contrary to a significant number of other Asian countries, Thailand was never ruled by a colonial power therefore colonial administration has had no impact on land structures. Historically, all land belonged to the King but in 1872 procedures for recognising private rights to land were introduced and in 1901 a titling system (based largely on the Torrens title system) was introduced.

The Land Titling Project commenced in 1984 and is one of the largest land titling programs in the world. The project accelerated the issuance of titles to eligible land-holders and over eight and a half million new titles were issued. It is recognised internationally as being a success and was a model for other countries in the region and throughout the world.

Land administration and land titling in Thailand has generally taken place in a fairly orderly and structured manner. It is however confined to non-forest land and leaves the rights of those living in areas formally classified as 'forest' as one of the major land-related issues faced by the country.

1.3.3 Europe and Central Asia Country Case Studies

Armenia. Armenia is a small land locked country of the former Soviet Union Republic with an area of 29,000 square kilometres. The population in 2003 at an estimated 2.5 million has decreased significantly from an estimated 3.68 million in 1997, halving the population of people living in the capital, Yerevan. This mass population emigration is a result of the poor economic situation in Armenia.

Common to all former Soviet Union republics, prior to independence all land was held in State ownership and buildings and apartments were allocated for use. After independence in 1991, private ownership was granted. The transition from State ownership to private ownership was completed very quickly (between 1991 and 1993) and is thought to have been completed fairly.

Although land and dwellings were privatised at an early date it has only been since 1997 that the titles were surveyed and registered in a reliable parcel based system that transactions to be recorded reliably. The Land Code, passed in 2001, now provides overall guidance to all land administration functions.

Kyrgyzstan. Kyrgyzstan is a former state of the Soviet Union, and a very poor country, with over half of its population estimated to be living in poverty. Before independence all land was held in State ownership and buildings and apartments were allocated for use. A new Constitution in 1993 set the path for privatisation and today, land, the building on the land, and apartments in buildings, may all be owned and registered separately. This practice of separately registering land and buildings is a distinguishing feature of the former Soviet Union and its satellite states. Another prominent feature of the system, unique to the former Soviet Union countries, was that buildings and their occupiers were recorded separately by a Bureau of Technical Inventory (BTI). These arrangements were incorporated into the current institutional structure.

Latvia. Latvia consists mainly of low lying arable plains over 63,500 square kilometres with a coastline along the Baltic Sea. It has a small population of 2.27 million (2006) with over 30 percent living in the capital of Riga. As a parliamentary republic, Latvia gained independence in 1991 from the former Soviet Union and accession to the European Union was granted in 2004.

At independence land ownership rights were restituted on the basis of the old property boundaries. Cadastral maps and Land Book records from the period 1924 – 1940 were used as evidence for restitution. The transition process granted land use rights to claimants by Land Commissions or restituted land ownership rights for former owners or their descendants, or users of land were given rights to purchase land by paying in vouchers. The vouchers were introduced as compensation and

were based on the time that each citizen had lived in Latvia. Vouchers were freely tradable at a market price.

Latvia liberalized its economy quickly, freeing prices at the beginning of its transition and now operates with a functioning market economy. Latvia benefited from involvement in the EU PHARE program (Pologne, Hongrie Assistance à la Reconstruction Economique) which provided technical assistance to land registration and privatisation from 1995 to 1998 in support of the transition to democracy and a market economy. It provided technical assistance and the purchase of some equipment for further development of the cadastre and Land Book registration systems transforming existing systems to an Oracle database and implementing those systems throughout the whole country.

Moldova. Moldova, like Latvia, is small land locked country of the former Soviet Union. Emigration has not as severe as in Armenia even though the country is in a similarly poor economic situation with only 34 percent of the population employed. Moldova has a population of 4.46 million in 2006 with arable rolling steppe land.

Land restitution occurred shortly after independence (1991 – 1993) but was not completed. Land, which was usually held in very large State or Collective farms, was sub-divided into shares and allocated en-masse to former collective members as shareholders. Transformation of these shares into specific pieces of land parcels was not done until assistance from USAID was granted in 1998 to 2000. Although land and apartments were privatised at an early date it has only been since 1999 that the titles started to be surveyed and registered in a reliable parcel based system that allows transactions to be recorded reliably.

The Land Code, passed in 1991, provides overall guidance to all land administration functions. A new Land Code is being prepared and will provide better prerequisites to finalise the privatisation process. The Law on Real Estate Cadastre, passed in 1998, establishes the procedure for the creation and maintenance of the Real Estate Registry, which determines an individual's rights to real estate in Moldova.

1.3.4 Latin America and Caribbean Country Case Studies

Bolivia. Bolivia has an area of about 1.1 million square kilometres and had a population of about 8.3 million in 2000. The country is one of the poorest countries in the Latin American region and has very high income inequality. The country has three distinct agro-climatic regions: the highland plateau (altiplano) in the west; the inter-Andean Valleys, some semi-arid and some humid, in the centre and the flat tropical lowlands in the east. The population has great cultural diversity (about 67 percent of the population is indigenous). About 36 percent of the population is rural, but this population is unevenly distributed, with the rural population concentrating in the Andean regions.

In the past, two agencies had responsibility for land titling: CNRA had jurisdiction over the whole country and INC had jurisdiction over legally declared settlement areas. The lack of coordination between these agencies and limited mapping often gave rise to duplicate and overlapping titles. Studies in Santa Cruz in the east have revealed overlapping claims over about 40 percent of the land. The situation on the ground also differed significantly from legally recorded land rights. The titling process in Bolivia has traditionally been extremely slow, typically taking 7 to 10 years or longer. The backlog of land reform titles from the 1950s took in excess of 40 years to clear. Only a small proportion of rural land titles issued over the past 40 years have

been registered in the Property Registry and land transactions have not been systematically registered. There is significant insecurity in land tenure, particularly in the east where population density is lower and community structures are less well developed. This insecurity is depressing land values and has been a barrier to investment and expansion of the agricultural frontier.

El Salvador. El Salvador has a total area of 21,040 square kilometres and in 2000 had a population of about 6.3 million. About 60 percent of the population is urban. Poverty and insecure land tenure in El Salvador have led to a range of problems including: low investments in agriculture and real estate, inadequate land management and severe land degradation. Over the past 30 years various administrations have recognised that land issues were a serious constraint to economic development. A major strategy was land redistribution, with 300,000 hectares expropriated in a land reform program initiated in the 1980s benefiting 550,000 families.

Government however did not have good systems to record land rights and land transactions. In 1996 a World Bank-funded project was started with the objective of regularizing 1.8 million land parcels and creating an efficient, streamlined, decentralized and self-sustaining national registration and cadastre agency, the National Registry Center (CNR).

Peru. Peru has a total area of 1.3 million square kilometres. The country can be divided into three broad geographic regions: (i) the Costa, or coastal region, that is a narrow belt of desert lowlands that contains most of Peru's cities; (ii) the Sierra of the high and rugged Andes, with average elevations ranging from 2,750 to 6,800 metres; (iii) the Montaña or Selva, the eastern lowland jungle of the Amazon Basin that covers 60 percent of the area of Peru but contains only 7 percent of the population.

The population of Peru in 2000 was estimated at 26 million, with about 45 percent Indian, 37 percent mestizo (mixed Indian and European), 15 percent European and 3 percent other. About 70 percent of the population in Peru is urban. Urban migration since the 1940s has radically altered the structure and size of Peruvian cities. The migrants from the rural areas were largely excluded from the established legal and administrative systems that support the formal sector. The migrants responded by establishing informal human settlements (*asentamientos humanos*) in defiance of the law. A system to formalise real property in Peru was established from the end of the 1980s through studies leading to pilots and legal reform. The World Bank-funded Urban Property Rights Project issued 1.35 million titles between 1998 and 2004, which benefited more than 5.7 million Peruvians in marginal areas. The IDB has funded activity to register rural property.

Trinidad & Tobago. Trinidad and Tobago is a higher middle-income country in the Caribbean. Although colonized by the Spanish and under their influence for 300 years (1498-1797), the subsequent colonisation by Britain wiped out most of the Spanish legacy in the land tenure and land administration structures. As a result, Trinidad & Tobago does not have much in common with the three Latin American case studies (Bolivia, El Salvador, Peru). Nevertheless, it provides an excellent example of land administration structures within the Caribbean region. The population of just over 1 million lives on the two main islands of which Trinidad is the most populous. The prosperous economy is largely due to the petroleum and natural gas production and processing.

Historical forces have resulted in holdings being concentrated into the hands of a small number of individuals and corporations, although there still remain large areas of land that are owned by the state but leased to private individuals. There is no customary tenure in the country but there are many parcels of land occupied under commonly accepted tenure regimes known as 'family land' (not recognised by law).

1.4 Regional Papers

Four regional papers were prepared as part of the second phase of the study. A regional paper for Africa was prepared by Clarissa Augustinus in early 2003 based on the abbreviated country cases studies for Africa and the results of the discussion in the conference in Kampala in May 2002 (Augustinus 2003a). A regional paper for Asia was prepared by Anne-Marie Brits et al in May 2002 before the regional conference in Phnom Penh (Brits et al 2002).

A synthesised regional paper for ECA was prepared by Gavin Adlington before the regional conference in Hungary in April 2002 (Adlington 2002). Land administration in the ECA region is so dynamic that statements true at the end of 2001 are not necessarily true at the end of 2002. For example, in Armenia the time period and cost of registration have more than halved and the rate of transactions more than doubled within a year. For this reason each author of the regional studies has commented on progress and trends five years on. Huge differences remain between Central Europe, Eastern Europe and the Confederation of Independent States (CIS). Central Europe and the Baltic are as advanced, if not more so, than some EU countries. Three of the four studies were from poor CIS countries.

A regional paper for LAC was prepared by Grenville Barnes in October 2002 based on information in the country case studies and the discussion at the conference in May 2002 in Pachuca, Mexico (Barnes 2002).

Some of the regional case study papers are available on CD from the respective regional meetings and through the World Bank Land Policy website: www.worldbank.org/landpolicy. Critical issues in the four regions is reviewed below in Chapter 3.

Chapter 1 Endnotes

¹ Defined in the wider sense of land and the immoveable property fixed to land.

² World Bank, World Development Report 1989, page 87. The table below shows the greater proportion of natural capital in land by the poor (World Bank/IBRD 2006:31). Ultimately land ranks as the highest asset across all three income brackets.

The Composition of Natural Capital (High Oil Exporters Excluded)

	Low-income countries	Middle-income countries	High-income countries
Land	75	61	50
Timber	8	8	10
Subsoil	17	31	40

³ 'Food security' is defined by the UN FAO as 'the access of all people at all times to the food they need for an active and healthy life'. Refer to FAO website: www.fao.org

⁴ As 'land tenure' is defined as 'the way in which the rights, restrictions and responsibilities that people have with respect to land are held', 'security of tenure' can be interpreted as referring to the recognition and protection of such rights. Robert Foster, PE, PLS, President of the International Federation of Surveyors (FIG) (refer to website www.pobonline.com) has noted that 'secure tenure does not require outright ownership of land. The important issue is access to land; people may have access and rights to the use of land without direct and exclusive ownership'.

⁵ Recognising that land administration, as discussed later in the paper, in different jurisdictions can cover a number of aspects, including land use, valuation and land information.

⁶ Wachter D, English J, **The World Bank's Experience with Land Titling**, Divisional Paper number 1992-35, Policy and Research Division, Environment Department, World Bank, March 1992 provide an assessment of World Bank experience in the rural sector.

⁷ The Thailand Land Titling project which began in 1984, has a total budget of \$350 million over the 15 years of the first three phases supported by World Bank and AusAID funding (Rattanabirabongse et al 1998). A more recent example is the Ukraine Land Titling and Cadastre Development Project where an estimated budget of \$166 million for a 5 year, one phase project is proposed. http://www-wds.worldbank.org/external/default/main?pagePK=64193027&piPK=64187937&theSitePK=523679&menuPK=64187510&searchMenuPK=64187283&siteName=WDS&entityID=000090341_20030605113431.

8

2 Land Administration

2.1 Definitions and General Background

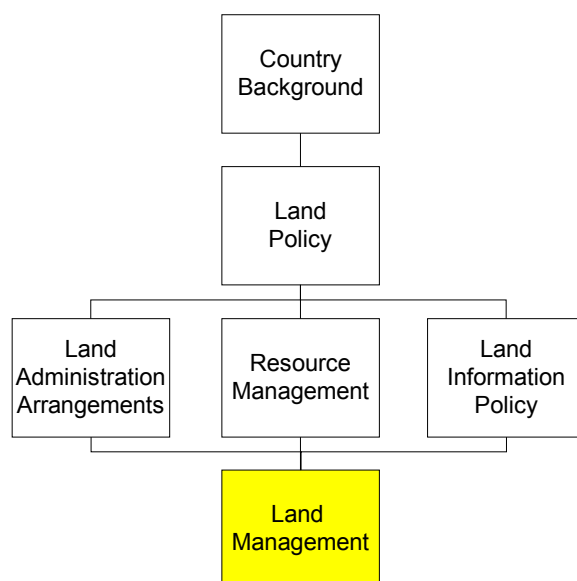
Simple definitions of the terms 'land administration' and 'land management' are set out in Box 1 and the policy context for land administration and land management is illustrated in Figure 1. Land administration is a basic tool that supports land management and operates within the framework established by land policy and the legal, social, and environmental background of a particular jurisdiction.¹

Box 1. Definitions - UN/FIG (1999:52)

Land Administration: the processes of determining, recording and disseminating information about tenure, value and use of land when implementing land management policies.

Land Management: the activities associated with the management of land as a resource from both an environmental and economic perspective towards sustainable development.

Figure 1 Land Management Arrangements (Dale and McLaughlin 1988:4).



Land Administration is a system implemented by the State to record and manage rights in land. A land administration system may include the following major aspects:

- a) the management of public land;
- b) the recording and registration of private rights in land;
- c) the recording, registration and publicising of the grants or transfers of those rights in land through, for example, sale, gift, encumbrance, subdivision, consolidation, etc;
- d) the management of the fiscal aspects related to rights in land, including land tax, historical sales data, valuation for a range of purposes including the assessment of fees and taxes, and compensation for State acquisition of private rights in land, etc; and

- e) the control of the use of land, including land use zoning and support for the development application/approval process.

Typically a land administration system is comprised of textual records that define rights and/or information and spatial records that define the extent over which these rights and/or information apply. In most jurisdictions land administration has evolved from separate systems to manage private rights in land and manage public land.

In countries with a colonial background there is often a dual land administration system; imported systems based on western models operate in urban areas and areas formerly occupied by colonial land-holders, and customary systems operate elsewhere. There are a number of legal sources for colonial systems; English common law, usually based on law prior to the major changes introduced in England in 1925, and the Civil Codes of France, Spain and Holland. Some countries (including Thailand, the Philippines, Kenya, and Uganda) have introduced later innovations, including systems based on the Torrens title system introduced in Australia from 1858. Other countries have a mixed colonial legacy which is reflected in their land administration systems; the Philippines, for example, has a Spanish and American colonial history and judicially based Torrens system imported in 1901 from the State of Massachusetts. Post-independence, many former colonies have tried to unify their systems; Indonesia, for example, took 12 years from independence in 1948 to draft and promulgate the Basic Agrarian Law in an attempt to unify land law.

There is a varied recognition of customary tenure in the land administration systems throughout the world. With some there is an explicit recognition of customary rights, as in the Philippines and Bolivia, but these administrative systems operate in a very complex and conflicting policy, legal and institutional environment and as a result offer limited security of tenure. In other instances there is a unified legal system based on customary law; for example, Uganda and Mozambique. Other jurisdictions do not formally recognise customary rights; Thailand, for example. In other countries there are religious tenure systems, for example the Islamic systems which administers Waqf land in the Middle East, as described by Powelson (1988:143-144).

Land classification² plays a major role in land administration, particularly in Asia, where it was introduced early in some countries (in 1913 in the Philippines), and more recently in others, (the 1960s in Thailand). In most Asian countries private rights are only recognised over non-forest land and a lack of clarity in forest boundaries is often a key factor in insecure tenure. With increasing pressure on land resources, many countries have set aside land for national parks and wildlife reserves but this has often resulted in conflict with 'customary use'. A good example is the forced removal of the Masai from the Serengeti in Africa. However governments in many countries either lack the political will or the ability to enforce land classification or the preservation of national parks and wildlife reserves. As a result, a significant proportion of the population has the legal status of 'informal settlers' or squatters. Furthermore the rapid urbanisation that has occurred since the mid twentieth century has resulted in informal settlements in urban areas that most governments have found difficult to address.

In many jurisdictions the core land administration functions of survey/mapping and registration operate separately, often in different Ministries, while in others they are brought together. In much of Europe and Latin America registry offices and cadastral offices are separated with the former usually linked to local courts or administrative

districts. Separate registries and cadastral offices frequently lead to problems with inconsistent and duplicated records. In some jurisdictions the registry operates without a reliable survey/map base which creates difficulties with the definition of the parcel over which a registered right might apply, leading to problems with overlapping and duplicate rights.

Notaries, lawyers, private surveyors and other intermediaries play a significant role in many land administration systems, while in others this is not the case. In Thailand there is a very small private survey industry with virtually all the legal work associated with registration, including the preparation of contracts, undertaken by the staff of the Department of Lands.

In most jurisdictions there are agencies that administer both renewable and non-renewable resources (agriculture, forestry, fisheries, mining etc) and national parks and wildlife reserves. Sometimes these are linked to a common land administration framework but in others they operate with varying degrees of coordination. For example, in Bolivia the military provides a central survey mapping function and there are departmental (state) registries throughout the country and a number of separate cadastres including various urban cadastres set up to support decentralisation ('popular participation'), a forest cadastre, a petroleum cadastre and others all operating with little coordination.

Land administration systems vary from single centralised systems in jurisdictions (most of the states in Australia, for example) to decentralised systems in most Asian countries. In Thailand, for example, the title register is split amongst 76 Province and 272 Branch Provincial offices, with each office maintaining the land administration system within its jurisdiction. Centralised systems as in Australia operate successfully because of established links through intermediaries such as lawyers, surveyors and financial institutions. There are also well-established systems of data brokers and electronic access to the registers and services offered by the registries. The decentralised systems in Asia facilitate direct access by the public.

In most jurisdictions planning and development applications/approvals are managed separately from the land administration system, with local government often playing a significant role. Jurisdictions such as Ghana link the planning and registration function by insisting on compliance with planning regulations as a prerequisite for registration but others such as Vietnam grant rights only for specific use.³ In many developing land administration systems there is a distinction between urban and rural land administration systems. This is typical of the transition economies where there are often separate projects, an urban project linked to the privatisation of apartments and a rural project linked to the privatisation of collective farms. However this distinction is not common in much of the developed world where it is virtually impossible to obtain a breakdown of formal land market activity into urban and rural components.

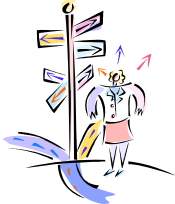
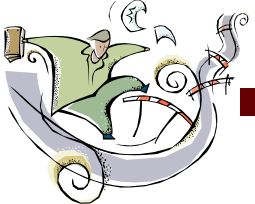
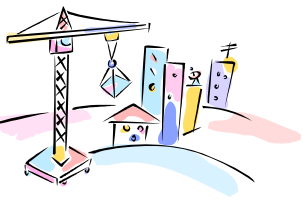
Finally the term 'land administration' can cover a much wider range of systems, from formal systems established by the state to record rights in land through to informal community administered systems. The World Bank's concept paper anticipated that the comparative study would cover this wide range of systems when it specified the institutions covered: '*government versus private sector, central versus local institutions, formal versus customary.*' (Lavadenz et al 2002:4). This breadth of cover presented some challenges particularly when the methodology set out in the objectives for the comparative study was '*systematically reviewing the*

characteristics, accessibility, costs, and sustainability of different land titling and registration options.’ Quantitative information on aspects such as characteristics, access, cost and sustainability was often available for formal land administration systems, but was usually not available for customary land administration systems. This publication has attempted to address the dichotomy by developing a model to assess the performance of both formal and customary systems.

2.2 Environment for Land Administration Projects

Not only is there great variety in land administration systems, but there is also great variety in the environments within which the various projects which strengthen such systems operate. Although there is fairly common agreement on the generic objectives for an improved land administration system, each project operates within a specific contextual mix of political, social and economic objectives (see Figure 2). These contexts vary from transitional economies, evolving market economies through to very poor countries with strong colonial legacies. There is also variety in the type and relative importance of the obstacles that the various land administration projects face. This variety complicates any attempt to undertake a comparative study of land administration project experience. Project and country development strategies themselves also undergo re-shaping given the environment they emerge from. A significant change in land projects in recent times has been a shift in donor priorities or emphasis. For example, Bloch et al (2006:115) note that USAID has shifted its focus from land reform in the 1970s to land tenure reform in the 1980s.

Figure 2 Land Administration Project Environments.

		
Contextual Alternatives	Possible Obstacles	Generic Objectives
<p>Post-conflict transition (demobilisation, settlement of refugees, limited government credibility and authority, etc)</p> <p>Colonial legacy/poverty (limited resources, lack of funds, limited government credibility, authority and relevance, confusion between formal and customary, etc)</p> <p>Transition economies (limited experience with property, limited relevance of existing bureaucracy, overstaffing, etc)</p> <p>Evolving market economy (unequal wealth distribution, limited safeguards, limited government credibility and authority, etc)</p> <p>Other (including a mixture of the above)</p>	<p>Lack of political will</p> <p>Legal overlap and ambiguity</p> <p>Conflicting/overlapping institutional mandates</p> <p>Operational constraints (poor land records, poor integration of registry/cadastre, limited access, etc)</p> <p>Corruption/low civil servant salaries</p> <p>Limited funding</p> <p>Limited safeguards for vulnerable groups</p> <p>Other obstacles</p>	<p>Clearly defined and enforceable land rights</p> <p>Accessible, efficient dispute resolution</p> <p>Efficient and secure processes to transfer rights</p> <p>Confidence of users, particularly the public, and their participation in the land administration system</p> <p>Regulation of land use in the public interest</p> <p>Management of public lands and the commons</p> <p>Equitable taxation of property</p> <p>Equitable access to land information</p> <p>Poverty Alleviation</p>

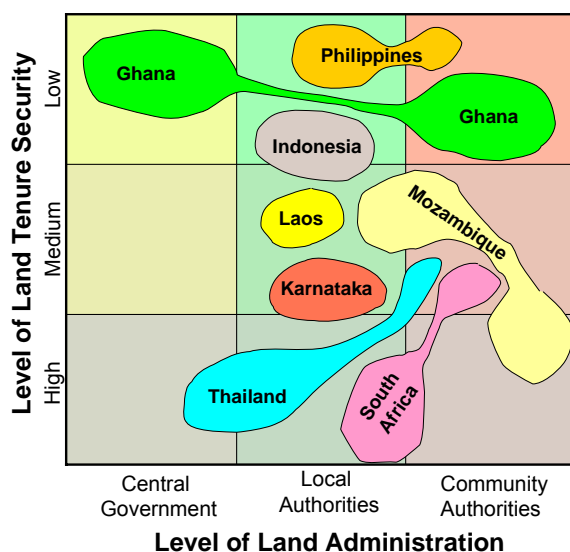
As noted in the comparative study concept paper, a number of lessons have already been drawn from project experience, these include the following:

- Land administration goes beyond the implementation of legal, cost-efficient cadastral and land registration systems to the set of services that make the land tenure system within a country relevant and operational;
- Records and recognition are the basis of land tenure security and are interdependent with the social, cultural and economic conditions of the respective social groups. Over time, needs evolve and institutions, both customary and formal, must be adaptive;
- The legal, institutional and technical elements needed to ensure that property rights are well defined, enforceable and transferable at low cost vary substantially. From the donor perspective, documents formalising land tenure arrangements have to be legally valid;
- Information on establishment and maintenance costs is extremely relevant with respect to the affordability and sustainability of registry systems.

2.3 Archetypical Contexts

An important element in undertaking the comparative study is a clear framework of archetypal contexts. One possible framework would be a combination of the contextual alternatives and possible obstacles listed in Figure 2. A critical element in any land administration system is the institutional arrangements, particularly the role of central government, local authorities and community or customary authorities. A strategy matrix mapping security of tenure against the major institution responsible for land administration is set out in Figure 3, where an attempt was made to subjectively map the current land administration situation for some the case study countries in Asia and Africa.⁴

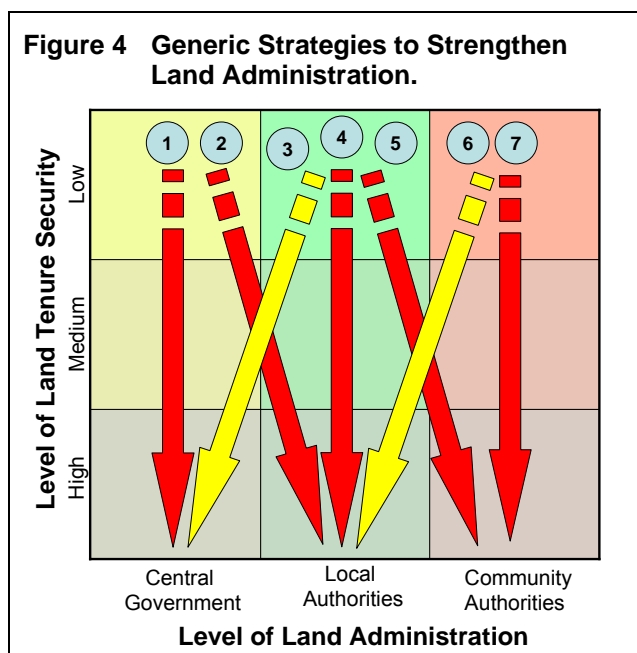
Figure 3 Tenure Security/Institutional Arrangements Matrix.



Although there is considerable subjective interpretation in the preparation of this matrix it demonstrates that the selected country case studies cover most of the strategic options. Most of the case studies in Asia are decentralised formal land administration systems with little recognition of customary systems, whereas customary systems are a significant influence in Africa. The key objective of any project to strengthen the land administration system is to move from the top of the matrix to the bottom.

The seven generic strategies identified to do this are (see Figure 4):

1. strengthening a centralised formal land administration system;
2. decentralising the formal land administration system;
3. strengthening and centralising an existing decentralised formal land administration system;
4. strengthening an existing decentralised formal land registration system;
5. promoting a significant role for community/customary authorities, and perhaps the community itself, in a decentralised land administration system;
6. transferring an existing land administration role from community/customary authorities to a strengthened decentralised government
7. Strengthening existing community/customary land administration systems.



Other possible strategies may include combinations of the seven generic strategies listed above. There are few examples of strategy 1 in the developing world but many examples in the developed world where centralised systems are developed and improved service delivery models such as the electronic searching of registers and electronic lodgement of documents and plans are implemented. There are also few examples of strategy 3 in the developing world although the current project to develop a centralised registration database in Poland is one example of an attempt to implement this strategy. In future, as technology improves and becomes more

available, more projects implementing strategies 1 and 3 are likely but they will only be successful when a basic infrastructure is in place. This includes widespread computer literacy, ready access to computers and the Internet, reliable telecommunications systems and, more importantly, procedures and systems that were tailored to the needs of the general populous and are supported by appropriate programs to educate users.

There are many examples and a detailed discussion of the other generic strategies in the developing world set out in the section entitled '*Sequencing of Land Administration Interventions*' in this document, in particular, Figure 10 on page 64.

2.4 Global Land Administration Issues

Although the outcomes desired from a system of land administration are frequently common across regions the means of achieving those outcomes, and the critical issues encountered differ according to the respective environments depicted in

Figure 1. The issues critical to successful projects and viable land administration were distilled from specific regional issues and are summarised here in a global context.

Arguably issues relating to the *institutional framework* present the biggest challenge to successful land administration reform. All regions face the existence of multiple organisations, each with legislation empowering them to participate in the delivery of some part of the land administration cycle. The powers often overlap and add to bureaucratic 'red-tape' which allows agencies to remain self-serving with scant regard to community needs and demands. Amidst this confusion there is ample opportunity for cronyism, patronage, informal fees and other forms of corrupt practices that preclude the least able from participating in the formal land market and gaining security of tenure. Those who benefit from chaos are reluctant to support change which results in lack of confidence in the formal system of land administration and a concomitant growth in informality. In Latin America and much of Europe the jurisdictional separation of registration and cadastre between the legal (Ministry of Justice) and surveying (land and/or surveying agencies) fraternities add an ingredient of professional bias to the institutional mix.

Potential conflicts between customary and/or informal systems of land tenure with the state supported formal systems of land registration are an issue in all developing regions except the case studies in ECA. Africa presents a significant challenge because the traditional authorities (chiefs, clans, families etc) have significant authority over land in most countries. While not as prevalent in Asia, customary forms of tenure exist such that care must be taken to protect these interests in formulating land policy. In the Latin American environment customary ownership is recognised as having legitimacy in formalising land administration in the region. The desired outcome is a marriage of the two systems and this presents particular challenges to the legal and policy framework of land administration.

The *legal framework* is almost universally characterised by a multiplicity of overlapping land-related laws compiled over decades with little attempt to rationalise the ambiguity resulting from successive legislation. Essentially there seems to be the relative ease of creating new laws compared to the effort required to improve existing legislation with the legal framework both aiding and abetting the institutional chaos referred to above. The frequent reliance on a litigious approach in dealing with land disputes rather than administrative processes extends the time and cost of resolution to the point where justice is very difficult, if not impossible to achieve and usually precludes all but the very wealthy.

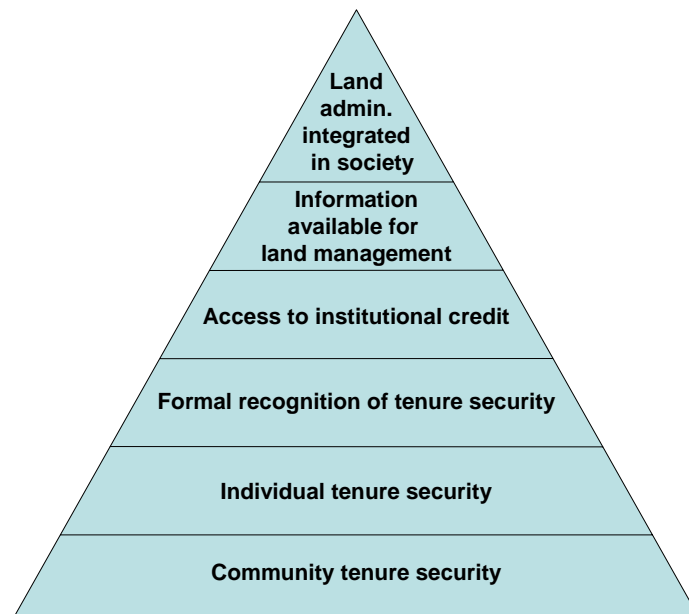
An issue affecting the administrative processes is the level of fees and charges that can be reasonably imposed to ensure the land administration system is at least self-funding. Care must be exercised to ensure that the revenue objectives are balanced by the capacity of those participating in the market to pay. In the initial stages this usually means a period of subsidisation until the critical mass of parcels needed to sustain a land market are registered and the land administration system has the confidence and support of the community.

Low skill levels and an acute shortage of resources are *technical issues* common to all regions studied. Despite this there is a tendency to justify investment at the high technology/high accuracy end of the technical spectrum based on the benefits of the multi-purpose application of the spatial data arising from the cadastre. Concepts such as the National Spatial Data Infrastructure have evolved to provide a vehicle for

downstream integration of information. While such concepts are ultimately necessary they can be confusing to countries struggling to introduce the basic elements of a land administration framework and are often a distraction from the fundamentals. Uganda, which is planning to introduce spatial data infrastructure prior to land registration, is a possible example of this as the cost-effectiveness is unclear.

To explain the evolution of land administration in society the following model, based loosely on Maslow's Hierarchy of Human Needs (Maslow 1987), sets out a hierarchy of tenurial concerns where higher tenure concerns will only be addressed when the lower concerns are satisfied. Spatial Data Infrastructure, a valid concern in many countries with well-developed land administration systems, addresses the high level concern of integrating land administration into society. In most developing countries much work is required to address lower level concerns before focussing on spatial data infrastructure. This is not to suggest that initiatives to improve land administration systems need not recognise the long-term objectives of SDI, but SDI objectives should not obscure the efforts to address lower level tenurial concerns.

Figure 5 Hierarchy of Tenurial Concerns.



In all regions the *sustainability* of the formal system is dependent to a large extent on the level of community trust in the formal system of land administration and the affordability of participation. These factors govern the level of registration of subsequent transactions in land rights after initial registration. Without the registration of all derivative transactions the accuracy of records will rapidly erode to the point where confidence disappears, informality grows and uncertainty reigns. Essentially, the formal land administration system needs to adapt to the procedures and costs in the informal system and the community needs education and awareness programs to extend beyond project public relations campaigns.

In ECA there was an urgent need to rapidly distribute land or affect the reinstatement rights in land and establish means by which rights could be protected. This was needed to meet immediate demand during the 1990s following the collapse of the

communist regimes. The long-term implementation of sound land administration systems is now beginning to be given the attention it merits.

All the issues above largely contribute to *effective maintenance* of the land administration system. Without simple secure forms of tenure, service conscious institutions, unambiguous laws and enforceable regulations, smooth and inexpensive administrative processes, the climate of transparency and openness conducive to an effective land market will not exist.

Chapter 2 Endnotes

¹ The word 'jurisdiction' is used to recognise the fact that in many countries there are a number separate land administration systems, often administered at State or Province level. This is the case in Australia, India and Canada.

² Land classification refers to the practice of defining land into a limited number of legal land classifications. For example, Article XII, Section 3 of the 1987 Constitution of the Philippines provides that lands of the public domain are to be classified into agricultural, forest or timber, mineral lands, and national parks. Alienable lands of the public domain are limited to agricultural lands.

³ Under the Land Law (promulgated in 1988 and amended in 1993, 1998, 2000 and 2001) land is classed into six uses: agricultural land; forest land; rural residential land; urban land; land for specialised use; and unused land. Land is always allocated for a certain use. This use is first stated in the application for land by the applicant/land holder and then inserted in the Land Use Certificate (LUC). If the land holder does not put the land for the use indicated in the LUC within a year the right to the land can be cancelled. However, in practice the risk of cancellation of a LUC is very low.

⁴ For the sake of clarity the information in Figure 3 is restricted to the country case studies for Asia and Africa. The case studies in LAC and ECA could be included and would demonstrate a similar range in the mapping of tenure security/institutional arrangements.

3 Critical Issues and Current Trends Specific to the Regions

The individual regional papers describe a wide range of issues which were analysed and distilled as far as possible to be representative of the respective regions as a whole. For consistency they are considered under the major headings for the contextual information for the country case studies: land tenure, institutional framework, legal framework, technical arrangements, administrative processes and land market information. These regional papers provide a quick overview of the context for the country case studies and thus provide a framework for explaining some of the regional variation in the country case studies. Within each topic significant changes and trends that have occurred in the regions are included since the regional workshops conducted in 2002.

3.1 Critical Issues in Africa

Over the last decade more than 13 countries in Sub Saharan Africa have adopted new land policies and/or laws which are pro poor and gender sensitive. However the big challenge has been to implement these policies in a general environment of constrained resources and limited funding. Despite numerous initiatives during the last decade to implement new land administration systems in sub-Saharan Africa or to modernise existing ones, limited results were achieved.

While each region has its own particular characteristics, it is apparent that Africa presents an almost unique case. Where it exists, formal land administration consists of the conventional approach based predominantly on deeds and title registration. However, the vast majority of the urban and rural population in African countries uses customary systems of land administration. Further, due to the complex nature of the cadastre and property rights, colonial land administration laws and regulations remain entrenched in many countries.

Like many developing regions, Africa is experiencing rapid urbanization with an urban population doubling almost every 20 years and the majority of those live in slums (Augustinus, 2005). With a strong emphasis to realise the Habitat Agenda and endorse policy options with political support, the African Ministers Conference on Housing and Urban Development (AMCHUD) was established in 2005. Biennial meetings will be used as a consultative mechanism on the promotion of sustainable development of human settlements in Africa, where land plays a central role in housing strategies. Supporting pro-poor and innovative solutions to land and house problems, support for the systematic titling option is fading.

Land Tenure. Many parcels in the land registration systems are uncertain and hold ambiguous information despite attempts to create land registration systems with certain, highly accurate spatial information.

In many instances customary tenure or informal land administration systems are sufficiently secure in themselves to make large scale titling programs unnecessary. Indeed, the formal land registration system in most countries is often not neutral and where titling is implemented, people with customary tenure may in fact lose their rights. Women and overlapping rights holders are very vulnerable in these

circumstances. It is because of this situation that African countries are introducing new forms of land tenure which are more appropriate.

Institutional Framework. There are major problems surrounding the flow of spatial information for land administration purposes within government, between departments at national level, between national and lower level tiers of government, and between government and the private sector and users. Coordination is therefore a critical issue. There are few comprehensive national spatial systems operating which contain reliable information for land administration purposes and where they do exist they only include that part of the country covered by the cadastre, typically formal urban areas.

For a range of reasons, many of which are related to governance issues, it is extremely difficult to implement large-scale national land titling programs, or to enforce land use controls. Hence most land titling is confined to the major cities and usually the capital city areas where cash crops have been/or are being grown.

Legal Framework. In common with other regions, a central issue in Africa is the proliferation of conflicting and overlapping laws. Many countries have begun legal reform to address the issues and to introduce new approaches including, amongst other things, new forms of evidence. For example Tanzania passed two new land laws in 1999, a Land Act and a Village Land Act to provide a framework for the formal recognition of land rights throughout mainland Tanzania. Other countries have also passed recent land laws, including Uganda and Mozambique which are included in the country case studies. However the scale and comprehensiveness of change needed is huge and has not yet reached full-scale implementation. Systematic titling for much of Africa is not considered an option for a range of reasons, largely related to the experience from the mid 1950s in Kenya, where systematic land titling led to a range of problems including 'land grabbing' by the urban elite.

In many countries, a lot of existing titles are of doubtful veracity and require complex legal processes rather than the simpler administrative methods to effect transfer. In defending their rights people will refer to the paper and to customary evidence, further adding to the complexity of dispute resolution.

Technical Arrangements. There is a general lack of financial, technical and human capacity, indeed all resources throughout Africa. Because the systems are under-resourced many of them are out of date, expensive to maintain and inefficient. Most countries also retain colonial forms of legal evidence requiring a high standard of professional input. For example, there are few registered professional surveyors with many countries boasting less than 30 in total.

Administrative Processes. Even if no dispute occurs land registration in most countries takes 15 to 18 months on average, while realistically two to seven years is not uncommon. This lengthy and costly procedure means that tens of thousands of land titles are usually pending and becoming obsolete as time passes.

Land Market Information. Land markets exist all over Africa, both in rural and urban areas and they are not a recent phenomenon. However they are not free land markets and the sale of land is often limited to relatives (by blood or marriage), ethnic/national groups, religion in certain areas and to men. Many of these sales generally take place outside the formal land administration system.

3.2 Critical Issues in Asia

A common characteristic of land administration in Asian countries is the influence of colonial history. With the notable exception of Thailand, colonial administration has commonly resulted in a duality of systems, one to accommodate western occupation (usually urban and commercial agriculture areas) and the other covering customary tenure arrangements.

Rising populations have put pressure on dwindling land resources, leading to widespread deforestation, land degradation and landlessness. Various land reform interventions were attempted with limited success. Land administration interventions have however been successful because of a conscious separation between respective land administration and land reform programs.

Land Tenure. Recognition of rights is confined to non-forest land, thereby excluding in many countries a significant proportion of the indigenous population who have lived on and cultivated land for many generations. In some countries whole communities (towns) are established in land classified as forest. This is a critical land classification issue where settled and cultivated land will never return to forest use. The existing policy, institutional and legal frameworks regarding forest protection often remain far removed from reality on the ground.

Institutional Framework. The institutional setting is usually characterised by large, conservative, central agencies with vested interests that resist change. Recent government land administration policy is almost universally to decentralise services and devolve power from central to local government. The trend is towards *de-concentration*, with central government responsible for policy, maintenance of a unitary legal and regulatory framework and uniform service standards, and all operational responsibilities devolved to the regions. In most cases the trend is yet to become reality.

Multiple agencies with overlapping land administration roles and responsibilities, each supported by empowering legislation, is a critical issue in some countries. Attempts to coordinate project implementation through “steering committees” etc. have invariably been unsuccessful. The compromise arrangement of separation of the project component parts amongst different agencies results in a disaggregation into separate projects. Institutional issues remain one of the biggest obstacles to successful land administration reform in the region.

Legal Framework. The need to rationalise the sheer volume of uncoordinated and disintegrated land related legislation is a critical issue in many countries. The level of law enforcement is low and the prevailing culture of consensus makes it very difficult to reach agreement on the need to amend existing legislation.

A common characteristic of the region is the predominance of title registration over deeds systems however, with the exception of the Philippines which has some limited and ineffective rights to compensation by the State, these systems are not backed by any form of State guarantee.

There is a high incidence of land tenure related conflict with attendant social disruption in some countries. Dispute resolution is usually subject to court litigation with the time delays and costs involved effectively removing most citizens from the process.

Technical Arrangements. The critical technical issue is the relatively low level of technology and the low skill levels of staff coupled with the perception that the lack of access to technology is at the heart of most land administration problems. In reality, incorrectly conceived and applied technology is likely to be a much more serious problem.

Underestimating the need for appropriate human resource training and development programs and the expansion of programs across the private sector or industry development is a critical technical issue.

Administration Processes. The existence of a hierarchy of rights over private land complicates the tenure system in many countries because many of the rights are for specific and temporary use, so the need for renewal, or conversion to a higher right, adds to the bureaucratic chain. For example, Indonesia registers separate rights for ownership, cultivation, building, use and management. When added to an already complex regulatory system this creates a concentration of power in numerous points of the process which increases the potential for “informal fees”, discourages participation and leads to distrust of the formal tenure system.

A parallel issue is the failure to delegate responsibility to an appropriate lower level of competence. The convoluted chain of officials whose signature is required in many jurisdictions to approve many routine functions in the land administration process adds to transaction time and expense, increases backlogs, and discourages participation in the formal system.

Land Market Information. With the commitment to systematic registration of rights to land in Asia there is a growing mass of registered land parcels in most countries. However, the security of title and sustainability of the land administration system relies on maintenance of the records so a critical issue emerging in many countries is the relatively low level of registration of subsequent transactions. This reflects low levels of community understanding of the benefits of formal registration and highlights the need to simplify procedures and processes, review fee structures and extend community education and awareness programs beyond project public relations campaigns.

3.3 Critical Issues in Europe and Central Asia

ECA countries fall into three basic categories dependant on their history and progress since the collapse of communism. These are generalised into the following groups:

- (a) **Central European countries** usually maintained their land records systems and adapted them to their socialist regimes but continued to allow private ownership and land markets to operate especially in urban areas. Following the fall of communism the countries had to revitalise and renew their systems and deal with restitution or compensation for people that had their rights taken away under those regimes;
- (b) **The Baltic and Balkan countries** wanted the reinstatement of land and property taken from people during the communist period. This required complicated and detailed investigation into the history of ownership and the reinstatement or compensation of the heirs of people who had land or property taken from them just after the Second World War;

- (c) **Confederation of Independent States (CIS) countries** that were part of the Former Soviet Union (FSU) and where land and real estate was distributed based on those that occupied houses or worked for State or Collective farms and enterprises.

There is great variety in the socio-economic development of ECA countries. Income levels and development in the Central European and Baltic countries is markedly different to the poorer countries of the CIS. For example, Latvia demonstrates that land administration is more affordable to users despite fees being more than ten times the absolute amount experienced by users in the poorer countries.

CIS countries have often proceeded to allocate rural land without physical boundary marking or locating rural parcels in any way other than through a plan in the office. This is because individual owners often continue to farm collectively and any ground marks would be removed by agricultural machinery. Deliberate steps to delay would-be private farmers leaving collectives were made by collective directors in Russia (Barnes 2006). These steps include simple neglect in adhering to legal requirements to demarcate individual parcels or signing release forms. Both scenarios inhibit the development of land markets.

Unlike most other regions undertaking land administration reform, there are few issues in the ECA countries studied relating to informal settlers, customary tenure, inheritance or special tenure arrangements (eg ownership by religious bodies) to complicate the tenurial arrangements. Rights are fully protected by civil law and the countries studied as representative of the region have well developed legal frameworks in line with best international experience.

The CIS countries studied also provide a useful model for successful land administration because they have effectively implemented a single agency approach to the cadastre and registration functions. For example, they have incorporated the former Soviet style *Bureau of Technical Inventory*, which registers buildings separate from land into the current registration offices. At the same time the institutional framework was strengthened by combining Land Management and Cartographic agencies into one new organisation.

Land Tenure. Systematic registration has not improved the tenure situation for some in the urban sector because the approach was to identify problems not resolve them. Thus the people who built without correct approvals and/or encroached on adjoining land find themselves unable to acquire a right to land they may have occupied in good faith for decades. This is the case in Yugoslavia which has led to half the properties remaining unregistered, leaving owners worse off than before the systematic program.¹ Armenia and Kyrgyzstan in recent time have made great efforts to legalize constructions through systematic processes.

A critical question in many jurisdictions is the efficacy of subdividing (on paper) the large rural holdings into individual parcels when it was evident that parcel sizes were often too small to be viable and now require consolidation. This approach was considered necessary for prevailing political and equity reasons. Economic and agricultural production issues were considered secondary to the need for citizens to perceive that their rights were restored and to give them a means of subsistence during the hard economic times of transition.

Institutional Framework. Corruption and staffing problems in cadastre and registration offices are serious issues affecting the operations of the offices and the

public acceptance of the new system. A policy is therefore needed to promote private sector capacity, reduce staff levels (especially eliminating corrupt and inefficient officers) and raise the salaries and working conditions of those staff that remain. In recent years a number of strategies have been implemented to improve this situation by changing office layouts and workflow procedures and programs are underway to make use of internet based applications. This will also eliminate the need for individuals to visit the land office directly.

Legal Framework. Whenever it was decided to privatise rural land and issue titles to individuals or enterprises in CIS countries, the political emphasis was on speed and short term results. The extent to which this compromises the accuracy and reliability of records is a potentially critical issue that will face subsequent generations and may lead to an erosion of confidence in the system. A risk analysis to determine a satisfactory compromise between the demand for rapid implementation and the sustainability of the land administration records should be considered.

Public awareness and understanding is a basic requirement of the registration system. It is essential in systematic registration systems that a well-publicised and effective public viewing period is conducted before registration and sufficient time given so people can examine and understand the location of their land and the rights recorded in favour of themselves and their neighbours. Concerns remain about the guarantee where it has often not been provided or there are added implications on the area in question.

A major issue facing the legal framework is implementing the 'open' register with information publicly accessible as most jurisdictions want to retain a closed register.

Technical Arrangements. The primary objective of boundary demarcation is to ensure that boundaries can be identified or replaced when in dispute. For the purpose of registering rights the primary aim was to deliver a secure system which allows people to transact dealings. Sophisticated geodetic networks, up-to-date mapping, accurate surveying and modern (expensive) surveying equipment are not considered necessary to make this possible and in fact a focus on technology has delayed projects in developing countries.

Administrative Processes. Cost recovery is a major factor in all agencies in the ECA however fees and charges should be assessed on the basis of the capacity of users to pay. High costs discourage participation in the formal system of registration therefore the time and money required to carry out a transaction should be minimised in order to encourage real estate markets. It is also necessary to ensure that systems are sustainable by recruiting good quality staff. Countries in ECA are having mixed results in achieving this objective.

Land Market Information. Experience in the rapidly developing markets of ECA suggests real estate markets are impacted upon more by effective registration systems that allow transactions to occur quickly and cheaply than by systematic titling programs.

3.4 Critical Issues in Latin America and the Caribbean

The distinguishing characteristics of Latin American land tenure and administration are the large inequities in land distribution and the history of land reform across the region. While many of the land reforms did not adequately address the inequity

problem they did put in place a tenure system and institutional structure that sets Latin America apart from other regions of the world. It should also be noted that Latin America contains a significant area of land claimed by indigenous peoples, thereby introducing both a separate tenure category as well as a land administration structure entirely different from the mainstream national structures. The large extent of informal land holdings in both urban and rural areas of the region has elevated the need for large-scale initiatives that formalise these holdings and re-engineer the land administration system to prevent the re-emergence of informality.

It was also observed that, other than geographical proximity, there is little similarity between Latin American and Caribbean countries with regard to regional issues and approaches to land administration.

Land Tenure. Informality in Latin America and the Caribbean, in both urban and rural sectors, continues to be a huge challenge to the development of land administration systems. While the level of indigenous tenure is a factor in the former, a parallel type of tenure in the Caribbean could be considered to be the extent of family land holdings. Such family land may have been titled many years ago in the name of a deceased ancestor but was passed down through subsequent generations without formal documentation. This issue is further complicated when descendants with valid claims reside overseas.

The tenorial profile in the Caribbean tends to favour large state owned land holdings historically leased out as a device to limit the ability of labourers to become peasant farmers and to ensure the availability of essential labour for the large estates and plantations. The same leasing system today allows greater control of land use and has the social benefit of ensuring access to land for resource poor farmers.

Institutional Framework. An issue that pervades almost every Latin American country is separation at the information and institutional levels between the property registry and the cadastre. While there is little uniformity across countries the national land agency is typically separate from the registry offices, which are often under the Supreme Court. In addition, the national mapping agency is typically located in a geographic institute, which in many cases is a military entity. With the exception of El Salvador, which has merged all three entities, these three land institutions are usually located in completely different parts of the government structure. This is contrary to the trend in the Caribbean, where these three agencies are often fused together in a Lands and Surveys Department. National land matters in the Caribbean are usually handled by the Commissioner of Lands, whose office (in the case of Trinidad and Tobago) is joined with Lands and Surveys.

Similarly, the legal and fiscal cadastres are typically separated into different institutions, with an overwhelming tendency to decentralise the latter out to the municipalities. This has resulted in each municipality developing independent cadastral systems based on different criteria, philosophies and approaches to procedures, software etc.

Legal Framework. The legal framework is *'plagued by confusing and contradictory norms originating in an exceptional manner and executed by multiple entities that do not have an integrated vision of the process.'* (Barnes 2002:9, translating Montúfar 2002:95)

Technical Arrangements. The low level of technical skills is a critical issue in Latin America. Most of the surveying work is done by topographers with little academic

training. There is a clear need to strengthen the training/education component of land administration projects in Latin America. This issue is not relevant to the Caribbean because it has a body of professional surveyors.

Administrative Processes. The trend in Latin America is to move from an owner-oriented deeds system to a parcel-based deeds system. This has to do with the structure of information management rather than a conscious change from a registration of deeds to a registration of title system, as is the case in the Caribbean.

Another administrative issue is the difficulty experienced in gathering costs for adjudication, survey and registration throughout the region. The available data varies considerably reflecting to some extent the different methods of aggregating and reporting costs.

Land Market Information. Based on the data collected by the consultants in the four countries it is clear there is an increasingly active formal property market but the magnitude of the residual informal property market is unclear. One issue is the difficulty of maintaining property in the formal system once it was initially titled and registered. This culture of not registering transactions may be related to a perception of high transaction costs which, in many cases, are beyond the means of the rural poor.

3.5 Trends in Jurisdictions with Well-Developed Land Registration Systems

A primary motivation for land administration projects throughout the developing world is the facilitation of transparent and efficient land markets. Generally, the major investment is in the acceleration of first time registration of rights to land and the systematic capture of related records which provide the security and confidence essential to the operation of the land market. While developed countries still emphasise this key role of documenting private ownership, the trend in developed systems is for land administration, particularly the core cadastral components to be applied to development goals which go beyond the focus on land markets.

In most developed countries the land administration system is so closely woven into the social and economic fabric of society that it goes almost unnoticed by the community it serves. Disputes over rights or boundaries are infrequent so that the continued need for high level safeguards is sometimes questioned, raising issues of risk management. This is not to suggest that there have not been changes in land policy in developed countries. In a number of countries there has been debate on the impact of land use regulations and other public restrictions on private rights in land (examples include Wiebe et al 1998 considering the debate in the US, Lyons et al 2002 considering the situation in Australia). There has also been recognition of native title in developed countries including the US, Canada, New Zealand and more recently in Australia (Bartlett 2004).

The land administration systems in these jurisdictions can deliver the social and economic outcomes expected, and support land markets which are fair and transparent for all. Since they are mostly used by professional intermediaries, the systems of land administration are largely invisible to, and taken for granted by, the general community.

The conservatism apparently attached to land-related institutions in developing countries has long dissipated in most developed countries, where institutional re-engineering is relatively common, if not frequent. It would be unusual in Australia, for example, if land administration agencies, along with other arms of government, are not subject to functional review and restructure in a 5 year cycle. Early examples were the amalgamation of cadastral and land registration authorities allowing the newly combined agency to concentrate efforts on improved data quality, streamlined processes, improved service levels and at the same time realising the economic rationalisation (cost savings, staff reductions, etc.) most governments demand. The trend towards integration of cadastral and registration data over the last few decades was assisted by technology and the growth of land information systems.

Programs of data conversion are either in progress or in many cases complete, making it commonplace now for land administration agencies to store and maintain land parcel details (combined text and graphics) in digital form. Titles are routinely stored in digital format and in most jurisdictions the laws have been adapted to give evidentiary weight to digital media and to allow for the electronic submission of data. This supports the trend to remote data access which facilitates enquires from banks and other lending institutions. Increasingly remote registration of transactions and dealings is facilitating the work of accredited agents such as lawyers, notaries and surveyors and assisting in the maintenance of the primary registries and map bases. An example of this is the Landonline electronic conveyancy system in New Zealand where changes in the register are implemented by private lawyers acting for the parties in a land transaction.

The introduction of digital data has raised policy issues concerned with access to data resources. Many jurisdictions are examining costs and pricing policies for data as access via the Internet increases (e.g. Switzerland and Australia). On the other hand, public opinion that access to cadastral data and other public registries on the Internet should be free of charge for all citizens is growing in countries such as the Czech Republic (*FIG-Commission 7 – Standardized Country Report 2002*).² While the debate on access and charges continues, revenue generation remains a political driver in land administration reforms. For the majority the immediate goal of cost recovery is being achieved in the selected jurisdictions with well-developed land administration systems set out in Table 39, page 175.

This improved efficiency is reflected in the trend toward shortening transaction times (refer Table 40, page 176) no doubt influenced by the service improvements such as the remote access mentioned above. There are signs of increasing interest in the performance of land administration systems and the trend of benchmarking systems against each other. The International Federation of Surveyors (Kauffman 2002) has examined a series of national benchmarking initiatives aimed at measuring products, services and practices in search of best practice in the sector. The dearth of performance statistics experienced in the compilation of this comparative study proves that this trend is well overdue.

Despite the capacity to innovate (e.g. via the Internet, value-added applications of spatial data) and improve the potential 'profitability' of providing land administration services, the trend towards full privatisation of land administration functions has not been pronounced. Private sector involvement in elements of the process is well established and the trend is to increase this input. For example, the role of the private sector in data capture (cadastral surveys) and transactions (lawyers, notaries

and settlement agents) was reinforced through licensing arrangements but responsibility for the overall system and integrity of the core data has generally remained a state function.

As observed by Williamson and Feeney (2001:14), land administration systems do not address the complex and dynamic relationship between public and private rights and the restrictions and obligations in land use that arise from competing priorities inherent in pursuing sustainable development objectives. In the US there is active debate on the infringement of property rights by the state through land use planning and environmental protection (Siegan, 1997 and Jacobs, 1998). Most systems of land administration and the core cadastral and registration components have historically supported land market objectives, and as such have primarily protected the individual buyer or seller operating within that market. As the pressure on land resources intensifies, especially in expanding urban areas, the land administration systems need to accommodate an increasing number of rights, responsibilities and obligations in order to facilitate decisions that will support sustainable development.

The trend is toward the evolution of land administration as part of an integrated land information infrastructure used to address economic development, environmental management and social stability. The need to integrate key data sets has seen the introduction of the National Spatial Data Infrastructure concept as the technical vehicle needed to maximise integration of all spatial data resources (Ting and Williamson 2000).

Chapter 3 Endnotes

¹ Since writing the paper both Kyrgyzstan and Armenia are in the process of dealing with this problem. Armenia passed a law to simplify regularisation and in Kyrgyzstan they have developed methods to regularise through simple and quick administrative process.

² Available on <http://www.swisstopo.ch/fig-wg71/core.htm>

4 Land Administration System Indicators

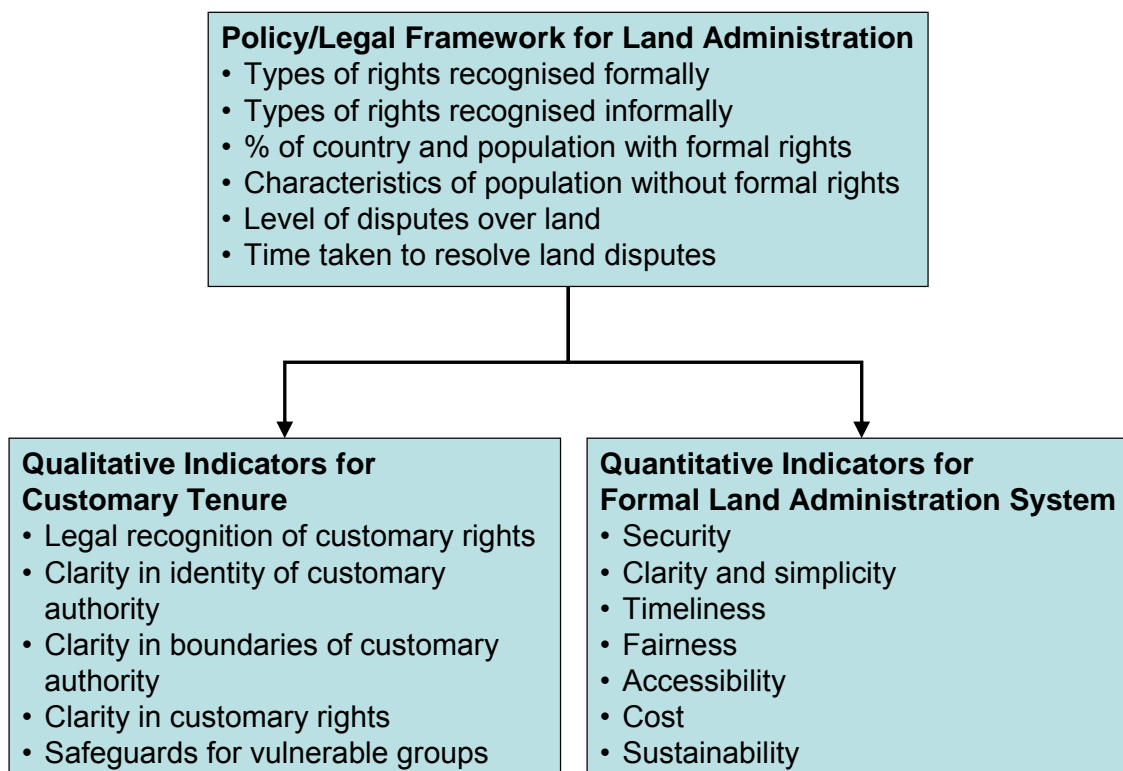
4.1 Framework to Assess Land Administration Efficiency and Effectiveness

The framework used in this study to assess the efficiency and effectiveness of the land administration system in a jurisdiction is set out in Figure 6, as follows:

- a top-level category that assesses the nature of the policy/legal framework that supports the land administration system, particularly the relative importance of formal and customary tenure systems;
- where customary systems operate, a second category to assess the qualitative effectiveness of these systems;
- a third category that is a set of quantitative indicators of the effectiveness of the formal land administration system.

This framework was developed by the authors in close collaboration with the key respondents responsible for the regional case studies. The framework assesses the efficiency of land administration systems in a holistic manner, with a set of qualitative indicators for customary systems and a set of quantitative indicators for formal land administrative systems within an overall framework that reviews the policy and legal framework.

Figure 6 Framework to Assess Land Administration Efficiency and Effectiveness.



These three categories are discussed in this chapter. Also a comparative analysis of quantitative indicators that assess the land administration environment from an end user perspective follows in section 4.5 based on the *Doing Business* database. In spite of the large investment in land administration development over recent decades the comparative study reveals remarkably little data previously available upon which to assess the effectiveness of land administration systems. The data herein has taken significant effort to gather, interpret and present in a comparative form but they provide a basis for comparing land administration systems and provide parameters to model land administration systems under varying conditions.

4.2 Policy/Legal Framework

As previously noted, land is a fundamental resource in most societies and there is great variety in the way land rights are recognised and recorded. Before delving into indicators of effectiveness it is necessary to gain an overview of the policy and legal frameworks that support the various land administration systems.

Many of the difficulties or short-comings of land administrations systems throughout the world are the inability of the civil service and/or local authorities to implement policy so there is no point strengthening the systems without addressing weaknesses in governance. In most situations this will require strong political will and it is no coincidence that significant developments in land administration have occurred following regime change, for example, the changes implemented after revolutions in Thailand in 1932 and in Bolivia in 1952. This continues today with property rights being on the agenda in Afghanistan¹ and Iraq.²

A less radical approach was gaining the attention of top policy makers and convincing them of the need for change. Peru is a good example where formalisation of property of informal settlers in urban areas was investigated and legislation was enacted with the direct support of President Alain Garcia and then implemented with mass programs under the supervision of President Fujimori (1990-2000) (Panaritis, 2005). Other countries have developed a comprehensive land policy (for example Ghana), often with extensive stakeholder consultation. However without good governance and strong political will and guidance, these policy documents can become long, unwieldy documents difficult to implement in practice. In other countries policy development was included as part of a land administration project (for example, the Land Administration Project in Indonesia³ and the Land Administration and Management Project in the Philippines⁴). There are projects that have focussed on dispute resolution as an important aspect of the land administration environment (e.g. recent or current projects in Cambodia,⁵ El Salvador⁶ and Nicaragua⁷).

Policy/Legal framework information from country case studies was gathered at a macro-level as described by the indicators in Table 2. Each of these policy and legal framework qualitative indicators from the case study jurisdictions are set out in Appendix 1, Table 25 to Table 29. A comparative summary of the jurisdiction issues according to each of the indicators are then presented in the subsequent paragraphs.

Table 2 Generic Approach to Indicators for the Policy/Legal Framework.

Indicator	Generic Issue/Approach
Types of rights formally recognised	Overview of the types and extents of formal tenure regimes and the tenure security offered by them.
Types of rights informally recognised (including customary systems)	Overview of the types and extents of informal tenure regimes and the tenure security offered by them. This may cover a range of situations, including informal settlers in both urban and rural areas and customary tenure systems.
Percentage of the country and population covered by the formal system	An estimate of the percentage of the country area and percentage of the population living on land where the rights are formally recognised. This includes land held by formal rights in the past where subsequent dealings have not been registered (avoiding where possible double counting) but excluding, where possible, areas long occupied by informal settlers.
Characteristics of population without formal rights	Overview of the major classes of people who do not benefit from the formal recognition of rights in land.
Level of disputes over land	An assessment of the level of disputes over land, including ongoing land-related court cases.
Time taken to resolve land disputes	Average time to resolve land disputes, perhaps relying on anecdotal experience.

Types of Rights Recognised Formally. In the ECA countries of Armenia, Kyrgyzstan, Latvia and Moldova land ownership rights can belong to the state, private individuals or be communal. Rights to land and property include full ownership, leases, permanent use rights, mortgages, easements and separate ownership of land and buildings. It is therefore difficult to classify the systems as either registration of deeds or title systems.

The Asian countries reviewed also distinguish between State rights and private rights. For example, in Indonesia the tenure system provides for a hierarchy of ownership/use rights, the highest level being confined to individuals, while corporate entities and foreigners are restricted to lesser forms of tenure. Thailand and the Philippines have tenure regimes based on the Torrens titling system, while Karnataka has a registration of deeds system and Indonesia has both a registration of deeds system and a private conveyancing system that records land rights.

The LAC countries reviewed generally allow private ownership of land and the registration of rights of possession, with land being categorised as State or privately owned land, or State-enterprise land (as in Trinidad & Tobago). Bolivia makes a further distinction between five different forms of private legal land tenure, ranging from small holdings to cooperative land, but vagueness in the distinction has contributed to confusion in the administration of the law. Although Trinidad & Tobago introduced a Torrens title system in 1985 following the introduction of a Registration of Deeds Act only 10 years earlier, most transactions continue to take place under the latter. In Bolivia and Peru private land ownership is allowed through an original title, but to obtain such is a very slow process, especially in Bolivia where it can take up to 12 years.

The African countries reviewed differ markedly with regard to formally recognised land rights and land ownership. In Mozambique all land in the country is officially State land, and no freehold is available. Occupants of land parcels are awarded a 50

year lease right. Conversely, in South Africa, Namibia and Ghana it is possible to distinguish between privately owned, State and communal land. South Africa has a very sophisticated and accurate deeds system, as does Namibia in parts of the country. In the communal areas in northern Namibia only customary tenure and a PTO system (Permission to Occupy), a relic from colonial rule, is in place. Ghana has both a deeds and title system with the latter only in the major cities of Accra and Kumasi, while Uganda has only a title system.

Types of Rights Recognised Informally (Including Customary Systems). In the ECA countries tenure is governed purely in accordance with formal laws and regulations, and informal tenure is not recognised. Although there are areas where people occupy land without any legal rights (e.g. Kyrgyzstan) this is not a common occurrence and informal settlement is very seldom recognised.

In Asian countries where large tracts remain legally classified as forest, there is still no clarity for the rights of those living in forest areas (Thailand, Indonesia and Karnataka), and confusion about forest boundaries. Generally, rights cannot be issued on forest land where many indigenous groups live. In the Philippines) communal land claims are recognised, as well as individual claims on communal land, while in Indonesia 'extralegal' occupants of State land may in certain cases be given the opportunity to apply for formal recognition of land rights.

In the LAC countries numerous revolutions and changes of government have had a fundamental impact on the official approach to land rights. In Bolivia, for example, those who were working the land prior to the revolution in 1952 have obtained formal land rights. In most LAC countries informal property rights were not recognised until fairly recently. Today it is possible for illegal occupants of land to obtain title in many countries although the process is often a lengthy one. In Trinidad & Tobago the situation regarding the recognition of informal rights is somewhat different to the rest of South America. A large number of people occupy 'family' land (mostly state owned land) to which many nevertheless have strong legal claims. Not many squatters live illegally on private land.

Customary tenure is a very important form of land tenure in Africa (e.g. in Ghana close to 80 percent of the country is under customary tenurial arrangements) and legal recognition of customary rights is increasing. Customary land ownership is legally recognised in Ghana, in certain parts of South Africa, Namibia, Uganda, and in Mozambique, where such rights were incorporated into the 1997 Land Law.

Percentage of Country and Population With Formal Rights. In Armenia roughly a sixth of urban land is privately owned while in Latvia 829,205 properties and land uses are registered in the Cadastre, of which just over 70 percent have ownership rights registered. In Moldova urban land comprises roughly 316,000 ha, of which about 30,000 ha (roughly 10 percent) is in private ownership.

With all the confusion regarding forest land in Asia, land rights are generally only issued on and recognised for non-forest land. In Indonesia registered parcels cover about 5 percent (about 17 million registered parcels) of the land but a significant proportion of the population. In the Philippines, where more than half the country is legally forest, there are about 10 million registered titles, some of which are duplicated and overlapping. About 6 percent of the country is unclassified, including parts of Metro Manila, where rights remain uncertain.

It is estimated that about 80-90 percent of South Africa is covered by the formal system, while in Mozambique, Ghana and Uganda respectively, about 10 percent, 20 percent and 38 percent of the country can be classified as areas of non-customary tenure. They are therefore assumed to represent the formal system, at least in part. In South Africa up to 75 percent of the population is estimated to be covered by the formal system and around 32 percent for Uganda.

Characteristics of Population Without Formal Rights. In countries such as Armenia, Kyrgyzstan and Latvia where there are a limited number of squatters, illegal occupation is sometimes recognised. If someone illegally occupies land openly, continuously and in good faith, they may obtain ownership rights after 15 years in Kyrgyzstan, and 10 years in Latvia. None of the ECA countries place any limitations on the rights of women to own land, and their rights are protected by law.

Informal settlement is a problem in Asia, particularly in areas of rapid urbanisation. It is generally considered illegal but as a result of socio-political issues it is rare for informal settlers to be evicted. In Karnataka it is possible for the State Assembly (on recommendation of the Cabinet) to approve certain land rights being awarded to illegal occupants of land. In the Asian countries reviewed there are no specific limits on women's right to own land but there is evidence to suggest their rights do not always translate into effective control over land in practice (e.g. Karnataka).

In the LAC countries, peasants and indigenous people are in a weak position when it comes to land rights and access to land. Some government interventions have proved disastrous. In Bolivia, logging rights on land inhabited by native groups were awarded to outsiders, and in El Salvador intervention resulted in the creation of a landless class, effectively forced to become labourers on large plantation properties. By introducing a formalisation program for those living in informal communities largely on State owned land, the Peruvian government has provided assistance to informal settlers and indigenous groups.

Although the lack of legal recognition for occupying land is still a problem in most African countries (particularly urban areas), considerable progress during the 1990's was made. Following changes introduced after 1994 South Africa now recognises informal settlement rights and, under certain circumstances, occupancy rights. Namibia does not recognise occupancy rights in urban areas and the State retains the right to evict those living informally on State land in urban areas. Similarly, Ghana does not generally recognise the rights of informal settlers. Although there are no legal restrictions on women who own or wish to own land, there are various factors that are believed to impact on women's right to own land in customary areas.

Level of Disputes Over Land. The level of land-related disputes is relatively low in Thailand and low to medium in the Philippines, but it is high in both Karnataka and Indonesia and a substantial number of cases end up in court (in the latter about 60 percent of court cases are land-related).

Conflict over land is considered to be low to medium in LAC countries, with the greatest problem being conflict over the geographic extent of registered rights. For example, the consolidated map of land ownership in Bolivia suggests that 40 percent of the total land area is subject to overlapping claims.

Although the level of land-related disputes is believed to be relatively low in South Africa and Namibia, the opposite appears to hold true for Ghana, Mozambique and Uganda. In Mozambique overlapping requests and land use concessions for what is

considered some of the best land in the country has contributed to conflict between communities. In Uganda some 48 percent of plots are reportedly being disputed at present, with roughly half the disputes related to boundaries, and a further 35 percent related to tenancy issues.

Time Taken to Resolve Land Disputes. Land disputes in ECA countries are normally dealt with within a week to three months. In Kyrgyzstan disputes are usually resolved within hours at the local registration offices. In the Asian countries reviewed, the court systems are congested, causing long delays and high costs. In Bolivia land disputes in traditional areas of the country are less frequent than in the urban areas, and are resolved quickly whereas in Trinidad & Tobago legal disputes may take years to resolve, partly as the result of congestion in the courts. In the African countries reviewed there appear to be various mechanisms in place to enhance speedy dispute resolution, with some countries having established special bodies for this purpose. They are not always effective though, and in some countries dispute resolution still takes years. In Uganda disputes involving the government take about five years to resolve. Given the importance and scope of customary land tenure, traditional authorities and tribunals play an important part in the process of dispute resolution.

4.3 Qualitative Indicators for Customary Tenure

Policy and legal framework indicators of a formal land administration system are easier to describe and deliver where concise results are required for comparison. Customary tenure systems on the other hand follow a less conventional model and are more qualitative in nature. Approaches to the formal recognition of customary rights is one aspect of customary systems that has a common theme for comparison.

There is great variety in customary tenure arrangements within a given country so they will not be reviewed in detail. However a number of factors impinge on the tenurial security provided by customary systems and this report attempts to document qualitative indicators on these factors. Table 3 below, sets out the indicators for the effectiveness of the systems and the approach adopted in assessing the indicators.

The customary systems in the country case studies were assessed and tabulated in Appendix 2, Table 30 to Table 34. A comparative summary of issues of each customary system indicators is set out in the subsequent paragraphs. There is a notable absence of ECA countries in the following discussion as there were no issues reviewed in this study with respect to customary land tenure or inheritance/use traditions that complicate tenurial arrangements.

Table 3 Approach to Qualitative Indicators for Customary Systems.

Indicator	Approach to Assessing Indicator
Formal recognition of customary rights	Assessing the legal recognition of customary tenure including the checks and balances in place to ensure community rights are not encroached upon by outsiders.
Clarity in the general community regarding the identity of customary authority	The cohesiveness of traditional communities depends on the authority of traditional leaders. Without clear leadership, or if leadership is disputed, customary tenure systems usually become less secure.
Clarity in the general community of boundaries of customary authority	Uncertainty over boundaries of community land decreases tenure security.
Clarity in the general community of customary rights	A number of factors confuse the perception of what customary rights exist, including inconsistencies between civil and customary law, internal migration into community land, etc. The level of disputes and the mechanisms for dispute resolution also impact on the clarity of rights.
Safeguards for vulnerable groups	Some customary systems provide inadequate safeguards for vulnerable groups such as widows and the young.

Legal (formal) recognition of customary rights. Customary rights are recognised in the Philippines and Indonesia, with the 1987 Constitution of the Philippines recognising the land rights of indigenous cultural communities and Indonesia's Basic Agrarian law of 1960 stipulating that the national land law shall be based on 'Adat' (customary) law and incorporate customary concepts, principles, systems and institutions. An Indigenous Peoples Rights Act was passed in the Philippines. Notwithstanding the objective of improving the position of groups living under customary tenure, just the opposite happened in Karnataka; protection for people from the Scheduled Castes and Tribes has had limited effect and misguided attempts at assistance have resulted in many marginal and small farmers becoming landless labourers. The issues pertaining to customary rights in forest areas remain unresolved in many Asian countries, including Thailand. Although there is some local recognition of the rights of tribes that live in the forests and in mountainous areas, there is no official recognition of the hill-tribes under the Thai Land Code.

In LAC countries such as Peru and El Salvador, since the late 1980s there has been increasing recognition of the rights of indigenous communities. In 1994 Bolivia, where some 67 percent of the population is of indigenous origin, amended its Constitution to recognise traditional indigenous territories and the right of indigenous people to administer their own land. Although Trinidad & Tobago does not have customary tenure, it has 'family land' that is similar in some respects. In many cases family land was titled a long time ago and handed down from generation to generation without formal documentation. 'Family land' differs from indigenous land in Latin America in that structures to deal with functions such as land allocation and conflict resolution are absent.

Customary tenure is the dominant form of land tenure in most African countries. At present South Africa and Namibia each have a range of tenure types, as do most of the other African countries. Customary owners may enter into a full range of land

transactions (both commercial and family transactions) in countries such as Uganda. In Ghana traditional norms and practices are recognised as the legal basis for land rights and relationships among land users, while in Mozambique customary land tenure was given formal recognition in the 1997 Land Law.

Clarity in identity of customary authority. In a country such as Indonesia where there are more than 200 different ethnic groups, the identity of customary authorities in traditional areas is clearer than urban areas where people from different ethnic groups live together. In the Philippines there were numerous community level disputes, with some contending that ethnic identities and ancestral domains are being 'imagined'.

Although there was greater recognition of customary rights during recent years, and although traditional authorities continue to play a formal and informal role in land administration, political and administration structures have diminished the identity and power of such authorities in Latin American countries such as Peru, Bolivia and El Salvador, and African countries such as Namibia and Mozambique. During the socialist period in Mozambique (1975-1990) the national government vigorously pursued a policy of reducing and even abolishing the power of indigenous leaders and administrative structures, yet they remain in place to this day, although their influence varies greatly throughout the country. In countries such as Ghana there were problems with traditional leaders pursuing their own interests through acting as the owners of customary land, often taking individual decisions such as selling land and then retaining the benefits.

Clarity in the general community of boundaries of customary authority. In Indonesia customary land rights are recognised by law. One of the criteria that the government uses is that boundaries must be well defined and understood, which is not always the case. In the Philippines boundary uncertainty and land grabbing seem to have become common. Uncertainty and confusion over the boundaries of customary authorities is also something that Latin American countries such as Bolivia and Peru are grappling with.

The high level of land-related conflict in countries such as Uganda is evidence that the boundaries of customary authority are not always clear. In Ghana, where both customary and statutory law apply in urban areas there is much confusion about who has the right and authority to approve the alienation of particular parcels of land. In South Africa the duplication of land allocation functions has created some conflict between traditional chiefs, municipal councillors, the State, and Provincial Departments of Agriculture, for example.

Clarity in the general community of customary rights. Given the high level of land-related conflict in Asia, customary rights are not always clear and, as noted in earlier sections, there is much uncertainty regarding rights, in particular rights in forests. In Thailand limited recognition (a 5 year renewable usufruct licence) is given to agricultural users in forest areas.

In Latin American countries such as Bolivia land tenure security and the recognition of property rights for indigenous people and community organisation remain problematic issues, although some progress was made in the last decade.

In Africa there is also considerable confusion over boundaries, and rights are not clear in countries such as Uganda and Mozambique (where overlapping rights have created problems). There are some issues regarding the differences between legal

rights and what happens in practice which also contribute to confusion and conflict (as is the case in Namibia).

Safeguards for vulnerable groups. In Asia much has been done to safeguard vulnerable groups, although there is still considerable scope for further assistance. In the Philippines the 1987 Comprehensive Agrarian Reform Law introduced guidelines for the redistribution of all public and private agricultural lands suitable for agriculture for farmers and farm workers who are landless. In Indonesia a 1997 amendment to the land law provided for right to title with proof of 20 years of occupancy 'in good faith' and community recognition. In Thailand, landless squatters may acquire rights over private land after a period of 10 years provided they occupied the land 'peacefully' and 'openly' during this time.

Peru recognised the rights of informal settlers in urban areas in 1988 when it introduced new concepts that provided for the registration of possession rights, set-up a new registry system with simple procedures to register possession rights and ownership. In Bolivia a comprehensive agrarian land reform plan distributed land to roughly a million peasants, unfortunately without any additional assistance in the form of technical assistance or credit, which greatly diluted the potential for positive economic impact.

In African countries such as South Africa and Namibia much has been done to safeguard the position of vulnerable groups since recent major political changes took place. Although South Africa has been upgrading informal settlements, many continue to live in shacks without formal land rights, albeit protected to some extent by anti-eviction laws. It is possible for them to obtain adverse possession rights after 5 years. Specific safeguards aimed at assisting women and the very poor are in the process of being incorporated into the South African system. In Namibia the rights of women are protected in the Constitution which has affected the practice of evicting widows from family land in the communal areas in the north of the country. Theoretically, the Ugandan land law protects tenants, communal land holding women, and minors, but practically, budgetary restraints mean this law has not been fully implemented.

4.4 Quantitative Indicators for Formal Land Administration Systems

4.4.1 Indicators and Criteria for Success

Considerable effort was devoted in recent years to preparing schedules of quantitative indicators for the efficiency and effectiveness of formal land administration systems, with perhaps more effort being devoted to the frameworks than to the collation of reliable data to apply the framework. Most of this effort was driven by the International Federation of Surveyors (FIG). In 1995 the FIG,⁸ in preparing its statement on the cadastre, listed criteria that could be adapted and used in measuring the success of a formal land administration system. This information is set out in Table 4.

Table 4 Criteria for Successful Administration of Legal Rights in Property.

No.	Criteria	Description of Criteria
1	Security.	The system should be secure such that a land market can operate effectively and efficiently. The geographic extent of the jurisdiction of the system and the characteristics of the rights registered should be clear to all players. Financial institutions should be willing to mortgage land quickly and there should be certainty of ownership and parcel identification.
2	Clarity and Simplicity.	The system should be clear and simple to understand and to use by administrators and the general public. Complex forms, procedures, and regulations will slow the system down and discourage its use. Simplicity is important to ensure that costs are minimised, access is fair, and the system is maintained.
3	Timeliness.	The system should provide up-to-date information in a timely fashion.
4	Fairness.	The system should be fair in development and operation and be perceived as being so. The system should be seen as objective, separated from political processes, such as land reforms, even though it may be part of a land reform program.
5	Accessibility.	Within the constraints of cultural sensitivities, legal and privacy issues, the system should be capable of providing efficient and effective access to all users. This includes providing equitable access to the system through, for example, decentralised offices, simple procedures, and reasonable fees. In some jurisdictions the public does not need access to registries, but access to notaries and lawyers, etc.
6	Cost.	The system should be low cost or operated in such a way that costs can be recovered fairly and without unduly burdening users. Development costs, such as establishing offices and the adjudication and initial survey, should not have to be absorbed entirely by the immediate clients of the system.
7	Sustainability.	Mechanisms must exist to ensure the system is maintained over time. Sustainability implies the organisational and management arrangements, procedures and technologies, and the required educational and professional levels are appropriate for the particular jurisdiction. Sustainability implies that the formal system is understood by and affordable to the general population.

The following table of indicators of the effectiveness and efficiency of land administration systems was compiled.

Table 5 Indicators of the effectiveness and efficiency of land administration systems.

Indicator
Percentage of total parcels registered
Percentage of transfers that are registered
Annual registered transactions as a percentage of registered parcels
Annual registered transfers as a percentage of registered parcels
Annual registered mortgages as a percentage of registered parcels
Ratio of annual registry running costs/registered parcels
Ratio of annual registry running costs (including cadastre if separate)/registered parcels
Registration staff days/registration
Total staff days/registration
Time to produce certified copy of title
Time to complete registration of transfer (including dealings with private sector suppliers)
Total ongoing land related court cases as a percentage of total registered parcels
Average time to resolve ongoing court cases
Number of registries per 1 million population
Number of registries per 100,000 square kilometres in country land area.
Average working days to pay for average transaction cost
Transaction cost as a percentage of property value
Unit cost of systematic title
Level of government where registration is undertaken
Ratio of revenue/expenditure

The indicators listed above were selected on the basis that the data to support the determination of the indicator is available in the various country case studies prepared for the Comparative Study.⁹ These indicators have also been validated against the benchmarks used in well-developed registries.

In Table 6 the indicators are mapped back to the criteria for successful land administration systems noting that each indicator may be mapped against a number of criteria. The generic issues and response to these issues in determining each of the indicators is set out in Table 7.

Table 6 Criteria and Relevant Indicators.

#	Criteria	Indicator
1	Security.	Percentage of total parcels registered Percentage of transfers that are registered Annual registered transactions as a percentage of registered parcels Annual registered transfers as a percentage of registered parcels Annual registered mortgages as a percentage of registered parcels
2	Clarity and Simplicity.	Annual registered transactions as a percentage of registered parcels Annual registered transfers as a percentage of registered parcels Ratio of annual registry running costs/registered parcels Ratio of annual registry running costs (including cadastre if separate)/registered parcels Total staff days/registration Registration staff days /registration Time to produce certified copy of title Time to complete registration of transfer
3	Timeliness.	Total staff days/registration Registration staff days/registration Time to produce certified copy of title Time to complete registration of transfer
4	Fairness.	Total of ongoing land related court cases as a percentage of total registered parcels Average time to resolve ongoing court cases
5	Accessibility.	Percentage of total parcels registered Annual registered transactions as a percentage of registered parcels Annual registered transfers as a percentage of registered parcels Number of registries per 1 million population Number of registries per 100,000 square kilometres in country land area Time to produce certified copy of title Time to complete registration of transfer Average working days to pay for average transaction cost Transaction cost as a percentage of property value Unit cost of systematic title Level of government where registration is undertaken
6	Cost.	Ratio of revenue/expenditure Ratio of annual registry running costs/registered parcel Ratio of annual registry running costs (including cadastre if separate)/registered parcels Average working days to pay for average transaction cost Transaction cost as a percentage of property value Unit cost of systematic title
7	Sustainability	Percentage of total parcels registered Percentage of transfers that are registered Annual registered transactions as a percentage of registered parcels Annual registered transfers as a percentage of registered parcels Ratio of revenue/expenditure Ratio of annual registry running costs/registered parcels Ratio of annual registry running costs (including cadastre if separate)/registered parcels

Table 7 Generic Issues and Approach to Determining Indicators.

Indicator	Generic Issue/Approach
Percentage of total parcels registered	<p>The major issue is the uncertainty in determining the total number of parcels. The objective is to assess what percentage of the total number of parcels is included in the formal registration system. Parcels are not included in the formal registration system for a range of reasons, including the inability to support registration and the lack of clarity in policy or entitlement to registration. An estimate of the total number of parcels is made, qualified as appropriate.</p> <p>In some jurisdictions there are different types of registration or types of tenure. Decide how many of these types are to be included in the number of registered parcels and note the basis/implications of this decision.</p>
Percentage of transfers of rights that are registered	<p>This is a valuable indicator of public acceptance and sustainability of the system, but will be very difficult to measure. In most jurisdictions there should be information on the number of registered transfers, but activity in the informal sector is often hard to quantify. This information may be available through data gathered in sample surveys or pilot studies.</p>
Annual registered transactions as a percentage of registered parcels ¹⁰	<p>This indicator of land market activity should be readily available. The registered transactions relate to the registration of subsequent dealings in registered property.</p>
Annual registered transfers as a percentage of registered parcels	<p>As above, but relating only to transfers.</p>
Annual registered mortgages as a percentage of registered parcels	<p>This indicator measures how effectively the formal credit market is operating, but only relates to the registration of new mortgages without adjustments for discharged mortgages.</p>
Ratio of annual registry running costs/registered parcels	<p>The total cost of providing the registration function is to be included. There will be variations in the costs are included, and where these variations will impact on the comparative analysis the variations are noted.</p>
Ratio of annual registry running costs (including cadastre if separate)/registered parcels	<p>This ratio is to be used where there is a separate cadastral office or function and where this cost has not been included in the running costs of the registration system. Variations are noted.</p>
Registration staff days/registration	<p>This indicator is to be calculated on the basis of multiplying the total number of staff supporting the registration function by the average number of working days in the year (taken generically to be 227 days¹¹), and divided by the total number of registrations undertaken during the year.</p>
Total staff days/registration	<p>This indicator is the same as the above, but using the total number of staff, including any staff in head office or in support, such as the cadastre. Where there are major variations – such as the deployment of a substantial number of staff on systematic registration activity – this is noted.</p>
Time to produce certified copy of title	<p>This indicator is straight forward.</p>
Time to complete registration of transfer	<p>This is also straight forward. This total registration time includes any preliminary dealings with private sector service suppliers such as notaries, lawyers or surveyors.</p>
Total ongoing land related court cases as a percentage of total registered parcels	<p>In many jurisdictions it is difficult to quantify the total number of land-related court cases. An estimate is made, qualified as appropriate.</p>

Indicator	Generic Issue/Approach
Average time to resolve ongoing court cases	This estimate is also difficult to extract from court records and anecdotal evidence is used.
Number of registries per 1 million population	A registry is defined as a physical office where the public can lodge and effect the registration of a dealing in property.
Number of registries per 100,000 square kilometres in country land area	As above.
Average working days to pay for average transaction cost	<p>The estimate of the average transaction cost includes, where possible, all transaction costs, including formal fees and taxes, where applicable the fees of service providers such as notaries and surveyors, and an estimate of informal fees and charges.</p> <p>Where fees and charges are ad valorem, some assumption will have to be made on the average price of the property being traded. This assumption is documented.</p> <p>Assumptions will also need to be made on the average salary. These assumptions are also documented.</p>
Transaction cost as a percentage of value	The transaction cost is the same as before. In many jurisdictions property values are under-declared. Where this is thought to occur it is to be noted.
Unit cost of systematic title	<p>There are variations on what costs are included in the total cost of systematic registration. Where the systematic registration function is contracted out the costs should be clear. Where the systematic registration cost is undertaken fully or partially by civil servants, the civil servant salary costs are often not included in the total project costs. Where possible an estimate of civil servant salary costs is made. The cost of technical assistance to support systematic registration is also included in the estimated costs. Any factors that may impact on the comparative analysis are noted.</p> <p>In counting 'titles', it is suggested that it only be called a title where the land holder has been issued with the title, the title has been registered in a registry and the land holder can register subsequent transactions in the registry. Where this is not the case, factors that impact on the comparative analysis are noted.</p>
Level of government where registration is undertaken	Central, provincial, district or other as appropriate.
Ratio of revenue/expenditure	The revenue/expenditure, where possible includes the full registration function, including the cadastral function. If a separate cadastral function operates then two ratios are provided, one for the registration function alone, and one for the total registration/cadastral function. Any factors that impact on the comparative analysis are noted.

4.4.2 Comparative Study Results

Some initial parameters are required to determine the indicators and these are listed in Table 35 and Table 36 (Appendix 3) for the case study countries. As previously discussed, much of the data was compiled in 2001 and in ECA there were already significant changes by 2002 and the systems have evolved. Parameters and other data from the case studies is then used to prepare tables of indicators set out in Appendix 4, Table 38 and Table 39.

For ease of comparison Table 37 (Appendix 3) sets out the parameters, and Table 40 (Appendix 4) sets out the indicators for the 8 registries in Australia, a selected number of OECD jurisdictions (England/Wales, Scotland and New Zealand) and for more developed countries/jurisdictions in Asia (Singapore and Hong Kong).

Before proceeding, a caveat should be made on the data set out in the following tables because, as noted earlier, there is considerable variation in land administration systems throughout the world and almost as much variation in statistics collected by the agencies administering these systems. An attempt was made to adjust for these variations or at least record them in footnotes. The numbers gathered for the case studies were used where available. Information for registries in Australia, selected OECD countries and Singapore and Hong Kong are compiled based on information collected by the annual Registrars Conference in Australia, with some subsidiary information gathered as necessary.

There are also many gaps and anomalies in the numerical data gathered in the country studies to determine the quantitative indicators for the efficiency and effectiveness of formal land administration systems. This particularly applies to Africa, for which little numerical data are available. Nonetheless, the indicators do provide useful information for modelling the resources and funding necessary to support a formal land administration system under a range of different scenarios. The results of the analysis for the various indicators are summarised below.

The following paragraphs provide a comparative analysis of the indicators for the country case studies as well as additional Australian, selected OECD countries and Singapore and Hong Kong.

Percentage of Total Parcels Registered (Title and/or Deeds Registration). Data are not available for ECA or Africa. In the developing systems estimates for the percentage of parcels registered range from 23 percent in Indonesia to 67 percent in Peru. In the selected jurisdictions with well-developed land registration systems it is estimated that 100 percent of parcels are registered.

Percentage of Transfers that are Registered. Data are not available for most developing systems. In the Philippines, based on a very small rural sample, it is estimated that only 15 percent of transfers are registered. In the registries in Australia it is estimated that all transfers are registered.

Annual Registered Transactions as a Percentage of Registered Parcels. There is a wide range in the value of registered transactions expressed as a percentage of registered parcels – ranging from 0.8 percent in the evolving system in Armenia, 3-4 percent in Kyrgyzstan, Moldova and Karnataka (India), 5-8 percent in Latvia, Indonesia and Trinidad & Tobago, 11 percent in the Philippines, 13.8 percent in Peru, 17.8 percent in El Salvador and 21.2 percent in Thailand. The ratio in the Australian registries range from 24.4 percent in South Australia to 41.8 percent in

Queensland and the other developed systems are in the range of 19 percent to 24 percent.

Annual Registered Transfers as a Percentage of Registered Parcels. Data on the number of registered transfers are not available in many jurisdictions. The ratio of registered transfers to registered parcels is 3.7 percent for the Philippines, 3.9 percent for Peru, and 13.1 percent for Thailand. The ratio in the Australia registries ranges from 7.1 percent in Tasmania to 10.2 percent Western Australia. The ratio in Hong Kong is 9.2 percent, England and Wales is 12.1 percent and Scotland is 6.4 percent. Thailand has the highest ratio indicating substantial market activity despite having a 3.3 percent fee on transfers of property held for less than 5 years and despite the decreased market activity resulting from the 1997 Asian crisis.

Annual Registered Mortgages as a Percentage of Registered Parcels. Little data on registered mortgages are available in the developing systems. The ratio of annual registered mortgages to registered parcels is 0.7 percent in Moldova, 2.1 percent in Peru and 4.5 percent in Latvia. In Australia the ratio of annual registered mortgages to registered parcels ranges from 6.0 percent in Tasmania to 11.1 percent in Western Australia. The ratio is 6.0 percent in Hong Kong, 7.7 percent in England and Wales and 7.1 percent in Scotland.

Ratio of Annual Registry Running Costs/Registered Parcels. The average annual cost of operating the registry per registered parcel is US\$0.21 in Karnataka, US\$0.79 in Indonesia, US\$1.17 in the Philippines, US\$2.70 in Trinidad & Tobago and US\$27.47 in El Salvador. In the developed registries the cost per registered parcel is US\$9.83 in the Northern Territory, US\$11.15 in New Zealand, US\$15.96 in Hong Kong, US\$25.64 in Scotland and US\$26.23 in England and Wales. These jurisdictions all record separate costs and revenue for the registry offices.

Ratio of Annual Registry Running Costs (Including Cadastre if Separate)/Registered Parcels. In the jurisdictions where the costs and revenue for a combined registry and cadastral office is recorded, the average annual running cost per registered parcel is US\$2.10 in Thailand, US\$2.46 in Moldova, US\$7 in Latvia, US\$17 in Kyrgyzstan and US\$46.92 in Armenia. In the Australian registries the average annual running cost per registered parcel is US\$19.76 in New South Wales, US\$20.50 in South Australia, US\$22.72 in Victoria, US\$28.55 in Queensland, US\$35.14 in Western Australia and US\$54.73 in Tasmania.

Registration Staff Days/Registration. The number of registration staff days per registration is estimated at 0.5 in Thailand, 0.56 in Karnataka, 0.6 in Latvia, 0.76 in Peru, 0.8 in Kyrgyzstan, 0.9 in Indonesia, 2.5 in Moldova and 10 in Armenia. This means that an average registration officer in Thailand can complete two registrations in a day while it takes an average registration officer in Armenia 10 days to complete a single registration. The high number of staff days in Moldova reflects the number of staff involved with systematic registration and some level of over-staffing in the registries. In the developed registries, the number of registration staff days per registration is 0.069 in Queensland, 0.076 in the Australian Capital Territory, 0.091 in Victoria, 0.16 in Tasmania, 0.18 in New Zealand and the Northern Territory, 0.21 in Hong Kong, 0.22 in Western Australia and 0.35 in South Australia.

Total Staff Days/Registration. The total number of staff days per registration is 0.5 in the Philippines, 0.54 in Peru, 0.66 in Thailand, 1.2 in El Salvador and 1.8 in Trinidad & Tobago. In the developed registries the number of total staff days per

registration is 0.05 in Singapore, 0.25 in New Zealand, 0.59 in England and Wales, 0.92 in Scotland and 0.94 in New South Wales.

Time to Produce Certified Copy of Title. The average time taken to produce a certified copy of a title is 30 minutes in Thailand and Peru, 1 hour in Latvia, 1 day in Indonesia and Karnataka, 2 days in the Philippines, 2-7 days in Kyrgyzstan, 4 days in Armenia, 6 days in Trinidad & Tobago, 6-10 days in South Africa and 8 days in El Salvador. The average time to produce a certified copy of a title in the developed registries is instantaneous in Victoria, Queensland and the Northern Territory, 2 minutes in Tasmania, less than 5 minutes in New Zealand, 5 minutes to 2 hours in South Australia, 9 minutes in New South Wales, 10-45 minutes in Western Australia, less than 15 minutes in the Australian Capital Territory, 30 minutes in Singapore and 1 day in England and Wales.

Time to Complete Registration of Transfer. The average time to complete the registration of transfer is 2.5 hours in Thailand, 3 days in Latvia, 3-4 days in Moldova, 4-7 days in Peru, 8-30 days in El Salvador, 10 days in Kyrgyzstan, 15 days in Armenia and 90 days in Trinidad & Tobago. In the developed registries the average time taken to complete registration is immediate in New South Wales, 24 hours in the Northern Territory, Australian Capital Territory and Tasmania, 2-5 days in Queensland, 5 days in Victoria, 5.2 days in Western Australia, 7 days in South Australia and Singapore, 15 days in New Zealand, 20 days in Hong Kong, 25 days in England and Wales and 27 days in Scotland. The average time taken in Thailand is world class and is due to a number of factors, including a very efficient registration and land records management system and the fact that there is no private conveyancy industry. All contracts for transfer are prepared in the land office as part of the process of registering the transfer.

Total Ongoing Land-Related Court Cases as a Percentage of Total Registered Parcels. There is limited data available on the number of land-related court cases. The number of land-related court cases per registered parcels is 0.15 percent in Thailand and 15 percent in the Philippines, with the differences reflecting a range of issues, including the relative quality of the land administration systems and the litigiousness of the two societies. Information on court cases is not available for the developed registries.

Average Time to Resolve Ongoing Court Cases. The average time taken to resolve land-related court cases is minimal in Kyrgyzstan and Latvia, 3 months in Armenia, 3 years in Thailand, 7 years in Karnataka and a 'long' time in Moldova.

Number of Registries per 1 million Population. The number of registries per million head of population is 19.2 in Armenia, 11.1 in Latvia and Kyrgyzstan, 6.6 in Moldova, 5.89 in Thailand, 3.77 in Karnataka, 2.3 in Peru (deeds), 1.96 in the Philippines, 1.48 in Indonesia and 0.8 in Peru (titles). To some extent these differences reflect differences in population densities and geography, however it is clear that ECA has the highest number of registries per million head of population. For the developed registries the number of registries per million head of population is 3.78 for New Zealand, 3.09 for the Australian Capital Territory, 2.51 for the Northern Territory, 2.11 for Tasmania, 1.66 for Queensland, 1.58 for Western Australia, 1.32 for Hong Kong, 0.66 for South Australia, 0.51 for England and Wales, 0.39 for Scotland, 0.37 for Singapore, 0.21 for Victoria and 0.15 for New South Wales. The differences here also relate very much to population densities and geography,

particularly for the Australian registries which, other than Queensland, Western Australia and the Northern Territory, are centralised.

Number of Registries per 100,000 square kilometres in Country Land Area. The number of registries per 100,000 square kilometres is 103.76 in Karnataka, 70.94 in Thailand, 54 in the Philippines, 15.79 in Indonesia, 4.6 in Peru (deeds), 1.6 in Moldova and Peru (titles), 0.9 in Armenia, 0.4 in Latvia, and 0.25 in Kyrgyzstan. In the developed registries the number of registries per 100,000 square kilometres is 1,515 for Singapore, 1,315 for Hong Kong, 41 for the Australian Capital Territory, 16.54 for England and Wales, 4.45 for New Zealand, 2.59 for Scotland and 0.1-0.5 for South Australia, Western Australia, New South Wales, Tasmania, Northern Territory, Queensland and Victoria. The small territorial extent of Singapore, Hong Kong and the Australian Capital Territory strongly influences the ratios for these jurisdictions. The low values for the other well-developed registries reflect the centralised nature of the systems.

Average Working Days to Pay for Average Transfer Cost. Substantial assumptions were required to arrive at an estimate for the average number of working days required to pay for an average transfer. The estimate for the average number of days required to pay for the average transfer is 12 in Thailand, 24 in the Philippines, 31 in Latvia, 66 in Moldova, 77 in Armenia and 228 in Kyrgyzstan. In the Australian registries the estimate for the average number of working days required to pay for an average transfer is 28.0 in New South Wales, 29.9 in Western Australia, 32.3 in Queensland, 32.9 in Tasmania, 39.1 in Victoria and 40.5 in South Australia.

Transfer Cost as a Percentage of Property Value. The estimate for the average cost of an average transfer as a percentage of property value is 0.5 percent in Indonesia, 0.4-4 percent in Latvia, 1.5 percent in Armenia and Moldova, 4.5 percent in Thailand, 5 percent in Kyrgyzstan, 8.2 percent in the Philippines and 13 percent in Karnataka. The cost of an average transfer as a percentage of property value is 3.24 percent in New South Wales, 3.25 percent in Tasmania, 3.28 percent in Western Australia, 3.31 percent in Queensland, 4.15 percent in Victoria and 4.19 percent in South Australia. Largely due to the relatively high transfer costs, property values are under-declared in Thailand, the Philippines and Karnataka and all three jurisdictions have great uncertainty in the assessment of property value.

Unit Cost of Systematic Title (US\$). Systematic registration applies only to the developing systems as most property in the well-developed systems is registered and there is no need for a systematic registration program. The unit cost of a title or first registration is US\$9.90 in Moldova, US\$12.66 in Peru (urban), US\$15.76 in Kyrgyzstan, US\$18.02 in Armenia, US\$24.40 in Indonesia, US\$32.80 in Thailand, US\$46.68 in Peru (rural), US\$1,064 in Trinidad & Tobago and US\$1,354 in Latvia (sporadic). There is considerable variation in the costs included and to some extent in what constitutes a 'title'. The higher rates in Trinidad & Tobago and Latvia are due largely to the use of sporadic processes and are exceptions rather than the rule. In Latvia's case the process involves the restitution of rights existing prior to communism.

Level of Government Where Registration is Undertaken. Most of the developing registries are decentralised, usually to an administrative district (Latvia, Indonesia, Karnataka, the Philippines, Thailand), or to local authorities (Armenia, Kyrgyzstan and Moldova). Single registries operate in South Australia, New South Wales, Victoria, the Australian Capital Territory, Tasmania and Singapore. Branch registries

operate in Queensland, Western Australia, the Northern Territory, Hong Kong, England and Wales, and Scotland.

Ratio of Revenue/Expenditure. The ratio of annual registration revenue to the annual cost of running the registries ranges from 20.7 in Karnataka (Registration only), 9.8 in Karnataka (Registration plus Survey Department), 5.08 in Thailand, 2.37 in the Philippines, 1.6 in Armenia and Latvia and 0.28 in Kyrgyzstan. The ratio of annual revenue to expenditure for the developed registries ranges from 2.67 for the Northern Territory, 2.11 for South Australia, 1.30 for Hong Kong, 1.15 for Victoria, 1.135 for Scotland, 1.023 for England and Wales, 1.00 for Queensland, 0.99 for New South Wales, 0.95 for New Zealand and 0.84 for Western Australia. Karnataka, which is a very manual registration of deeds system, demonstrates that land administration can generate a significant return on investment for the government, as does Thailand and to a lesser degree the Philippines. The ECA systems are evolving, generally under a policy of cost-recovery. The fee structures for the developed registries have generally been prepared under government policies of restricting fees for services such that the cost of providing the service is recovered.

4.4.3 Summary of 'Mean' Indicators

Based on results of the study, a 'mean' value was extracted and this has been used to compare other indicators of the countries studied (see Table 8). The 'mean' value is not an average based on empirical data, it is a perception of a 'fair level' based on an overview of the data and many years experience.

It is not suggested that all systems line up with the 'mean' values because there are valid reasons for variations from them and in some jurisdictions and situations they may not be appropriate. This particularly applies to the 'mean' values expressed in US\$, a unit with significant variation in the various jurisdictions in terms of purchasing power or average salary equivalents.

An important caveat is required. The targets, methods and 'means' will vary in a given situation depending on the objectives of the intervention. Possible objectives for intervention might be to rapidly achieve equitable land distribution *or* to increase land market activity *or* to deal with squatters *or* to clear the courts of land disputes *or* to establish a system for property taxes, etc. Factors such as the survey approach, targets in terms of cost or speed, and end result will vary accordingly. There may also be constraints on what is legally and publicly acceptable. Historically some jurisdictions will not accept administratively based systems (for example some countries with civil law tradition requiring notaries and registration at a court) *or* will only accept local administrators (such as the local village headman) *or* will only accept systems guaranteed by the central government. Then there is the whole realm of what is acceptable from a survey and property definition perspective. The results of this study need to be seen as a first step in undertaking a rigorous analysis of interventions to strengthen land administration systems.

Table 8 Comparison of 'Mean' Indicators for Formal Land Administration Systems

Legend

Country indicator substantially better than the 'mean'	
Country indicator near the 'mean'	
Country indicator substantially worse than the 'mean'	
Blank indicates that information was not available to calculate indicator	

Indicator	'Mean'	Armenia	Kyrgyzstan	Latvia	Moldova	Indonesia	Karnataka (India)	Philippines	Thailand	Bolivia	El Salvador	Peru	Trinidad & Tobago	Ghana	Mozambique	Namibia	South Africa	Uganda
Percentage of total parcels registered (a)	> 50%																	
Percentage of transfers that are registered (b)	high																	
Annual registered transactions as a percentage of registered parcels	> 15%																	
Annual registered transfers as a percentage of registered parcels	> 5%																	
Annual registered mortgages as a percentage of registered parcels	> 5%																	
Ratio of annual registry running costs/registered parcels (c)	< \$5																	
Ratio of annual registry running costs (including cadastre if	< \$10																	
Registration staff days/registration	< 1																	
Total staff days/registration	< 1																	
Time to produce certified copy of title	< 1d																	
Time to complete registration of transfer	< 5d																	
Total ongoing land related court cases as a percentage of total registered	< 1%																	
Average time to resolve ongoing court cases (e)	< 5y																	
Number of registries per 1 million population (f)	> 2																	
Number of registries per 100,000 square kilometres in country land area	> 2																	
Average working days to pay for average transfer cost	< 30d																	
Transfer cost as a percentage of value	< 5%																	
Unit cost of systematic title (US\$)	< \$30																	
Ratio of revenue/expenditure	> 1																	

(a) Will depend on the objective and approach (systematic or sporadic)
 (b) This is often difficult to assess and usually depends on small samples or anecdotal evidence.
 (c) / (d) Will depend on the level of development
 (e) A little subjective as it is often hard to quantify land disputes in court and to assess how frequent they are. Ideally it would be good to get the 'mean' to less than 6 months.
 (f) Will vary on population density and market activity. A figure <2 is fairly common and not necessarily a good model. With improved, easily accessed technology more centralised systems will develop.

It is clear that some interventions were more successful than others. The three CIS countries Armenia, Kyrgyzstan and Moldova successfully produced titles at a unit cost less than the 'mean' and have a relatively high number of registries per capita. However they have limited registration of subsequent dealings. All three countries require a high number of average working days to earn the money to cover the cost of an average transfer. Latvia despite having a high unit cost for titling, using a sporadic approach with costs largely covered by applicants, has a high level of registered transactions and is more than covering costs. Thailand and Karnataka

have high ratios of revenue to expenditure and efficient registration processes. In Karnataka's case this despite a high transfer fee, a relatively long period to affect transfer and a relatively low rate of annual registrations. In LAC, Peru and El Salvador have the basis for efficient land administration systems, with high levels of registered transactions and efficient registration processes. The formal land administration system in Africa except for South Africa is not well developed, typically only covering urban areas and little information is available. There are problems with informal settlement common to other regions such as LAC.

For a rapid appraisal of the efficiency of a formal land administration system four indicators from the 'mean' indicator-set are suggested. These indicators focus mainly on internal system processes. These indicators are chosen based on the breadth of internal system efficiency they portray and relatively minimal efforts required to collect the information:

- Annual registered transactions as a percentage of registered land parcels
- Ratio of annual registry running costs/registered parcels
- Registration staff days/registration; and
- Ratio of revenue to expenditure.

This sub-set of indicators for case study countries is included in a summary of efficiency indicators in Chapter 6 (Table 24).

4.5 Property Registration as a Business Indicator

In 2004, the World Bank, IFC and Oxford University Press co-published *Doing Business 2004*, the first of a series of annual publications that set out simple indicators of how efficiently the regulatory environment supports business and private entrepreneurs. In *Doing Business 2005* a section on property registration was added, which recognises the importance of formal registration of property rights in supporting business and economic growth (World Bank *et al* 2005). Efficient property registration strengthens property rights and increases the possibility for entrepreneurs to obtain credit using a land title as collateral (de Soto 2003). In Zambia 95 percent of commercial bank loans to businesses are secured by land, in Indonesia 80 percent, and in Uganda 75 percent.¹² The *Doing Business* reports compile indicators for a large number of countries (135 countries in 2004, increasing to 175 in 2007). Three basic indicators are used to measure the efficiency of formal registration systems as shown in Table 9. These particular indicators assess the formal land administration system efficiency from the user perspective which reflects the ease of dealing in land market transactions for business development. The ease of use is measured through time, cost and complexity indicators for registering a property transfer.

Table 9 Doing Business Indicators for Formal Land Administration System. ¹³

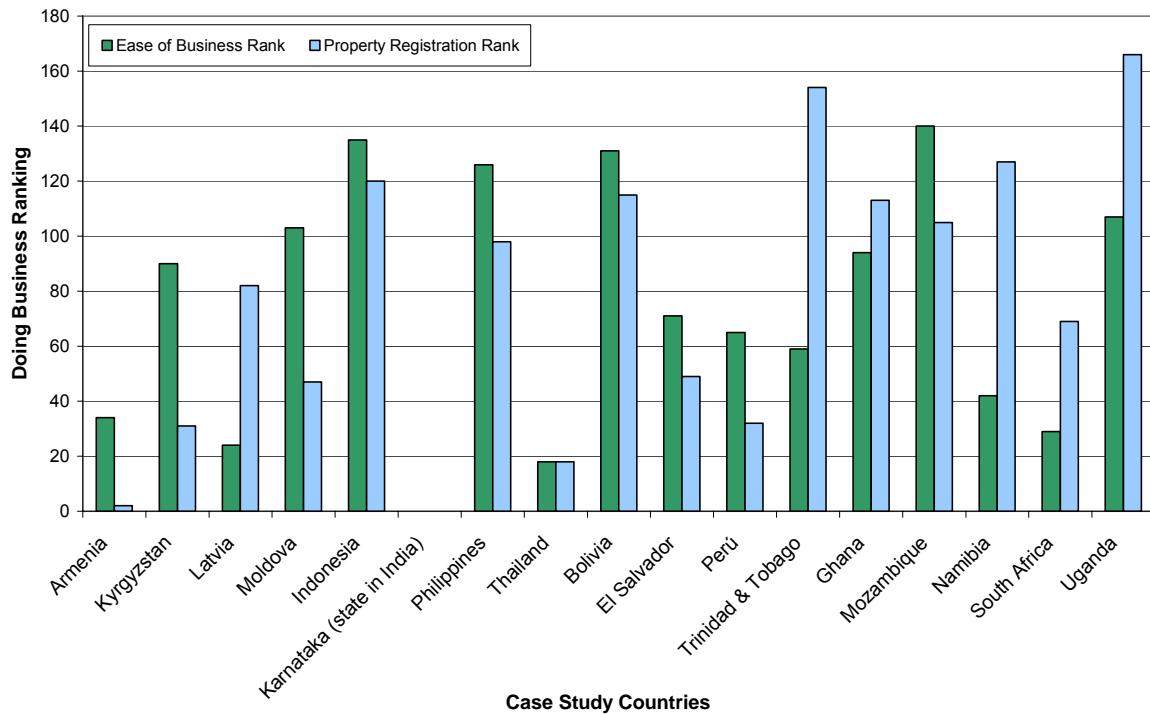
Indicator	Approach to Assessing Indicator
Number of procedures required to complete the registration of a property transfer	All interactions of the buyer, seller, agents, government agencies, notaries and lawyers that are legally or in practice required for registering property are recorded. This indicates the degree of regulation and hence the complexity or streamlining of the service.
Number of days for the procedure	Time, recorded in calendar days, captures the median duration that property lawyers or registry officials indicate is necessary to complete a procedure. This gauges the process with a regulatory outcome.
Cost of registration as a proportion of the property value	Cost is recorded as a percentage of the property value. Only official costs required by law are recorded. Other taxes, such as capital gains tax or value added tax, are excluded from the cost measure. If cost estimates differ among sources, the median reported value is used.

The methodology adopted to build the database uses key informants from private lawyers offering conveyancing services and key individuals within government. Informants were asked to carry out a mock transaction using a standardised case where an entrepreneur wants to purchase land and building in the largest business city for a country or jurisdiction. The assumptions made are that the property is previously registered and free of disputes.

Specific land administration indicators provide a rapid, simple and objective appraisal about transacting on commercial property in major cities of up to 175 economies. Comparative analyses are made in relation to who, what and why countries reform their registration procedures. New Zealand is ranked the highest performer in terms ease of property registration where it takes only 2 days and 2 procedures at a cost of 0.1 percent of the property value to register. Armenia is ranked second where it takes 4 days and 3 procedures at a cost of 0.4 percent of the property value. In contrast among the worst performers is Uganda. Ranked at 10th most difficult, it takes 227 days, 13 different procedures and costs 6.9 percent of the property value to formally register the property transaction.

Using the Doing Business data other analyses can be made. Individual indicators, for example property registration, can be compared to a country's generated ease of business ranking. This is used to indicate areas for reform. Of the countries studied in this report Kyrgyzstan Republic, Armenia and Ghana made notable reforms during 2005 and 2006 to ease overall property registration procedures. Figure 7 shows Latvia, Trinidad and Tobago, Namibia and Uganda as having a large gap between their overall performance and the ease of property registration rankings. Ghana along with several other African countries contributed to an active property registration reform agenda by lowering taxes and fees (World Bank *et al* 2006b).

Figure 7 Case Study Country's Ease of Business Rank against Property Registration Rank (based on Doing Business 2007¹⁴)



Generalisations of reform performances based on these indicators are subject to serious bias because in many cases figures do not encapsulate the entire property market. For example while reforms may have been significant in Africa only 1 percent of the property market is considered formal. The suggestions for reform are also questionable because they do not address why and how property transactions acting outside the formal market could then be revived from being declared 'dead capital'.

Although the Doing Business report assumptions¹⁵ are somewhat simplistic and the reliance on the data capture could be subjective they do provide a framework for assessing the relative performance of countries.

Another set of indicators are summarised below based on those in Kälin's International Real Estate Handbook (Kälin 2005). A select sample of countries and columns including the Brokers commission, Land register and notaries' fees, and purchase taxes have been extracted to provide a comparison to the Doing Business indicator of transfer costs Table 10. The Broker's commission is generally paid by the seller and is an additional transfer fee that is not included in the calculation of the Doing Business transfer cost indicator. In most countries there is a close comparison between indicators. Italy, Monaco, and Greece figures differ significantly. It is assumed that results calculated for the Doing Business database may be based on under-declared values. The Real Estate figures for the United States make additional note of title insurance fees, which would appear to have not been considered in the Doing Business cost percentage.

Table 10 Property Transfer Costs.

Country	From Kälin 2005:15-19			Doing Business 2007
	Broker's Commission	Land Register and Notary Fees	Purchase Taxes	Transfer Cost (% value)
Austria	Max. 3% (possibly by both buyer and seller)	1% land register fee plus authentication fee; 1-3% lawyer fees	Land transfer tax 3.5%	4.5%
Bahamas	6% for developed, 10% for undeveloped plots	2.5% of value (lawyer's fee)	1-2% of value	
Canada	3-6%	Notaries in Quebec/lawyers elsewhere – hourly fee	Varies by province – mostly 0.5 to 1.5%	1.7%
Croatia	2-5%	€ 35 register fee, € 10 authentication fee by notary	5%	5%
France	5-10%	7%	Included in land register and notary fees	6.8%
Greece	2% from buyer and possibly 2% from seller	1.5% for purchase	Conveyancing fee 7-11%; registration fee 0.5%	3.8%
Hungary	2-5%	Scale of fees – about 1% total	Conveyancing fee generally 6-10%	11.0%
Ireland	1.5 to 2.5%	Each party pays their own fees – generally 1%	Conveyancing tax up to 9%; statutory duties 2%	10.3%
Italy	2-3% for one intermediary, 5% for exclusive broker	€ 2,500 to € 10,000, depending on value and notary	3-10%	0.9%
Malta	5%	1%	Transfer duty 5% plus € 500 for authorizations	
Monaco	8% for purchase	Registration and notaries total about 9%	Total 9%, 7.5% of which is registration and stamp duty	4.4%
Portugal	2-6%	€ 300 minimum for notaries and land register	Transfer tax 6.5%; stamp duty 0.8%	7.4%
Spain	4-7%	Ancillary purchasing costs about 3%	Land acquisition tax 7%	7.2%
Sweden	3-5%	None	Statutory duty 1.5% for individual and 3% for company	3.0%
Switzerland	2-4%	0.01 to 0.7% depending on canton	1-3% depending on canton	0.4%
United Kingdom	2-3%	Max £800 registration, plus lawyer's fees	Up to 4% stamp duty; up to £150 for data searches	4.1%
United States	6% developed, 10% undeveloped	None	Documentary stamp taxes, lawyer's fees, title insurance 2-5%	0.5%

Experts then use the *Doing Business* investigations to analyse and identify trends useful for improving land registration systems. Doing Business (World Bank *et al* 2006a) publications suggested a number of recommendations to assist practitioners reform property registration processes:

- Simplify and combine procedures for registering property;
- First link, then unify the agencies involved;
- Provide easier access to the registry;
- A warning: don't regard technology as a panacea;
- Make registration an administrative process;
- Simplify taxes and fees; and
- Make the involvement of notaries optional.

While the Doing Business indicators are highly subjective the initiative provides ongoing benchmarking and analysis of simple performance measures and emphasises the importance of effective and efficient land administration functions for economies.

Chapter 4 Endnotes

¹ Article on the Cato Institute web page entitled 'Promoting Afghanistan'

<http://www.cato.org/dailys/01-23-02.html>

and the recognition of the need to recognise property rights in the February 2003 Business Round Table on rebuilding Afghanistan, available on:

http://www.export.gov/afghanistan/events/feb_03_roundtable_030303.html

² Discussion in the National Review Online article entitled 'Who Should Own Iraq?' available on:

<http://www.nationalreview.com/ponnuru/ponnuru050503.asp>

³ <http://www->

[wds.worldbank.org/servlet/WDS_IBank_Servlet?pcont=details&eid=000009265_3961006023721](http://www-wds.worldbank.org/servlet/WDS_IBank_Servlet?pcont=details&eid=000009265_3961006023721)

⁴ <http://www->

[wds.worldbank.org/servlet/WDS_IBank_Servlet?pcont=details&eid=000094946_00102111360933](http://www-wds.worldbank.org/servlet/WDS_IBank_Servlet?pcont=details&eid=000094946_00102111360933)

⁵ <http://www->

[wds.worldbank.org/servlet/WDS_IBank_Servlet?pcont=details&eid=000094946_02021204004320](http://www-wds.worldbank.org/servlet/WDS_IBank_Servlet?pcont=details&eid=000094946_02021204004320)

⁶ <http://www->

[wds.worldbank.org/servlet/WDS_IBank_Servlet?pcont=details&eid=000009265_3961008074111](http://www-wds.worldbank.org/servlet/WDS_IBank_Servlet?pcont=details&eid=000009265_3961008074111)

⁷ <http://www->

[wds.worldbank.org/servlet/WDS_IBank_Servlet?pcont=details&eid=000094946_02060604011399](http://www-wds.worldbank.org/servlet/WDS_IBank_Servlet?pcont=details&eid=000094946_02060604011399)

⁸ FIG Publication No. 11, [The FIG Statement on the Cadastre](#), 1995 (ISBN 0-644-4533-1).

http://www.fig7.org.uk/publications/cadastre/statement_on_cadastre.html

⁹ Although there is a considerable spread in the accuracy and reliability of the data collated during the country case studies. In preparing this synthesis report, some data has had to be reviewed.

¹⁰ A transaction is a trade in rights and includes actions such as the transfer of rights by sale, gift or by inheritance, mortgage, a discharge of a mortgage and a range of other actions with respect to rights in land such as leases, caveats, liens, easements, right-of-ways, covenants. A typical transfer may involve several transactions – for example a discharge of an existing mortgage, the transfer of ownership and the registration of a new mortgage.

¹¹ Forty eight weeks, by 5 days, less 13 days public holidays.

¹² World Bank Investment Climate Assessments (various).

http://www.worldbank.org/privatesector/ic/ic_country_report.htm

¹³ The methodology and all assumptions are explained on the *Doing Business* website along with the database for all *Doing Business* indicators.

<http://www.doingbusiness.org/MethodologySurveys/RegisteringProperty.aspx>

¹⁴ <http://www.doingbusiness.org/EconomyRankings/>

¹⁵ The *Doing Business* is based on the purchase by a limited liability company of a hypothetical property valued at 50 times the annual per capita income on the periphery of the commercial district in the major capital city in the country. Only official costs are assessed, excluding any capital gains or value-added taxes. The full assumptions are set out on web page:

<http://www.doingbusiness.org/MethodologySurveys/RegisteringProperty.aspx>

5 Future Challenges

Chapter 4 of this report summarised the experience and lessons from recent efforts to strengthen land administration systems based on the country case studies. One of the shortcomings of describing past experience is that critical issues may be systematically overlooked. A number of potential “blind spots” in the country and regional studies were identified, most of which are inter-related. This section provides a systematic discussion of future challenges in the main areas of land administration development from reform approaches, institutional challenges to sustainability and land tenure policy. The material presented forms important components in how land administration systems can be appropriately designed according to the jurisdiction requirements, budget, and cultural traditions. Country examples are used to clearly illustrate these concepts.

5.1 Approach to Land Administration Reform

The approach chosen to improve land administration effectiveness depends firstly on the stage of development of the jurisdiction and secondly on the project objectives. Land administration reform can take on numerous different roles from small redesigns within particular sections of the system, for example registry and or cadastre digitization, to a comprehensive re-engineering of the land administration system. As a consequence reform periods range from short, less than 3 years to comprehensive national land administration reforms that are proposed over more than 15 year time frames to ensure new concepts and institutional relationships can be fostered in a sustainable and amenable environment. Phasing techniques and beneficiary participation through community awareness programs are also key implementation factors of the design approach discussed. The final reform factor discusses the importance of realising decision making responsibilities so that progress can continue with minimal delays or obstructions.

5.1.1 Long-Term Nature of Land Administration Intervention

'It is important to note that there are no quick fixes to land tenure problems. Except in particularly favorable circumstances, improvements in this field can only be achieved in the long run.' (Wachter and English 1992:17).

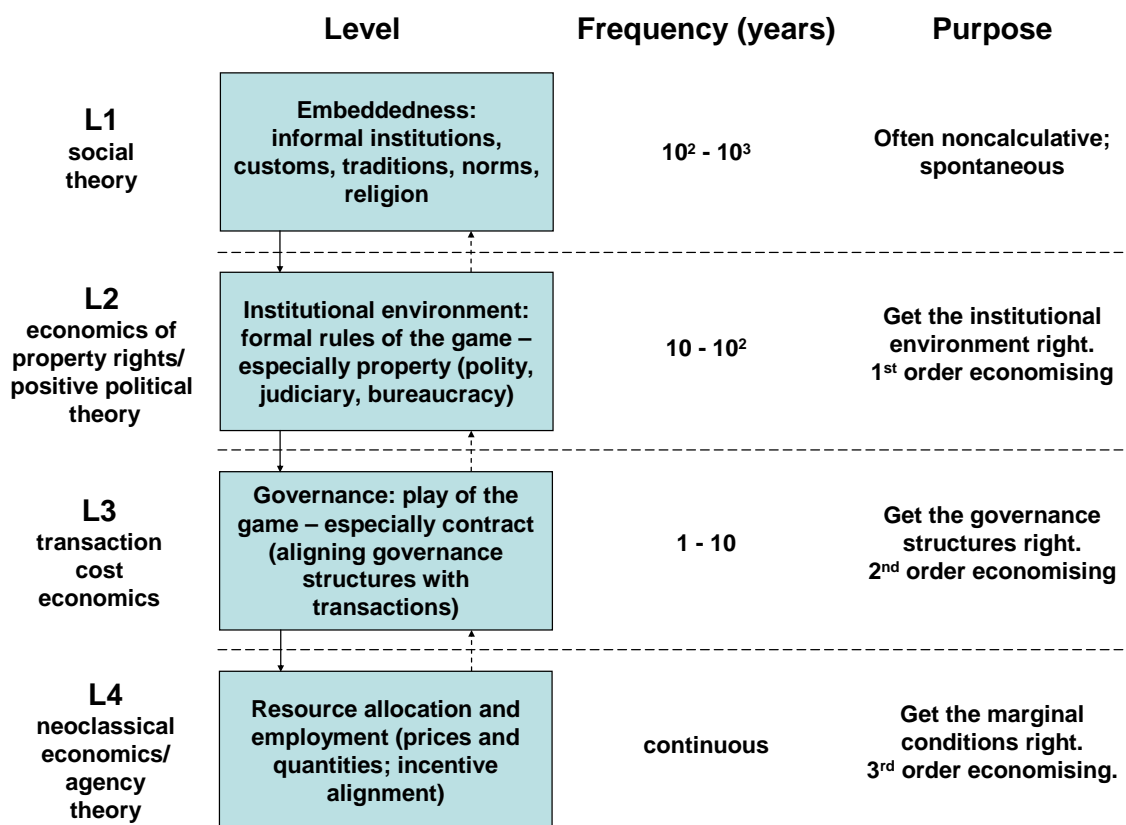
Any initiative to develop or strengthen a land administration system must recognise the strong political, legal and social environment it must operate within. There are many stakeholders and many different points of view that need to be recognised. Projects will take time and will often have to be phased over many years. The systems that operate in the developed world took many years to reach their current status, something often forgotten when designing projects for the developing world. A key lesson from the review in 1992 by Wachter and English of rural land titling projects in the World Bank was that many projects, often designed as part of wider development projects, failed as the complexity of the task of strengthening the land administration systems was grossly underestimated during design.

With many stakeholders consultation can take a long time and has risks. Delville (2000:108), in reviewing experience in introducing the Rural Code in Niger, observed *'...the difficulties in organising [detailed surveys and public debates], coupled with the potential risks of reform, sometimes gives the impression that the whole process*

has become bogged down in detail and consultation.’ Some of the activity required to strengthen land administration systems can take many years. This may impact on the overall design or sequencing of the intervention, something that is discussed below (see page 61). A good example is the 15 years it took to reach agreement on boundaries between regions administered by different chiefs in KwaZulu-Natal in South Africa.¹ If this activity is included in the design of the project, a long timeframe needs to be anticipated.

Williamson (2000:597) presented a model of four levels of social analysis (refer Figure 8), identifying the definition and enforcement of property rights as important elements in the second level of analysis with emphasis on governance and contracts in the third level. The frequency ranges nominated by Williamson for levels 2 and 3 (10 to hundreds and 1 to 10 years respectively) contrast sharply with the traditional land administration project duration of 3 to 5 years, particularly as many projects cover many of the issues identified by Williamson in levels 2 and 3.

Figure 8 Economics of Institutions (from Williamson 2000:597).



A key feature of the initiatives for strengthening land administration systems in East Asia was a long planning horizon. The land titling activity in Thailand was planned over a 20 year timeframe and the activity in Indonesia was planned over 25 years. The techniques adopted in Thailand are very flexible and relatively low cost, but even so the Department had 3-5,000 personnel deployed on project activities for long periods over many years. A project operating over this timeframe requires a clear vision and a strong political commitment. Both the Thai and Indonesian projects were designed within overall strategic plans that geographically and technically phased the activity. Political support can be important in a country such as Thailand

where there are frequent changes in government. Often a project has to build wider political support. The urban land titling project in Peru was very much a part of President Fujimori's political agenda, but the titling agency (COFOPRI) and the project have continued under President Toledo's administration largely due to their good reputation and credibility, particularly amongst the urban poor. Many projects need to build stakeholder support as an important part of project design. Where major problems exist, initial phases are likely to focus on strengthening the policy, legal and institutional framework and building stakeholder support, often through pilot activity.

The long-term focus in Asia contrasts with the focus on short-term objectives in Europe and Central Asia. In most of the countries in transition the urgent need was to deal with the sudden change in land tenure for the population and establish a means by which millions of people could make use of their suddenly acquired assets. As Adlington (2002:11) notes, in the four countries in transition that were reviewed '*...the need for speed has been emphasized. It is not acceptable to politicians or the public for the process to take tens of years or to cost hundreds of millions of dollars.*' This emphasis on speed has had problems. In some urban areas a significant number of beneficiaries could not receive title due to problems that could not be solved in the field such as the encroachment of buildings or unapproved construction. In rural areas boundaries were often not marked nor occupied by the new 'owners', and there were at times limited consultation with the public. It is not surprising that there is little market activity in these areas.

A long time-frame can be a challenge for governments focussed on election cycles and to donors used to projects with durations no longer than 5 years. Here the formulation of a long-term strategy with phased implementation can break down the activity into manageable parts and ensure it is appropriately focussed and not dissipated by trying to address all perceived issues at the same time.

5.1.2 Sequencing of Land Administration Interventions

'Often too much is expected as a result of the implementation of cadastral mapping and land registration programs. Claims regarding the potential benefits of these programs far outweigh those actually realised. in almost all cases estimates of the time required to complete programs of cadastral mapping and land registration are unrealistic.' (Kent 1981:413).

Land administration projects in Thailand, Indonesia and Ghana were planned as long-term projects implemented in a number of 5-year phases. Three phases were implemented in Thailand. The Thai project builds upon a strong legal and policy framework with the initial emphasis on increasing capability to undertake systematic registration and the geographic expansion of systematic registration activity. An emphasis in later phases was improved service delivery. This change in emphasis can be seen in Table 11 (from Rattanabirapongse et al 1998:23). There has also been a geographic spread in systematic titling activity (see Figure 9), with the initial phase concentrating in the lower North-East of Thailand, the poorest provinces in the country at the time, and in the North of Thailand, an area with potential for economic growth. The second phase continued the mix of economic and social objectives, with extensive work in the Central and North East as well as the Eastern Seaboard, an area targeted for economic development. The third phase completed the work in the North, North-East and Central regions and the fourth phase is planned to concentrate in the South.

The situation in 1993 in Indonesia provided a less firm foundation for a program to strengthen land administration. Following 12 years of preparation the Basic Agrarian Law was introduced in 1960 but by 1993 only 20 percent of the non-forest land was registered under the Basic Agrarian Law and articles regularly appeared in the media highlighting problems such as corruption, multiple certificates over the same parcel, public mistrust in the land administration system and conflict between formal and traditional land administration practices. Sporadic registration in the formal system was not even servicing the predicted demand due to increasing population. To address this situation a 25-year program was prepared to be implemented in five phases of 5-years each. Based on tax-mapping it was estimated that at the end of the 25 year period the total number of parcels in Indonesia would be about 78 million. The nature of the planned phasing is set out in Table 12. Implementation has not gone as planned with the first phase extended to 7 years but the output for phase 1 of 1.957 million has exceeded the planned target of 1.2 million. Due to a range of factors, there was a delay in implementing phase 2. The strategic approach adopted in designing the proposed land administration project in Ghana is illustrated in Table 13.

Figure 9 Geographic Phasing of Systematic Titling in Thailand (updated from World Bank 1990b).



Table 11 TLTP Component Structure (from Rattanabirabongse et al 1998:23).

Item	Component - Phase I (output 1,634,533 titles) ²	Actual Cost (US\$M)	% Base Cost
1	Rural mapping, surveying and systematic adjudication	37.8	60.9
2	Urban mapping	2.8	4.5
3	Land administration (including civil works)	6.0	9.7
4	Valuation	0.7	1.1
5	General institution building (including technical assistance)	14.8	23.8
Total, Phase I		62.1	
Item	Component - Phase II (output 2,100,377 titles) ³	Actual Cost (US\$M)	% Base Cost
1	Cadastral mapping and remapping	25.6	29.9
2	Land Titling and administration	49.9	58.0
3	Valuation	0.6	0.7
4	Institution building	4.2	4.7
5	Technical assistance and training	5.5	6.4
Total, Phase II		85.5	
Item	Component - Phase III (output 4,772,055 titles) ⁴	Base Cost ⁵ (US\$M)	% Base Cost
1	Land Titling (including surveying, mapping and title issue)	118.9	67.8
2	Improved service delivery	17.1	9.7
3	Strengthening DOL	17.5	10.0
4	Valuation	15.1	8.6
5	Technical assistance and training	6.3	3.6
6	Studies (socio-economic and environmental impact)	0.5	0.3
Total, Phase III		175.4	

Table 12 Planned Phasing of Activity in Indonesia (BPN 1993:64-65).

Phase	Period	Planned Output	Scope
1	1994-1999	1.2 million	This phase is very much an institution building phase. Significant work on the policy framework. Systematic registration activity is confined to Java. Project areas selected on the basis of assisting in the development of efficient land markets and the alleviation of social conflict over land, but focussed on offices receptive to change and keeping the geographic spread of activities manageable.
2	2000-2004	6.0 million	This phase will build on the processes and procedures developed in the first phase. A major part of the systematic registration output would still concentrate on Java, the area of most demand, but activities would be carried out to test and refine procedures to register communal adat (e.g. in West Sumatra). If socially acceptable, pilots could be conducted in South Sulawesi. Further work would be required to strengthen BPN as an institution with automation, computerisation, HRD and training.
3	2005-2009	11.0 million	This phase would concentrate on the islands of Java and Sumatra. Work could commence in South Kalimantan on the basis that efficient procedures have been developed to mark forest boundaries, reclassify land, and incorporate customary tenure procedures.
4	2010-2014	13.0 million	Work in this phase would also concentrate on Java and Sumatra, with increasing activity in the outer islands on the basis of the results of social assessment and clear selection criteria.
5	2015-2019	13.0 million	This phase would complete the planned 25 year program. Activities would be undertaken in most remote provinces, subject to social assessment.

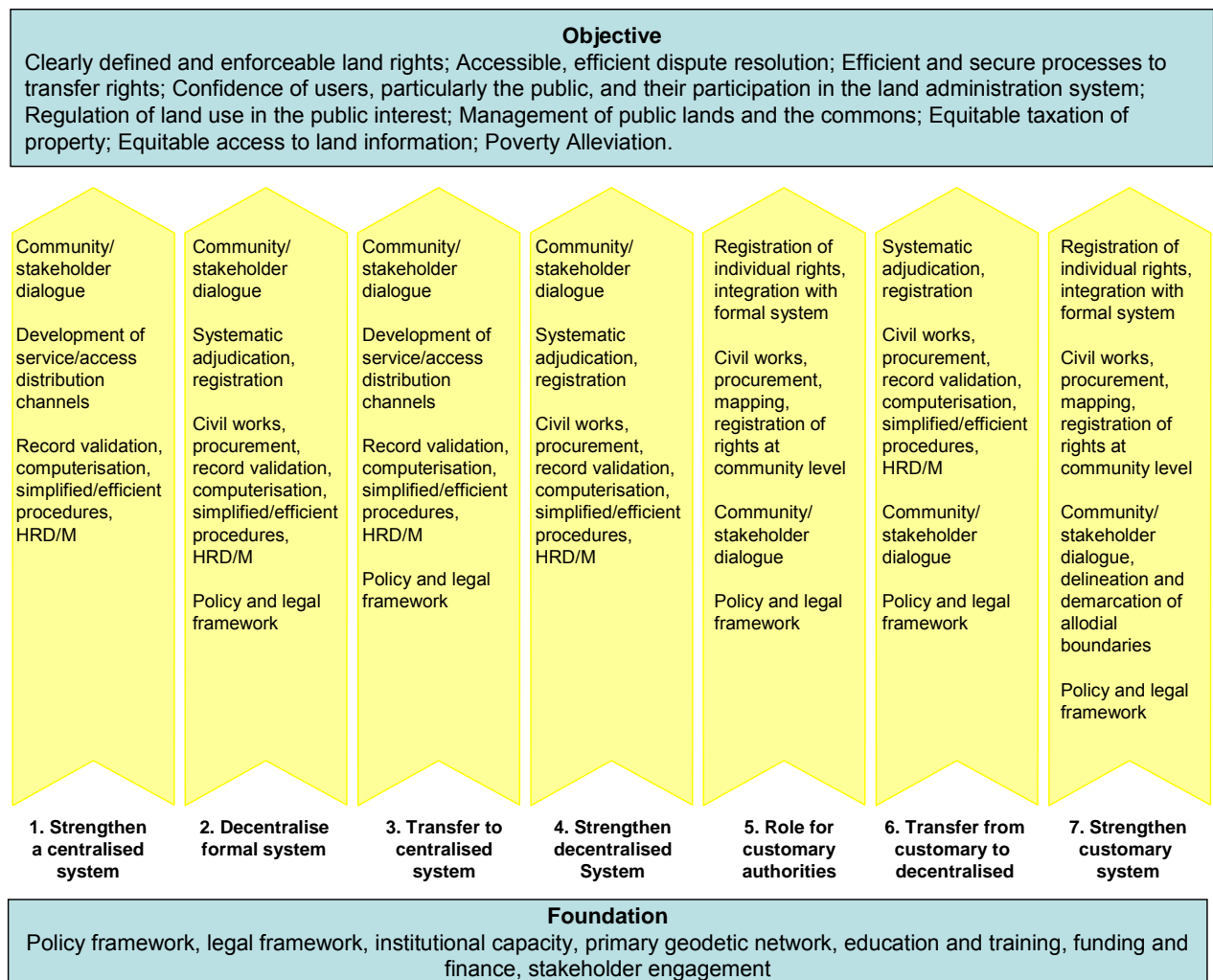
Table 13 Planned Phasing of Activity in Ghana (Ministry of Lands and Forestry 2002:33).

Objective	Output	Pre-Impl.	Short-Term	Medium-Term	Long-Term
Disciplined land market	Model linking land use/administration in urban areas			Develop	Expand
	Model linking land use/administration in rural areas				Develop
Clearly defined allodial rights	Delineation, demarcated, surveyed boundaries	Pilot	Pilots	Expand	Complete
	Register of allodial rights		Develop	Expand	Complete
Problems with compulsory acquisition resolved	Resolution of problem		Policy Detail	National	Institutionalise
	Inventory of government-owned land		Complete		
Secure land tenure	Alternatives to land titling in rural areas		Pilots	Expand	Complete
	Systematic land titling	Pilot	Pilots	Expand	Institutionalise
Improved access to land	Framework of incentives/preserving rights		Develop	Expand	Institutionalise
Strengthened, decentralised land administration	Strengthened land sector agencies		Strengthen	Support	Institutionalise
	One-Stop-Shop		Pilots	Expand	Institutionalise
	Strengthened customary secretariats		Pilots	Expand	Institutionalise
Engagement with land owners, customary authorities	Communications, Information Education Program		Develop	Expand	Institutionalise
Enhanced coordination of land sector agencies	Restructured, strengthened sustainable system	OMO	Policy	Institutionalise	Corporatisation
Effective collection of land-related fees, taxes, revenue	Improved model to identify, value & collect revenue		Policy	Expand	Institutionalise

In breaking down a program into phases it is important to note that not all problems need be solved at once. Pilot activity is an important strategy to build capacity by developing and field testing efficient procedures, and building stakeholder support. To gain support from stakeholders, particularly where there is not a strong policy and legal framework, one strategy is to select pilot areas with limited difficulty. This may mean confining initial activity to a sub-set of the problems being faced by the land administration system. For example, in Indonesia one of the criteria used in selecting pilot areas in phase 1 was the absence of forests as there was a lack of clear policy on the delineation and demarcation of forest boundaries. In Lao PDR, where rights to land are complicated by the unclear rights to the land of Lao nationals who fled the country after the change of administration in 1975, initial land titling activity was confined to urban areas of Vientiane.

As illustrated in Figure 2 there is great variety in the contextual environment for land administration projects and in the obstacles faced in attempting to strengthen land administration systems. This variety is reflected in the different approaches adopted for the projects in Thailand, Indonesia and Ghana. A framework illustrating typical approaches is set out in Figure 10 based upon the seven generic strategies that were illustrated in Figure 4, but with a foundation.

Figure 10 Schematic of Tasks within Generic Strategies.



The tasks listed above the foundation, within the generic strategies, are not necessarily in order of priority. In some cases, such as Thailand, a strong foundation already existed although effort was required to strengthen the education system in cadastral survey, land information and valuation. Other countries require significant effort to build a foundation. For example the need to formulate policy in the Philippines and Ghana, tasks that Williamson (2000) might call formalising the ‘rules of the game’ and ‘playing the game’ (refer Figure 8 on page 60).

In other cases pilot activity might be undertaken to help strengthen the foundation and the land administration system itself. Some tasks can take considerable time, for example, it took almost 20 years to systematically register 8.5 million titles in Thailand and 15 years to adjudicate and demarcate customary boundaries in KwaZulu-Natal. Moreover the emphasis may change as a project is implemented; in Thailand for instance, the emphasis changed to improving service delivery as the project was implemented. Strategies that combine the generic strategies might also be adopted; in Mozambique new innovations are being developed to grant secure tenure to foreign investors while concurrently securing the rights of local communities under customary tenure systems.

When planning for a phased implementation a key question is often where to start. In Thailand, systematic titling activity started in the lower north-east, the poorest provinces, and in the north, where it was considered that farmers would be well placed to access increased opportunities for institutional credit. In Indonesia, selection criteria focussed on efficient land markets and reducing social conflict over land, within the overall constraints of confining activity to areas where customary rights were not present and avoiding areas that lacked clarity in policy, such as forest land. In many countries a decision on whether the project starts in urban or rural areas must be made. In other cases it covers both, as ultimately the land administration system itself will cover the whole country. A key issue in deciding where to start systematic titling and registration is the expected demand for titling and registration services. There is no point in titling areas where the population sees little benefit in titles and or the registration of subsequent dealings. This often means placing an emphasis on the urban sector where, as noted above in the case of Thailand, there are also more opportunities for raising revenue to recover the initial and on-going investment in a strengthened land administration system.

5.1.3 Community Mobilisation

‘...in every country we investigated, we found that it is very nearly as difficult to stay legal as it is to become legal. Inevitably, migrants do not so much break the law as the law breaks them – and they opt out of the system.’ (de Soto 2000:21).

An essential element in any effort to initially register rights in land and then ensure that subsequent dealings in those rights are registered is building community confidence in the system and fostering participation. As de Soto (2000:21) indicates, gaining this confidence may require simplification of existing systems. The need for community participation applies particularly to systematic titling activity where the efficiency of the whole process depends on land-holders being in the right place at the right time with the necessary documents and information. Gaining an understanding of community practices and concerns is an important first step, particularly in countries where the formal system is neither efficient nor well regarded. In Africa extensive multi-stakeholder consultations were necessary in formulating land policy and legislation (Augustinus 2003a:10). In other countries focus groups, semi-structured interviews and household surveys were undertaken to prepare for and implement land administration projects.

A range of terms were used to describe the process of fostering participation during project implementation; a term used in ECA is ‘Public Awareness’. A description of this process is set out in the project information document for the proposed Ukraine Rural Land Titling and Cadastre Project (World Bank 2002b), where *‘... the publicity campaign would focus on informing small land holders of their rights to individual title, and their land use rights and obligations after these rights have been granted. Information would also be supplied on farm management, legal procedures related to land, and leasing of parcels. This would be achieved through mass media campaigns, production of pamphlets and leaflets on a mass scale and through holding public meetings at each farm...’*. In Uganda there are ‘sensitisation campaigns’ with the objective of *‘letting everyone know what the new law says, what it does not say, what role it plays in the land reform, what is going to change and how, what kind of timeframes may be expected and what the law means for different stakeholders’*, (Palmer 2000:279). In the Philippines the term Communications, Information and Education (CIE) is often used.

All these terms imply a one-way dialogue in situations which frequently require two-way communication. A range of tools and techniques were developed to foster participation, including: posters and leaflets; mass media campaigns (radio, television); mobile display/announcements; public meetings; web sites, etc. Establishing temporary field offices in project areas is also a good means of developing close contact between the community and field staff at times suitable to the community which is often not during working hours. Often a range of meetings are required, initially with key local leaders, village meetings and at times special meetings, for example separate meetings were arranged with women in Indonesia. Publication of notice for systematic registration in official gazettes or newspapers is also required in many countries, often with limited impact, and sometimes a requirement for public display of notice. In Thailand public notice is required in the Provincial Office, district office, village office, and in some cases on the land itself.

The term Customer Relations and Services (CRS) was adopted in the early 1990s in the design of the Land Administration Project in Indonesia. This term attempts to cover public communication requirements of the activity as well as the project objectives of fostering an ethos of customer focus in land sector agencies. Customer focus can be developed in a number of ways including simple posters in land offices explaining registration processes and prerequisites, customer help desks in waiting areas, the public display of fees and process times and suggestion boxes in land offices. These can be assessed in a number of ways including customer satisfaction surveys. While these processes work well in some offices and not in others, they require a clear commitment of the leadership in the organisation to the concept that the public is a 'customer', definitely not an easy process in some jurisdictions. The customer's expectations of land administration are security, clarity and simplicity, timeliness, fairness, accessibility, cost and sustainability (refer Table 4 on page 42). A major concern for most users is cost and time. Much can be said about customer focus by the preparedness to display clear promises regarding cost and time. As previously noted, the registration system in Thailand is very efficient because all registrations must be completed on the day they are lodged. This promise of timely response takes the discussion away from a rationale for delay such as problems with process, staffing, working hours etc. to the steps needed to ensure the promise is honoured.

The scope of the term CRS has broadened in Asia and within the Australian Agency for International Development (AusAID). In the Philippines they now use the term 'Community Relations and Services' to reflect the need to engage the community in the process of reforming the land administration system. It was recognised that a wider group of stakeholders has to drive the reform agenda including, community advisory groups, NGOs, academia, and politicians because the bureaucracy is incapable of reforming the system. This process is also occurring in Africa. The term Community Education is finding favour in Lao PDR, reflecting the more autocratic nature of the government in this country.

Two final points are worth noting. Firstly, as de Soto (2000:155) notes '*...operating in the underground is hardly cost-free...*' Convincing people to formalise their rights and to keep their rights in the formal system is not a question of convincing them to move from a costless informal system. Secondly, despite some very inefficient systems there is evidence that individuals will put up with a lot to obtain formal recognition of their rights. A survey of six individuals who had sought to register transfer of title in a registry in Metro Manila was recently undertaken. The shortest time required to

obtain title was 2 weeks, three managed to get a title in 4 to 8 weeks, while another took over 74 weeks and the sixth person required over 115 weeks. The official estimate for the time required to process is five days. 'Facilitation fees' were asked in all cases and paid in at least four of the cases. One applicant in desperation wrote to the President and two months later was surprised to be advised by telegram that her title was ready to be collected.

5.1.4 Solving Rather than just Identifying Problems

'... it is a cardinal principle of adjudication that it does not, by itself, alter existing rights or create new ones. It merely establishes with certainty and finality what rights exist, by whom they are exercised, and to what limitation, if any they are subject.' (Simpson 1976:195).

Without delegated responsibility for decision making, problems must be identified, documented and passed to a higher authority. This higher authority may be superior officials in a remote head office, or, as is often the case, a statutory committee, convened from time to time in the respective registration district or locality. This approach destroys targets, alienates beneficiaries, adds to frustrating backlogs, and creates bottlenecks in a procedure which is meant to be systematic and rapid.

Usually problems leading to disputes over rights and/or boundaries can be classified and anticipated when designing registration programs. Pilot programs can be used to identify policy implications of a systematic registration program and identify mechanisms (decrees, declarations, orders etc) needed to facilitate delegation with appropriate checks and balances. Small pilot projects can be used to prepare and test the manual of operations. They are an adjunct to delegation and guide field staff in the rules applying to evidence and the procedures to be followed in the field when mediating disputes. Experience in large registration programs in Thailand for example suggest that the overwhelming majority of disputes are resolved by field teams, with very few requiring reference to courts or other dispute resolution authority. Of course the Thai culture is one of conflict avoidance which lends itself more to conciliation than (say) a similar situation in the more litigious Filipino culture. Nevertheless, operational manuals can eliminate many problems by simple and fair application of rules and basic mediation.

Reliance on judicial processes in which evidence is gathered for referral to a court or other judicial authority, complicates systematic registration programs. The confusing array of land laws and the delays encountered in the court system are commonly listed issues in all countries involved in this comparative study. Experience shows that systematic registration is more affective when an administrative approach is followed. This allows for registration by appropriately qualified and trained officials following administrative procedures based on government policy implemented with appropriate community participation and oversight, and tested under pilot conditions.

The need for documentary evidence exacerbates the tendency to identify rather than resolve problems and is especially problematic in poor rural areas where documents are usually sparse and a right is commonly based on long-term occupation. Prescription, or the acquisition of legal rights by peaceful, community accepted occupation of land for a specified period of time, is a useful means of ensuring the formal registration system reflects reality on the ground. It is also a very useful tool in systematic registration because it shifts the requirement for proof of entitlement from having to provide documentary evidence to having to prove long-term, community-accepted and peaceful occupation. Prescription is possible under many jurisdictions.

In Thailand under the Civil and Commercial Code, prescription is possible over private land occupied for a period of 10 years but not over State land. In the Philippines the reverse is true, with prescription possible over state land held for 10 years, but not over private land.

The need for prescription was evident in the initial pilot study phase of the Land Administration Project in Indonesia. Subsequently a longstanding regulation of the Basic Agrarian Law was amended⁶ to provide for title issuance on the basis of oral evidence of occupation provided it was shown to be in good faith, and acknowledged as such by the community. As an ex-officio member of the adjudication field team, the village/community head is on hand to attest to the occupation and further streamline the issue of title to the occupant. The occupation horizon was set at a conservative 20 years and, since under the negative system of land registration in Indonesia any right can be disputed after title is awarded, the security of those who might be adversely effected by prescription was considered adequately safeguarded. Another innovation in the same amendment was the introduction of a sunset period of 5 years, after which claims against title could not be made and absolute title was awarded. This was designed to minimise the level of disputation and clear the way for the eventual introduction of a positive element into the Indonesia land registration system.

5.2 Institutional Challenges

Core land administration functions are typically founded within the government sector where often complex systems exist to coordinate registry and cadastral services. Opportunities and complications within government institutional arrangements strongly affect the efficiency of land administration systems and the services provided. The following sub-sections describe both effective and ineffective arrangements of state authority and responsibilities, institutional structures necessary to support and coordinate core land functions and considerations of accountability and transparency to reduce corrupt activities. Institutional challenges are best approached when there are good opportunities for long term support and cooperation and a consensus can be reached on the development direction.

5.2.1 Authority of the State

'...the state's capacity to engineer and orchestrate social change and to mediate social conflicts often falls well short of its ambitions, indeed it may pursue contradictory strategies.' (Juil and Lund 2002b:2)

In most societies an early consideration was the establishment of systems to administer rights in land. Popular political philosopher Jeremy Bentham asserted that historically the inception of both property rights and law were deeply intertwined (Mandelbaum 2002). The type of system established will depend on a range of factors including the type of society and the nature and extent of the land resources available. Diamond (1997:267-92) sets out a simple classification of societies based on four classes: band; tribe; chiefdom; and state (see Table 14). Diamond notes that over the past 13,000 years there was a general trend of the replacement of smaller, less complex societies with larger more complex units and suggests that population pressure or population density is a prime driver (Diamond 1997:284). Critical elements in the classification of the State set out by Diamond are centralised decision-making, multiple levels of bureaucracy and reliance on laws and judges to

resolve disputes. Similarly The World Bank (1997) suggests there are benchmark functions for the scope of state. State authority is set in terms of minimalist, intermediate and activist function and property rights were prioritised as a minimalist function of the state indicating the state's mandatory responsibility.

Table 14 **Types of Societies (from Diamond, 1997:268-9).**

	Band	Tribe	Chiefdom	State
Membership				
Number of people	dozens	hundreds	thousands	over 50,000
Settlement pattern	nomadic	fixed: 1 village	fixed: 1 or more villages	fixed: many villages
Basis of relationships	kin	kin-based clans	class and residence	class and residence
Ethnicities and languages	1	1	1	1 or more
Government				
Decision making, leadership	"egalitarian"	"egalitarian" or big-man	centralised, hereditary	centralised
Bureaucracy	none	none	none, or 1 or 2 levels	many levels
Monopoly of force and information	no	no	yes	yes
Conflict resolution	informal	informal	centralised	laws, judges
Hierarchy of settlement	no	no	no → paramount village	capital
Religion				
Justifies kleptocracy?	no	no	yes	yes → no
Economy				
Food production	no	no → yes	Yes → intensive	intensive
Division of labour	no	no	no → yes	yes
Exchanges	reciprocal	reciprocal	redistributive "tribute"	redistributive "taxes"
Control of land	band	clan	chief	various

Reliance on laws and judges, or the rule of law, is central to the definition of the "State". Neumann (2002:82) observes that if *'...things are to go according to law, there must be a lawmaking power whose edicts are enforced over a certain geographical area in which that power monopolizes violence and controls those aspects of life important to the (publicly observable) well-being of those who inhabit the territory.'* Much of the difficulty in establishing land administration systems in many developing countries has been the limited authority of the State and the attempt to extend land administration authority beyond the 'geographical area' in which the State *'monopolises violence'*. There are many examples of this, one being the black communities in Choco and Valle Departments in the lower Atrato river in Colombia who were displaced by paramilitary shortly after receiving collective titles in 1997 (Ng'weno 2000:30). The state's jurisdictional authority is clearly neither comprehensive, nor uniformly applied. Informal urban settlements are an example of state's limited mechanisms for securing property rights. Typically there is an evolution in a states response to informal settlement. Durand-Lasserve and Royston (2002) summarised the following typical responses: public authority tolerance of dual systems; legal adaptations; formal recognition of informal land delivery systems; reduction in planning and construction norms; integration of land delivery systems; setting up parallel systems; and tentative, top-down land policy and institutional reforms. A summary of events in Peru provides an example of the evolution of responses (see Table 15).

The relationship between formal or State sanctioned systems of land administration and customary tenure is discussed in the next section. In this section we will consider the important issues of the rule of law and dispute resolution.

Table 15 Historical Stages of the Evolution of Informal Housing in Peru.

Period	Key Events	Consequences	Laws/Decrees
- late 1920s	Informal development of residential neighbourhoods by the formal sector.	Negotiable basis of state laws established.	First urban development laws.
Late 1920s to late 1950s	Period of gradual invasion by migrants.	Increasing state recognition of property rights acquired through gradual invasion.	
1945 – 1960s	Courting of settlement residents by politicians.	Reduced evictions. Massive growth in the informal sector.	Civil Code, Civil Procedures Code
1961 – 1968	First legislative recognition of informal housing (limited to existing settlements).	Increasing incidence of invasion and increased expectation of gaining secure housing in cities.	Act 13517, February 1961
1968 – 1975	Attempt by revolutionary government to impose a standard model on informals as a condition for state assistance. Creation of a process to adjudicate state land (207 steps).	Demonstration of the political power of informals - invasion of Pamplona.	Decree Law 18898, Decree Law 19352
1975 – 1980	Process for informal settlements to become formal neighbourhoods. Responsibility for settlements transferred to Municipalities.	Increasing growth of informal sector.	Decree Law 22612, 1979 new Constitution, 1979
1980 – 1983	Increased distribution of titles and recognition of informal organisations.	Strengthened organisational basis for invasions.	Council Ordinance 192
1985	Legislative recognition of illegal land sales as a means of acquiring property for housing.	Weakening of formal system and strengthening of informal system.	Act 24071, January 1985
1988 – 1994	New registry and simplified procedures based on informal rules. Pilot formalisation projects in Lima.	Demonstration of viability of simplified formalisation methodology. Growing political support.	Leg. Dec.495/496 1988, SD's 001/002-90-VC 1990, Leg. Dec. 667 1991.
1996	Creation of COFOPRI, transfer of responsibility for formalisation from Municipalities to COFOPRI.	Raised expectation for titles.	Law 803, 1996
1996 – 2004	Implementation of World Bank Urban Property Rights Project.	Issuance of 1.135 million titles in marginal urban areas.	
2000 – 2004	Unification of registration and transfer of responsibility for formalisation to municipalities.	Increase risk of losing emphasis of prop-poor streamline procedures	Framework law of decentralization Municipalities organic law Formalisation law

Source: initial data based on de Soto 1989.

An important aspect in considering the rule of law, particularly where the central State is weak, is to ensure that the law accords with social customs, is in a form that can be implemented and the State has the authority and willingness to enforce the law. Bruce (2003:268) describes the legal framework as a 'layer cake' for assessing the authority and legality involved in common property rights control. Local and community systems with minimal legal recognition make up the bottom layer of land use control. Above this layer is communal, state owned and managed natural resources with national legislative controls originating from colonial or later periods. The third and fourth layer is for unified national land laws. Lindsay (2002:25-30) proposes the following design principles for strengthening the legal framework for land administration:

- be realistic about laws ability to change deeply engrained behaviour;
- make sure that interventions to formalise land rights are tailored to people's needs, priorities and practices;
- be realistic about what approvals, permissions, procedures etc. are critical to policy objectives, and try to eliminate the rest from the law;
- be realistic about government's financial and institutional capacity to implement a law;
- be realistic about people's ability to use the law;
- be aware that laws that seek to empower poor people, if taken seriously, may engender conflict;
- build "reality checks" into the process of law drafting.

There is a need to strengthen the judicial system in many developing countries and this is often a necessary prerequisite for a strengthened land administration system. In many developing countries disputes over land are a major component of the cases in the court system. In 1995 it was estimated that 60 percent of the court cases in Vientiane in Lao PDR were related to land. Some countries have established administrative dispute resolution systems. In Vietnam an administrative procedure for resolving disputes is set down by law.⁷ District- and commune-level People's Committees have one day free per week when they can receive complaints from the community. The District/commune People's Committee chairpersons settle complaints or denunciations of their own activities or illegal actions, as well as those of people and agencies under their jurisdiction. The Fatherland Front and citizens are responsible for supervising this process. Complainants have the option of taking unresolved disputes to higher levels of Government. In Cambodia, where the courts have limited capacity and credibility, a Cadastral Commission was established to investigate, mediate and arbitrate land disputes and the World Bank-funded Land Management and Administration Project is supporting the strengthening of the mechanisms for dispute resolution (World Bank 2002a:37-38).

One strategy for dispute resolution in Africa, where the central State is generally weak and the traditional authorities too often lack transparency,⁸ was to establish Land Boards. Tanzania introduced a new land policy and Land Act in the mid-1990's and when conducting an institutional and legal review, mechanisms for settling land disputes were investigated. The possibility of creating an administrative or quasi-judicial machinery located in the executive arm of the State was one of the issues considered by the Land Commission, but was rejected as it was deemed to be inefficient and illegitimate. A three tier system (primary, magistrates and the High Court) was taken on board and it was further decided to provide for village mediation panels consisting of *'not less than five, and not more than seven persons'*, of which at least two had to be women. The jurisdiction of such panels was voluntary and decisions were not binding, which meant most disputes remained unresolved (Shivji 1998:102).

In LAC many registration processes and decisions are undertaken by the judiciary, leading to delays and inefficiencies. In many countries land disputes can only be settled in the courts. In Nicaragua under the Land Administration Project (World Bank, 2002c) a National Directorate of Registries is being formed to oversight the modernisation of the registries as an administrative arm of the Supreme Court. The

project will also strengthen the agency responsible for mediating land disputes by developing low-cost alternate dispute resolution procedures.

5.2.2 Institutional Arrangements

'Whatever set of structures is chosen, attention should be paid to providing information, training and support to those at village level to ensure they know how powers are meant to be exercised and by whom. This should provide some guarantee that the potential benefits of decentralisation and land administration stand a chance of being achieved.' (Toulmin 2000:244).

Consideration of the institutional arrangements for land administration relates to many of the other issues, including community/participation, governance, sustainability and making decisions in the field, all of which are discussed below. In reviewing institutional arrangements for land administration a number of issues arise, (i) the organisational structure and roles and responsibilities of the institutions providing the core land administration functions (registration, and survey/mapping); (ii) decentralisation; (iii) linkages of the core land administration function to other land sector agencies/functions; and (iv) the role of the private sector. These issues are reviewed below.

Core Land Administration Functions. The core land administration functions are the registration of rights in land and the survey and mapping of the boundaries of the extent of these rights.⁹ A key determinate in the efficiency of a land administration system is the institutional structure that supports these core functions. In many jurisdictions the registration function and the survey/mapping function, or the cadastre, is provided by two different organisations, often in different Ministries. This is common in much of Europe and in Latin America. It can lead to a range of difficulties, including additional effort for users of the system, inconsistencies in records, duplicated effort in records and record management and, in some developing jurisdictions, an inadequate spatial framework for registration. The differences in institutional responsibilities can also present difficulties where the two functions were decentralised to different levels. This is the case, for example, in the Philippines where there are 162 registries of deeds, one in each province and city, and each operating 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, the fourth level in DENR's deconcentrated structure.¹⁰ Partially as a result of these complicated institutional arrangements many survey and map records were lost or destroyed and there are many overlapping and duplicate titles in the registries of deeds.

One strategy put forward in many jurisdictions to address these problems is to adopt consistent standards for records management and data models. Another is to implement clear coordination guidelines supported by memoranda of agreement between the various institutions. While these work in theory, in practice the experience in the developing world is that duplication of effort and inconsistencies are best addressed by institutional reorganisation and bringing the core functions together in one organisation.

Decentralisation. Although many land administration systems in the developed world operate as centralised systems, many in the developing world operate as

decentralised systems. This is certainly the case in Asia. There is a range of reasons, but arguably the major reasons are ease of access by users, particularly the public, to land administration services and support for the information needs of local authorities. In the developed world most direct users of land administration services are lawyers, surveyors and staff in financial institutions. Systems have evolved to provide access for these intermediaries to an often centralised registry, initially through data brokers/lodgement clerks and remote electronic access to information and databases, and more recently through the ability to search registers and lodge documents and plans over the Internet. In the developing world, where decentralised land administration systems operate they have often developed as isolated registry offices, usually operating with manual records systems, with each local office responsible for their own specific jurisdiction. While decentralised systems can provide efficient local registration services, they have potential disadvantages, including:

- the requirement that users go to the local registration office to effect registration;
- a limited ability to integrate the registers into a national system to enforce limits on land holdings, support land reform programs or collect taxes;
- limited facility for providing other users, particularly other national and local government agencies, with copies of or access to land administration records;
- the possibility of inappropriate influences and lack transparency; and
- lack of institutional capacity at a decentralised level and lack of oversight.

Steps can and were taken to address these disadvantages and some decentralised systems have evolved to provide some of the most efficient land registration services in the world. In Thailand, for example, the average time taken to register a transfer, including the preparation of the legal contract, is two and a half hours. However in other jurisdictions, including Indonesia, the Philippines and much of Latin America, decentralised systems operate significantly less effectively.

Where centralised land administration systems operate, such as most of Africa, the centralised system often provides very limited geographic cover and decentralisation is strategically used to extend services. As noted by Toulmin (2000:231) there are other drivers for the introduction of decentralised land administration systems, including:

- significant cut-backs in national government budgets;
- increased emphasis on good governance and democratisation, particularly under strong pressure from donors; and
- clarification of the respective roles of local authorities and customary authorities and, in particular, the perceived need to provide some oversight and checks and balances on the powers of customary authorities.

There are a number of possible models for decentralising land administration functions, including:

- A direct linkage of land administration services to regional and/or local court system;

- A direct linkage to local administration and/or local government (what Toulmin (2000:230) calls decentralisation);
- Provision of the land administration services through local representation and/or offices of a central agency (what Toulmin (2000:230) calls deconcentration);
- The establishment of new, autonomous or semi-autonomous bodies such as Land Boards (see Quan 2000b and Toulmin 2000:240);
- The devolution of land administration services to customary authorities (see Toulmin and Quan 2000c).

Decentralisation models of deconcentration, delegation, and devolution (World Bank 2004) have varying degrees of political, fiscal and administrative features and respective service accountability. The key administrative features of each model are shown in the table below with examples of countries from South East Asia that have adopted these models.

Table 16 Administration Features of World Bank Decentralisation Models.

Degree of Decentralisation	Administrative Features	South East Asian Example
Deconcentration (minimal change)	<ul style="list-style-type: none"> • Provider staff working at local level are employees of centre, and accountable to centre, usually through their ministries; weak local capacity is compensated for by central employees. • Accountability remains distant: the <i>short route of accountability</i> may be weak if provider monitoring is weak and citizens may have to rely on a <i>weak long route</i> stretching to politicians at the centre; a strong <i>compact</i> between policymakers and providers can compensate to some extent. 	Thailand
Delegation (intermediate change)	<ul style="list-style-type: none"> • Providers could be employees of central or local government, but pay and employment conditions are typically set by centre. • Local government has some authority over hiring and location of staff, but less likely to have authority over firing. • Both <i>long</i> and <i>short routes of accountability</i> potentially stronger; greater local knowledge can allow better matching and monitoring of supply with local preferences, strengthening both the <i>compact</i> and <i>client</i> power. 	Philippines, Laos
Devolution (substantial change)	<ul style="list-style-type: none"> • Providers are employees of local government. • Local government has full discretion over salary levels, staffing numbers and allocation, and authority to hire and fire. • Standards and procedures for hiring and managing staff may still be established within an overarching civil service framework covering local governments generally. • Potentially strongest <i>long</i> and <i>short routes of accountability</i>, but now also more influenced by local social norms and vulnerable to local capacity constraints and politics. 	Indonesia

Source: World Bank 2004:189 (table modified)

There are complications or constraints in adopting any of the proposed decentralisation models. A complication can be the divergence between policy on decentralisation/local authority and what actually happens on the ground. In Indonesia a model of local administration was implemented, based on the village

administration that has traditionally operated on the island of Java. This system operates reasonably well on Java, but has limited success in the outer islands where there were other models of traditional authority. In India from about 1993 a system of local autonomy was introduced into the various Indian states (the Panchayati Raj). The Panchayati Raj was given some authority for raising revenue from land but it has largely not been taken up. The traditional responsibility for land administration in India was at State level in the various Revenue Departments and there is lack of clarity in the responsibilities of the Panchayati Raj and the local offices of the Revenue Departments on land matters. In Bolivia various urban cadastres are being established as part of a policy of devolution ('Popular Participation'), but there is no coordination between them and other types being implemented such as an agrarian cadastre, a forest cadastre, etc.

A further complication when considering decentralisation is the difficulty in defining the actual boundaries of local or administrative areas. This becomes an issue where corner marks have to be placed and a decision made on who approves them on behalf of the local authority. This often occurs in an environment where there is no agreement on local boundaries that can be plotted on medium scale mapping. There are many reasons for the lack of clarity on administrative boundaries. In the Philippines the revenue of local government units (LGU) is largely based on the geographical extent and population of the LGU, and the electoral roll is also based on population. There is substantial incentive for LGUs extending their boundaries and many attempt to do so. Also in the Philippines, IPRA makes provision for the formation of indigenous people's organisations (IPOs) and the delineation of ancestral domain. However, as noted by the Asian Development Bank (2002), there were many community level disputes and suggestions that ethnic identities and ancestral domains are being 'imagined'. The country case study for South Africa (Augustinus 2003b:5) notes that it has taken 15 years to reach agreement on traditional boundaries in KwaZulu-Natal. These examples indicate that when considering decentralising land administration services, a careful assessment of how well boundaries are defined or what strategies could be adopted to ensure that delays in the definition of administrative boundaries have minimal impact on the overall program should be undertaken.

Another complication is the need to ensure that any plans for decentralisation of services are financially sustainable. A classic example is the 1998 Land Act in Uganda which created an array of Land Boards and oversight arrangements which when costed with other measures proposed under the law, required an increase in government funding for the land sector from less than 2 percent of government revenue to approximately 33 percent (Augustinus 2003c:4). Clearly this was not possible and the requirements were reassessed. Another less dramatic example of the importance of carefully considering an appropriate model for decentralising land administration services is Ghana. In the recent preparation for the proposed Land Administration Project, a request for a long list of survey equipment, costed in the high 7 figures of US dollars, was submitted, largely in units of 110, the number of districts in Ghana. This despite the Survey Department having no presence in many of the districts, in fact little presence outside of Accra and Kumasi, and the fact that there was no clear model in Ghana for the respective roles and responsibilities of the central, local and traditional authorities.

Having considered some of the complications, there is value in reviewing some examples; Thailand and Indonesia, both of which are decentralised and include a

comprehensive land administration function in one agency.¹¹ The Thai Department of Lands (DOL) has a very strong central office and an extensive network of regional offices, with the title register distributed amongst 76 provincial land offices and 272 branch provincial land offices. Lesser documents are maintained in 758 district land offices. There is a local reporting function to district heads and provincial governors, but the main line of reporting is from district to branch/province and then to Bangkok (a deconcentration model). In many respects the Land Titling Project centralised, rather than decentralised functions, creating a large network of branch provincial land offices and generating about 8.5 million new titles by either field adjudication or transforming existing land records held at the district level. To support this network of land offices there is a limited number of office typologies, with standards for offices, staffing and equipment as well as clear criteria for establishing new branch provincial land offices based on the number of titles, projected levels of annual registered transactions and the distance people need travel. The Thai network was not built from scratch, but has since 1901, when the Department was established, gradually expanded from Bangkok to the rural cities and then into the rural areas as the coverage of the title register has gradually expanded. Registration is very efficient, in part due to regulations that require registration on the day of application, but also because there are little if any prerequisites such as compliance with planning regulations or payment of local taxes.

The land administration system in Indonesia is much less efficient than Thailand. The National Land Agency (BPN) was only formed in 1988 when several different functions were brought together, and operates with a weaker central office (than exists in Thailand) and a network of 27 provincial offices and 273 municipality/regency offices. The main land registration function is undertaken at the municipality/regency level while the provincial offices are largely restricted to oversight. BPN had nearly twice the staff of the Department of Lands in Thailand, but has a range of problems including overstaffing, less well-educated staff, and lower morale. There is no clear typology of offices, equipment and staff. The 1999 Decentralisation Law is transferring increased responsibility to the municipalities/regencies, by-passing the provinces (moving from a deconcentration to a decentralisation model).

Linkages to other Land Sector Functions. The linkage between the core land administration functions and other public agencies/requirements is a further challenge. One of the reasons for the efficiency of the Thai system is the lack of linkages to other systems and requirements. This is not the case in other jurisdictions; in the Philippines there is a requirement to pay local and national taxes before registration; in Ghana proof of compliance with planning regulations is required prior to registration. These linkages should be carefully reviewed and one strategy might be to incorporate steps into the registration process; for example, the Department of Lands in Thailand collects a capital gains tax on behalf of the Revenue Department. In the developed world, concepts of multi-purpose cadastres and spatial data infrastructure were developed (Williamson, Chan and Effenberg 1998:177). These efforts are relevant for the developing world to ensure there is an overall vision for developing the system and building future capacity but there needs to be a clear understanding of project costs and benefits, and systems must be financially sustainable and user-friendly.

Private Sector. One last factor that needs to be considered is the role of the private sector. In most jurisdictions land administration is purely a public sector role but in

many countries a range of issues arise when using public sector resources to implement land administration projects. These include limited incentives/rewards, lack of skills and limited experience with new technology, and a limited ability by government to adequately fund land administration services. One strategy to address these problems is to set up the registration system as a government trading enterprise. This strategy was implemented in England, Hong Kong and the Australian State of New South Wales, all of which operate off-budget. Another variant is to establish semi-autonomous agencies that operate under similar employment conditions to those of private sector; this approach was implemented in Peru and Greece.

Another strategy to address the public-sector issues listed above is to involve the private sector in service delivery. In a limited number of jurisdictions the private sector was formally brought in as a land administration service provider. In 1991 the Ontario provincial government reached agreement with Teranet Inc to undertake a major revamp of the land registry system. Under the agreement Teranet Inc was equally owned by the province of Ontario and a private company Teramira Holdings Inc, with limits placed on individual shareholdings in Teramira Holdings Inc. This arrangement seems to be working well and Teranet Inc has since established a range of subsidiaries offering land administration services internationally and wider e-commerce services.¹² In the 1990s New Zealand and the Australian state of Victoria attempted to enter into a partnership with the private sector to enhance their respective land administration systems. Both attempts failed, due largely to an inability to reach agreement on fee structures, revenue projections and the costs to be borne by the private partners. The Philippines is currently implementing a major upgrade of the land registration system under a Build-Own-Operate (BOO) agreement with a private sector consortium. This project, which commenced in late 2000/early 2001, is seriously behind schedule and is faced with a number of difficulties including the inability to agree on arrangements for government access to land records and an acceptable fee structure.

Another model for involving the private sector is to have the private sector provide a network of 'front-offices' that feed information back into and/or access information from a government-run central land registration 'back-office'. This was discussed in a number of jurisdictions, with options for the private sector partner being an organisation with an established network of offices, such as a private bank or utility company. Such an arrangement has many potential advantages, including minimal public sector staff, most of whom would be specialists focussed on the integrity of the registration system itself, fewer levels of checking and administration and increased control over rent-seeking. We are not aware of any jurisdiction that has implemented this model.

Many jurisdictions have licensed private sector surveyors because public-sector surveyors can not service market demand. Surveyors can however represent a particularly strong vested interest, often pushing for high standards for survey and mapping and often with limited policing of these standards. As the cost of survey and mapping can be a major element in any land administration system this is a concern, particularly as most developing countries have great difficulty in supplying the human and other resources necessary to support an over-specified survey and mapping requirement. The survey lobby is particularly strong in a number of countries, including Malaysia, the Philippines, and Greece. In the Philippines, where the cost of survey is passed onto the public, participants in a recent social assessment

undertaken for the Land Administration and Management Project have expressed strong concerns about the cost.

Public notaries are also a powerful force in a number of countries including much of southern Europe and former colonies such as Latin America and Indonesia. In Peru, for example, to overcome a range of problems including high notarial charges and resistance to using simplified forms, legislation was introduced to broaden the categories of persons able to prepare and witness transactions.

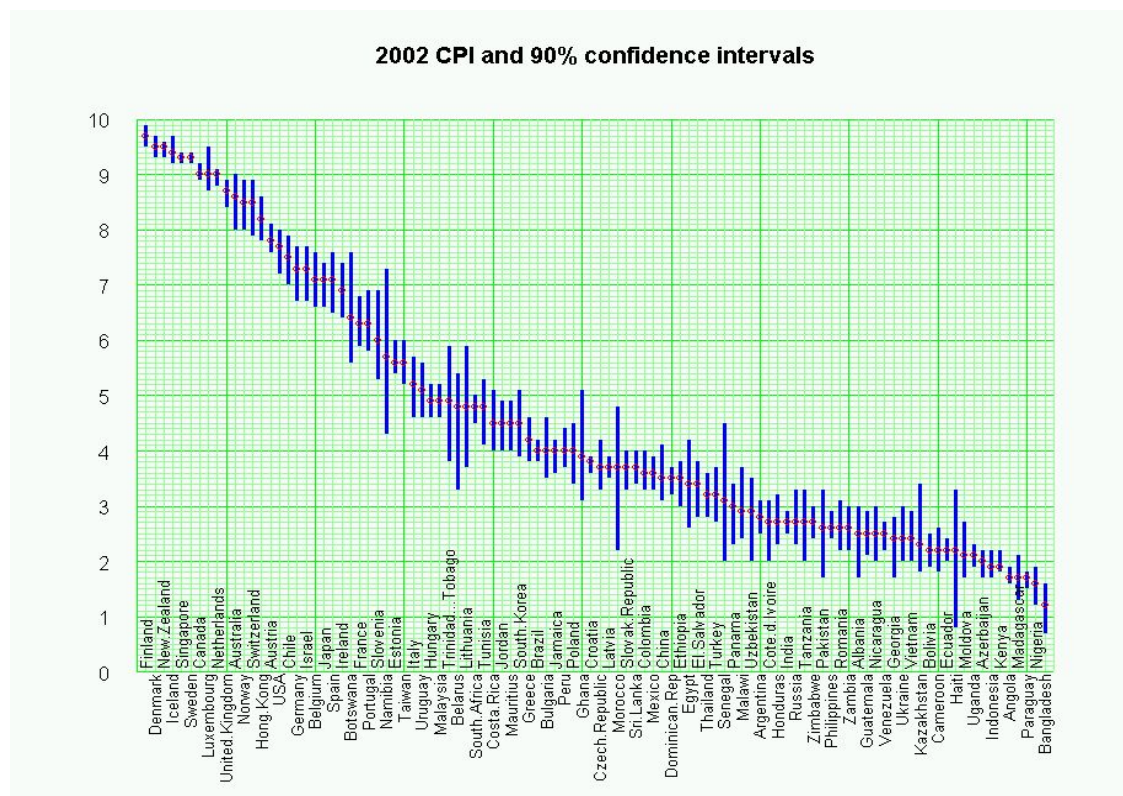
In Greece the system of deeds registration functions separately from the cadastre in regional and district offices which are operated independently on a private sector basis by legally qualified land registrars. A key strategy of the proposed EU supported Hellenic Cadastre Project was the progressive transition of these deeds registry offices into *Cadastral Offices* with responsibility for all aspects of the newly established parcel based system of title registration.

5.2.3 Corruption and Governance

‘Senior politicians and public servants in cities all over the world manipulate or ignore the law and administration relating to land allocation and development so as to line their own pockets and those of their families, friends and political allies’ (McAuslan 2002:27).

Land is a fundamental resource in all countries and systems to administer rights in land, as McAuslan notes, can be subject to manipulation and corruption. A number of organisations prepare indices of perceived corruption and an example is set out in Figure 11. From the chart there appears to be a high correlation between perceived levels of corruption and perceptions of efficiency in land administration systems.¹³

Figure 11 The 2002 Transparency International Corruption Perceptions Index.¹⁴



Source: Internet Center for Corruption Research

In many developing countries the land sector is considered one of the most ill-disciplined. In 1999 it was reported that research into perceptions of corruption in Thailand found that the Department of Lands was perceived as the fourth most corrupt agency after the Customs Department, the Royal Thai Police and the Revenue Department.¹⁵ Thampi (2002:2), in reporting on public perception of corruption in seven public sectors¹⁶ in five countries in South Asia, noted that land administration was perceived as the second sector most prone to corruption in Pakistan and the third most prone to corruption in India, Bangladesh and Sri Lanka. Surveyors and local officials (Tehsilders) were named as the major perpetrators of corruption in all countries except Sri Lanka, where respondents named deed writers as the major perpetrators of corruption. Lack of accountability and transparency were cited as the main reasons for corruption although monopoly power was named as a major cause of corruption in Bangladesh and Sri Lanka (Thampi 2002:29). In 2002, Transparency International conducted a survey of companies in leading exporting countries. Asked to identify the business sector in which bribery is most likely to occur, respondents listed the “real estate/property” sector as the fourth (out of 17) sectors where bribery was most likely (after the “public works/construction”, “arms and defence” and “oil and gas” sectors) (Hodess et al 2003:268).

The level of corruption and the size of individual incidents vary greatly. In many countries, demands for facilitation fees are rife and there is often some degree of cultural toleration. Isles (2002:18), in researching six recent recipients of titles in the Philippines noted the comment by one participant that *‘hardly anything moves in this country without lagay [bribes]’*, and that there is some cultural basis for this. He did note however that for the usually infrequent users of the system *‘...it is difficult to distinguish between what is illegal and what is just a part of “pakikisama”, or maintaining good relations with others.’*

The types and incidents of corruption in many countries are more significant with the political elite and those with connections and an understanding of the system using the land administration system to usurp the legal and customary rights of others and create conflict and a climate of uncertainty.

There is a high level of perceived corruption in Indonesia, with estimates of the diversion of loan funds as high as US\$13 billion (Harahap 1999:3). The land sector in Indonesia lacks transparency, particularly in Jakarta. Surveys indicate the primary causes in Indonesia are low civil servant salaries, lack of controls and accountability, and poor law enforcement (Partnership for Governance Reform in Indonesia 2002:35). It is suggested however that inadequate pay may be only one factor within an overall institutional environment that fosters corrupt behaviour. This argument is supported by wider studies which show that the role of wages is ambiguous, the impact of democracy and colonialism is unclear, but press freedom and the judiciary seemed to be important elements in reducing corruption (Lambsdorff 1999:14). Harahap (1999:4) notes the following recommendations to address corruption in Indonesia:

- establishment of a national Integrity Workshop as a forum for government and civil society;
- establishment of a code of conduct for top officials;
- declaration of wealth and income, including a provision for political leaders to place private interests in blind trusts;

- focussed efforts to improve government programs in high priority areas such as social safety nets;
- setting up new mechanisms for citizen oversight of government projects.

Various strategies were developed to address bureaucratic inertia and difficulties with staff reward/incentive systems. In Thailand the Department was able to substantiate generous budgets based on firm output targets. Initially allowances for field staff were very attractive, perhaps too much as it impacted on other activities in the Department. Although these benefits were eroded over time, reward systems for field staff have never been a real issue in Thailand. In Indonesia where the allowances were more rigid, a system linking staff allowances, budgeted on a daily basis to titling output was implemented. This system provided sufficient incentives for field staff. In other countries more radical approaches are required. In Peru and Greece semi-autonomous agencies were created outside the formal civil service and although formally attached to Ministries, operated under more private sector conditions. This worked well in Peru, but was less successful in Greece where the design was very weak and the agency had limited autonomy. This is a risky approach because it usually relies on having a senior political champion so the whole agency and project is exposed if this champion loses power. Another strategy is to outsource or sub-contract some or all of the activities to the private sector. This approach was adopted in Laos, Indonesia and in the Philippines, although in Laos, where private contractors were hired to work with government officials, problems with the relative salaries of the contractors and the officials did arise. In some countries the only alternative is to seek some mechanism to increase staff conditions. In Latin America and ECA several countries have contracted out large systematic registration activity. In Cambodia, where government salaries are very low (US\$15-20/month) and there is a well-established tradition of paying allowances of US\$5-10/day to project staff, key staff working on the project must receive an appropriate reward. During loan negotiations in Cambodia it was agreed that the government would fund a higher allowance for 70 staff during project implementation.

Another strategy to improve the transparency of land administration is to build in community oversight. In the Philippines local advisory groups were formed to oversee prototype activity, with representation of local government, other agencies and civil society. NGOs have also been engaged in a number of countries to undertake project activity such as social assessment, community consultation and public awareness campaigns. In Peru, the Institute for Liberty and Democracy, and NGO headed by Hernando de Soto, was responsible for the basic reform¹⁷ that evolved into the World Bank-funded urban project.

5.3 Focus on Sustainability

When designing land administration interventions it is imperative to ensure the system is sustainable. Sustainability has at least four dimensions; first it must be technically sustainable, an issue that is particularly important in Africa as noted by Atwood (1990:666). Second it must be financially sustainable. Based on experience, systems that cannot fund their activities are at risk of future funding cuts and/or donor fatigue.¹⁸ Third it must be sustainable from a community perspective and it must gain and maintain public confidence. Both separate and integrated to these

dimensions is capacity building. Capacity building it is discussed as a fourth dimension although it is considered an integral theme of all activities for a sustainable land administration system, not as an add-on (Enemark and Williamson 2004).

5.3.1 Technical Sustainability

'The adjudication, sophisticated recording systems, precise boundary delineation, and the mapping requirements of land registration or titling are quite costly in the use of legal, technical, and managerial skills. These skills tend to be needed in a number of other high priority areas in many African countries' (Atwood 1990:666).

Technical Tools. Technology is a useful tool in improving land administration systems but there are many situations where technology was pushed on the basis of capability rather than need, and this has put projects at risk. One example is proposals in the mid 1980s to digitise and integrate digital topographic data for the whole country in a GIS being established to computerise leases in Papua New Guinea. This is despite the fact that the PNG government had great difficulty in maintaining records for the leases themselves which only covered the 3 percent of the country that had been alienated from customary tenure. Another example is proposals in the mid-1990s to establish a 1 millimetre accurate cadastral GIS over the whole of Peru. This is despite the fact that the network of public registries was full of registered documents setting out legal rights over often very poorly described parcels of land and the primary geodetic network in the country would have trouble supporting a 1 metre GIS of the whole country. There are also many examples of technology gathering dust because the agency lacks the budget for materials and maintenance.

Technology has many applications in strengthening land administration. These applications include: the digitisation of alphanumeric data, data validation and verification, and the generation of cross-indices; the capture of spatial data and the generation of mapping; the linkage of alphanumeric and spatial data and the building of spatial data infrastructures; the computerisation of valuation and tax rolls and the development of computer-assisted mass-appraisal techniques. It is not possible to cover all these topics in this paper. Suffice to say information and communication technology decisions require significant attention, but should be seen as a means to an end and not an end in itself. In the developing world, the computerization of land records is often seen as a strategy in its own right that can make a quantum improvement, independent of process re-engineering or more fundamentally a shift in focus from processes to service delivery. Two recent examples of projects with a prime focus on computerization that largely failed to deliver are the Land Office Computerization Project in Indonesia and the Land Titling Computerization Project in the Philippines.

Therefore, where a long term vision can be developed it is recommended this be aligned to an ICT strategy as a more efficient and effective way of doing business (Todorvoski 2006). Todorvoski (2006) suggests that "as soon as Cadastral and Land Registration organizations recognize ICT as a discipline properly aligned with their businesses, they improve their business, business performance, quality of output and all this with return of investments in ICT". This ICT/business strategy for cadastral and land registration recording would greatly support the expansion of geo-ICT based services of a land administration system particularly in area of land markets and valuation. However conceptualizing is often easier than operationalizing

these strategies, particularly where capacity and resources are low and institutional arrangements are weak.

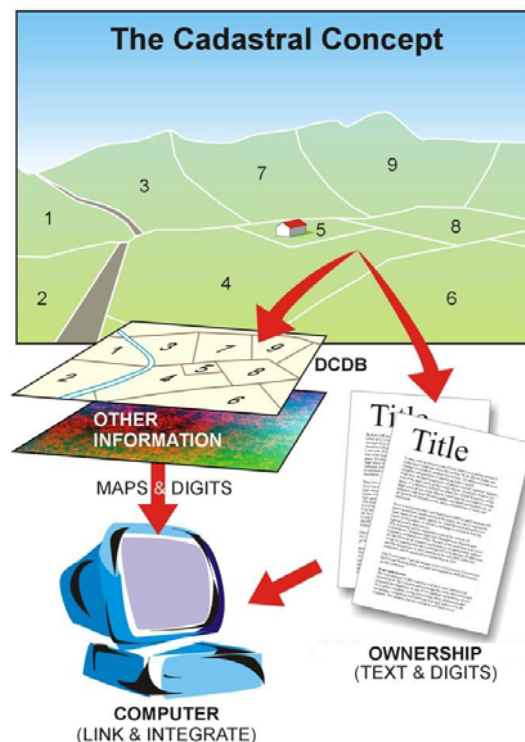
The capture and maintenance of spatial data is a major, high-cost component of most projects to strengthen land administration systems in developing countries. The following discussion focuses on this important aspect of technology.

Cadastral Concept. Efficient systems to officially record rights in land comprise two basic sets of information:

- registers comprised largely of textual or alphanumeric data that record rights in land; and
- maps or a spatial framework that define the boundaries and extent of land parcels over which these rights apply.

These two basic sets of information constitute the concept of the cadastre, which is illustrated in Figure 12. Under the cadastral concept there is a close, explicit linkage between the textual and spatial data. With this link in place, various search/access mechanisms can be developed to search information on rights in land. These searches can be from keys in the alphanumeric data or from queries in the spatial framework and reports can be produced in either or both domains. The spatial framework can also be a useful tool in validating the textual data, identifying, for example, parcels where numerical data is not available. An essential prerequisite for an efficient cadastral system is therefore ensuring that the two datasets are maintained and up-to-date. No set of rights should exist without a spatial parcel to assign them to, and all spatial parcels should be linked to a set of rights. This is a simple concept, but can be very difficult to implement in practice. In many countries there is a weak or non-existent spatial framework and this is a major cause of uncertainty in rights in land.

Figure 12 Cadastral Concept (from Williamson, 2002)



It is important to consider the social context of land boundaries in assessing the technical requirements for surveying and mapping. Where there is a simple, community-accepted system of defining parcel boundaries or where there is a low social cost in getting agreement on boundaries there is reduced justification for accurate but costly surveys and comprehensive mapping systems. This is the situation in Thailand where the prime emphasis in re-establishing boundaries is agreement by the parties rather than re-instatement from information recorded in the land records. Most surveys in Thailand are undertaken to lower accuracy, but lower cost, graphical standards. In other countries, such as Tunisia, there is a higher social cost in reaching agreement on boundaries. When agreement is reached on boundaries in Tunisia, accurate and costly surveys are undertaken and the coordinates determined from these surveys are used to re-instate boundaries.¹⁹ In England a general boundary system operates with strong community acceptance. The general boundaries are charted on large-scale topographic maps produced by a national authority. Registry maps and file plans are produced from these maps. Land owners have the option of requesting accurate surveys to fix their boundaries, but few such requests are made.

The cadastral map record is a prime layer in supporting the development of national Spatial Data Infrastructure (Ting and Williamson 2000). In many countries cadastral maps compiled to graphical standards that support the index aspect discussed above provide the foundation for SDI. Many users in these countries express a need for higher accuracy. These users include utility authorities that want to chart their assets on the cadastral spatial framework and typically express the need for 'spade-width' accuracy, something that approaches survey-accuracy in the cadastral framework. Few if any developed countries have been able to implement such a system, even with significant recent improvements in technology and a range of innovative approaches to phase the introduction of improved accuracy.

There are two broad aspects to the spatial framework that might support a land registration system. The first is a topological or indexing aspect that supports a range of applications, including:

- the identification of land parcels recorded in the register, including support for the sub-division or consolidation of land parcels;
- identification of parties with an interest in a particular land parcel for a range of purposes including the identification of adjoining owners for service of notice;
- the validation and verification of registered land, including the identification of duplicate or missing records and the identification of possible problems with overlapping parcels; and
- a spatial framework for data queries and access to the data in the register.

The second is a metric or calculation aspect that supports a second set of applications, including:

- the accurate re-instatement of parcel boundaries;
- strong evidence to support the resolution of disputes over boundaries;
- the calculation of accurate parcel areas, offsets, etc; and

- the accurate determination of updated parcel dimensions where land parcels are sub-divided or consolidated.

Many systems restrict the spatial framework to the first aspect. This is the case in England. In other countries there are accurate individual survey plans that record the information that supports the second aspect, and this information is used to compile a series of cadastral index maps that support the topography and indexing of the first aspect. There is a significant increase in the cost of implementing and maintaining a system that calculates parcel boundaries. This is the situation in Australia and Thailand. In other countries, the registry maps precisely define parcel boundaries and go some way to addressing the second aspect (although most still record more accurate survey information for at least some properties on the register). This is the situation in much of continental Europe.

Costing Technology. Cost is an important consideration in looking at the technology options. In reviewing international experience in strengthening land administration systems, Dale and McLaughlin (1999:46) provide the following indicative breakdown in costs where technical options can comprise a large percentage:

- institutional strengthening: 10-15 per cent;
- mapping: 20-5 per cent;
- adjudication and surveying: 30-50 per cent; and
- registration: 20-5 per cent.

The data from the case studies provides some information on the cost of various technology options. Table 17 sets out the unit cost breakdown for systematic registration in the countries studied. Overall the unit costs range from about \$10 to \$55 per parcel, although there are some inconsistencies.²⁰

Table 17 Breakdown of Systematic Registration Costs from Case Studies (US\$/parcel).²¹

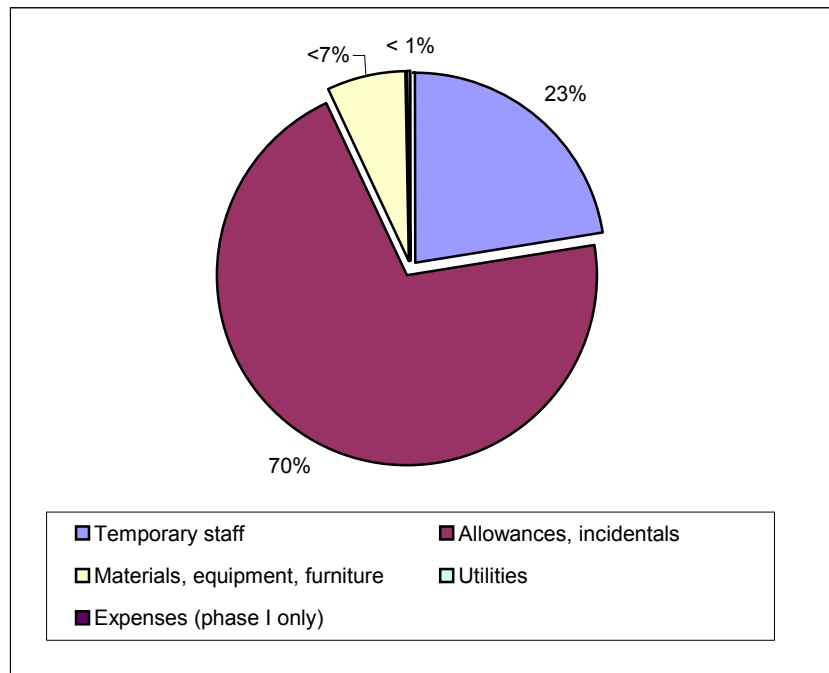
	Armenia	Kyrgyzstan	Moldova	Indonesia	Thailand	El Salvador	Perú (urban)	Perú (rural)
Pre-Field					4.89			
1 Geodetic Network	-	-	5.66			-	0.39	
2 Cartography	0.20	-	7.08			7.05	0.24	11.26
3 Compilation of existing records	0.02	0.03	1.53			1.30		
4 Publicity Campaign	0.02	0.31	0.55			1.94	0.42	
5 Acquisition of Government equipment	0.68	0.91	-			1.50		
Field					19.32			
6 Collection of claimant information	1.00	0.30	3.77				0.23	3.62
7 Boundary investigation, survey, marking	4.57	2.09	7.64			9.67	1.61	10.50
8 Conflict Mediation	-	-	-			0.06	0.08	
Post-Field								
9 Quality control	0.12	0.14	0.94				0.05	10.00
10 Legal validation	1.00	0.15						0.56
11 Public display of field results	0.02	-					0.02	
12 Conflict Resolution	-	-						
13 Prepare land record	1.00	0.04	2.92			2.89		1.40
14 Prepare cadastral maps/plans	0.82	0.04	1.98			1.44	2.37	1.68
15 Cadastral/Registry database design	0.50	1.06	3.77					
16 Data entry	0.10	0.03	0.19					
17 Register property rights in registry	0.05	0.14	7.55					5.44
18 Issuance of titles to beneficiaries	-	0.01	0.94					1.95
19 Administration/management	3.25	5.30	1.89			3.89	7.27	9.28
20 Total per parcel cost	13.35	10.55	46.41	16.30	24.21	29.74	12.68	55.69
21 Amount paid by beneficiaries	-	-	-	-	2.55	-	-	-
Total Cost	13.35	10.55	46.41	16.30	21.66	29.74	12.68	55.69

Pre-field costs – mainly the cost of geodetic control and base mapping – can be a significant cost as indicated in the cases of Moldova, Thailand, El Salvador and the rural project in Peru. The unit cost for pre-field activity in Thailand, mainly geodetic control, aerial photography and photo-mapping is relatively small due to the large number of titles projected in the third phase of the project (over 4.77 million titles). In the earlier phases of the project, where the titling output was smaller, the unit cost of pre-field activity was higher (\$9.73 in phase II with an output of 2.1 million titles and \$14.86 in phase I with an output of 1.6 million titles). Where a project involves significant expenditure on geodetic control and mapping there is the risk that unit costs will blow-out significantly if the planned number of titles is not produced. This happened with the Northeast Region Land Tenure Improvement Project in Brazil, which incurred significant expenditure on mapping yet, due to institutional and policy difficulties, was unable to issue the number of titles planned. This project was cancelled.

The unit cost in the field of boundary identification and surveying was a significant cost element in most projects (Armenia, Kyrgyzstan, Moldova, El Salvador and the rural project in Peru). In Armenia significant cost saving for the survey activity were realised by contracting the activity to the private sector. Many countries seek to improve land administration by large-scale re-survey activity. Dale and McLaughlin (1999:53) quote the example of Poland where after the move from socialism in the early 1990s various interests pushed for a re-survey of cadastral boundaries to new standards of accuracy using new technology. This effort was costed at US\$1 billion and did not proceed. This approach is also evident in various states in India. In 2004 it was noted that the Survey and Settlement Department in Karnataka was pushing for a full re-survey of the state using new technology, even though the legal basis of the new surveys was unclear and despite the fact that several pilot projects had failed to develop efficient, cost-effective methodology. This effort was conservatively costed at US\$200 million (Land Equity International 2004:18) and did not proceed.

Appropriate Technology. No project in the developing world has been able to implement and sustain high-accuracy surveys over extensive areas of their jurisdiction. Those countries that have been successful in registering significant numbers of titles have tended to concentrate on relatively simple, low cost survey methods and produced graphical standard cadastral index maps. This was the approach in the urban project in Peru. In Thailand most land parcels were surveyed graphically as square offsets off break-down control traverses or photo-identified on rectified aerial photographs. A significant number of titles in Thailand were also produced by the office conversion of certificates of utilisation that were adjudicated in a major program starting in the mid-1970s. The low-technology/low-cost approach in Thailand is reflected in the breakdown of cost components for the systematic registration activity for phase I and II in Thailand (see Figure 13). Over 70 percent of the field costs that resulted in registered titles were spent on staff allowances and incidentals. A further 23 percent was spent on temporary staff salaries. Only 7 percent was spent on materials, equipment and furniture.

Figure 13 Thailand Land Titling Project Ground Survey/Conversion Cost Components (Phase I and II - Burns 1995).



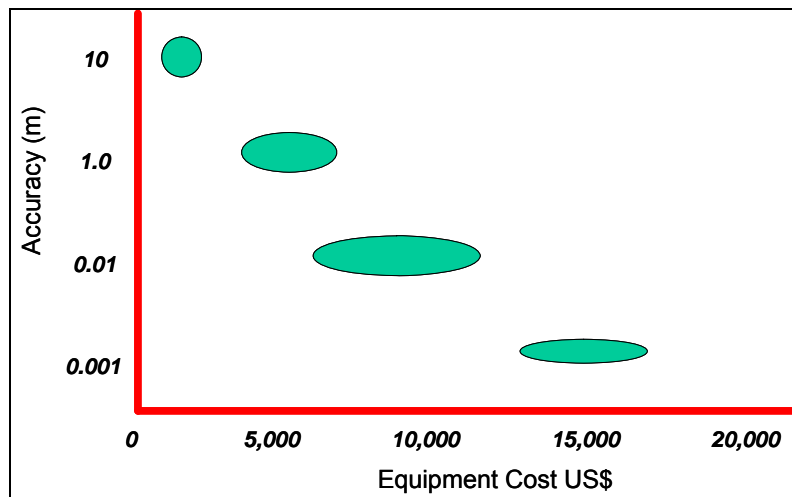
There are trade-offs in the various technical options available for cadastral surveying. Figure 14 maps four key technical options against the criteria of accuracy, simplicity, cost, efficiency, utility and flexibility. The two map options (ortho-photos and maps) provide a base for cadastral maps. Cadastral maps can be produced from field survey diagrams by connecting to control points. It is more difficult to use sketch maps to produce cadastral maps. Sketch maps are very simple and have low cost and are therefore used as the spatial reference in many developing countries. These maps however suffer from low accuracy and limited use beyond their immediate application.

Figure 14 Options for Cadastral Surveying (based on Dale and McLaughlin 1988:110).

OPTIONS				
	<u>Sketch map</u>	<u>Ortho photo</u>	<u>Map from photo</u>	<u>Field survey diagram</u>
CRITERIA				
Accuracy	L	H	H	H
Simplicity	H	L	L	L
Cost	L	H	H	H
Efficiency	H	L	L	L
Utility	L	H	M – L	L
Flexibility	H	M	L	L

An important factor in deciding on appropriate survey technology is the relationship between equipment cost and positional accuracy. Figure 15 illustrates the relations in 1999 (from Dale and McLaughlin 1999:55). With improvements in technology, the relationship is changing. For example, it is now possible to consider 1 metre positional accuracy with equipment costing about \$1,000. Developments with other mapping technology, such as high-resolution satellite imaging systems and digital procession work-stations, increase the range of technical options.

Figure 15 **Equipment Cost/Accuracy Matrix (from Dale and McLaughlin 1999:55).**



Cost / Benefits. There is limited information available on the cost/benefits of various technical options in a developing country. Alemu (2006) has recently published an investigation of 8 technical options for one rural village of 154 land parcels covering 120 hectares about 35 kilometres outside Addis Ababa in Ethiopia. The technical options tested were:

- the use of hand-held GPS equipment to coordinate corner marks to define the parcel location and area;
- the traditional rope survey technique used at local government (Woreda) level in Ethiopia to measure parcel areas for registration;
- a combination of the traditional rope technique to determine parcel areas and hand-held GPS units to measure parcel centroids);
- a tape-and-compass technique to produce sketch maps and determine parcel areas;
- a combination of tape-and-compass surveys to determine parcel areas and hand-held GPS to map parcel centroids and corners;
- surveys with electronic total stations to measure parcels corners and determine parcel areas; and
- ortho-projected IKONAS high-resolution satellite imagery to photo-identify parcel corners and determine parcel areas.

A key constraint of the study was that the surveys were to be undertaken by staff at the local government (Woreda) level who have limited training in surveying. The economic life of the various items of equipment was estimated and the depreciated

daily cost of the equipment was included in the cost analysis of the study, as was estimates for the salary costs of staff and other direct costs of the various methods. The results of the study are summarized in Table 18 and Table 19.

Table 18 Summary of Cost and Time Estimates in Ethiopia (from Alemu 2006).

Methodology	Cost (US\$)		Survey time/speed (hours:minutes)	
	/parcel	/ha	/parcel	/ha
Hand-held GPS	4.98	9.27	00:19	00:34
Rope only	0.81	1.50	00:15	00:28
Rope and hand-held GPS	0.97	1.81	00:17	00:30
Tape and Compass	18.18	33.66	01:34	02:53
Tape and Compass and hand-held GPS	18.29	33.80	01:36	03:00
Total Stations	7.27	13.54	00:23	00:44
IKONAS satellite imagery	14.23	26.52	00:17	00:31

The use of hand-held GPS equipment is relatively cheap and quick, however significant capacity building was required for this equipment to be used by Woreda staff. The use of tape and compass was the most expensive option, due to increased time in undertaking the surveys. The use of total stations was moderately expensive, largely due to the cost of equipment, and required significant capacity building. The use of high-resolution satellite imagery was very expensive, largely due to the cost of the ortho-projected imagery (equivalent to \$12.11/parcel). If the imagery cost could be offset against other users then this had a significant impact on the cost of this option. The traditional rope survey method is clearly cheaper and requires no capacity building. This process however will not result in any cadastral maps and will provide limited information to settle any future disputes over boundaries.

Table 19 Summary of Performance Assessment in Ethiopia (from Alemu 2006).

Methodology	Cost	Speed	Appropriate-ness	Flexibility
Hand-held GPS	L	F	Massive CB	Very flex.
Rope only	L	F	No CB	Very flex.
Rope and hand-held GPS	L	F	Massive CB	Very flex.
Tape and Compass	H	S	Mod CB	Very flex.
Tape and Compass and hand-held GPS	H	S	Massive CB	Very flex.
Total Stations	M	M	Massive CB	Inflexible
IKONAS satellite imagery	H	F	Massive CB	Mod. Flex.

Key: L = low; H=high; M, Mod.=moderate; F=fast; S=slow; CB = capacity building

Decisions on technology made in land titling can have a major impact on the successful integration of the records into the land administration system and its long-term sustainability. Other factors in the overall success of projects have been the review of existing manual procedures such as simplifying a dealings form, or the streamlining of administrative procedures. Experience also shows that investment in technology will also require significant effort in training and may require support for the education sector (Toulmin et al. 2005). The following factors should be addressed:

- the agency concerned has the ability to fund on-going materials and maintenance of the technology and/or can fund outsourcing to the private sector;

- there are adequate resources in the public and private sectors to supply the engineers and technicians necessary to support the technology or there is a viable funded plan to ensure that resources are available;
- the agency can recruit and keep the necessary staff to use the technology, or alternative strategies are in place such as outsourcing work to the private sector; and there is a backup strategy if the technology fails.

In summary, the following factors should be considered in selecting a cadastral survey approach:

- the social context and legal framework for defining parcel boundaries;
- whether boundaries are fixed, which tends to favour ground survey, or general, which tends to favour mapping from aerial or satellite imagery;
- the land titling strategy, with mapping tending to be more cost-effective with mass, systematic land titling and ground survey tending to be more cost-effective with sporadic, or geographically dispersed activity;
- the land use and land cover. Aerial photography can be very useful in some types of terrain such as paddy fields and agricultural pastures but less suitable in other types of terrain such as some plantations, forests and mountainous country;
- the availability of technology;
- the ability of the government and/or users to fund the initial purchase and on-going operational cost of using the technology; and
- the human capacity in the country to support the initial use and continued operations of the technology.

5.3.2 Financial Sustainability

‘While the initial creation or re-engineering of land administration systems may require subsidies, there is in many jurisdictions increasing pressure to fund some or most of the ongoing operations through services sold to the public. This is the case in both developed and developing jurisdictions.’ (Dale and McLaughlin 1999:140)

As demonstrated in the quantitative tables in Appendix 4, Table 38 and Table 39), a land administration system can generate significantly more revenue for government than the costs required to fund the various land sector agencies, but not in all countries. In much of Africa governments are reliant on donor support for the ongoing operation of land administration. Several countries have undertaken studies of the financial sustainability of their land administration systems (for example, the Philippines and Peru) and these studies typically involve an investigation of a number of factors, including:

- appropriate fee and tax structures,²² including the balance of transaction-based and annual fees and taxes.
- the effectiveness of collecting fees and taxes;
- fiscal policy concerning the raising of revenue at the various levels of government;

- alternatives for land administration service delivery and the costing of these alternatives, looking at options such as decentralisation which facilitates access and participation, but increases costs; and
- budgetary support for land administration at the various levels of government and the availability of funds from government and donors to support the initial development of the land administration system.

In reviewing the financial sustainability of a land administration system not all services in a system may be sustainable and there will usually be geographic variation in the ratio of revenue to expenditure. It has been suggested there is usually a cross subsidisation from the urban sector, where property is usually higher in value and there is more market activity, to the rural sector. However it is very hard to get figures to substantiate this. Table 20 attempts to set out the situation in Thailand, noting the impossibility of getting a definitive breakdown of the total urban figures.²³ Based on these figures the 'return on investment' in Thailand for the expenditure allocated for maintaining land offices in urban areas is at least twice that of the return in rural areas.

Table 20 Land Office Revenue/Allocated Budget in Thailand (year ending 30/09/01).²⁴

	'Urban'	'Rural'	Total
Revenue (US\$m)	219.404	130.280	349.684
Allocated Budget (US\$m)	16.358	21.377	37.735
Ratio revenue/expenditure	13.4	6.1	9.3

When comparing revenues from land administration in the developing world (Table 38 and Table 39) with those in some of the developed world (Table 40) one notes that some developing countries have collected significantly higher revenue from land administration than the cost of supplying the service (Karnataka and Thailand). The trend in the developed countries is to break-even or aim for cost recovery, as proposed by Statement 6 of Cadastre 2014 (Kauffman and Steudler 1998). This largely reflects the greater revenue raising options and effectiveness of tax collection in developed countries and the general policy in the developed world of setting fees for service to recover costs. As the private sector gains importance, the inflexibility of the public sector requires better strategies for cooperating and integrating services and functions. Creating a business environment within public sector operations would aim to improve efficiency through better planning, management and operational standardisation.

5.3.3 Participatory Sustainability

[a]ll the photographs and computer inventories in the world cannot tell anyone what local rules enforce rights or what networks of relationships sustain them.' (de Soto 2000:202).

Participatory sustainability is a two fold process requiring initial awareness education and a subsequent shift in attitudes towards a culture of formal registration. Systematic registration programs will generate an initial register of rights in land but unless the system captures the subsequent dealings in these rights the register quickly becomes out-of-date and takes on the characteristics of the Domesday Book²⁵ – little more than an historical record or census.

Initially it necessary to ensure the personal benefits for participation in the formal system outweigh costs. The benefits have been studied showing that in addition to improved tenure security, direct and indirect benefits of titling to the title holder appear in areas of property value (Jimenez 1984, Alston et al. 1996, and Landjouw and Levy, 2002); agricultural investment (Besley 1995, Jacoby et al. 2002, Brasselle et al 2002, and Do and Lyer 2002); household investment (Galiani, 2005); labour supply (Field 2003); access to credit (Place and Migot-Adholla 1996, Carter and Olinto 2002, Field and Torero 2003), and education opportunities (Field 2003, Galiani 2005). Feder's (1988) benefit-to-cost studies in Thailand revealed that providing secure ownership for agricultural land produced an extremely high social rate of return under the assumption of risk aversion. Recent Argentinean and Peruvian studies continue to strengthen initial predictions of the benefits (Galiani 2005). It was revealed investments in housing improvements, longer working hours outside the house because it was not necessary to spend the time seeing off intruders, resulted in children less likely to be put to work (Field 2003). Benefits in this titling scenario did not directly translate in greater access to credit for poor title holders against non-title holders (Field and Torero 2006). Evaluating project success according to social benefit indicators can be subjective, and this produces varied results between urban and rural settlement scenarios across different regions.

The privileges of title are not without their costs. After initial title adjudication, which is often heavily subsidised under large scale titling projects, subsequent registration typically incurs fees. Registration can also provide the basic information for improved land tax rolls. Registering changes to the title guarantees tenure security and ensures subsequent market activities remain within the formal market and thereby protecting the value of the title. Experience shows that transaction costs exceeding 5 percent deter people from registering property transactions or providing under-declared property values (Burns, 2006). Maharashtra and Karnataka experienced greater than 20 percent increases in participation of registration after reducing transaction costs to 5 percent and 8 percent respectively (World Bank *et al* 2006a). This equated to a total revenue increase from stamp duty and fees of greater than 20 percent compared with previous years (LEI, 2004).

There is a range of reasons why people may not be inclined to register subsequent dealings, including:

- perception of high fees and charges;
- conviction that informal rights are secure. For example, there is no need to register an inheritance, or there are competing customary or informal systems for enforcing rights;
- difficulty in gaining access to the register;
- perception of complex rules and procedures; and
- lack of awareness of laws, rules and procedures.

There are a number of strategies that can be and were developed to address these reasons, including:

- a review of fees and charges;
- reduced fees for registration of inheritance;
- decentralisation of registers or registration lodgement points;

- the simplification of laws, rules and procedures both in the register itself and simplifying prerequisites for registration; and
- public awareness campaigns.

Public and institutional awareness campaigns should be aimed at educating potential title holders and key institutional agencies, such as the financing sector. Public support and understanding is essential during initial title adjudication and registration. To be successful and sustainable a land administration system also needs to foster a 'registration culture' – a culture where registration is undertaken as a matter of course, something that we take for granted in the developed world. Education must involve information about benefits and obligations for registering subsequent title transactions and title alterations and the risks associated with unregistered interests.

This is often a real challenge in some projects as the public perception of titling is that it is the basis for taxation and there is often mistrust of land sector agencies. A major benefit of a strengthened land administration is increased security in tenure. As de Soto (2000) points out, there is a real cost in informality and the challenge is to communicate the benefits of registration, and at the same time develop and implement efficient, streamlined procedures at a cost acceptable to users. This may sound difficult, but it can be achieved. Experience in Peru showed that different methods of communication and interaction with the formalised population were required as it requires a changing of attitudes and practices related to property registration (World Bank 2006) and not just information dissemination.

5.3.4 Capacity Building for Sustainability

'There is no point in introducing a system of title registration, for example, where the capacity continuously to update the registers does not exist.' (Feder and Noronha 1987:164)

Capacity building within the government sector is critical to sustainability as often land administration projects are designed where major resource and capacity voids exist. Capacity building can be directed at societal, organisational and individual levels (Enemark and Williamson 2004). Capacity building at the societal levels was dealt with in the initial sections of this report that looked at issues and principles of policy and legal frameworks, tenure and administration systems.

Capacity building at the organisational level looks more closely at enabling good governance, institutional strengthening, consideration of spatial data infrastructure principles, and development of a professional body (Enemark and Williamson 2004). Sustainability of these elements typically requires a strong mandate, commitment and good management from the lead agency. Organisational level efforts will generally return better results where transparent and reciprocal relationships exist between the concerned agencies. Deficiencies in areas such as customer relations and surveying were identified early during the Lao Land Titling Project design. As a result formal links were developed with the Lao Women's Union and National Geographic Departments respectively, to meet demands and provide ongoing services within the project (Virachit and Lunnay 2005). Forging development partners for networking and implementation contributes significantly to organisational level capacity building yet this should not be confined to the government sector. The strengths of involving the private sector need to also be realised and supported by similar capacity building programs. The political and bureaucratic environment will

largely affect capacity building at these two higher levels, whereas individual level capacity building can be more directly applied as discussed at length below.

Enemark and Williamson (2004) use three indicators to assess capacity building at the individual level: professional and technical competence; capacity needs; and educational resources. Strengthening capacity to record, maintain and deliver land administration services requires short term training approaches for introducing new systems and technology, as well as longer term education opportunities to ensure there is a stream of skilled personnel to maintain the system. Short term training courses that directly apply new skills or theories in the work place are a rapid response to capacity building. This should be followed up with refresher training or training reviews to ensure the new skills or theories learnt are being applied in the workplace correctly and have improved processes or performance. This is particularly relevant where new technology is introduced, such as GPS or Total Stations, as most users may not have strong computer skills or a survey background to troubleshoot problems.

Projects often commence with a small group of dedicated people. This was the case in Lao PDR which commenced with pilot projects in 1995 through the central level government department with 11 staff, of which 3 were technically trained (Virachit and Lunnay 2006). Ten years later 9 provincial land offices and one central office have been established and operate land adjudication, survey and registration services with over 600 staff. Thailand, while building from a higher base, needed comprehensive training and education programs to support the introduction of modern technology. A considerable success factor for both projects that maintains a strong impetus on human resource development and training was to establish divisions within the government department responsible for the management and monitoring of training programs. Amhara National Regional State in Ethiopia in a smaller scale rural land administration project with few experienced staff took a low-cost approach to establishing initial tenure security measures. The project invested much energy in training regional and district officers in a strong participatory process with locals using lost-cost survey technology and a paper based registration system. Over a 3 year period the project was able to train 1000 staff and register 2.4 million certificates, while recognising the need for upgrading the system for follow-up activities (Backstrom 2006).

Who benefits from the training is important. While managerial training is very important, capacity building opportunities should not only be received by higher ranked officials, up-skilling and information dissemination has to get to operational staff. This may be cost-effectively implemented by providing effective training of trainer (TOT) courses. TOT courses double as leadership and managerial training, while subsequently providing cost-effective training to lower level staff or those in remotely located offices. Having staff trained as TOT is also useful where re-training or refresher training is needed, as is typically the case on long-term, mass programs of systematic registration.

Long term and large financial commitments to establishing education institutions for land administration, cadastral surveying and computer training is encouraged by donors as it shows the government's commitment to developing a sustainable industry base. In Lao, a lack of national expertise to support the development of the project's key initiatives was a serious concern hence an In-Country Course in Surveying and Land Administration was developed through the existing Polytechnic

School. This high diploma course provides an internationally recognised professional qualification and meets national needs for a skilled workforce to operate a modern land registration system. Institutional education is more than just training, it develops the ability of personnel to identify problems relating to the provision of land services, to analyse these problems and to formulate solutions (Lunnay 2006). During such a course it is important that there is sufficient time to provide personnel with an understanding of the social and economic objectives and an overview of the processes necessary to achieve the project objectives. The need for education opportunities for sustainable capacity building in the area of land administration and surveying is receiving more attention internationally. Institutions are expanding existing programs and courses, and establishing schools, to respond to the demand for formal land administration education. The recent agreement to establish the School for Land Administration Studies in the Netherlands in association with the United Nations University is one example (van der Molen 2006).

However as a consequence of capacity building at the individual level often problems of staff retention arise. Long term educational opportunities are attractive for staff, especially where higher educational opportunities to study abroad are offered. ILAP had provisions for 40 overseas positions emphasising development of management skills and the majority of staff attending specifically tailored course in land administration for developing countries. This often leaves positions of responsibility vacant for a significant period of time and secondly retaining returned staff in low paid government positions can be troublesome even where contractual agreements are made to prevent such situations. In both Thailand and Indonesia, staff trained during major projects at national and international universities, have a bond that can be as high as twice their education costs if they leave service early. Whilst these bonds are a disincentive to leaving, in a booming private sector in Thailand in the 1990s many private companies paid out the bonds in order to employ trained staff. In the long-term the leakage of trained staff to the private sector will help lift the overall service standards of the land sector, so it is often important to make allowance for such leakages when designing training programs for land administration projects.

Staff retention can also be problematic in governments that are unstable or regularly change leadership positions. Other circumstances of staff retention issues occur due to systematic land titling procedures that can involve staff spending long periods in the field, working from temporary field offices, over many years. Attention to staff rewards and incentives are important. In Thailand staff are assigned to the field for periods of up to 10 months and many have been involved for more than five years. The work is production orientated, unlike the usual land office situation, so field staff are required to work to stricter time constraints. There is a higher level of responsibility and risk in the work and therefore adequate reward is expected. Where field procedures are kept simple it may be appropriate to contract local staff that expands a core mobile field team when entering new or remote districts. The Lao Land Titling Project has been quite successful at maintaining quality work and expanding field teams through incentive and local hiring approaches. While Thailand are experiencing difficulties staffing field teams as allowances have become less attractive over time since they were originally set at twice the base salary.

From the issues and examples raised we can summarise a number strategies for sustainable capacity building, including:

- Ensure a sustainable capacity building strategy is considered in all design components, particularly where new systems and technologies are introduced;
- Use refresher training and training reviews to assess the effectiveness and sustainability of training and newly applied systems or technology;
- Use of Training of Trainer courses to improve leadership and develop training base;
- Ensure institutional educational facilities are accessible, preferably in-country; and
- Staffing strategies should be designed with reasonable incentive schemes and with the expectation of staff leakages.

5.4 Land Tenure Policy

To this point the main emphasis of this report identified practical approaches to improving land administration system efficiency. The final section is dedicated to tenure policy issues that can form a critical platform for land administration systems. Land tenure policy issues are one of the most highly debated areas of land administration. Friction between customary and formal tenure systems are often caused by regularisation attempted in full or in part and the resulting social costs and benefits of either system. The following section initially deals with the common confusion between land administration and land reform. It then digresses further into social issues of customary tenure systems particularly focussed on African examples, followed by options that compliment and challenge the private land title model with alternative and interim steps of tenure security.

5.4.1 Land Administration and Land Reform

'A land tenure system can be likened to a prism through which government policy must pass on its way to delivering a product or service to the recipient farmer. In traditional Latin American land-tenure systems the government policy is so refracted that most benefits go to an elite group – the larger and more capitalised landowners. Agrarian reform changes the shape of the prism so that the rays fall on a wider group of people, including at least some of the poor' (Thiesenhusen, 1995:12).

In the context of this paper, *agrarian reform* is a blanket process covering the key issues of production relationships, socio-economic structures, the role of institutions and vertical socio-cultural divisions. *Land reform* is considered an element of agrarian reform and, in turn, *land tenure (or land administration) reform* is considered to be one element of land reform.

Prosterman et al (1990:3) note that the term 'land reform' is often misunderstood, that its meaning is limited to referring to the transfer of agricultural landholdings to landless tenants hoping it will alter inequitable power structures, encourage long term investment and increased agricultural production, and assist greater economic growth. It is important to recognise that redistributing land assets is not complete without supporting measures to build on land reform, so providing secure ownership is, in itself, generally not enough to achieve the goal of increased and diversified agricultural production (e.g. Mexico). To achieve agrarian reform it is essential that

complementary services such as access to credit and access to inputs are offered and a supportive marketing environment is created.

There are numerous examples of countries where agrarian reforms were carried out on an institutional basis and failed disastrously, leaving the poor in a worse position (e.g. Nicaragua, USSR, Africa, Peru, Mexico). Other countries have difficulties because inadequate compensation for expropriation is a major factor of tenure insecurities. In the majority of failed reform examples the driving force for the planning of agrarian reforms was re-distribution of agricultural land and the amalgamation of small plots (Dixon-Gough 1999:7). Christodoulou (1990:xv) quotes Paul Baran who noted many dangers in agrarian reform and warned that it may '*retard rather than advance*' the economic development of some countries.

Even where there may be benefits associated with agrarian and land reform, such benefits may not necessarily be distributed evenly, as was the case in Peru. Following the 1968 revolution, large scale expropriation of large enterprises such as farms and processing plants took place, and large commercial enterprises were turned into workers' self-managed cooperatives. But only those people who already had a stake in land benefited, i.e. mainly those who were permanent employees of the large estates. Others such as seasonal labourers were not made members of the new cooperatives. Their position markedly deteriorated as they ended up working longer hours and for 'considerably lower wages'. Ethnic communities such as the Indians living in the highlands benefited least from the post-revolutionary land reforms (Christodoulou 1990:148).

Land titling interventions are aimed at providing tenure security as a basis for improved access to investment credit and fostering commercial land markets. The process of adjudication which underpins a titling program is specifically and by definition, employed to recognise an existing right to land. The process results in the issuance and registration of a title and is generally performed in an environment where there is minimum disputation surrounding the land parcel being adjudicated. Land Reform on the other hand usually seeks to re-assign rights to land, a process which has far greater potential for disputation and usually attracts a significant degree of political attention and community sensitivity. It may be driven from the top-down through expropriation and nationalisation of land by the state (ECA) or by peasant mobilisation in a bottom-up approach to correct inequitable land distribution (Latin America). In either case land reform objectives are inherently more problematic and the track record is universally poor. For example the long running land reform programs in Thailand and the Philippines (Comprehensive Agrarian Reform Program – CARP) are yet to impact on distribution or recognition of informal occupation by communities over many generations of forest or other protected land areas. It was no accident that the land titling programs which address land administration reforms in these countries were implemented at arms length from the respective land reform programs.

Notwithstanding the undesirability of linking land reform and land administration in a project intervention, the former clearly relies on a determination of existing formal and informal rights to land which result from the latter. In cases where the reform involves a restitution of rights, such as in some of the former communist countries of ECA, the rights that previously existed need to be established. Similarly the unrecorded rights which exist in customary form in African countries are a starting point for land reform.

Thus the system of land administration provides a foundation upon which successful land reform can be built without necessarily offering a solution to the problems of rural development in itself. For example, governments may use tools such as land ownership ceilings to break up large holdings and distribute land to small producers and prevent accumulation by re-aggregation of smaller holdings. These tools obviously rely on good ownership records. In a similar way the title registry can be used to impose and enforce restrictions on land transactions by the beneficiaries of land reform to prevent selling and/or mortgaging their land prematurely. While the effectiveness of land ownership ceilings, transaction restrictions and the like may be open to debate, the tools, effective or otherwise, demonstrate the inherent links between the system of land administration and land reform.

Finally, on the link between land administration and land reform, the 1992 Divisional Working Paper on the World Bank's Experience with Rural Land Titling (Wachter and English 1992:9) made some interesting observations. In a comparison of rural titling projects undertaken in various regions up to that time the paper concluded that only a small handful had successfully achieved their objectives. The paper observed that in all cases except one, the land tenure objectives were attached as an adjunct to the primary objective of a larger multi-component project often aimed at productivity improvement or a wider agrarian/land reform outcome. The exception was Thailand where the titling effort itself was the primary objective of the project. Since it is almost universally accepted that the Thai project reflects best practice in the sector this separation provided an early lesson concerning clarity of objectives in the design and implementation of subsequent projects. There were of course other characteristics of success, such as political will, institutional focus and capacity, etc, however the separation of programs remains a basic platform for successful intervention in land administration.

5.4.2 Customary Tenure

"The key to understanding the apparent contradictions between what is said to be customary and what is actually practiced under the guise of 'customary' land tenure lies in the difference between custom as unconscious, generally understood and accepted practice, and custom as objectified, codified and proclaimed as part of the essential character of one body of people against others." (Ward and Kingdon 1995:251).

There is ongoing debate in the development community about the relationship between formal land administration systems which have traditionally focussed on the formal recognition of individual rights in property, and informal customary systems of land tenure. Much of this debate has centred on the situation and experience in Africa (see Toulmin and Quan 2000a and Juul and Lund 2002a), but also involves other regions such as Eastern Europe, Latin America and Asia (de Janvry et al 2001a). The focus of this report is land administration systems, not land policy, so it is not proposed that a detailed review of the background, history and current status of the policy debate be undertaken. However, it is important that an overview of the current debate, focusing on land administration aspects and on Africa, be set out.²⁶

The situation in Africa is coloured by the long history of the interaction of formal western systems and customary systems. McAuslan (2000:80) identifies five overlapping phases in the introduction into Africa of western land law and concepts regarding property rights:²⁷

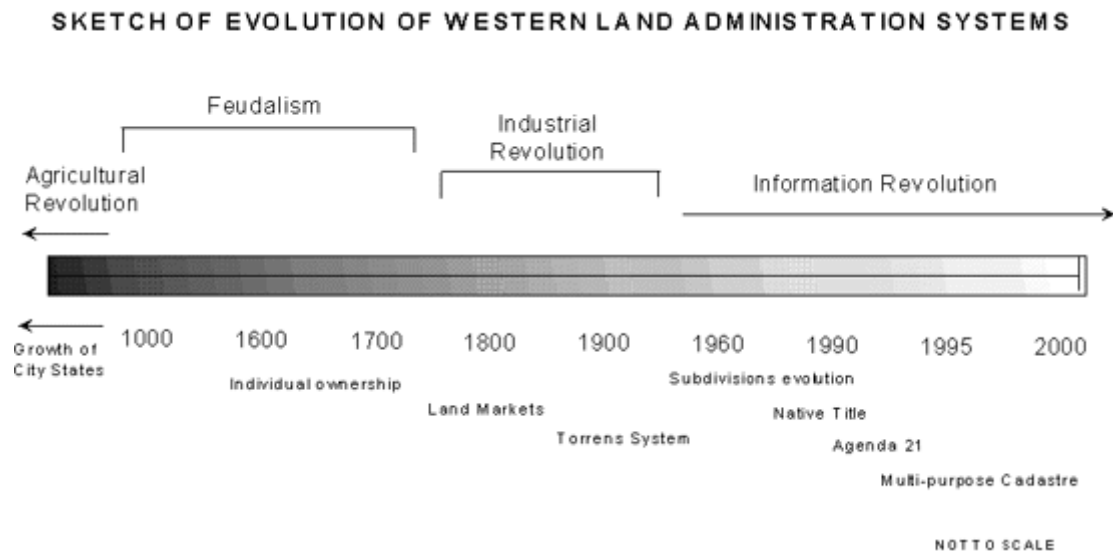
1. **Acquisition** in the 19th century of territory and the allocation of individual rights to this territory under ‘*a semi-feudal process*’ (page 80).
2. **Destruction** of the indigenous law and its partial displacement by the received western law.
3. **Reconstruction**, a term used by McAuslan to describe a phase where ‘*colonial authorities attempted to adapt customary law largely for their own ends*’ (page 84).
4. **Substitution**, dating from the mid-1950s, where policies were adopted to rapidly move to a system of individual tenure for indigenous populations.
5. **Integration**, the attempt to develop a new common land law in a country based on the disparate parts of existing law.

Post-independence initiatives to rearrange land administration matters have tended to add complexity in the administration of land. Peters (2002:49) notes that the ‘*post-independence years of the 1960s and 1970s have been described as “the land reform decades”, ... a period when often more problems were caused than solved.*’ In Ghana and Mozambique there were unsuccessful attempts to assert State authority over land administration in place of traditional authorities. Revolutions in a number of countries has also added complexity – Lund (2002:25) notes that in Burkina Faso ‘*the revolution meant a period where both “traditional” and “bourgeois” institutions had to keep a low profile and “revolutionary” institutions had tremendous discretionary powers.*’

The evolution of western land administration systems and land markets is illustrated in Figure 16. An increased focus on individual rights was suggested as necessary for economic development. It was argued that as land scarcity increases, society will demand greater security of tenure and as a result private property rights will emerge.²⁸ Various arguments were presented to suggest that economic efficiency requires individual rights to be recognised in a way that provides sufficient security (Feder and Feeny 1987:136) and arguments were presented in the past that suggest that customary tenure arrangements are a constraint to agricultural intensification in Africa (Dorner 1972, World Bank 1974). These earlier studies provided a policy framework for various government initiatives to introduce formal land administration systems. Unfortunately, the introduction of formal land administration systems in Africa has become associated with ‘mass, systematic land titling’. Criticism of the initiatives to introduce formal land administration systems tend to focus on the words ‘systematic’ and ‘title’, rather than on process and implementation, or more fundamentally, policy. The economic arguments for individual rights were reassessed and it is now suggested there is little evidence that customary tenure arrangements are a constraint on agricultural productivity (Migot-Adholla et al 1991:155). As noted by Delville (2000:118), ‘*[o]nce the allocation of formal title is no longer seen as absolutely vital to the process of agricultural intensification, the tenure issue shifts from the economic to social arena.*’ A number of studies have highlighted the adverse social effect of programs that formally register individual rights, including the impact on or exclusion of holders of secondary rights in land such as migrants, pastoralists, women and young men (Hilhorst 2000, Platteau 2000 and Toulmin and Quan 2000c), increased landlessness as land markets develop, the fact that people may be encouraged to sell their land for short-term returns, and ‘land

grabbing' by the social elite or those with privileged access to information and formal institutions (Peters 2002:57).

Figure 16 Evolution of Western Land Administration Systems (from Ting and Williamson 1999:2).



Much of the current debate therefore focuses on the integration of informal and formal land administration systems rather than replacing the former with the later. When comparing customary tenure systems with modern land administration systems, it was noted that there is not a dichotomy of rigid, ancient customary systems and modern, adaptable formal systems. Peters (2002:51) notes that ‘*the actual patterns of landholding in Africa have not been static or rigid but have been dynamically transformed over time by rural people through hard work and social creativity*’. The informal systems have evolved to support land markets (Feder and Noronha 1987:163, Platteau 2000:64). However, there have also been examples where customary systems have failed to provide adequate protection. Toulmin (2000:236) cites examples where customary chiefs in Cameroon have sold land held in trust for the larger clan to outsiders, and cases in peri-urban areas in Ghana where customary chiefs have colluded with developers to take land for commercial purposes with little or no compensation. The deficiencies of formal land administration systems are noted by many (Delville 2000:97, Cousins 2000:170). Cousins (2000:170) notes that ‘*[I]and administration structures in Africa suffer from the same weaknesses as other components of the state: they are often highly centralised in structure and attempt to implement decisions in a top-down manner, yet are ineffective in practice because of resource constraints, corruption and “capture” by private interest groups.*’ In reviewing the current policy debate, Cousins suggests there is general agreement to the need for: (i) greater legal recognition for rights under customary systems; (ii) strengthening of local institutions for land administration and management; and (iii) support for institutions and procedures for mediation, arbitration and negotiation, particularly at the local level. However, he also notes there is no consensus on how these objectives might best be achieved. McAuslan (2003:16) notes that the following policies are of particular importance when addressing land issues in traditional societies:

- investigate and record customary rights to assist with administration;
- encourage group and cooperative rights to make clear what land is available;
- ‘graft’ on to customary law ways to make it more acceptable for one ethnic group traditionally occupying and using land in a certain area to accept people from other ethnic groups entering that area for the purpose of occupying and using land; and
- that land-related policies do not operate in isolation.

Despite significant reform efforts, land administration systems in much of Africa remain dual tenure systems characterised by ambiguity and inconsistency (Cousins 2002:68). As Shipton (2002:x) notes ‘... more often [the norms and procedures under imported land administration systems] seem to crowd together with [indigenous systems] to produce a wider range of options and strategies for the wealthy or well-connected, and new vulnerabilities for others.’ Delville (2000:102) argues that one cannot really contrast “traditional” local practices with formal systems as [s]takeholders are often opportunistic, and make use of various systems to back up their land claims.’ It was argued that the negotiability of rules and relationships is one of the fundamental characteristics of African societies (Juil and Lund 2002b:5) and Lund (2002:33) details a case in Burkina Faso that supports the statement that [a]pparently fixed titles, rules, rights, and authorities are constantly negotiated and re-interpreted.’ Others suggest that placing an emphasis on ambiguity and negotiation downplays the role of the State and perhaps there was too much emphasis on negotiability and ambiguity and we need look at limits on negotiability, where claims to property “stick” (Peters 2002:47). Delville (2000:104) notes that it is the possibility of conflicting claims, not uncertainty in customary tenure systems that is responsible for the unpredictable nature of land disputes in Africa. There are therefore considerable challenges in formulating policy to clarify rights in land and in particular ‘... to move beyond the safe, reliable conclusions that (whatever the problem) it always depends, or that every local community is unique. Such conclusions seldom help real decision makers, be they bureaucrats, revolutionaries, or humble farmers or herders’ (Shipton 2002:x). Nonetheless, there is considerable interest in land matters in Africa due to a range of factors, including mounting evidence of conflict over land, concern with increasing inequity in access to land (Peters 2002:45), and declining agricultural productivity.²⁹

A critical question in the ongoing debate is the form of tenure that may best ensure access to and achieve efficient use of land. De Janvry et al (2002b:2) suggest there is no dominant form of tenure in terms of efficiency, and that all major options, common property resources, usufruct licenses through community/lineage, tenancy agreements, and ownership have relative merits under varying circumstances. Whilst the benefits of ownership may have been overstressed it is the best option where feasible. However, due to high cost, market failures and institutional gaps the option of titles is unlikely to be available to most rural households. This question relates particularly to the strategic approach in strengthening a land administration system, through either the formal system or the customary system. The World Bank attempts to answer the question in the World Development Report (1990a:65), where it states ‘... this shift toward individual rights tends to undermine the ability of traditional systems to ensure that all members of the extended family have access to land. This feature of their land system has helped some countries in Africa to avoid the extremes of poverty and landlessness that are common in much of Asia and Latin

America: traditional systems have provided secure land tenure and encouraged farmers to invest in their land. In such cases, encouraging individual land registration and titling may be undesirable. Where traditional systems have failed to provide clear land rights, land titles and registration are useful. This advice lacks clarity and as Quan (2000a:36) notes, two questions are critical in reforming tenure arrangements:

- under what circumstances do existing tenure arrangements fail? and
- where there is failure, what sort of intervention is appropriate?

These two questions are considered in the following paragraphs.

When have Existing Tenure Arrangements Failed? The circumstances in Africa where existing tenure arrangements (usually a blend of formal and customary systems) fail was discussed by a number of authors (Quan 2000a:34, Platteau 2000:51, Toulmin and Quan 2000b and Cousins 2002), and include:

- where there was a breakdown in customary tenure systems, or when traditional lines of authority were severed and loyalties to lineage and communal groups eroded;
- where land encroachment by outside interests is common or increasing;
- where defensive registration is needed to safeguard individual or group rights;
- in areas where there are high levels of fragmentation, disputation, and inheritance problems;
- where there are inter- or intra-ethnic conflicts over land; and
- where there is a demand for titles, as a result of a range of reasons, including changing social norms, the need for credit, etc.

These indicators of failure are likely to be evident in areas subject to resettlement or colonisation or in development programs such as projects improving irrigation infrastructure, and in areas subject to acute land pressure such as urban and peri-urban areas. These indicators are not definitive, but provide some guidance. A discussion on the general failure of existing systems in Greater Accra is set out in Box 2.

Where there is Failure, what Sort of Intervention is Appropriate? A range of strategies were identified in the literature, many of which have at some time been implemented. Central to many proposed approaches is the focus on the community and the devolution of responsibility for tenure administration to local levels. As Quan (2000b:197) notes, one strategy for devolving responsibility is to establish local Land Boards. This was tried initially with success in Malawi and Botswana and more recently in Namibia and Uganda. Land Boards have a number of advantages. They provide a vehicle for decentralising land policy and a means of balancing the role of traditional chiefs without rejecting customary tenure systems. They also provide the flexibility to devise simple methods that service both formal and customary tenure systems, and they can facilitate a gradual means to implement a local rather than central focus to land tenure administration. However, experience indicates a number of weaknesses. Land Boards can be subject to bureaucratic intervention and domination by local elites and they can be poorly equipped to resolve overlapping claims and claims between different ethnic groups. They also can be very costly to establish. The cost of Land Boards was a real issue in Uganda, where the cost of

implementation of the 1998 Land Law was not properly considered as the law was finalised. Subsequent investigations have indicated that the cost is neither viable nor sustainable and changes in the legislation had to be developed.

Box 2. Land Administration in Greater Accra

Greater Accra, with about 10 percent of the population of Ghana, was estimated in 1990 to have produced about 17 percent of GDP. There is considerable disputation over land in Greater Accra. About 20 percent of Ghana has been alienated from customary tenure and most of this is in Greater Accra. However much of this land is not being used for the purpose it was alienated by the State and in many cases compensation has not been paid. A lot of vested land has been informally reclaimed and there is much informal settlement in Accra. Customary authority over land in Accra is unclear – late in 2001 nine of the nineteen Stools covering Greater Accra were unoccupied, one due to disputation for a period approaching 25 years, and many clans, families and individuals claim rights over land independent of the Stool authority.

In 1986 the Land Title Registration Law was put in place to improve tenure security and provide certainty about land ownership and land transactions. The existing process operated by the Land Titles Registry is a sporadic rather than systematic process – despite the fact that the 1986 law specifically sets out the basis for a systematic process. Some 20 districts have been declared under the 1986 law covering most of Greater Accra, and this widespread coverage requires the survey department to cover large areas with cadastral survey plans to meet the sporadic applications for title registration. In the past 13 years some 348 section maps have been plotted comprising the survey and mapping of more than 400,000 parcels. The process of land titling is also overly complex and not well understood by the various actors involved. There have been about 45,000 applications for title since 1986, and just over 11,000 titles have been issued, all except one in Greater Accra. In a recent survey of the land holding public two-thirds of respondents were unaware of the Land Titling Law, 30% had land applications outstanding for more than one year, with 20% still awaiting registration after 10 years. Dispute resolution took between 2 -10 years in most cases. Thus public perception is that acquiring land in Ghana through formal channels is a daunting task.

Systematic land titling seems appropriate for Greater Accra:

- Customary authority has broken down;
- Although there is sound legislation, the formal system is inefficient, not understood by users and not responsive to their requirements;
- There is demand for titles and much of the survey and mapping work has been completed to support a systematic registration activity.

Another key strategy identified in the literature is the integration of customary and formal land tenure systems. McAuslan (2000:94) identifies two approaches to doing this: (i) the enactment of a unified national law, perhaps supported by strengthened dispute resolution procedures at the local level; and (ii) leaving it to the grass-roots and replicating the evolution of the English common law. As Delville (2000:107) notes, there are difficulties in codifying customary law and failure to reflect the diversity evident in customary law in the Rural Code of Niger has increased the risk that the new law may be deemed inappropriate.

The registration of local rights is another strategy that was identified. Toulmin and Quan (2000b:35) note here that careful consideration needs to be made of the cost/benefit case for establishing such systems in all areas and that there may be a better case to register rights at a community level, with individual registration reserved for areas of conflict. One means of providing legal recognition for customary rights is to offer the option for the legal and administrative registration of transactions (Delville 2000:115). As Delville notes, such a system would provide great flexibility, cover a wide range of rights and could be implemented at significantly less cost than a land title system. However, such a system raises a number of questions, including the legal status accorded to registered rights and how priority is assigned to rights registered at various levels of traditional authority. A

system to register transactions is also basically a registration of deeds system which suffers from many of the same potential difficulties; inadequate spatial reference to the parcel covered by the registered rights set out in the deed; inconsistencies with previous deeds; and lack of certainty in rights. These and other difficulties could be addressed by a range of initiatives, including undertaking surveys or mapping to provide a spatial reference for the deeds, establishing and maintaining indices, and examining deeds against prior deeds (Dale and McLaughlin 1988:23 and discussed below on page 105). But these initiatives will add to the overall cost of the system.

Difficulties with programs to implement mass titling through a country were noted by several sources including Atwood (1990:668). However, such programs may be appropriate for part of a jurisdiction, as noted above in Box 2 for the case of Greater Accra. In addition to the indicators listed above systematic land titling should only be considered where the costs are affordable and acceptable to beneficiaries, where there are appropriate incentives to register subsequent dealings in rights, and where there are appropriate institutional arrangements to register subsequent dealings in rights. Implementing systematic titling in only part of a jurisdiction will mean there are at least two tiers in the land administration system however this was managed in most other jurisdictions as land administration systems have evolved.

As previously noted, the above discussion on customary tenure has focused on the situation in Africa. Customary land tenure systems are also widespread in Latin America and constitute an important form of community tenure (Barnes 2002:2). The 2001 census in Bolivia reveals that approximately 67 percent of the population is of indigenous origin and indigenous tenure may be formalised as a TCO (*Tierras Comunitarias de Origen*) or simply as community property titled collectively to an indigenous group. Most of the 8 million indigenous people of Peru live in “*comunidades nativas*”, many of which have been titled to indigenous groups. Although there has been increasing recognition of indigenous people and their rights, much more remains to be done to resolve overlaps with protected environmental areas and encroachments by private farmers seeking land.

Customary tenure is also a feature in Asia (Brits et al 2002:2). However the land administration system in most countries, which frequently covers only that part of the country deemed non-forest, does not usually or explicitly recognise customary rights. Thailand, which has a good land administration system, only covers the 37 percent of the country deemed non-forest, even though satellite land classification shows that Thailand only has 20-26 percent tree-canopy cover. The rights of hills-tribes are not recognised under the Land Code. In Indonesia, the Basic Agrarian Law, although theoretically based on the customary ‘adat’ law only covers that part of Indonesia that is deemed non-forest, and the rights of customary groups have been eroded by encroachment on forests, forest concessions and other programs such as transmigration. The Philippines is one of the few countries in the region with a law explicitly recognising customary rights, but the Indigenous Peoples Rights Act (IPRA) has not been fully implemented and many issues remain to be resolved, including how the rights recognised under IPRA fit within the already complex and conflicting policy, legal and institutional framework for land administration in the Philippines.

5.4.3 Alternatives to Titles

‘... there is not one dominant form of tenure. Common property resources (CPR), access to land in usufruct via community membership and lineage, tenancy

contracts, and ownership (private, community, corporate, or public) all have their relative merits under particular conditions.' (de Janvry et al, 2001a).

At least three basic types of systems to formally record rights in land exist: (i) private conveyancing; (ii) registration of deeds; and (iii) registration of title (Dale and McLaughlin 1999:36). Under a system of private conveyancing, deeds recording dealings in rights in land are handled by the parties involved and witnessed by an independent intermediary such as a public notary. In some countries the intermediaries are restricted to geographic areas and maintain registries for these areas; this, for example, is the case in Greece. There is limited security in such a system and the role of the State is typically limited to registration of the intermediaries.

Registration of Deeds is a system administered by the State under which documents setting out dealings with respect to rights in land ('deeds') are officially registered. A registration of deeds system has a number of limitations. The deed in itself does not prove rights of ownership or possession, it is merely a record of an isolated transaction. If properly drawn up the deed is evidence that the dealing took place, but it does not prove that the parties to the dealing were legally entitled to carry it out and without further investigation it does not prove that the dealing itself was valid. Also, systems to register deeds often do not efficiently enable individuals or the government to readily ascertain rights in land. Despite these difficulties, efficient systems to register deeds were developed; in South Africa, for example. There is a range of strategies for improving a registration of deeds system (based on Dale and McLaughlin 1988:23):

- Standardised forms and procedures;
- Improved indices for deeds, possibly including the generation of a spatial index;
- Better records management, document storage and access to records;
- Back-up of records for archival and access purposes;
- Simpler and more flexible arrangements for survey and mapping;
- Partial examination of surveys and dealings;
- Compulsory registration of dealings;
- Automation of indices and the computerisation of abstracts.

Registration of Title systems were introduced in many countries to overcome the limitations of systems for registering deeds. The main characteristics of a registration of title system are:

- It is based on parcels of land (i.e. the register is divided into units of property, with a record for each individual land parcel);
- Transactions are set out in simple documents and are recorded with reference to the land parcel; and
- Registration of transactions is essential for their validity and a transaction becomes valid and effective by virtue of registration.

Title registration systems are generally based on comprehensive survey and map records (often called a 'cadastre'), which provide a spatial framework and index for

the registration system. These systems readily enable rights in land to be ascertained simply and with certainty. The title registration system introduced by Sir Robert Torrens in South Australia in 1858 was a model for many such systems in other jurisdictions and is based on three main principles (Dale and McLaughlin 1999:38):

- The 'mirror principle', where the register reflects accurately and completely and beyond all argument the current facts that are relevant to the rights in a parcel of land;
- The 'curtain principle', where the register is the sole source of information for interested parties in ascertaining rights in land;
- The 'insurance principle', where, if through human frailty the register fails to give an absolutely correct reflection of rights in land, anyone who suffers a loss is entitled to an indemnity from the government.

A term that Torrens introduced with his legislation was 'indefeasibility of title', used to describe the indestructibility of the title (Hepburn 1998:212). There are exceptions to indefeasibility of title³⁰ but this aspect and the application of the insurance principle is one of the major benefits for users of title registration systems. Harpum et al (2000:278) observe that one '*...of the attractions of registration of title is the general principle (nowhere made explicit in the Act [the UK Real Property Act of 1925]) that the registered proprietor has a title which is indefeasible without compensation. In other words, there is State guarantee of title, so that the registered proprietor and those dealing with him may rely on his title being as it appears on the register, and will normally be able to claim compensation if it is not. But the principle as it emerges from the Act, is a principle of partial compensation rather than indefeasibility.*'

Where it is applied, the 'insurance principle' is usually funded by either an Assurance Fund funded by a levy on registered dealings or is funded out of operational funds. In New South Wales in Australia the Assurance Fund is funded by a levy of A\$2 (about US\$1.20) per registration and is comfortably in surplus.³¹ The Land Registry in England and Wales maintains an Indemnity Fund of £4 million (about US\$6.4 million) which is replenished annually from fee revenue.³² A number of lesser developed countries have indemnity funds. The Philippines has an Indemnity Fund limited by budget allocation but this fund has never successfully been claimed against and therefore has limited effectiveness. Ghana has provision for an Indemnity Fund under the 1986 title legislation but this fund has never been put into operation. A number of other countries have looked at setting up Assurance Funds, including the Ukraine and Kyrgyzstan, but this activity has not been implemented.³³

In the United States of America a model of title insurance evolved in the 19th century in an environment of poorly organised State-run deeds registries at a county-level and the rapid expansion of settlement. Private insurers entered the market offering insurance against defective title. The private insurance industry expanded greatly after the Second World War, largely in response to the demand for title guarantees by institutional providers of credit and particularly by private buyers of securities in the secondary mortgage market. The US title industry seeks global expansion.³⁴ In countries with effective title registration systems, title insurance is often marketed to lenders through existing intermediaries³⁵ but the insurance industry faces a number of difficulties including potentially higher costs and the fact that title insurance will not cure a defective title (Morgan 1999: 176-177).³⁶ The US title insurance companies

have sought business in developing countries.³⁷ However as noted by Jaffee and Kaganova (1996:18), in comparing the “European/Torrens” model of title registration and the “American” model of private title insurance as options for Russia, but the perception is that the American system is *fast but expensive for users*.³⁸ With increased cost a title insurance system also increases the risk of the exclusion of disadvantaged groups. In addition to cost, a difficulty faced in many developing countries is the difficulty in assessing risk where there is usually a very poor land administration system within an environment of limited rule of law.

It is also worth noting that there tends to be few ‘pure’ deeds registration or title registration systems. There are deeds registration systems that operate with very good spatial frameworks and provide certainty in rights (South Africa, Netherlands). The American system is a deeds system that operates well with the support of title insurance and without a cadastre, although surveys are required in most states. There are title systems that operate without State guarantee. In Indonesia registration of rights is only ‘strong evidence’ of rights. The Thai system is a title registration system that operates without a State guarantee and a dealings file is maintained for every parcel. This information is often referenced in any court proceedings so the system has elements of a deeds registration system. As previously noted, it is difficult to classify the systems in ECA as either registration of deeds or registration of title systems. Therefore, one needs to be careful in pushing one ‘model’ against the other, albeit there is a general trend towards title registration.

The apparent emphasis on titles in many initiatives to strengthen land administration systems has been criticised by some (Augustinus 2003a:4, Payne 2002:9, de Janvry et al 2001a:2). Part of this criticism has resulted from experience in Africa and the adverse social impact and lack of economic impact of mass titling in countries such as Kenya. Others take issue with Peruvian economist Hernando de Soto, who in his latest book (de Soto, 2000) is seen as advocating individual titles as the foundation of capitalism (Payne 2002:10, Home and Lim 2004). Payne (2002:9) seems particularly concerned about the impact of titling (formalisation) on the ability of the poor to access land close to employment centres in major urban areas.³⁹ This is a theme taken up by Angel (2001:2) who noted that in the last half of the twentieth century informal settlers benefited from weak governments and legal frameworks. Angel wonders whether the projected 2 billion increase in the urban population over the next 30 years will *‘confront a pattern of ownership that is more rigid, more regulated, better enforced, and hence less affordable than before?’* This point is taken up later when the pro-poor emphasis is discussed. Payne (2002:18) documents investigations of innovative alternatives to full titles throughout the world. Examples, some of which are interim steps in obtaining a full title, include:

- accretion of rights in Cairo through the acquisition of documents such as receipts for payment of property taxes;
- intermediate rights such as ‘Declaration of Possession’, ‘buying and selling rights for future use’ and ‘communal tenancy’ in Colombia, supported by a program to supply services based on the ability and willingness to pay for services rather than tenure status;
- dynamic informal land delivery systems tolerated and partly controlled by the State in Benin;
- Occupancy Permits in Burkina Faso that can be upgraded to titles;

- ten-year licences granted to residents of unauthorised settlements in New Delhi;
- appropriating and building on State land in Turkey;
- the 'anticretico' tenure system in Bolivia, where a property owner grants the use of a property for a fixed period in return for a sum of money refunded at the end of the period;
- Certificates of Rights in Botswana;
- Concession of the Real Right to Use land in Brazil;
- Temporary Occupation Licences in Kenya;
- Land rental systems for low income communities occupying private land in Bangkok.

Implementing titling approaches is considered even more difficult than institutional design components in land administration projects as they are highly conditional to their social and cultural context (Fukuyama 2004).

Of the options mentioned above it should be noted that it is usually more difficult to establish and maintain a system to reveal leasehold or temporary occupancy rights. Such a system requires that leases/licenses be re-negotiated as they expire and typically requires on-going oversight to ensure that lease/occupancy conditions are observed. These additional steps which are not required in a system that recognises ownership will increase the risk of system failure. In Papua New Guinea where a leasehold system operates in the approximate 3 percent of the country that has been alienated from customary tenure, there are a number of significant problems including lost and duplicate records.

A comparative study conducted by the International Food Policy Research Institute of six African land reform processes analysed the opportunities and constraints of rights characteristics as presented in Table 21. The paper suggests that titles offer the most flexibility and security and it contentiously adds that "land resources managed under customary tenure must evolve toward titling in a stepwise process, transiting through the registration of customary rights" (Ngaido 2004). This is contrary to the African-based land debate that request a greater focus on options for alternative titles based on customary tenure systems. There are some who wish to avoid any grey area in title and ask the question 'why should legitimate people receive rights to their land that are lesser than a full title?'

While tenure systems in developing countries attempt to create full rights for their citizens, the private property rights movement in developed countries, typically used as the model, is gaining momentum as people have to challenge authorities to retain their full bundle of rights and freedom of decision making in land use (Jacobs 1998). Private land owners of developed nations are clenching fewer rights in the bundle of sticks since authority from federal to local levels increasingly impose regulations over private property ownership through restrictive covenants, land use zoning and environmental and planning regulations.

Table 21 Land reform processes and the values and characteristics of associated land rights.

Characteristic	Land reform process					
	Maintaining customary rights	Registering land rights	Titling land rights	State ownership / redistributing land rights	Subsidized land ownership	Market-based land access
Role of the state	None or limited intervention		Strong state intervention			
Objective	Improving bundle of land rights			Reducing imbalances in landownership		
Land Rights	Customary use rights	Registered private rights	Titles	Registered use rights (titles)	Limited titles	Titles
Tenure Security	Yes	Yes	Yes	Yes	Yes	Yes
Sales	Limited	Yes	Yes	Very Limited	Yes	Yes
Rental and Share cropping	Yes	Yes	Yes	Limited	Yes	Yes
Credit Access	Informal / Parastatal	Yes	Yes	Cooperative / parastatal	Yes	Yes

Source: Ngaïdo 2004

Payne (2002:17) reviews the results of two conventional approaches to increasing security of tenure by issuing titles, including the urban project in Peru where COFOPRI has issued over 1 million titles to informal households in the peri-urban areas of major Peruvian cities. Payne considers the experience in Peru is not an appropriate model for other countries as most of the titles were issued to informal households occupying public land, despite an earlier observation that ground-breaking studies indicated that informal settlements generally *‘consisted almost completely of organized invasions of per-urban, often state-owned, land.’* (Payne 2002:5). Recent studies also indicate that significant informal settlement elsewhere occurs on public land. A recent Asian Development Bank study, for example, suggests that only about 15 percent of the informal settlement in Metro Manila is on private land.⁴⁰ Perhaps there is some relevance in the Peruvian experience for other countries. However, an important point made by Payne is there is a continuum of rights ranging from illegal occupation through to full titles and many of the innovations or alternatives listed above are entry points along the continuum to avoid the social, economic and environmental penalties of illegality.

McAuslan (2002:36) notes that Namibia is considering legislation to provide for ‘starter’ titles and landholder titles. Starter titles are rights held in perpetuity by an individual to a parcel within a larger block, administered by a defined community and administered under the rules of the community, while a landholder title is more formal, approaching the formality of a full title. In some jurisdictions there is the possibility of issuing titles that are provisional with respect to boundaries and/or titles provisional with respect to rights (‘provisional titles’). There are usually procedures for provisional titles to mature into full titles, typically by subsequent survey if the provisional nature of the title relates to boundaries or by the passage of time without

conflicting claim if the provisional nature relates to rights. In other jurisdictions a lesser document may be issued which may mature into a full title under specified conditions. For example, in Thailand the district land offices, under the authority of the district head, can issue a pre-emptive right (NS2) which is not transferable except by inheritance and is not accepted as collateral by institutional credit providers. NS2s are issued with very simple, local surveys. If an NS2 holder uses a specified percentage of the parcel for a specified period of time then an application can be made for either a certificate of utilisation (NS3/3K) or title (NS4) both of which are fully transferable and accepted as collateral by institutional providers of credit. Both the NS3K and NS4 parcels are mapped onto cadastral maps. There are thus alternatives to titles within established formal systems, but 'starter' titles, provisional titles and pre-emptive rights are only real options within the framework of a functioning system that supports full titles.

Delville (2000:115), as an alternative to titling, advocates a 'lighter approach' where plots are mapped and a land tenure register and system for recording dealings in rights is created over time, particularly in areas where customary rights might exist. Toulmin et al., (2005) also supports this view for upgrading rights of the urban poor overtime as they become increasingly vulnerable to market forces. Delville's system may have merit but funding must be established for the survey and mapping activity, which can be a major cost element in establishing any registration system. Delville also suggests that an alternative to titling might be to grant some legal recognition to transactions, or a registration of deeds system. This is a lower cost alternative to titles that has some weaknesses, some of which could be addressed by having survey/map records available.

5.4.4 Pro-Poor Emphasis and Safeguards for Vulnerable Groups

'Tenure also means different things to different people. For the very poor, it is primarily a matter of being able to access any space where they can obtain a basic livelihood, such as street trading, without fear of eviction. Location is therefore more critical than the form of housing they occupy and long-term security of tenure may be less important than the ability to move when livelihood changes' (Payne 2002:300).

There is considerable discussion and debate in the development community on the impact of initiatives to improve land administration on the poor. There are arguments that restrictions on land rights reduce land values and therefore their asset endowment.⁴¹ There are arguments that reducing restrictions and securing rights with titles will increase land values and thus restrict the ability of the poor to access land (Payne 2002:9). However as Payne (2002:300) notes, secure tenure, while an essential condition, is not sufficient in itself to achieve the broad policy objectives of benefiting the poor and ensuring they have access to affordable shelter under reasonable conditions. The following policy action is suggested by Payne to benefit the poor:

- taxing land at market value to increase the cost of holding land for speculative reasons;
- creating a legal framework that protects the rights of all citizens, including the poor (including dispute resolution and improved registries);
- simplifying planning, building and other administrative regulations;

- mandating that utility companies supply services irrespective of tenure status;
- setting objectives to encourage social and spatial integration of urban areas;
- strengthening the capacity of public sector agencies to perform their roles.

Using tax as an instrument of land policy was raised many times but this strategy has difficulties. It was argued that such policies had little impact where they were introduced in countries such as the Philippines and that *'...the time and effort devoted to designing land taxes intended primarily to achieve non-fiscal purposes has detracted from the more important task of implementing an effective and efficient revenue source for local governments.'* (Bird and Slack 2002:33).

A number of countries have implemented schemes to protect informal settlers from eviction and to provide some tenure security as is the case in the Philippines.⁴² Payne (2002:18) quotes the case of Colombia in mandating that utility companies provide services based on the ability and willingness of residents to pay for services rather than their tenurial status. Land titling was reported as increasing the availability of land for lease by reducing land owner concerns that the land would be granted to tenants (Sadoulet et al, 2001:224). It is also noted that land titling can lead to land concentration and the expropriation of common property, therefore it is recommended that titling be undertaken systematically with broad publicity campaigns rather than sporadically in response to individual request for title. This runs counter to the approach advocated for Uganda that land tenure should be systematically mapped and adjudicated with titles issued only on individual request (Augustinus 2003c:6).

There is strong momentum to continue developing these innovative tools and experiences through The Global Land Tools Network (GLTN)⁴³ recently established by a UNHabitat, World Bank and Swedish International Development Agency initiative. Working through 17 partner organisations with local to global research, documentation and dissemination capacity, the GLTN focuses on pro-poor land tools that improve the security of tenure for the poor. During the launch of the GLTN six themes on land tool development were introduced: land rights and records; land information/planning; land management/administration; land law and enforcement; land tax/valuation; and cross cutting issues (GLTN 2006). Mechanisms that address gender, eviction, conflict and Islamic specific land were raised as requiring immediate attention in the tools typology (Fergus 2006).

Gender. Although the legal status of women was the object of considerable attention in many studies, few deal extensively with the rights of women to land. There are various arguments on the gender impact of land administration. Some noting the adverse impact in Laos of issuing forms in the name of 'head of household' rather than land holder (Viravong 1999:159) and others noting (in the African context) that the *'...registration process may also run the risk of maintaining and reinforcing the traditional male dominated control of access to land'* (Hilhorst 2000:189). Yet others advocate that any project should be gender neutral. Hilhorst notes that "gender aware" land tenure policies may also mean changes in constitutional rights and reform in family law. Women in Africa, particularly those divorced or widowed, often suffer from limited protection and increased vulnerability because of gaps in land ownership laws that are typically a legacy of colonial administration and inheritance traditions under customary laws (Gopal 1999). However, legal reform is not the full answer. In India where women's right of inheritance were significantly strengthened

by the Hindu Succession Act of 1956, there was limited impact on actual inheritance practice due largely to very strong local customs (Agarwal 1994:175). Religious law can also have a gender impact. For example, under Islamic law women are entitled to a lesser share of an inheritance than any children of the marriage, which often conflicts with modern civil law that is generally gender neutral. This is the case in Indonesia. The arguments presented by Agarwal (1994:27-42) for ensuring that women have a 'field of their own' are:

- a welfare argument that increasing women's rights in land reduced a woman's own and her family's risk of poverty;
- an efficiency argument, based on a range of evidence, including the experience of micro-credit agencies that women have higher rates of loan repayment; and
- an equality and empowerment argument.

Agarwal (1994:478-493) presents a range of strategies to address the issue of women's access to land, some of which such as dowry reform are specific to South Asia, but others have broader implications, including:

- law reform – both in land and family law, supported by community awareness campaigns;
- strengthening land claims through channels other than inheritance;
- exploring joint management and promoting infrastructural support;
- building group support among and for women.

Some progress was made in improving women's access to and control over land during the past twenty years. Table 22 from Deere and León (2001:185-187, 294) summarises the main changes in favour of women's land rights incorporated in recent agrarian codes in Latin America. It was found that seven countries now state that the land rights of men and women are equal. In four of these (Brazil, Bolivia, Costa Rica and Nicaragua) land rights are considered independent of marital status, while in Peru, Ecuador and Mexico this is only implied. The authors acknowledge that important advances were made in achieving gender equity, and note that in six of the countries they studied (Brazil, Colombia, Costa Rica, Honduras, Nicaragua and Guatemala) provision for joint allocation and titling of land to couples were among the most important. Deere and León (2001:187) note that '*...the joint allocation and titling of land to couples is an advance for gender equity for it establishes explicitly that property rights are vested in both the man and woman forming a couple...*' and that '*... it serves to reinforce the principle that both spouses represent the family and may administer its property.*'

Table 22 Changes in Agrarian Codes with respect to Gender (Deere and León 2001: 186).

Country	Explicit Equality	Non-Sexist language	Joint titling	Priority to female household heads	Special Groups
Bolivia, 1996	Yes	No	No	No	-
Brazil, 1988	Yes	No	Optional	No	-
Chile	No new code	-	-	Land titling project	-
Colombia 1988 1994	No Yes	No No	Yes Yes	Yes Yes	- Unprotected women
Costa Rica, 1990	Yes	No	Yes	No	Women in consensual unions
Ecuador, 1994	Natural persons	No	PRONADER project	No	-
El Salvador	No new code	-	-	-	Women combatants
Guatemala, 1999	Yes	Yes	Yes	Women refugees	-
Honduras 1991 1992	Yes Yes	No Yes	Yes Optional	No No	-
Mexico 1971-92 1992	Yes Natural persons	No No	No No	No No	-
Nicaragua 1981 1993	Yes Yes	No No	No Yes	No Yes	-
Peru, 1995	Natural persons	No	No	No	-

In Ecuador joint titling to couples was adopted in a rural development project in twelve different zones of the country. In Chile female household heads were given priority in the country's titling program despite there being no legal provision for joint titling to couples. In Honduras where land titling projects have been ongoing since the 1980's, a primary factor preventing women from obtaining titles was lack of awareness of their rights due to scant publicity regarding the rights of women under the 1992 Law for the Modernisation of Agriculture (Deere and León 2001:294).

Regarding vulnerable groups, the 1994 Colombian law gives priority to rural women without protection because of internal political violence. Another country where special attention was given to women within vulnerable groups is Ecuador, where there was a strong focus on women who fought in the civil war as well as female informal settlers in conflict areas. The land rights of women in this country were honoured irrespective of their civil status, so individual allocations were made to men and women who formed a couple.

The Lao PDR studies commissioned by AusAID (among others) for the Lao Land Titling Project focussed on the legal aspects of the names noted on the existing land documents. It was initially established that *'men may be over-represented and joint titles under-represented'*, but later figures suggest a move towards a *'truer recording of land ownership'* (Lao Land Titling Project 2002:40). There were practical problems to recording the ownership of a jointly owned parcel of land on forms, but this was identified and the format of the titles was reviewed. Considerable attention is also now being given to informing women of their legal rights relating to land.

Gender equity has not been a specific objective in the agrarian legislation of countries such as Peru. Deere and León (2001:303) contend that women who own land are often disadvantaged in the land titling process because among other things, they have a low level of literacy and do not possess legal documents. Also, to participate in the land titling program in Peru one must be a registered voter and many women are not registered.

In most Latin American countries women's organisations have not pushed hard for independent land rights for women in couples for three main reasons (Deere and León 2001:226):

- structural; in view of the limited land available for distribution in most countries in the region and in view of political constraints;
- strategic; joint titling is in principle supported by all sides because to some extent it seems to promote family stability;
- the development level of women's organisation in rural areas, most of which is still fairly new.

There was considerable discussion on using the name appearing on registration records as a safeguard for women and vulnerable groups. There is the criticism mentioned above of the term 'head of household' rather than 'land holder' on the land tax declaration forms in Laos. Various people have suggested that the use of joint names is a way of protecting the rights of women and similar proposals are advocated for land owned by customary groups. These steps are appropriate in some jurisdictions, but other strategies were adopted elsewhere. In Kenya there is an insistence on the agreement of family members before the title-holder sells or mortgages land (Platteau 2000:63). This practice constrains the market and delays land transactions and in some respects harks back to the complex nature of English land law before the late 19th century where family members could block land transactions (McAuslan 2000:78).⁴⁴ A simpler approach is the situation in Thailand where, to affect registration, a married person has to produce approval by the spouse to the land transaction regardless of whose name appears on the title.⁴⁵ This provides some protection and does not seem to impact on a very efficient land registration system.

Inheritance Rights of Women. Deere and León (2001:284) noted that in Peru and Bolivia widows are in a relatively strong legal position regarding inheritance rights, and within peasant and indigenous communities usufruct rights are governed by traditional customs and practices enforced by the governing board of 'comuneros', chosen by and consisting of a group of male household heads. When the head of a household dies, the usufruct parcel normally reverts back to the community as a whole and then the governing board decides whether to give the rights to the widow or the eldest son. Although widows in the highlands of Peru have mostly been

treated favourably there were cases where the widow's rights had been restricted by being given access to less land than had previously been the case, or to the poorest land. Widows in many of the indigenous communities of Bolivia were not treated as well, with many permanently losing their rights as the land rights reverted back to the community.

Plaza's 1999 study (Deere and León 2001:284) which discussed changes in inheritance patterns over the past 30 years established that wives and partners are increasingly designated as the main heirs after the head of the household dies. This change was partly attributed to the increasing recognition of the role of women in agriculture, brought on because sugar cane is increasingly being replaced with coffee production in the Veracruz region where the study was conducted. It is argued that *'...in these circumstances, the titling of a parcel to a woman is not just a formal affair but rather, gives her real prerogatives. Once a widow is in possession of the agrarian certificate, she effectively assumes control of family production'*.

Deere and León (2001:284) note the difficulty of identifying ancestral inheritance practices in view of the many different forces of change impacting on indigenous communities. It is also difficult to isolate the impact of 'gender-equitable civil codes' in fostering more equitable inheritance patterns over time. Furthermore, in Peru, Ecuador, Bolivia, Mexico and Brazil it was found that inheritance of land becomes more equitable as agriculture becomes less important as the main source of household income.

Customary Tenure. In Africa there was a push for recognising and formalising customary systems (rather than introducing new systems) in spite of the fact that the rights associated with such systems generally favours males. Toulmin and Quan (2000a:23) note that *'gender issues loom large in the current policy debate, cutting across discussion of customary and formal tenure systems, both of which have marginalised women's rights'*. They acknowledge that women *'tend to have subordinate roles in relation to land in both customary and statutory systems'*. In customary systems women are normally relegated to secondary users with access rights to land closely related to their social connection with those who hold primary rights. Toulmin and Quan (2000a:24) however, also note that there is evidence of changing conditions with women obtaining firmer rights under traditional systems. Although women are generally treated more favourably under statutory law than under customary law, there is often an implementation problem. Toulmin and Quan note that issues such as access to services and economic opportunities (credit, markets) are also very important, and that it may be necessary for a government to consider affirmative action towards women to ensure they are informed about legal changes in formal processes.

In the African context, Tinker and Summerfield (1999:17) note that during discussions about the new constitution in South Africa there was conflict between customary rights over women and civil rights, giving women equality with men. The authors (1999:16) argue that many programs meant to aid women have in fact increased the burden on them. They refer to the example of Julius Nyerere's Ujamaa village efforts that increased the workload of women but did not better their financial situation as men continued to in effect control the sale of their produce. They also note that in this example that *'... women tried to save their access to land by appealing to customary rights, which were considered stronger than land titles.'* Such rights were considered *'malleable and responsive to power'*.

In Latin America there is evidence of indigenous female leaders increasingly challenging the structure of decision-making within traditional communities, demanding greater input into how 'customary' rules are determined and defined. As the land rights of women are closely connected to the broader struggle for indigenous land and territory, it is perhaps understandable the demands have not yet had much impact (Deere and León 2001:262). Recognising indigenous territories was one of the main demands put forward by indigenous communities in Latin America. Deere and León (2001:236) note there is a distinction between this and the concept of land rights as a territory is associated with the right to 'self-determination and self-government'.

Indigenous groups in Latin America have mainly focused on obtaining recognition for their historical land claims, collective property rights and the inalienability of collective property, including recognition of customary law. Indigenous women in turn focused on establishing equality between the sexes regarding adjudication and titling of land. This was mainly by way of joint adjudication or titling to couples 'irrespective of their marital status', as well as prioritising female household heads (Deere and León 2002:53).

Deere and León (2002:53, 54, 67) argue that countries with some of the largest indigenous populations in Latin America (Mexico, Guatemala, Peru, Bolivia and Ecuador) have made the least progress regarding land rights of women. They also acknowledge there is some tension between the rights of women and the rights of indigenous communities of which the future is arguably first and foremost based on communal access to land. *'To question how that communal land is then going to be distributed...is seen to be divisive and a threat to indigenous unity'* and *'The primary demand of indigenous women must be for the defence of the community, which they see as being based on collective access to land. ...'*

In many rural areas women's lack of legal rights to land was highlighted because many men work elsewhere as migrant workers while the women who remain close to the land have no access to technical assistance or credit. Indeed their insecure position is exacerbated because seasonal male migration often turns into permanent migration and abandoned women do not necessarily retain usufruct rights to the land they work (Deere and León 2002: 72). Women are increasingly beginning to address not only 'practical', but also 'strategic' gender issues within women's organisations at the local and/or regional level and have raised concerns about their access to land (Deere and León 2002: 71).

Table 23 below summarises the main 'gains and losses' of indigenous peoples in Latin America. Much has been achieved since the late 1980's in recognising historic indigenous land claims and collective property rights, with the exception of Brazil, where, although indigenous communities have been granted collective land use rights, their land has remained federal property.

Table 23 Collective Land Rights in New Constitutions and Agrarian Codes (Deere and León 2001:238).

Country	Constitution	Recognition of Collective Indigenous Lands	Recognition of Customary Law	Possibility of Privatising Collective Land
Bolivia	1994	Yes	Yes	No
Brazil	1998	No	No	No
Chile	No	No	No	Yes (1979) No (1993)
Colombia	1991	Yes	Yes	No
Costa Rica	No	-	-	-
Ecuador	1998	Yes	Yes	Yes (1994) No (1998)
El Salvador	No	-	-	-
Guatemala	1998	Yes	Yes	No
Honduras	No	Yes	No	No
Mexico	1992	Yes	Partial	Yes
Nicaragua	1987	Yes	Yes	No
Peru	1993	Yes	Yes	Yes

Chapter 5 Endnotes

¹ One of the lessons noted in the Africa regional paper.

² From Brits et al 2002.

³ *ibid*

⁴ *ibid*

⁵ Budgeted base cost as per Staff Appraisal Report for the Thailand Land Titling Project III.

⁶ The first amendment to the regulation in 30 years.

⁷ Law on Complaints and Denunciations (No. 09/1998/QH of December 2, 1998), Government of Vietnam.

⁸ Diamond (1997:276) in reviewing chiefdoms, observes that: *'At best, they do good by providing expensive services impossible to contract on an individual basis. At worst, they function unabashedly as kleptocracies transferring net wealth from commoners to upper classes.'*

⁹ In a global review of land administration systems there is always a risk in talking about 'core land administration functions'. In Australia valuation would also be considered a core function. In countries in transition and other countries, land use is often a core function. In other countries, the management of public land is a core function. In this report the two main functions – the registration of rights and the survey and mapping of the boundaries of these rights – have been labelled as the 'core' land administration functions as these functions would be included in virtually all jurisdictions.

¹⁰ DENR has a central office in Manila, 15 Regional Offices, 74 Provincial offices and 171 Community offices, with land records nominally maintained at the community level, but with some records maintained in the central office.

¹¹ The Department of Lands in Thailand includes a survey, registration and valuation function. The National Land Agency in Indonesia has a survey, registration and land use function – land valuation is undertaken in another agency.

¹² <http://www.teranet.ca/>

¹³ de Soto (1993:8) for example claims that only 25 countries have made the jump to a developed market economy and that the countries to join these 25 *'...will be those that spend their energies ensuring that property rights are widespread and protected by law...'* These 25 countries all have low perceptions of corruption.

¹⁴ Prepared by the Internet Center for Corruption Research, a joint initiative of Goettingen University and Transparency International. <http://www.gwdg.de/~uwww/2002graph.html>

¹⁵ In a report on research by academics in Chulalongkorn University of government corruption in Thailand, corruption was found *'... most widespread in the Customs Department, followed by the Royal Thai Police, the Revenue Department, the Land Department, and the Bangkok Metropolitan Administration...'*, as reported in the Bangkok Post,

http://search.bangkokpost.co.th/bkkpost/1999/october1999/bp19991002/021099_news20.html

¹⁶ The sectors were Education, Health, Power, Land Administration, Taxation, Police and the Judiciary.

¹⁷ Including the social research, pilot activity, establishing of a new registry based on the cadastre, and the legal reform.

¹⁸ Hughes (2003) in her recent provocative analysis of aid in the Pacific states (page 12) *'Pacific Islanders who want to cling to communal land ownership rather than command individual property rights have every right to make that choice. They have to accept, however, that their living standards will not rise, and that the present levels of male underemployment, alcoholism and crime, will increase. Young men will continue to drift in and out of urban areas, spreading HIV/AIDS. There is no reason moreover, for Australian or other taxpayers, to underwrite such choices with aid.'* Much of this sentiment is based on the statement that *'Communal land ownership has held back indigenous entrepreneurship in the Pacific as it has everywhere in the world'* (page 11) a statement that would not be accepted in many quarters. However one of the prime aims of Hughes paper is the fact that the *'...time for a well-informed public debate on aid to the Pacific to support policy change is long overdue'* (page 1).

¹⁹ This is not without issue. There are inaccuracies in any measurement technique. Systems that rely on coordinates will need to address a range of issues, including: the selection of the coordinate datum and what happens when the national datum is changed; the impact on cadastral coordinates of re-adjustment of the primary geodetic network and densification of the control network; the impact of

destruction and reinstatement of cadastral control points; and the significant impact of changes in survey and mapping technology.

²⁰ The unit cost of \$46.41 for Moldova is for the World Bank-funded component of the first Cadastre Project. The case material only provided the cost breakdown for this component. The overall unit cost of the titling activity in Moldova is \$9.90, due in large part to the significantly lower unit costs realised in the USAID-funded second Cadastre Project. The unit cost for the urban project of \$12.68 as documented in the Perú case study is significantly cheaper than reported in the Project Appraisal Document for the subsequent Real Property Rights Consolidation Project (World Bank 2006). This document reports that the unit cost of titling in Perú increased from \$43.30 in 2000, to \$49.80 in 2001, to \$55.40 in 2002 and to \$62.00 in 2003 (World Bank 2006:78). This increase in cost is attributed to increasing complexity in the properties being formalised.

²¹ This table has been prepared setting out the unit cost breakdown of systematic registration from the case studies. Latvia and Trinidad & Tobago have been excluded as the title issuance in these countries has been undertaken on a sporadic basis with substantial costs borne by the beneficiaries. In the case of Latvia, the process involves restitution of property nationalised under socialism. Information is not available from the case studies to provide a detailed breakdown for Indonesia or Thailand. The figures for Thailand are for phase III of the project and the actual field costs of \$13.45 have been inflated by \$5.87 an estimate of the cost of the salaries of government officials. The figures quoted for Moldova are for the titling activity which was funded by the World Bank as part of the First Cadastre Project. The overall unit cost of the titling activity funded by a range of donors in Moldova is US\$9.90, substantially less than that the unit cost of the activity under the World Bank activity for which detailed activity costing is provided in this table.

²² Bearing in mind that fees and taxes can be a major disincentive for participation in the formal land administration system. This investigation would typically look at a range of factors.

²³ The figures in the column 'urban' correspond to the figures for the Bangkok metropolitan area, the Banglamong Branch of Chonburi Province which includes Pattaya, and the Haad Yai Branch of Songkhla Province which include Haad Yai, and the figures in the column 'rural' are the residual figures. The urban figures exclude other major urban centres such as Chiang Mai and Korat and therefore understand the true situation. Note also that the total ratio of revenue/expenditure of 9.3 overstates the actual figure as there are considerable costs not recorded in the table for head office. The ratio of revenue to expenditure for the whole department, as recorded in the country case study for the year ending 30 September 2001 is 5.08.

²⁴ Information provided by the Director of the Land Titling Project Office, converted into US\$ at the average rate for the year ending September 2001 of 44.2805 as published by the Bank of Thailand.

Revenue/Expenditure Collection in FY 2001 (Thai Baht)

	Urban	Rural	Total
Revenue	9,715,303,065	5,768,863,163	15,484,166,228
Expenditure	724,337,606	946,593,212	1,670,930,818

Note:

1. Revenue excludes 205,822,265 baht in specific business tax, leaving total revenue of 15,689,930,493 baht.
2. From the Statistics of Revenue Collection by Planning Division, Specific Business Tax can not be categorized into Urban and Rural Revenues.
3. Urban Revenue consists of revenues collected in Bangkok Metropolitan Area and revenues from 75 Provincial Land Offices, together with revenues at Chonburi Provincial Land Office – Banglamong Branch where Pattaya Municipality's revenues is included and Songkhla Provincial Land Office – Haad Yai Branch where Haad Yai Municipality's revenue is included. This is the best approach using the data available at Planning Division. The revenue collection reported from Land Offices throughout the country to Planning Division was recorded by each individual land office, but Muang District Land Office showed no revenue because the revenue collections were made at Provincial Land Office. The classification of land offices was based on type of land documents, Provincial Land Office and its branches are responsible for collection of revenues from transactions on Title Deeds whereas District Land Offices do for the other type of land documents i.e. NS 3, NS 3K etc. except for Muang District.
4. Rural Revenue is derived from Total Revenue subtracted by Urban Revenue showed in the above table.

5. The expenditure records by the Planning Division in the year ending September 30 2001 of Baht 1,670,930,818 is slightly less than the 1,762,976,100 recorded in the Thailand country case study, using figures supplied by the Department of Lands. The figures in the above table are based on the best information available in the Planning Division in February 2003.

²⁵ The Domesday Book was commissioned as a basis for raising tax revenue in December 1085 by William the Conqueror, who had successfully invaded England in 1066.
<http://www.domesdaybook.co.uk/>

²⁶ This separation between policy and land administration is not straightforward, as noted by Delville (2000) the major issues relate to policy not to the administrative arrangements and technical procedures required to implement policy. *'In any event, emphasising rights (via registration) or rules is more a matter of making political choices about systems of authority and regulatory mechanisms than a technical issue.'*

²⁷ There is a degree of subjectiveness in the classifications used by McAuslan and some might object to the use of the terms 'semi-feudal' and to the suggestion that colonial authorities acted largely for their own ends.

²⁸ The evolutionary theory of land rights is discussed by Platteau (2000).

²⁹ The agricultural statistics for Africa are not strong, but the following table of food production per capita index drawn from the African Development Indicators 2001, published by the World Bank (p 221) indicates the basis of concern.

	Average annual % growth		
	75-84	85-89	Since '90
Ghana	-4.0	0.9	2.9
Senegal	-6.3	5.5	-1.3
Mozambique	-4.1	0.3	0.8
Namibia	-5.2	2.5	-3.1
South Africa	-1.6	2.1	-1.4
Uganda	-4.5	1.5	-1.4
Kenya	-1.6	3.6	-1.9

³⁰ Although provisions vary in the Australian States, the major exceptions are: fraud; a prior folio or certificate of title; erroneous description of land; paramount interests that are unaffected by the statutory regime and are enforceable against a registered proprietor; easements; adverse possession; leasehold interests (Hepburn 1998: 221-226). All States also provide powers for the registrar to correct the register, limited to the extent that it cannot prejudice any rights that may have been acquired by a bona vide purchaser prior to the error being noticed.

³¹ In the year ending 30 June 2002, A\$1.962 million (US\$1.14 million) was collected as revenue for the Assurance Fund and A\$1.218 million (US\$0.71 million) was paid out in claims for compensation (including legal fees and other costs). The A\$1.218 million in expenses was about 1.0% of the revenue collected by LPI of A\$124.185 million in the year ending 30 June 2002. Even with the payment of A\$1.218 million in 2001/2002, the balance in the Assurance Fund at the end of June 2002 was A\$8.142 million (US\$4.72 million). Data from the DITM Annual Report for 2001/2002 - <http://www.ditm.nsw.gov.au/department/publications/ar2002.pdf>

³² In the year 2001-2002 the Land Registry paid out about £2.5 million in indemnity claims, about 0.7% of the fee revenue of £342 million.

³³ Private communication with Gavin Adlington.

³⁴ Hick M, **Going Global: the US Title Industry's Next Big Frontier**, available on www.alta.org/store/ttlenews/98/9806_03.htm and McKenna B, **American Title Insurance: An Emerging Presence in Canada**, available on http://www.alta.org/store/ttlenews/98/9801_03.htm

³⁵ Morgan identifies the following advantages to lenders in the UK: title insurance can cover a number of defects including failure to register, conveyance of the wrong property, improper execution of a mortgage deed, failure to get local authority charges etc; potentially addressing the current situation where lenders have largely had to prove negligence rather than breach of contractual duty against conveyancers and have not always recovered costs; potentially reduced costs; potential income through the sale of insurance products. Lavelle (2202:50-51) identifies the potential benefits to lawyers in Australia who have traditionally provided conveyancy services, but she also discusses the potential impact on the government registries and the likelihood of government changes to indemnity cover under the title registers in response to increased private title insurance activity.

³⁶ Wilcox (2005), an article questioning the value of title insurance notes that it generally costs 0.5 to 1% of the mortgage amount, except in the State of Iowa where the state has established a system where title insurance is available at a cost of 0.1% of the mortgage value, plus US\$150-300 for a lawyer to prepare a transaction history for the property.

³⁷ Arruñada (2002:33), based on a data available on company web pages, press articles and contact with title insurance companies lists the presence of the six major title insurance companies in: Australia, Bahamas, Belize, Canada, Costa Rica, Dominican Republic, England, France, Guam and Marianas, Ireland, Israel, Korea, Mexico, Puerto Rico, Scotland, Spain and the Virgin Islands.

³⁸ Jaffe and Kaganova (1996:19) note that, despite a policy preference for a state registration system, a hybrid system is developing in St. Petersburg ‘...which unfortunately means it is borrowing the shortcomings of the two “pure” models: the slowness of state registration and the high cost of title insurance. Indeed, in the middle of 1995, registration of a standard apartment transaction in St. Petersburg took 2 days, cost 0.2-0.4 percent of the market value of an apartment, and title insurance would cost another 1-3 percent.’

³⁹ In ECA there is an old tradition for a dacha or garden plot. These were designed even in communist times to allow people to grow food for support in dire times and as a supplement to their salaries. Virtually everyone still has such a plot. They are being included in registration systems but are seen as low priority being added when the time and finances permit.

⁴⁰ The following table was prepared by an ADB study team, based on surveys undertaken by the National Housing Authority in April 2000.

Magnitude of Informal Settlers in Metro Manila

(by area type as at 11 April 2000)

Areas	Number of Families
Danger areas	
Waterways	72,102
Railroad Tracks	28,993
Pasig River	9,731
Sub-total	110,826
Government Infrastructure	
Right-of-Ways (RoWs)	73,836
Public Utilities	20,405
Sub-total	94,241
Government Owned Lands	315,406
Private Lands	110,956
Tourism Areas	5,650
Designated Housing Sites	66,869
Areas for Priority Development (APDs)	22,960
Grand Total	726,908

⁴¹ An observation in the draft Policy Research Paper, page 90, that notes claims that land values in Sri Lanka have been depressed by 50% due to restrictions on land ownership and that these have impacted on the endowment of the poor.

⁴² RA 7279 (Urban Development and Housing Act of 1992, otherwise known as the Lina law, enacted March 24, 1992) provides for protection to informal settlers in the Philippines.

⁴³ Global Land Tools Network was formally launched at the World Urban Forum, Vancouver, June 2006. Partners and participants are from governments, non-government organisations, donor agencies, representatives of the UN system, universities and the private sector - www.gltln.net

⁴⁴ As McAuslan (2000) notes, the reforms in English land law from the late 19th century simplified the law, introduced a system of registration of title and eliminated the rights of family members to block commercial transactions in land.

⁴⁵ This system works well as there is both a good system of personal identification cards and a good land records system. A person’s marital status is recorded on registration and it is clear where a spouse’s agreement to a subsequent transaction is required.

6 Conclusions and Recommendations

6.1 Conclusions

The efficiency and effectiveness of land administration is constrained by the political and social environment within a regime and largely determined by the ability of the civil service/local authorities to implement policy. Key elements in assessing the environment for land administration are:

- Clarity and social congruence in formally recognised rights and the ability of the regime to implement systems which recognise these rights as indicated by the proportion of the population and jurisdictional area that benefits from formal land administration services;
- Recognition afforded by the regime to informal land rights covering, where appropriate, both informal settlers and populations living under customary arrangements;
- The level of disputes over land rights, the formal and alternative dispute resolution mechanisms available to resolve these disputes and the efficiency and effectiveness of them. The land administration system with its information and records can be critical in dispute resolution.

Section four of this publication presented detailed indicators that can be used to systematically assess the land administration environment. A comprehensive framework of qualitative indicators was developed. However, a subset of the indicators can be used to assess the efficiency of a land administration system of a range of different perspectives. These include:

- **customer perspective:** number of steps; time required; and cost as a percentage of property value;
- **community acceptance/market activity perspective:** number of registered transactions as a percentage of registered parcels;
- **internal efficiency perspective:** number of registration staff days per registered transaction;
- **sustainability perspective:** annual running costs per registered parcel; ratio of revenue to expenditure.

Based on the data from the country case studies and wider experience in the sector, indicative 'mean' values were developed for these indicators. These 'mean' values provide a basis to assess the efficiency of a land registration system, and provide some metrics that can be used in the design of land administration projects. Table 24 summarises, where available, data from the country case studies.

While very useful for formal land administration system settings, it is notably more difficult to make comparative assessments of customary systems. The behaviour and components of these systems, while considered responsive and fluid within the heterogeneous environment in which they exist, are far less predictable when based on regulatory assessment indicators.

Table 24 Summary of Land Administration System Efficiency Indicators

	Time required to reg. transfer (days)	Transfer cost as a % of property value	Annual reg'd transactions as a % of reg'd parcels	# of reg'd transfers as a % of reg'd parcels	# of reg. staff days / reg'd transaction	Ratio of annual running cost / reg. parcel	Ratio of revenue / expenditure
'MEAN'	<5 days	<5%	>15%	>5%	< 1	<\$5-\$10	> 1
Armenia	15	1.5%	0.8%		10	\$49.62*	1.6
Kyrgyzstan	10	5.0%	3.1%		0.8	\$17.00*	0.3
Latvia	3	0.6-4%	7.7%		0.6	\$7.00*	1.6
Moldova	3-4	1.5%	4.0%		2.5	\$2.46*	
Indonesia	14	0.5%	5.8%		0.9	\$0.79	
Karnataka	20	13.0%	3.9%		0.56	\$0.16	20.7
Philippines	14	8.2%	11.0%	3.7%	1.56	\$1.17	2.4
Thailand	1	4.5%	21.2%	13.1%	0.5	\$2.10*	5.1*
El Salvador	30		17.8%		1.20*	\$27.47	
Peru	4-7		13.8%	3.9%	0.76		
Trinidad & Tobago	90		6.7%		1.80*	\$2.70	

* figure includes registration and cadastral functions

6.2 Recommendations

The following major recommendations are put forward to assist in future efforts to strengthen land administration systems.¹ There is some overlap in the rationale for the recommendations so the recommendations should be viewed as a framework for achieving an efficient and sustainable land administration system rather than a suite of individual recommendations.

6.2.1 Approach to Land Administration Reform

Recommendation 1: Prepare a framework for the long-term development of the land administration system.

Efforts to strengthen land administration systems typically occur over long periods of time. This framework should set out a 'vision' for the land administration system, preferably expressed in terms of service delivery or outcomes for users of the system rather than the perspective of land sector agencies or inputs to support service delivery. The framework should also identify strategies and actions required to achieve the vision, in the near-term, mid-term and the long-term and thus provide a guideline for government and donors to plan specific interventions. A critical element in the development of the framework is an assessment of the 'foundation'

for the land administration system, in at least the areas of: policy, legislation, institutional arrangements and capacity, human resources, funding and finance and stakeholder engagement (see Figure 10 on page 64). In many developing countries there is a weak legal framework and limited capability for dispute resolution. In developing the legal framework a realistic assessment of the current social environment and the government's ability to implement laws in a manner that is acceptable to the general population needs to be undertaken. With limited capacity and credibility in the court system in many countries, efforts to develop efficient and responsive alternate dispute resolution procedures are often a necessary part of strengthening land administration systems (page 71).

Recommendation 2: Broaden the geographic extent of land administration services only where the legal framework reflects reality on the ground and where there are appropriate dispute resolution mechanisms.

Some countries have developed a comprehensive land policy (for example Ghana), often with extensive stakeholder consultation, which can be an important input into the framework for the long-term development of the land administration system. Reform in land administration faces many vested interests and requires strong political will.

Recommendation 3: Raise the institutional profile of land issues in formal political/administration structures.

In Cambodia there is a Land Policy Council comprising of ministries concerned and chaired by the Minister of Lands (Malaysia has a similar arrangement). Forming a Ministry of Land with the head having a seat in Cabinet is one of the best ways to raise the profile of land matters and have a strong impact on policy formulation. In the ECA countries reviewed it was critical to have support at a high political level and to have directors of projects or agencies that were influential and motivated to achieve good results.

Recommendation 4: Before implementing a formalised systematic registration activity do the following:

- Determine whether there is a demonstrated demand for registration;
- Ensure the registered right will reflect the existing social tenures;
- Ensure the process will not have major adverse social impacts;
- Ensure the costs are affordable and acceptable to beneficiaries;
- Ensure there are appropriate incentives to register subsequent dealings in rights; and
- Ensure there are appropriate institutional arrangements to register subsequent dealings in rights (page 91).

Generally, land rights and obligations exist but are not supported by the formal system, thereby turning the system into one of *'formal illegality'* (McAuslan 2003:18). Although a land market exists, official laws are often ignored because they are seen as too complicated, subject to official interpretation and generally do not accommodate user needs. For the policy to be effective and enforceable, it must

reflect reality on the ground and therefore should be fixed on the basis of consultation, while according with the considered input of the community. In many Asian countries, for example, forest boundaries are based on jurisdictional control rather than reality on the ground. It is a simple technical matter to determine boundaries based on macro land use classifications or technical standards relating to features such as topographic slope. Resolving this issue calls for a political decision and political will to determine and adopt a policy of land classification which removes doubt in determining rights and guides land administration in a fair and just way. The guidelines for formalising informal rights should specify a fast, efficient and participatory methodology that reflects reality on the ground, without necessarily compromising accuracy.² As demonstrated in the comparative study, many jurisdictions were able to develop efficient and cost-effective methods to systematically register rights in land. Systematic processes have a number of distinct advantages. They are cost-effective and when implemented with strong community participation they are more transparent than traditional sporadic registration procedures. However, as demonstrated in many countries in Africa, systematic registration is not appropriate in all situations. In planning land administration interventions the question of support for sporadic registration will often arise. Some jurisdictions adopt a policy of 'user-pays', others provide infrastructural support for sporadic registration (buildings, equipment, operations, etc.) and others support sporadic registration activity.

Recommendation 5: Adopt a customer rather than process focus and where possible make clear promises on quality, time and cost of key procedures.

A mass program to systematically register rights in land is only a first step in strengthening a land administration system. It is essential that an efficient, community accepted system be developed to register subsequent dealings in rights in land. The limited impact of the first phase of the Indonesian Land Administration Project was largely due to the failure of the Indonesian project to develop an efficient, community-accepted system for the registration of subsequent dealings in land. This was despite the fact that the project exceeded targets in issuing titles.

It is important that a registration culture is fostered, a culture where the community appreciates the benefits of keeping their record of their rights within the formal system. This will involve public awareness campaigns and assurance that the benefits of registration outweigh the costs. Simple, cost effective procedures and accessible lodgement points will also be important. There also needs to be a shift in focus on internal processes and workflows to a focus on service delivery, with individuals seeking to register dealings in land considered as 'customers' rather than merely 'applicants' at the beck and call of officials.

Customer focus can be developed in a number of ways including simple posters in land offices explaining registration processes and prerequisites, customer help desks in waiting areas, the public display of fees and process times and suggestion boxes in land offices. These can be assessed in a number of ways including customer satisfaction surveys. The customer's expectations of land administration are security, clarity and simplicity, timeliness, fairness, accessibility, cost and sustainability. A major concern for most users is cost and time. Much can be said about customer focus by the preparedness to display clear promises regarding cost and time. As previously noted, the registration system in Thailand is very efficient because all

registrations must by regulation be completed on the day they are lodged. This promise of timely response takes the discussion away from a rationale for delay such as problems with process, staffing, working hours etc. to the steps needed to ensure the promise is honoured.

Recommendation 6: Where possible, adopt administrative rather than judicial approaches for formally recognizing rights in land.

In most developing countries the judicial system is overloaded and struggling to cope with the number of cases presented to the courts. In many countries disputes over land rights are a major proportion of court cases. In Vientiane, Lao PDR, 60 percent of cases in the court were land disputes. Often there are separate judicial reform projects to address issues of transparency, access for all, wide scale legal education, and efficiently operating legal systems. Land projects should therefore seek to reduce the need to use the court system by determining rights and resolving disputes through administrative rather than judicial processes.

Clear and simple administrative processes aim to encourage participation in the formal system rather than avoidance. Administrative procedures should be implementing government policies with the backing of trained and qualified staff. An example of this is establishing systematic registration using an administrative approach which permits greater flexibility and ease of implementation with a participatory community focus. South Africa can attest to having success using administrative procedures for upgrading titles. However, administrative procedures in Philippines and Bolivia remain complex and conflicting. It is therefore essential that administrative procedures, with the objective of reducing delays and expenses for the public typically experienced in judicial processes, impose reasonably set fees and charges while aiming for cost recovery.

6.2.2 Institutional Challenges

Recommendation 7: Form a single land administration agency or coordinate policy between existing government agencies, with concrete mechanisms to support and encourage coordination. This coordination should define the charter of the respective agencies, clarify roles and responsibilities, define lines of communication, set a framework for coordination with land management agencies and lay a foundation for institutional reform.

Many jurisdictions have struggled with a lack of integration at the information and institutional levels between the property registry and the cadastre. Experience has demonstrated the benefits of having a single agency; Thailand, El Salvador, Armenia, and Kyrgyzstan for example. In other jurisdictions there is a complex web of overlapping institutional roles and responsibilities. In the Philippines, for example, 19 agencies have some role in land administration and at least four agencies issue documents evidencing rights in land.³

Decentralisation can be a major factor in facilitating access to the land administration system but can also affect the cost of providing land administration services. Having flexible arrangements for decentralisation and linking decentralised offices to the level of expected demand for services is usually better than adopting a blanket policy of providing land administration services at a set administrative level (see the

discussion of the potential cost implications of the latter approach in Ghana on page 76).

Recommendation 8: Make an early policy decision on the level of decentralisation of service and the devolution of decision-making responsibility.

Decentralised service delivery requires inter-agency co-ordination between lands, local government and (sometimes) justice, as well as vertical co-ordination. Generally, the responsibility for decision making should be devolved to the lowest practicable operational level, leaving the central level responsible for policy, legal, standards and quality, personnel training and discipline. It is not easy to arrive at a policy consensus in these matters and political will, backed by a strong resolve to change, will be needed in the face of entrenched interests. Whilst land administration is invariably a public sector activity, the private sector has a role in most jurisdictions.

Recommendation 9: Develop a framework for private sector involvement in land administration services, including arrangements to regulate and oversight private sector service suppliers.

There is almost universal acceptance of the role of professional intermediaries who interface between the public land administration agency and the customer community. Through careful quality assurance (licensing etc) the private sector can assume much of the burden for maintaining spatial and other records necessary to sustain the system. Using the private sector to prepare documentation for registration with legal liability can dramatically lower the costs of land registration to the State. However, it can also make the system unaffordable to the poor if land professionals undertake routine rather than just management operations (Namibia).

6.2.3 Focus on Sustainability

Sustainability is a critical issue with land administration interventions and has at least three dimensions: (i) technical sustainability; (ii) financial sustainability; and (iii) community participation (see page 81). To develop these elements requires a carefully planned capacity building strategy. It is important that technology does not drive the process and that the technology proposed is appropriate in terms of the available human and financial resources and is affordable by users. Mistakes made during policy development by not tying policy development sufficiently closely to technical implementation strategies, and costing this implementation properly, can potentially derail the entire land reform process (Uganda). Systems should be financially sustainable in the near to medium term.

The importance of costing land administration services, particularly on decentralisation and/or where significant new resources are proposed is illustrated in the case of South Africa and Uganda. Major changes in land administration policy were costed and as a result South Africa stopped a draft Bill and the Uganda scaled back implementation to pilot activity. In some countries land administration services are being provided by independent agencies running on a self-supporting basis. In Moldova and Kazakhstan the registry offices had to be self-funding from the start and the business plan for Moldova even provided for repayment of the World Bank loan. The 'independence' of these agencies means they can provide many different types of service, maximise income and pay staff well enough to substantially decrease corruption.

Recommendation 10: Make a decision very early in the design stage on the registration model and the approach to the cadastre; this may be a hybrid model, perhaps with a title registration system supported by a graphical cadastre being developed in project areas, and less sophisticated systems operating elsewhere. Adopt simple, low-cost survey mapping technology depending on sustainability of capacity and resources.

Registration systems, particularly registration of deeds and title registration, were reviewed (see page 104). As noted there was criticism that land administration interventions have tended to concentrate on registration of titles, particularly based on experience in Africa. One strategy suggested in Africa is to set up systems to register transactions (page 110), basically a form of deeds registration. In ECA it was observed that the development of land markets were impacted upon more by systems that allow transactions to occur quickly than by systematic titling efforts (page 28). Some countries that currently operate deeds registration systems are looking at moving to title registration (India, Peru, El Salvador). As systems have developed over many decades taking into account the country's own particular laws and history, there tends to be few pure 'deeds' or 'title' registration systems (page 107). There is, however, an almost universal emphasis on using property identifiers to link legal and spatial records to minimise errors and provide better information to users.

A spatial framework or cadastre supported by appropriate surveying and mapping methodology is essential for title registration and a key strategy for strengthening deeds registration (refer page 104). Survey and mapping however, are usually major cost elements in establishing and maintaining a land administration system and are considerations for assessing technical sustainability (refer page 68). Despite advances in survey, mapping and computer technology one needs to avoid over-specifying technology. No country has implemented a digital cadastre in support of mass a systematic titling program. Most titling systems were introduced on the basis of graphical cadastres. This has happened in the developed world; for example England, Australia, Sweden; and in the developing world; for example Thailand, Indonesia. Graphical cadastres provide adequate spatial frameworks in many jurisdictions and can be upgraded at a later stage on the basis of careful cost-benefit analysis.

This will almost certainly mean that there may be two or more tiers in the registration system but this should not be a concern because all existing well-developed land administration systems have developed in this manner. Close consultation with key stakeholders is often necessary in making decisions on registration models and cadastres, particularly with lawyers and surveyors who usually have strong vested interests. Although some assessments of land administration systems emphasise a jurisdiction-wide cover,⁴ it is important to ensure that interventions are implemented within the framework of a long-term development plan and where more than one registration process operates, be clear about what process applies in a given case or situation.

Recommendation 11: Prepare a financial model of the land administration system under a range of market and service delivery/technology scenarios before basic parameters are agreed.

In looking at financial models for land administration (see page 90) it is important to model the geographic phasing of interventions. When preparing financial models it is important to ensure that the schedule of fees and charges are not a major barrier to on-going community participation in the land administration system. The comparative study provides some information on what people seem prepared to pay.⁵ It is important to acknowledge the social impact of land administration projects and the need for maximum community inclusion at all stages of the project. In some jurisdictions it can be critical to look at oversight arrangements and governance issues. Public support and understanding is essential and to be successful a land administration system needs to foster a culture where registration is undertaken as a matter of course, something that is taken for granted in the developed world.

Recommendation 12: The design must consider existing human and technical resource capacities of the implementing agency, potential service providers, and its users. Appropriate land administration system design and capacity building strategies involving short to long term training and education are necessary from project inception, preferably using local solutions (see page 93).

One of the major challenges in developing countries is implementing systems that are sustainable once external assistance has pulled out. Three key areas of human resource development need to be addressed including the implementing agency staff, both, higher authority and local decentralised levels, the private sector, and the users. Societal and organisational capacity building should be underwritten in the project design, however individual capacity building typically requires additional programs to train and up-skill providers, suppliers and users operating the system.

Short term training and up-skilling inputs address immediate short-comings but the design should also seek to develop or tap into more sustained avenues of education in the field of surveying and land administration that will supply both the government and private sectors with trained and qualified employees. Leveraging off existing education institutions as was the case in Lao (see page 93) will be easier than establishing an entire new facility. In addition engaging existing skills in the private sector can help fill service and resource deficiencies as long as reciprocal capacity building opportunities exist to support new systems or technology.

Participation and capacity building in the community through awareness and education programs can be effective at ensuring they play an active role in using the system..

6.2.4 Land Tenure Policy

Recommendation 13: Assess the need to intervene in customary tenure by understanding the community's needs and concerns, to ensure tenure certainty for all.

Countries where customary land tenure systems operate face a number of challenges. There are examples such as Indonesia and Ghana where developing countries have sought to dismiss traditional forms of tenure and customary land

practices in the belief this would speed the path to development. This fails to recognise reality and ultimately presents more problems than solutions. As previously discussed (page 102) where customary systems operate two key questions need to be addressed:

- under what circumstances do the existing tenure arrangements fail? And
- where there is failure, what sort of intervention is appropriate?

Some countries have recognised customary tenure, but the systems that were implemented to recognise this have limited integration with the formal land administration system (Bolivia, the Philippines). Other countries do not formally recognise customary rights (Thailand). The experience from the comparative study shows that customary and State systems of land tenure are not necessarily mutually exclusive and the evolution of a land administration system can be based on co-existence or the integration of the two. Integrating customary and formal land tenure systems is one intervention approach but it must ensure there is certainty in what rules apply in a given situation and ensuring any attempt to codify customary law must reflect the diversity evident in customary law. Customary practices relating to marriage, divorce and inheritance should not be codified for the purposes of a land registration system because even a superficial overview indicates various existing approaches as well as modifications stemming from the pressure of urbanisation and the legal framework of the country in relation to gender etc. (Namibia, Mozambique, Uganda).

Strategies to integrate customary and formal land administration systems include:

- registration of rights at a community level, with individual rights reserved for areas of conflict;
- registering rights at a local or community level through local institutions such as Land Boards, but this strategy needs to be cost-effective;
- granting legal recognition of transactions, perhaps supported by cadastral mapping, the 'lighter approach' (page 110) proposed by Delville, but such systems need to address the issue of assigning priority to customary transactions undertaken at the various levels of customary authority. Again, these systems need to be cost-effective.

Recommendation 14: Build into the design strategies to collect gender disaggregated data and data related to other disadvantaged groups and monitor gender impact during project implementation.

Consideration of sensitive social impact issues such as women and vulnerable groups is important to project success and sustainability. "Gender aware" policies, family, inheritance and land law reforms and active support groups and networking are important strategies, however these require monitoring and evaluation of their impact. Without the need for additional social impact studies, recording of data which reflects the involvement of women and vulnerable groups in registration processes would be beneficial. Having this gender disaggregated data and data related to disadvantaged groups will enable the development impact on these vulnerable groups to be monitored and ensure these groups are appropriately targeted. It is important that evaluations consider what a fair representation of these groups are, recognising demographic variations from war widows, the impact of HIV (particularly

African women forced into divorce) and gender distribution, for example total female populations in Laos are recorded at 51 percent.

Recommendation 15: Adopt a phased approach to recognising rights to assist the poor and vulnerable groups in both urban and rural areas gain security of tenure.

It is often a real challenge to design a project that addresses the issues of the various stakeholders, poverty alleviation, gender equity, environment sustainability, in a country that cannot adequately fund government services and where the land sector is often perceived as one of the most corrupt government sectors. One strategy to build a sustainable system is to target areas of potential development. However, such strategy can be difficult to defend against the criticism of designing projects to benefit the urban elite rather than the most vulnerable in society. An important point to note is that improvements in land administration infrastructure are part of a long-term strategy. What is often being debated is the initial emphasis or starting point, not the overall rationale for the activity. However, strategies can be developed to focus on the needs of the poor, including:

- creating a legal framework to protect the rights of all citizens, including the poor (including dispute resolution and improved registries);
- simplifying planning, building and other administrative regulations;
- mandating that utility companies supply services irrespective of tenure status; and
- setting objectives to encourage social and spatial integration of urban areas.

Chapter 6 Endnotes

¹ These recommendations concentrate on the recognition of rights and do not cover associated areas such as property valuation or taxation, areas not specifically covered by the Comparative Study.

² Although it should be noted that many of the successful systems have flexibility in survey and measurement methodologies, often specifying high accuracy techniques for expensive urban land and less accurate and hence less expensive techniques for lower value land. This is the case, for example, in Thailand.

³ Various types of patents (public land grants) are issued by the Department of Environment and Natural Resources to applicants, Certificates of Land Ownership are issued to land reform beneficiaries by the Department of Agrarian Reform, the National Commission for Indigenous Peoples administers ancestral domain for indigenous peoples and the Courts issue decrees on land rights.

⁴ Dale and McLaughlin (1999:39) note the five criteria proposed by Palmer for considering the registry function: jurisdiction-wide cover; quality control; currency; guarantee; and indemnification. Jurisdiction-wide cover was seen as important as the registration system becomes more effective as more parcels are registered.

⁵ As noted in Table 8 on page 52, for example, the study seems to suggest that the cost of registering a transfer should be less than 5% of the property value and should cost less than an amount that users can earn in about 30 days.

Appendices

- Appendix 1 – Policy/Legal Framework Indicators
- Appendix 2 – Customary Tenure Indicators
- Appendix 3 – Land Administration Parameters
- Appendix 4 – Formal Land Administration Effectiveness Indicators

Appendix 1 - Policy/Legal Framework

Indicators

- African Country Case Studies - Tables 25
- African Country Case Study (Uganda) – Table 26
- Asian Country Case Studies – Table 27
- European and Central Asia Country Case Studies – Table 28
- Latin America Country Case Study – Table 29

Table 25 African Country Case Studies ¹

Indicator	Ghana	Mozambique	Namibia	South Africa
Types of rights formally recognised	<p>There is a deeds and title system in place, with the latter only in Accra and Kumasi cities. The registration of titles has not been very popular – most people appear to find the system of registration of deeds adequate. Only the title system has legal liability.</p> <p>Some 78% of land in Ghana is under customary tenure, with the remaining 22% belonging to the State. Generally, customary law and statutory law operate alongside in the customary tenure areas.</p>	<p>No freehold is available. All land belongs to the State and cannot be sold, transferred, mortgaged, or offered as collateral. However, improvements on the land may be mortgaged, and may even be sold provided approval is given by the public administration.</p> <p>Fifty year leases (renewable for a further 50 years) are available for commercial investors and small holders (for Mozambicans and foreigners who have resided in the country for more than 5 years and for companies registered in the country). Inheritance of such right is possible, provided customary and occupancy rights had already been taken into account.</p>	<p>Most of the population lives in the north of the country under customary tenure. An inferior colonial relic system termed 'Permission to Occupy' exists in the north as the only tenure available apart from customary. Most of the remaining land is registered in full ownership (freehold) in a deeds registry system for which the private sector has legal liability.</p> <p>One part of the country –Rehoboth– has a local level deeds registry system where full ownership (freehold) is registered, also in undivided shares with no cadastral boundaries.</p>	<p>South Africa has a deeds system with compulsory registration. Title to land and other real rights is not guaranteed by law. Liability for compensation for errors is assumed by private sector land conveyancers, and land surveyors, who produce documents that are registered.</p> <p>The system is sophisticated and highly accurate. It primarily registers full ownership (freehold), title in land and sectional title units, long term leases, leasehold rights, servitudes, mineral cessions, mineral leases, prospecting contracts etc.</p>
Types of rights informally recognised (including customary systems)	<p>Customary land ownership rights are recognised. In areas of customary tenure, land management is community based, with communities ranging from small families to entire tribes (Stools/Skins). Customary law does not prevent land sales to strangers but does not encourage it.</p> <p>A few informal settlements have been recognised but squatter rights are generally <u>not</u> recognised.</p>	<p>The new 1997 Land Law holds that customary rights and land use rights acquired through 'good faith' occupation over a minimum of 10 years are recognised (not yet in urban areas). Customary rights and unregistered occupancy rights can be registered, but a registered customary right is not stronger than an unregistered one. Group customary rights can also be delineated as community land. This is recorded in the Surveyor General's office not as a registered right, but as a land use designation.</p>	<p>Customary landownership rights are recognised in some parts of the country. Namibia does not recognise occupancy rights and does not have anti-eviction rights in urban areas.</p>	<p>After the 1994 reforms, the following rights are recognised: customary tenure; informal settlement rights; the rights of squatters; occupancy rights (under certain circumstances); adverse possession; anti-eviction rights.</p> <p>The Interim Protection of Informal Land Rights Act (1996) has given informal occupants land rights, including a right to compensation if moved (State retains freehold title).</p>
Percentage of the country and population covered by the formal system	<p>not available</p> <p>78% of the country is under customary coverage</p>	<p>About 10%</p> <p>Customary tenure accounts for roughly 90% of land tenure rights.</p>	<p>not available</p>	<p>Estimated to be about 80-90% of the area and about 70-75% of the population nationally.</p>

Indicator	Ghana	Mozambique	Namibia	South Africa
Characteristics of population without formal rights	<p>Squatter rights are generally <u>not</u> recognised under the law and no particular provision has been made for their registration.</p> <p>There are no gender specific provisions in the law and no restrictions on women who wish to register interests in land.</p>	<p>The 1997 Land Law has incorporated customary rights into the formal legal framework. The need to protect the rights of poor occupants has been recognised by law, and the new Land Law notes that women could be land use right holders.</p>	<p>Most people live in the north of the country under customary tenure. In rural areas where people have not settled according to prior planning, authorities did not give residents legal land rights. Around towns in commercial areas, squatting informally on land belonging to the local authorities or private individuals has become common. Around 10% of the population lives in urban areas on land to which they have no formal rights.</p>	<p>In urban areas, inferior titles to land owned by Blacks have been upgraded to freehold through administrative processes. Rural land in the former homelands must still be addressed. The Communal Land Rights Bill currently under discussion (in its 8th draft) can significantly affect the land registration system and customary tenure in the former homelands.</p>
Level of disputes over land	<p>Land disputes are considered to be numerous but data on conflict resolution is not reliable. Between August 1999 and the end of 2001, 17 disputes were recorded in the Accra title registry, but the title registry only covers about 13,000 properties. The most common source of conflict appears to be boundary disputes.</p> <p>The non-performing nature of the Land Title Adjudication Committee is probably the main obstacle to dispute resolution.</p>	<p>Conflict over land appears to be a problem. Conflict stems mainly from numerous overlapping land requests and land use concessions, most of which were in competing with existing community lands. Such concessions cover large parts of the best land in the country. Many applicants have exploited of resources etc. after only submitting an application (i.e. without prior approval). This resulted in confusion and exacerbated existing conflict between them and local communities.</p>	<p>Information not readily available but the level of disputes relating to land is thought to be reasonably low.</p>	<p>There have been only 3 court cases in 46 years in relation to the records of the Deeds registry. Of 67,314 restitution cases since 1994, 35,137 were settled through a separate judicial mechanism (the Land Claims Commissioners Court).</p> <p>Although the number of disputes over registered land records is low, there is estimated to be a fair number and range of disputes over land in general.</p>
Time taken to resolve land disputes	<p>Various mechanisms are in place to enhance speedy dispute resolution. The ability of Traditional Authorities to resolve land disputes appear to be good but adjudication procedures of the Land Title Registry need improving.</p>	<p>Information not readily available.</p> <p>Note: The 1997 Land Law did not include a special body to undertake conflict resolution because customary institutions and judicial and community tribunals already exist and are adequate. Conflicts are resolved by judicial tribunals, other tribunals and local level structures.</p>	<p>The Court system in the urban areas is fairly efficient so the time to resolve disputes is estimated to be reasonably short</p> <p>In traditional areas local authority and traditional authorities resolve land disputes. Disputes are thought to be resolved fairly quickly but no statistics are available.</p>	<p>Information not readily available.</p>

Table 26 Uganda Country Case Study

Indicator	Uganda
Types of rights formally recognised	<p>Uganda has a title system in place but no deed system. The registration of titles (Torrens) was first introduced in 1908. The State has legal liability for the title system. Only about 40% of the Torrens titles (roughly 280,000) are thought to reflect the rights of the current owners and lease-holders. There are four types of land tenure in Uganda: customary, mailo, freehold and leasehold.</p> <p>The following rights are recognised: occupancy rights, anti-eviction rights, group/family titles, modern 'starter' type titles, informal settlement rights.</p>
Types of rights informally recognised (including customary systems)	<p>Uganda has a range of forms of legal pluralism, which also contributes to land disputes. These include customary and/or statutory forms of evidence, customary kings and/or public land owned by the state, pastoralists and/or land gazetted as game reserve, and customary rights holders and public land.</p>
Percentage of the country and population covered by the formal system	<p>Freehold and leasehold covers about 12-15% of the country. Customary tenure covers about 62% of land.</p> <p>About 5-6% of the country has current titles mostly concentrated in urban areas.</p> <p>Only about 40% of titles (280,000 of the roughly 700,000 titles issued) realistically reflect the rights of current owners and leaseholders.</p> <p>Customary tenure covers ±68% of the population.</p>
Characteristics of population without formal rights	<p>Rights obtained by the poor include the right to sell, lease, mortgage, inherit, and to claim compensation if moved (not an individual right, but that of a family/group).</p> <p>There is partial protection of the rights of women in that transfers can be prevented.</p>
Level of disputes over land	<p>Implementation of the Land Act of 1998 has been slow, and the delay between the removal of old mechanisms and structures, and failure to introduce new measures in a timely manner has left a vacuum, in particular with regard to dispute resolution. Land disputes that were previously settled quickly at local level are now being drawn out. Disputes have become numerous and long lasting.</p> <p>A total of 48% of all plots are in some way being disputed at present, with about half of all disputes relating to boundaries, and roughly 35% relating to issues of tenancy. Over 70% of conflicts that have been resolved have been subject to formal processes.</p>
Time taken to resolve land disputes	<p>The average dispute has a duration of about 3.5 years, with family conflicts estimated to last about 2.5 years on average. Disputes involving the government could take up to 5 years to resolve.</p>

Table 27 Asian Country Case Studies²

Indicator	Indonesia	Karnataka	Thailand	Philippines
Types of rights formally recognised	<p>Land rights are recorded in two systems: (i) private conveyancing and (ii) registration of deeds. The Indonesian system of title registration is not guaranteed by the state.</p> <p>The tenure system provides for a hierarchy of ownership/use rights. There are five basic forms of tenure each with levels of restrictions:</p> <ul style="list-style-type: none"> • Hak Milik – ownership • Hak Guna Usaha – cultivation only • Hak Guna Bangunan (HGB) – nominally a renewable 20-30 year lease • Hak Pakai – use only • Hak Penguasaan – land management only. <p>Ownership (Hak Milik) is confined to the individual, while corporate entities and foreigners are restricted to lesser forms of tenure.</p>	<p>The land registration system in Karnataka is a registration of deeds system. There is a fairly high participation rate, despite a fairly high transaction tax, but there are problems with under-declaration of values.</p> <p>There is a separate system of registration of rights based on old systems implemented by the British to raise revenue. They record tenancy in rural areas (RTC) and rights in urban areas (Property Cards) supported by reasonably complete survey map records. The technology for survey and mapping is very low and there are problems with completeness, particularly in areas subject to development. There are linkages between the registration system and the rights systems (RTC/Property Cards), but there are gaps.</p>	<p>A titling system was introduced in 1901, based largely on the Torrens title system operating in the state of New South Wales, Australia.</p> <p>The tenure regimes recognised in Thailand include the private rights recognised under the Land Code (pre-emptive (NS2) rights which are not transferable, certificates of utilisation (NS3/3K) and titles (NS4), both of which are transferable and accepted as collateral, State land under the Land Code (NSL). There are other rights that are not recognised under the Land Code, including rights issued to land reform beneficiaries (ALRO 4-01), and usufruct, renewable 5-year licenses issued to agricultural land users in forests (STK).</p>	<p>The judicial-based Torrens system was introduced to the Philippines through the Land Registration Act 496 of 1903. Approximately 20% of privately owned land is now “registered land” under the Torrens system, with some of the balance relying on deeds to establish rights in property and most of the remainder relying on informal systems.</p>

Indicator	Indonesia	Karnataka	Thailand	Philippines
Types of rights informally recognised (including customary systems)	<p>A differentiation is made between squatting and extralegal occupation. Squatting applies to occupation on land where a right had been granted but the rightful owner has neglected the land, or the person trusted to watch the land has informally leased it to other persons.</p> <p>Extralegal occupation concerns cultivation or occupation of state land where in certain cases the occupants are given the opportunity to apply for the land right.</p> <p>Extra-legal tenure is an issue especially in forest areas where there has often been occupation for generations. Forest boundaries are unclear and often gazetted without consultation with 'residents'. Possession (adverse possession) is not considered a legitimate source of title or a cure for title defects.</p>	<p>Karnataka has a number of tribal communities that live in varied environments, including the forests. The tribal communities view the concept of property differently and have difficulty in substantiating claims under law, which have been based on old revenue laws. However, squatters in the forests may get land ownership under special considerations.</p> <p>In north Karnataka a Tibetan refugee colony was given 'permanent residence' status.</p>	<p>Rights under the Land Code cannot be issued systematically in forest land and this includes most of the land held by hills-tribes and indigenous groups.³ Although there is local recognition of the rights of hill-tribes, there is no official recognition under the Land Code.</p>	<p>Communal claims can be made on land, resources and rights thereon, belonging to the whole community within a defined territory. Individual claims can be made on land and rights thereon which have been devolved to individuals, families and clans, including, but not limited to, residential lots, rice terraces or paddies and tree lots.</p> <p>There are two types of Certificates that may be issued:</p> <ol style="list-style-type: none"> 1) Certificate of Ancestral Domain Title that formally recognise the rights of possession and ownership over ancestral domains identified and delineated according to the law and 2) A Certificate of Ancestral Lands Title that formally recognises rights over ancestral lands.
Percentage of the country and population covered by the formal system	<p>Private rights in land can only be recognised on non-forest land. About 70% of the total area is legally classified as forest land with the land administration system only covering about 30% of the country. Registered parcels represent about 5% of the total land mass of Indonesia, but covers a significantly higher proportion of the population – the island of Java, which has about 60% of the total population of Indonesia constitutes only about 6% of the total area of the country. There are about 17 million registered parcels.</p>	<p>not available</p>	<p>It is not known what percentage of parcels is held with rights that are recognised as eligible for title deeds. DOL records show that in December 2001 there were 18,629,088 titles covering 11.3 million ha, 1,894,960 NS3 covering 2.69 million ha, 7,332,669 NS3K covering 6.34 million ha and 368,033 NS2 covering 0.576 million ha (some duplication in these numbers likely). Earlier records⁴ show about 37% (189,120 km²) is eligible for private rights and of the above total 209,100 km², about 110% of eligible land, is covered by a registered document indicating that there is significant double counting in DOL records.</p>	<p>Private rights in land can only be recognised on non-forest land. Forest land covers about 16 million ha of the total land area of about 30 million ha (about 53%). There is uncertainty about issuing rights to occupiers of forest land. There are about 10 million registered titles but problems with duplicate and overlapping titles exist, particularly in urban areas. About 6% of the Philippines remain unclassified, including much of Quezon City in Metro Manila, where rights are uncertain.</p>

Indicator	Indonesia	Karnataka	Thailand	Philippines
Characteristics of population without formal rights	<p>Squatting is considered illegal and treated accordingly.</p> <p>There are no specific limits on land ownership by women. Property brought to a union by the woman can be registered solely in her name. Some parts of Indonesia (e.g. South Sumatra) are matrilineal and inheritance is affected accordingly in favour of women family members. Joint registration of property acquired during marriage is possible and encouraged.</p>	<p>Squatters present a big problem in Karnataka. The State Assembly (on the recommendation of the Cabinet) can however legalise squatters and allow them to obtain rights.</p> <p>Two categories of Tribals (nomads and forest dwellers) co-exist in Karnataka without private ownership on communal land. Tribal people are badly affected by the loss of land and restricted access to forest produce.</p> <p>By law, women have been granted rights concerning land. However, there is proof that it seldom translates into effective control over land in practice.</p>	<p>A substantial number of people in rural areas have the legal status of squatters occupying State land – predominantly land considered legally forest land. Due to socio-political constraints, it is very rare for squatters to be evicted. Squatting also exists in urban areas and it is estimated that in 1993 there were about 1.256 million informal settlers in Bangkok (Mohit, 2002). These squatters also have no legal recognition, but evictions can be difficult.</p>	<p>Has had a long history of Agrarian reform and redistribution of land to assist landless farmers. The Comprehensive Agrarian Reform Law (CARL) of 1987 covers the redistribution of all public and private agricultural lands suitable for agriculture to farmers and regular farm workers who are landless. “Landless” is now defined as owning less than 3 hectares.</p> <p>Rapid urbanisation is causing squatter problems. The informal settler population in Metro-Manila is estimated to total 4 million, with about 80% of these settlers illegally occupying public land.</p>
Level of disputes over land	<p>There is a fairly high level of land-related conflict in the country (60% of court action involve land issues). Disputes arise mainly from cultivation by communities on plantation/State and forestland; non-compliance with land reform rules; land acquisition for development and excessive allocation of “location permits”, an exclusive right to acquire land to develop large tracts; civil claims about entitlement; customary rights issues; failure to recognise long occupation as a right; and level of compensation.</p>	<p>There is a high level of litigation in the courts (particularly the High Court) related to land disputes. Statistics on the number of land dispute cases are not available.</p>	<p>The level of land-related disputes is considered to be low. Generally, Thai people tend to avoid social conflict.</p> <p>Under the systematic land registration program that forms part of the Land Titling Project, very few disputes arise that cannot be settled in the field and few, if any, appeals are made to the court system.</p>	<p>The level of land-related disputes is considered to be medium to low. Generally, about 15% of court cases are land related.</p> <p>Conflicts in rural areas are few in number; in the project area in Leyte about 4.5 % of the parcels in the pilot of 850 lots have been noted as being involved in some form of dispute.</p>
Time taken to resolve land disputes	<p>Most disputes are handled by the General and Administrative Courts, with a limited number being handled by Civil Court. Appeals can proceed to the High Court and ultimately the Supreme Court, contributing to long delays and very high costs. Only the best informed and wealthy can avail themselves of the court system to resolve disputes.</p>	<p>Court cases over land can take many years to resolve – there are some family disputes that have even taken decades to resolve. The “average” time taken to resolve a land dispute in court is anything between 2 to 25 years. (Informed sources from the Court premises have indicated an average period of seven years).</p>	<p>Statistics are not available.</p> <p>The standard procedure is for a ruling to be made by the Provincial Land Officer, with parties then given 60 days to take the matter to the court.</p>	<p>Although the Registration Act notes set periods for matters to be dealt with by the courts, these specifications have little bearing on what actually happens. Land matters typically have low priority in the courts. Routine matters can take years to complete and disputed cases decades to resolve. The court process also lacks transparency.</p>

Table 28 Europe and Central Asia Country Case Studies⁵

Indicator	Armenia	Kyrgyzstan	Latvia	Moldova
Types of rights formally recognised	<p>Land ownership rights can belong to the State, private individuals or be communal rights. Rights to land and property include full ownership, lease, permanent use, mortgages, easements and other restrictions.</p> <p>Land and buildings may be owned separately.</p>	<p>Land ownership rights can belong to the State, private individuals or be communal rights.</p> <p>Rights that must be registered include full ownership, leases (more than 3 years), mortgages, easements and other servitudes.</p> <p>Land, the building on the land and the apartments in a building may be owned separately.</p>	<p>Land ownership may be private, municipal or State. Private ownership rights may be registered in the name of a private or legal person; joint ownership is also often registered. Rights include full ownership, lease, mortgages, easements and other restrictions.</p> <p>Land and buildings may be owned separately.</p>	<p>Land ownership may be private, communal or State.</p> <p>Rights include full ownership, lease, permanent use, temporary use, mortgages, easements and other restrictions.</p> <p>Land and buildings may be owned separately.</p>
Types of rights informally recognised (including customary systems)	<p>Tenure is governed purely in accordance with formal laws and regulations. Informal tenure is not recognised.</p>	<p>Tenure is governed in accordance with formal laws and regulations. Informal tenure is not recognised. There are many areas where people occupy land to which they have no legal right. Informal tenure may be through squatting (fairly rare), erecting unapproved buildings, or encroaching into adjoining land.</p> <p>In rural areas there are traditional and customary processes which may be utilised in the transfer of immovable properties.</p>	<p>Tenure is governed purely in accordance with formal laws and regulations. Informal tenure is not recognised and any form of informal occupation is very rare.</p> <p>Squatters or extralegal tenure is very rarely recognised. Extralegal (or non-registered) land occupation law permits 10 year acquisitive prescription. Squatters are considered to be mainly a matter of strict policing.</p>	<p>Tenure is governed purely in accordance with formal laws and regulations. Informal tenure is not recognised.</p>
Percentage of the country and population covered by the formal system	<p>not available</p> <p>Urban land comprises 36,620 ha, 6,987 ha is in private ownership. Most urban land is privately occupied, but not officially privatised.</p>	<p>not available</p>	<p>99.7% of the total area of Latvia is registered in State Land Cadastre.</p> <p>The total number of real properties and land use registered in the Cadastre is 829,205. Ownership rights are registered for 70.4% of this.</p>	<p>Urban land comprises about 316,000 ha, and approximately 30,000 ha is legalised in private ownership. Most household land is privately occupied but not officially privatised and registered.</p>

Indicator	Armenia	Kyrgyzstan	Latvia	Moldova
Characteristics of population without formal rights	<p>Encroachment into neighbouring land and illegal construction of buildings will prevent registration. Occupation is recognised but cannot be legally transacted. This is a serious problem on private and public land but 10-year 'acquisitive prescription' is permitted.</p> <p>During systematic registration up to 20% of land encroachments are regularised free of charge to the owners. Others acquire the land they have encroached by sale or lease.</p> <p>There are no limitations with regard to the rights of women to own land. Spouses are protected by law and through notarial practice.</p>	<p>There are many areas where people occupy land to which they have no legal right. Someone who openly and continuously and in good faith possesses immovable property as an owner for 15 years shall obtain ownership right.</p> <p>There are no limitations on land ownership by women. Rights are protected through normal notarial practice. However, in some rural areas women are reluctant to use official procedures to claim their rights (after divorce or separation) because of social pressure.</p>	<p>Squatters are allowed to acquire land and buildings through 'acquisitive prescription' after 10 years possession. Illegally constructed buildings must be legally regularised or removed.</p> <p>There are no limitations with regard to the rights of women to own land.</p>	<p>There are no problems with squatters.</p> <p>There are no limitations to the rights of women to own land. Spouses are protected by law and through notarial practice.</p>
Level of disputes over land	<p>Conflict over land is not a serious issue in Armenia.</p> <p>There are very few court cases relating to land.</p>	<p>There are few serious disputes over land. Over 95% of disputes are resolved at the local registration office or Centres for Land and Agrarian Reform (CLAR) without the need for legal counsel.</p> <p>During 2001 over 20,000 cases were resolved by CLAR, and a similar number by GosRegister, the State Agency that deals with registration of rights to real property.</p>	<p>Conflict over land is not a serious issue in Latvia.</p> <p>During the early stages of the land reform process conflicts were resolved early on by the Land Commission.</p>	<p>The rapid mass registration program meant that several hundred thousand cases needed resolving because of minor problems with name spelling or matching documented parcel boundaries with the existing ground situation. Courts are not well equipped to deal with more serious cases but the large number of less serious cases is being corrected administratively.</p>
Time taken to resolve land disputes	<p>Disputes are normally dealt with by the local community within a week. Court cases are normally resolved within a 3 month period.</p>	<p>Most conflicts are resolved within hours at the local registration and CLAR offices. A very small number of disputes are taken to court.</p>	<p>The local government deals with land conflict prior to land registration. Disputes are normally resolved within 1 week to a month.</p> <p>If taken to court, it may take up to 6 months for a case to be judged. The decision of a judge may be appealed in the Senate of the Supreme Court.</p> <p>There are few appeal cases – only 5 to 6 on average per year and they are normally quickly resolved.</p>	<p>Cases involving technical problems are dealt with locally by registration offices and local Mayors.</p> <p>Nevertheless, most take a long time to solve. Cases that go to court take even longer.</p>

Table 29 Latin America and the Caribbean Country Case Studies⁶

Indicator	Bolivia	El Salvador	Peru	Trinidad & Tobago
Types of rights formally recognised	<p>Bolivia allows private ownership of land through the issue of an original title. Titling has, however, been a slow and complicated process (on average, it used to take up to 12 years to process a title).</p> <p>The Agrarian Reform Law of 1953 provides the legal framework for rural land ownership and administration. The Law identifies 5 forms of legal land tenure:⁷</p> <ol style="list-style-type: none"> 1) smallholdings; 2) medium sized holdings: farms larger than (1), capable of producing for the market; 3) commercial farms: large farms with wage employees, modern technology and equipment etc. 4) community holdings: legally recognised Indian community land worked by them; 5) cooperative land: land worked jointly by individual farmers. <p>The vagueness of these descriptions has confused administration of the law.</p>	<p>El Salvador is one of the most densely populated countries in Latin America. The Government acknowledged the importance of land issues in the late 1970's, but rather than taking a comprehensive view, it focused only on one aspect: land redistribution. Although roughly 14% of the land in the country was subsequently redistributed it did not markedly improve tenure security as incomplete land records prevented the formal completion of many transfers.⁸</p> <p>Private ownership of land is allowed.</p> <p>Possession rights can be registered.</p>	<p>Rapid and unplanned urbanisation has resulted in large informal settlements in Peru. About two thirds of the population now live in urban areas. The country does have a formal titling system, but much of the established areas of the country are covered by a separate registration of deeds system.</p> <p>Since the early 1990's, but in particular since 1996, there has been a strong push for mass titling. Private ownership of land is allowed through the issue of an original land title. A title may also be acquired through a supplementary title. Possession rights can be registered.</p> <p>Peru has done more to consolidate its (confusing) land laws during the past decade than any other country in Latin America but, the formal legal framework does not cope with the large and consistent influx of people to the urban centres.⁹</p>	<p>A Torrens title system (through a Real Property Ordinance-RPO) was introduced in 1895, 10 years after the introduction of a Registration of Deeds Act that regulated the registration of deeds.</p> <p>Given the high costs and administrative problems associated with the RPO, most land transactions continue to take place under the 'old law' deeds system.</p> <p>Land can be classified as State, State-enterprise or privately owned land. Actual tenure is in fact quite complicated; and private individuals have strong legal claims to State lands through adverse possession.</p> <p>Approximately 55% of farmers have no formal, documented rights to their land.</p>

Indicator	Bolivia	El Salvador	Peru	Trinidad & Tobago
Types of rights informally recognised (including customary systems)	<p>The Agrarian Reform Act of 1953 determined that those who had been working land prior to the reform program would be the new owners. In this way land invasions prior to and just after the 1952 revolution ended up being legitimised. Land was not given to its rightful owner and landlords lost those parts on which peasants were raising subsistence crops. There were many problems with the process, e.g. the target for expropriation was 'areas which inefficient landlords hold in excess', but 'inefficiency' was never clearly defined.¹⁰</p> <p>The Agrarian Reform Act was replaced in 1996 by the INRA Act (Law for the National Agrarian Reform Service). This new law made conceptual progress, eliminated land gifts, separated administration and justice, created automatic mechanisms based on taxation instead of visual inspection of land use, and established procedures for public auction of lands and preferential access for those belonging to indigenous groups.¹¹</p>	not available	<p>Property rights associated with informal arrangements were not recognised until fairly recently. It is now possible to obtain legal recognition of informal settlement and clear title (registered in the Property Registry), although the process is protracted.</p> <p>Between the 1930's and 1960's informal settler rights were strengthened by shortening the prescription period from 30 to 10 years. Officially, settlers were given 'expectative' property rights, i.e. the State acknowledged the validity of their rights and took responsibility for resettling them but prohibited the establishment of new informal settlements. Since the late 1980s the law has been amended to simplify the formalisation of informal settlements and about 1.2 million titles have been issued to informal settlers in urban areas under a World Bank project commenced in 1997.</p>	<p>There are parcels of land occupied under commonly accepted tenure regimes, especially family land that is not recognised by law.</p> <p>Many occupiers of State lands without valid leases have strong legal claims to land. The number of 'illegal squatters' on private land is considerably less; most not having documentary evidence to support claims of ownership or tenancy.</p> <p>Only 10% of agricultural (state owned) leasehold parcels are estimated to be occupied by lessees with valid leases. Many are squatters with informal rights, but there are a significant number of landholders with either expired or irregular leases.</p>
Percentage of the country and population covered by the formal system	During a 1984 census, about 20% of land in the country (22 million ha) was identified as having owners.	not available	not available	not available

Indicator	Bolivia	El Salvador	Peru	Trinidad & Tobago
<p>Characteristics of population without formal rights</p>	<p>Peasants and Indian indigenous people are in a weak position for access to land and land rights.</p> <p>It has been estimated that native groups claim about one third of the eastern lowlands of the country (the government recognises less). Since the late 1980s there have been many problems there with regard to government concessions to forest logging companies. Settlers often move in when the loggers move out, and there has been trouble between loggers and indigenous groups living in the forests.</p>	<p>In the late 1800s a landless class was 'purposely' created by government to provide workers for coffee plantations. The expansion of plantations and the subsequent foreign exchange earnings through coffee export was seen as a solution to the economic problems of the country. This resulted in the transfer of much Indian land and that of other peasants to private framers, as well as communal land being outlawed.</p> <p>Rural landlessness and skewed land distribution are still serious problems. In the early 1970s, 2% of the agricultural population owned 60% of agricultural land. It was also established in the early 1970s that 65% of the rural population was landless or land poor. Following the civil war, and a land reform program, about 54% of the agricultural work force has remained landless, land poor or without work.¹²</p>	<p>The State regularises the rights of those living in informal communities on State owned land. Recognition is only given where the community has already accepted the situation, or given the impression that it will. Regulation of informal rights on State owned land has given some legal safety for those living on 'collectively owned' urban land parcels, without granting a right to ownership of the land. Squatters on State land may also be relocated.¹³</p>	<p>There are no limitations on land ownership and women's rights are protected under the standard constitutional provisions (rights to enjoy property etc.).</p>
<p>Level of disputes over land</p>	<p>A consolidated map of land ownership (based on descriptions registered in the cadastre) suggests that there are overlapping claims on about 40% of the total land resource. This has contributed to disputes.</p> <p>Various groups claim rights and interest in the ownership and use of land. The main groups are logging companies, land title holders, large and small scale farmers, environmental groups and indigenous people. As economic activity increases, conflict over land, and in particular forest resources, is intensifying.¹⁴</p>	<p>not available</p>	<p>There are a fair number of disputes among informal settlers and between informal settlers (living on State owned land), and the State.</p>	<p>There are none of the structural conflicts between landlords and tenants that prevail in the rest of Latin America.</p> <p>The most common conflicts are between neighbours over boundaries. Statistics are not available.</p>

Indicator	Bolivia	El Salvador	Peru	Trinidad & Tobago
Time taken to resolve land disputes	<p>Tenure insecurity is less prevalent in traditional areas where community organisations have remained strong. Land disputes there are less frequent than in other areas and are resolved relatively quickly through community mechanisms.</p> <p>Officially land disputes are resolved by officers of the National Land Institute, and on appeal by the Agrarian Judiciary (which still has many shortcomings). Municipalities and natural authorities have no part in dispute resolution.¹⁵</p>	not available	not available	Disputes can only be resolved through the Court system, leading to severe delays. Legal disputes over land often take years to resolve, in part as a result of congestion of the Court system.

Appendix 1 Endnotes

¹ Information taken directly from relevant case studies compiled by Clarissa Augustinus; additional information for Ghana taken from Seth Opuni Asiamah's paper that formed part of the World Bank Project Preparation Report for the Ghana Land Administration Project 2002.

² Information taken directly from relevant case studies prepared for the Comparative Land Administration Study by Land Equity International Pty Ltd.

³ Rights under the Land Code can be issued in forest lands on an individual basis, provided the applicant proves entitlement.

⁴ See attached table based on Burns (1985) and Brits et al (2002).

	Rai (1 Rai =1,600 m ²)	Square Km	%
Public land	202,500,000	324,000	63.1%
Private land	118,200,000	189,120	36.9%
Total	320,700,000	513,120	100.0%

Source: Burns (1985)

	Number	Area M ha	Area Square Km	% private land
NS4	18,629,088	11.30	113,000	59.8%
NS3	1,894,960	2.69	26,900	14.2%
NS3K	7,332,669	6.34	63,400	33.5%
NS2	368,033	0.58	5,760	3.0%
Total	28,224,750	20.91	209,060	110.5%

Source: Brits et al (2002) , based on DOL records

⁵ Information taken directly from relevant case studies prepared for the Comparative Land Administration Study by Gavin Adlington, with the assistance of Daninge Danielson, Baiba Ziemele and Elisabeth Lundgren.

⁶ The information has been taken directly from the relevant case studies. As the case studies for Latin American countries are only available in Spanish, the main source of information was the regional paper on Latin America compiled by Grenville Barnes. The case study for Trinidad & Tobago was written by Thackwray Driver. Information was also extracted for various other sources as specified in the endnotes.

⁷ Thiesenhusen, William C., 1995, Early Revolutionary Reforms: Bolivia, *Broken Promises – Agrarian Reform and the Latin American Campesino*, Westview Press, Boulder, Colorado.

⁸ World Bank, 31 January 1996, Staff Appraisal Report El Salvador Land Administration Project, p 3, Natural Resources and Rural Poverty Division, Latin America and Caribbean Region.

⁹ Information taken from addendum to the World Bank Urban Property Rights Project in Peru, Project Preparation Report (PPR), section on 'The Legal and Institutional Framework', which was prepared by Watermark Industries Inc (Canada) during a mission to Peru in 1997.

¹⁰ Thiesenhusen, William C., 1995, Early Revolutionary Reforms: Bolivia, *Broken Promises – Agrarian Reform and the Latin American Campesino*, Westview Press, Boulder, Colorado.

¹¹ Justiniano, J., 2002, Country Case study for Bolivia. Paper presented at a World Bank Regional Workshop on Land Issues in Mexico during May 2002.

¹² *ibid*

¹³ Information taken from addendum to the World Bank Urban Property Rights Project in Peru, Project Preparation Report (PPR), 'The Legal and Institutional Framework', which was prepared by Watermark Industries Inc during a mission to Peru in 1997.

¹⁴ The World Bank, 1995, IDA Staff Appraisal Report, Bolivia National Land Administration Project, Resources Management and Rural Poverty Divisions, America and Caribbean Regional Office

¹⁵ Justiniano, J., 2002, Country Case study for Bolivia. Paper presented at a World Bank Regional Workshop on Land Issues in Mexico during May 2002.

Appendix 2 – Customary Tenure

Indicators

- African Country Case Studies – Tables 30
- African Country Case Study (South Africa & Uganda) – Table 31
- Asian Country Case Studies – Table 32
- European and Central Asia Country Case Studies (no relevant issues) – Table 33
- Latin America Country Case Study – Table 34

Table 30 Customary Tenure Indicators for African Country Case Studies ¹

Indicator	Ghana	Mozambique	Namibia
Legal recognition of customary rights	Traditional authorities own and control nearly 80% of the land resources. In the customary system traditional norms and practices are recognised as the legal basis for land rights and relationships among land users.	Customary tenure account for over 90% of land tenure rights. Under the new land policy, participatory approaches and the variety of customary land rights are recognised. The customary land tenure administration system was given formal recognition in the 1997 Land Law.	Most of the population lives in the north of the country under a range of customary tenures. Rights are recognised in some of the customary areas.
Clarity in the general community of identity of customary authority	<p>The identity of customary authority as such seems reasonably clear. In urban areas, customary authorities no longer administer land on behalf of communities. They have virtually become the owners as they take all decisions and retain benefits.</p> <p>In customary areas traditional leaders also remain very influential, although there are often disputes within groups about leadership; leaders/chiefs may be challenged and so lose their position. In such event all land grants made by the incumbent chief may be annulled by his successor and re-negotiations would need to take place. In some cases, even where the State acquired customary land, customary tenure still prevails because compensation has not been paid.</p>	During the socialist period (1975-1990), the national government pursued a policy of reducing and abolishing the power of indigenous leaders and administrative structures. Notwithstanding such attempts the indigenous structures remain in place today. As a result of this policy such power and the relationships of traditional leaders with their communities and local government officials today are varied throughout the country.	<p>In the north where customary tenure is in place, traditional authority structures play a formal and informal role, but their powers of land allocation and transfers has greatly diminished.</p> <p>Tension between the role of the traditional authority officials in the new civil society of Namibia and the policy of the new national government is mirrored in structures operating on the ground. For example, people prefer to take inheritance problems to headmen, who do not have the power to enforce decisions. Although involved in all aspects related to inheritance etc., headmen operate in a 'legal vacuum'.</p>
Clarity in the general community of boundaries of customary authority	<p>Where both customary and statutory law apply confusion exists over who authorises the alienation of particular parcels of land.</p> <p>Stools may be different from land owning institutions, and adjacent stool may be uncertain about their boundaries.</p>	Please refer to information below.	Around towns in the former 'homelands' most informal settlers were allocated land by traditional leaders. They cannot really be described as squatters.

Indicator	Ghana	Mozambique	Namibia
Clarity in the general community of customary rights	<p>Social and political institutions (such as the extended family system, chieftaincy, etc.) that guide customary rights, and which existed under the traditional regime, have continued to exist. However, their functional significance has been curtailed and modified to some extent. Nevertheless, their influence remains strong enough to affect modern land tenure relations.</p> <p>Laws relating to land are well respected. Confusion over land rights and the real status of land takes place mainly when the State acquires land but does not pay compensation to owners, or does not utilise the land.</p>	<p>Because of the high level of conflict during recent years over numerous overlapping land requests and land use concessions in customary areas, clarity and clear guidance by the authorities is lacking (institutional capacity is considered to be weak).</p>	<p>Customary rights seem clear. Issues regarding the differences between legal rights and what happens in practice create some confusion and disagreement. Customary rights are not always in line with the new 1990 Constitution.</p>
Safeguards for vulnerable groups	<p>Squatters who illegally occupy lands to which they have no title was virtually unknown until recently. Squatting has not become a common occurrence because of the diligence of land-owners.</p> <p>Only one example of squatters being evicted from State land has been noted: in late 2001, the Accra Metropolitan Assembly ejected squatters who camped and established an informal settlement on a road reservation in the city to make way for a road.</p>	<p>Customary rights are firmly entrenched in the new Land Law of 1997. There is ongoing donor-assisted work to ensure that tenure security is given to customary rights holders.</p> <p>The 1997 Land Law specifically notes the rights of women to be land use rights holders.</p>	<p>In the north among the Oshiwambo speaking people (40% of the population), there is conflict between the law and what happens in practice in relation to matrimonial property regimes. This should be considered in any future system that may replace the customary systems.</p> <p>The rights of women are protected in the Constitution. This has encouraged a move away from, for example, evicting widows from family land in the Oshiwambo speaking areas in the north.</p> <p>Social land tenure issues regarding, for example, inheritance, marriage, informal unions, group rights and the role of customary functionaries in land designated as urban should be considered when changing the system.</p>

Table 31 Customary Tenure Indicators for South Africa and Uganda Case Studies ²

Indicator	South Africa	Uganda
Legal recognition of customary rights	<p>At present the country has a range of tenure types. Customary tenure <i>per se</i> is not a land right but the rights of occupation are protected. Informal settlement tenure is not a land right but the occupants can obtain adverse possession after 5 years and can be evicted only in terms of specific procedures.</p>	<p>Customary tenure is the dominant tenure system in the country.</p> <p>The Land Act of 1998 (LA 98) vests land in the citizens of Uganda, rather than the state as was previously the case. It also formalises customary tenure while simultaneously recognising customary law. In addition, it establishes a new independent for land administration and dispute resolution, and creates a Land Fund with a number of compensation and lending responsibilities.</p> <p>LA98 allows persons occupying land under customary tenure to obtain a certificate of customary ownership as documentary evidence of entitlement through the process of adjudication and demarcation of boundaries. Third party rights may also be recovered at the time of adjudication, and be protected.</p> <p>Customary owners may enter into a full range of land transactions, both commercial and family transactions (sale, lease, mortgage, gift, devises).</p>
Clarity in the general community of identity of customary authority	<p>Some people are still disputing the role and authority of traditional leaders.</p> <p>Customary structures remain prevalent in the former homeland areas, including KwaZulu- Natal, where the majority of State owned land belongs to the King of the Zulus. This land is covered in customary tenure, and chiefdoms, and is being managed through the 'Ingonyama Trust'.</p> <p>Problems being faced include the fact that there has been no authoritative list of tribes/clans linked to proclamations of the areas of jurisdiction of a traditional authority, and that it has been hard to obtain agreement between adjacent traditional authorities.</p>	<p>It is not clear from the case study whether the authority of the customary leaders is clear to the people.</p> <p>A Traditional Rulers Statute was introduced in 1993. This statute was meant, among other things, to restore to Traditional Rules assets and properties previously owned by them or connected to them, and confiscated by the State. The Traditional Ruler was to have the same estate or interest as was previously held by the Uganda Land Commission. The state created a degree of uncertainty for occupants on Traditional Rulers land, which needs to be clarified in light of the new Constitution that was passed after 1993, as well as through LA98 that curtails and limits the role and interest of the Uganda Land Commission.</p>

Indicator	South Africa	Uganda
Clarity in the general community of boundaries of customary authority	<p>There is duplication of land allocation functions with conflict between chiefs, municipal councillors, the State, provincial Departments of Agriculture and/or Traditional Affairs all involved.</p> <p>KwaZulu-Natal is an example of where the lack of a complete description of all the boundaries of the different clans/tribes made it impossible to identify the complete boundary of the Ingonyama Trust land (belonging to the Zulus). The boundary has become a combination of the chiefs' areas, plus the area that belonged to the former homeland of KwaZulu.</p> <p>Agreements with Traditional Authorities about areas of jurisdiction must be finalised. Although agreements are presently reached based on the notion that the Traditional Authority representatives have seen beacons marking boundaries, such representatives should accept boundaries and stop claiming neighbouring lands.</p>	<p>Given the large number of land-related conflicts (see information below) these boundaries do not always appear to be clear.</p>
Clarity in the general community of customary rights	<p>In spite of confusion over boundaries (see above), rights appear to be reasonably clear in customary areas.</p>	<p>The 1998 Land Act has led to a significant increase in the number of land-related conflicts, rather than a decrease. It may be argued there is confusion regarding rights.</p>
Safeguards for vulnerable groups	<p>South Africa has numerous large informal settlements in urban areas. Notwithstanding the progress the State has made in upgrading settlements, many people continue to live in shacks, without formal land rights, but protected to some extent under anti-eviction laws. After 5 years they may obtain adverse possession rights.</p> <p>Safeguards for vulnerable groups such as the poor and women are presently being incorporated into the system. More needs to be done to accommodate the poor, those living with customary tenure, occupants of the former homeland areas, those living in family groups, as well as those without any personal documentation, many of whom are illiterate or women.</p>	<p>LA98 initially focused on providing a basis for the emergence of a functioning land market, but as public interest grew the focus shifted towards a more equitable system in which the rights of the poor and vulnerable were protected. Today the law protects tenants, communal land-holding women, and minors, Although rights are noted in LA98, the law has not been fully implemented because of budgetary constraints (the full implementation of the law would have cost government about a third of the national budget).</p> <p>Following pressure by women to include a provision dealing with land ownership rights between spouses, an amendment to LA98 was proposed, stating that land acquired by either spouse before marriage remained the property of that spouse. Although published for debate, the amendment was never passed in parliament and therefore not included in the published version of LA98.</p>

Table 32 Customary Tenure Indicators for Asian Country Case Studies³

Indicator	Indonesia	Karnataka	Thailand	Philippines
Legal recognition of customary rights	<p>The Basic Agrarian Law – BAL – (UU 5/1960) is the basis for land administration. Article 5 stipulates that Indonesian national land law shall be based on ‘Adat’ (customary) law. Implementing regulations are still based on the old Dutch Civil Code. Most existing implementing regulations fail to elaborate or even contradict the adat principles.</p> <p>The BAL was aimed at creating a National Land Law based on the utilisation of traditional concepts, principles, systems and institutions. Many feel the BAL has been used to dilute customary rights and has now outlived its usefulness.</p>	<p>There is protection under the law for Scheduled Castes (SCs) and Scheduled Tribes (STs), including priority under the land reform program and protection from alienation of land - however this protection has been of limited effect and evidence that landlessness is increasing amongst SCs and STs at a faster rate than others due to pressure as more marginal and small farmers become landless labourers. Where SCs and STs have been allocated land they have often been evicted and persecuted.⁴</p>	<p>Reservation in the 1960s of over 50% of the country as forest is an important land issue. People have continued to develop land under customary practices, but can no longer be certain their rights in land will be recognised.</p> <p>Rights under the Land Code cannot be issued systematically in forests and this includes most of the land held by hills-tribes and indigenous groups. Although there is local recognition of the rights of hill-tribes, there is usually no official recognition under the Land Code. In 1995 it was noted that the government estimate for hill tribe population was 554,172, compared to NGO estimates of 700-800,000.⁵</p>	<p>To date the Philippines is the only country in Asia that has used the term ‘indigenous peoples’ and acted to recognise their rights. Article XII of the 1987 Constitution creates a formal legislative basis for recognition and establishment of land rights for indigenous cultural minorities. The Government enacted an Indigenous People Rights Act (IPRA) RA 8371 in 1997 and formed a National Commission on Indigenous People (NCIP). The NCIP is mandated to identify, delineate, recognise and ultimately issue title to ancestral land claims (of individual, family or class) and ancestral domain claim (community or large group). According to NCIP in 1998 there were 12 to 15 million indigenous people in the Philippines.⁶</p>

Indicator	Indonesia	Karnataka	Thailand	Philippines
Clarity in the general community of identity of customary authority	There are more than 200 ethnic and sub-ethnic groups in Indonesia with the major groups being Javanese, Sundanese, Minangkabau, Batak, Melayu, Bugis, Makassar, Banjar, Manadonese, Acehnese, Madurese, Balinese, Ambonese, Timorese, Dayak, and Papuans or Irianese. Each group consists of several sub-ethnic groups, each with their own dialects. There are also other sub-ethnic groups like the Baduy, Kubu, Sakai, and Suku Laut. Traditionally there are inter-island migrations among those ethnics. There is migration from Java to the outer islands and reverse migration from the outer islands to Java, partly because of a better economic infrastructure.	not available	not available	IPRA provides a mechanism to establish and manage indigenous people's organisations (IPOs). There are indications that IPRA has lead to a proliferation of IPOs and engender disunities amongst indigenous peoples. There have been many community level disputes and suggestions that ethnic identities and ancestral domains are being 'imagined'. ⁷
Clarity in the general community of boundaries of customary authority	'Adat' or customary land rights and customary systems of tenure are acknowledged by law. The government recognises the existence of customary land, provided certain criteria are met; i.e. that boundaries must be well defined and understood. It would appear that boundaries are not always clear.	not available	not available	Considerable uncertainty on the extent of ancestral domains (see comments above) with a lot of past pressure from mainstream development projects, 'militarisation', and land grabbing by settlers and migrants. Procedures to define and protect ancestral domain and to resolve inconsistencies with other laws and regulations is still to be established.

Indicator	Indonesia	Karnataka	Thailand	Philippines
Clarity in the general community of customary rights	Rights do not seem clear, given the high level of land-related conflict throughout the country.	not available	There is very limited recognition of rights to land in forests – limited to 5 year, renewable usufruct licences for agricultural users. There is no recognition of customary law.	As noted above, there is much uncertainty surrounding the issuing of rights to occupiers of forest land.
Safeguards for vulnerable groups	<p>There are not many safeguards for vulnerable groups.</p> <p>Persons who occupied state land since the early years of independence may apply for Hak Milik (freehold), except in DKI Jakarta where they may only be issued HGB ('building only'). To underpin the systematic registration program of ILAP, an amendment (regulation PP24 /1997) was made recently, the 1st amendment in 30 years. It provides for right to title after proof of 20 years occupancy. The occupancy must be in 'good faith', and recognised by the adat community.</p>	<p>The provision of legal assistance to poor farmers and the protection of socially disadvantaged groups, including Scheduled Castes and Scheduled Tribes, form part of one of the four phases of land reform and is currently receiving attention. However, as noted above, this assistance is limited.</p> <p>Land held as 'common property resource' (CPR) is essential to support the rural poor.</p>	<p>Landless squatters may acquire rights over private land after 10 years of peaceful and open possession of the land.</p> <p>There are no restrictions on land ownership by women. 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 DOL registration processes require spousal consent for a transfer of rights, regardless of who is registered on the actual title.</p>	<p>IPRA provides significant protection for indigenous peoples when it is implemented and operational issues resolved.</p> <p>The Philippines has had a long history of Agrarian reform and redistribution of land to assist landless farmers. The Comprehensive Agrarian Reform Law (CARL) of 1987 covers the redistribution of all public and private agricultural lands suitable for agriculture to farmers and regular farm workers who are landless. "Landless" is defined as owning less than 3 hectares. The law and its implementation is strongly supported by the public.</p>

Table 33 Customary Tenure Indicators for Europe and Central Asia Country Case Studies⁸

Indicator	Armenia	Kyrgyzstan	Latvia	Moldova
Legal recognition of customary rights	There are no issues with respect to customary tenure or inheritance/use traditions that complicate tenure arrangements.	There are no issues with respect to customary tenure or inheritance/use traditions that complicate tenure arrangements.	There are no issues with respect to customary tenure or inheritance/use traditions that complicate tenure arrangements.	There are no issues with respect to customary tenure or inheritance/use traditions that complicate tenure arrangements.
Clarity in the general community of identity of customary authority	not available	not available	not available	not available
Clarity in the general community of boundaries of customary authority	not available	not available	not available	not available
Clarity in the general community of customary rights	Tenure arrangements, particularly in the rural sector, are clear, with few problems with regard to ownership.	Tenure arrangements in the rural sector in particular are clear and there are few problems with regard to ownership.	Tenure arrangements in the rural sector in particular are clear and there are few problems with regard to ownership.	Tenure arrangements, particularly in the rural sector, are clear, with few problems with regard to ownership.
Safeguards for vulnerable groups	not available	not available	not available	not available

Table 34 Customary Tenure Indicators for Latin America and Caribbean Country Case Studies⁹

Indicator	Bolivia	El Salvador	Peru	Trinidad & Tobago
Legal recognition of customary rights	<p>Bolivia amended its Constitution in 1994 to recognise traditional indigenous territories (TCO) and the rights of indigenous people to administer their own land according to their own customs. Indigenous tenure may be formalised as a TCO (Tierras Comunitarias de Origen) or as a community property titled collectively to an indigenous group.</p> <p>Indigenous land tenure is widespread and constitutes an important form of community tenure. Approximately 67% of the population is of indigenous origin so this is a key point for tenure and land administration initiatives.</p>	<p>Recognition is now being given to indigenous groups and their rights. Up to the 1980s, successive governments limited the power of peasants and perpetuated the existence of a landless peasantry labour force to work on the coffee plantations. Land reforms during the 1980s aimed at improving their lot had little input from the peasants regarding design or implementation so it was met with strong opposition from the militias working for landlords.¹⁰ Since then land reform has been a very slow process, marred by violence.</p>	<p>There has been increasing recognition of indigenous groups and their rights in the country. Most of the 8 million indigenous people in Peru live in '<i>comunidades nativas</i>', many of which had been titled to indigenous groups.</p> <p>In agrarian reform, no agricultural parcels smaller than 3 ha could be adjudicated. The property registry was forbidden to register transfers or subdivisions involving parcels of smaller than 3ha. This resulted in massive informality, estimated at around 700,000 parcels and affecting more than half of the farmers in the country.</p>	<p>In Trinidad & Tobago (as well as some of the other Caribbean nations) 'family land' has some similarities to indigenous tenure. Family land may have been titled many years ago in the name of some deceased ancestor of the present holders, and has subsequently been passed down through several subsequent generations without formal documentation; many of the living family members with a valid claim to the land now tend to reside overseas.</p> <p>Family land is distinct from indigenous land in Latin America in that structures (formal /informal) to deal with functions such as land allocation and conflict resolution are absent.</p>
Clarity in the general community of identity of customary authority	<p>The identity and power of customary authorities appears diminished by political and administrative structures. Although unlikely to be as strong as it used to be, the formal recognition of the right of indigenous people to administer their own land according to their own customs may re-establish the identity of traditional leaders.</p>	<p>The identity and power of customary authorities appears diminished by both pre- and post-revolutionary political and administrative structures. Despite this there has been increasing recognition of customary rights after the revolution.</p>	<p>The identity and power of customary authorities appear to have been diminished by political and administrative structures in the country.</p>	<p>not available</p>

Indicator	Bolivia	El Salvador	Peru	Trinidad & Tobago
Clarity in the general community of boundaries of customary authority	<p>Prior to the revolution, Indians spread their risk by farming on land both in the highlands and lowlands. The 1954 law determined that they would only be able to formally obtain the right to one such plot of land, i.e. not two different plots in different geographical areas.¹¹</p> <p>Land tenure security and recognition of property rights for indigenous people and community organisations remain problematic issues.</p>	not available	Much remains to be done in terms of addressing overlaps with protected environmental areas and encroachment by private farmers seeking land.	not available
Rights are understood by the people	not available	not available		not available

Indicator	Bolivia	El Salvador	Peru	Trinidad & Tobago
Safeguards for vulnerable groups	<p>Agrarian reform resulted in land being granted to approximately a million peasants. Although peasants were given parcels, they did not receive inputs, credit or any technical assistance which limited the economic impact of the land reform.</p> <p>Following protest of the government's granting of lumber concessions in forest land on which indigenous tribes live in 1986, land on the outer fringes of the forests was conceded to the Indians. This was not accepted by the Indians, and led to the government complying with native territorial demands and a cessation of the awarding of logging rights in 1990 until more studies had been conducted into the impact of forest reserves and policies.¹²</p> <p>Due to lack of enforcement, the INRA Act (Law for the National Agrarian Reform Service) of 1996 has been criticised for not radically changing the pattern of access to land. It has significantly changed the distribution of Original Community Lands for lowland indigenous groups. Ethnic communities have been given land for free, and awarded rights similar to permanent usufruct. Land has not yet been given to individuals nor has the mechanism of 'public collation' necessary to create a transparent land market been implemented.¹³</p>	not available	<p>The rights of urban squatters was recognised in 1988 with the introduction of 3 novel concepts to the legal framework surrounding land administration:</p> <ol style="list-style-type: none"> 1) it provided for the registration of possession rights; 2) it set a new registry system with simple procedures to register ownership and possession rights; 3) it legalised the concept of a mortgage based on possessory rights. In 1991 Decree 653 was passed, removing many remaining restrictions, most notably those on the free transfer of land. 	not available

Appendix 2 Endnotes

¹ Information taken directly from relevant case studies compiled by Clarissa Augustinus; additional information for Ghana taken from Seth Opuni Asiamah's paper that formed part of the World Bank Project Preparation Report for the Ghana Land Administration Project 2002.

² The information has been taken directly from the relevant case studies.

³ The information has been taken directly from the relevant case studies.

⁴ National Commission to Review the Working of the Constitution, 'Issues of Social Justice: Scheduled Castes, Scheduled Tribes and Other Backward Classes – An Unfinished Business' http://www.humanrightsinitiative.org/programs/constitutionalism/publications/issues_of_social_justice_scst_obc.pdf

⁵ The missing figures – www.signposts.uts.edu.au/articles/Thailand/Population/357.html

⁶ Asian Development Bank 2002.

⁷ *ibid*

⁸ Information taken directly from the relevant case studies compiled by Gavin Adlington, with the assistance of Daninge Danielson, Baiba Ziemele and Elisabeth Lundgren.

⁹ The information has been taken directly from the relevant case studies. As the case studies for Latin American countries are only available in Spanish, the main source of information was the regional paper compiled by Grenville Barnes. The case study for Trinidad & Tobago was compiled by Thackwray Driver. Information was also extracted for various other sources as listed in the footnotes.

¹⁰ Thiesenhusen, William C., 1995, Reforms of the 1980s: El Salvador, p 139-158, *Broken Promises – Agrarian Reform and the Latin American Campesino*, Westview Press, Boulder, Colorado.

¹¹ *ibid*

¹² *ibid*

¹³ Justiniano, J., 2002, Country Case study for Bolivia. Paper presented at a World Bank Regional Workshop on Land Issues in Mexico during May 2002.

Appendix 3 – Land Administration Parameters

- Land Administration Parameters for Africa and Asia
- Tables 35
- Land Administration Parameters for Europe and
Central Asia and Latin America and the Caribbean
– Table 36
- Land Administration Parameters for Selected
Jurisdictions with Well-Developed Registries
– Table 37

Table 35 Land administration parameters African and Asian Country Case Studies

Parameter	Ghana	Mozambique	Namibia	South Africa	Uganda	Indonesia	Karnataka	Philippines	Thailand
Area (km ²)	239,460	801,590	825,418	1,219,912	236,040	1,919,440	191,791	300,000	514,000
Population (in millions)	20.2 m	19.6 m	1.8 m	43.6 m	24.6 m	231	52.7	84.5	62.6
Estimated number of land parcels	not available Kumasi region – 36,000 parcels surveyed (only one title registered = over palace ground)	Millions still to be registered	not available	± 8 million surveyed parcels	700,000 titles;	75 million	not available	not available	20-30 million
Registered land parcels	Accra: 11,383 parcels registered over 13 years; Accra: an average of 3,956 p/a for 1st registrations	Roughly 1,000 valid 'old' titles in country. For 1991-96, with foreign aid, 69 titles had been issued, with 800 being pro-cessed at the end of 1996. Titling to re- commence in 2003, after restructuring.	not available	6,996,658	an estimated 5 million still to be registered	± 17 million	>15 million	> 10 million titles	±19 million (2001)
Annual transfers	not available	not available	not available	379,839 (2001/02 financial year) Many of State's subsidised houses are transferred 'informally'	not available	not available	not available	not available	not available

Parameter	Ghana	Mozambique	Namibia	South Africa	Uganda	Indonesia	Karnataka	Philippines	Thailand
Annual registered transactions	not available	not available	Rehoboth registry - rough average of 5 transactions per day	1,240,778	not available	540,200 registrations in 2000 (but records incomplete) 909,000 in 1999	589,000 in 1999/00	'Very low level'	± 4 m (for year ending 30 Sept 2001)
Annual registered transfers	1,368 in total (1990-2000) (registration of subsequent transactions)	not available	not available	380,000	unknown ± 300,000 current titles	252,200 (1998 sales, mortgages and leases)	not available	368,068 (2000)	2.44 m (for year ending 30 Sept 2001)
Annual registered mortgages	797 in total (1988-2000) (registration of subsequent transactions)	no registered mortgages	not available	249,656	not available	not available	not available	398,195 (2000) – Registrar of Deeds	not available
Annual budget for registry	not available	not available	not available	R173 million (±US\$19.3 million)	not available	650 m Rupiah (1999) (±US\$92,198.00 at Dec 1999 rate)	367.5 m Rs in 1999/00 (US\$7.9 million)	1,184.6 million Pesos for 2002 (±US\$22.3 million at Dec 2002 rate)	US\$69.8 m (for year ending 30 Sept 2001)
Annual budget for cadastre (if separate)	not available	not available	not available	R70 million (2001/02 budget for Surveyor General) (±US\$7.8 million at Oct 2001 rate)	not available	134,000 m Rupiah (1999) (±US\$19 million)	403.1 m Rs in 1999/00 (US\$8.7 m)	Nil	not available

Parameter	Ghana	Mozambique	Namibia	South Africa	Uganda	Indonesia	Karnataka	Philippines	Thailand
Annual revenue	not available	not available	not available	R217,086,000 (2001/02) revenue for information supplied by the registry (not cadastre) (±US\$24.1 million at Oct 2001 rate) Note: Surveyor General revenue figure not available	not available	2,070 m Rupiah (1998) 351 m Rupiah (1999) * * registration fee revoked by law	±7.6 million Rs in 1999/00 (±US\$163.4 million)	1,146.7 million Pesos (2000) (±US\$22.9 million at Dec 2000 rate)	US\$354.3 m (for year ending 30 Sept 2001)
Number of registry staff	55	Registry office still under legal development	not available	not available	not available	not available	1,546	2,408 (2002)	±8,500
Total number of staff (registry/cadastre)	±700 in Survey Dept ±755 in registry	326 in DINAGECA (National Directorate of Geography and Cadastre)	not available	not available	not available	25,000	2,863	not available	11,834
Number of registration offices	Headquarters in Accra; branch offices in Kumasi and Tema	Registry office still under legal development	Country: not available Rehoboth – only 1	9 (provincial)	not available	273 Municipal/ Regency Land offices	199 sub-registries at city/Taluk level	162 registries of deeds	76 Provincial land offices and 272 Branch Provincial Offices (title register) 758 district land offices keep registers for lesser documents

Table 36 Land administration parameters for European and Central Asian and Latin American, Caribbean Country Case Studies

Parameter	Armenia	Kyrgyzstan	Latvia	Moldova	Bolivia	El Salvador	Peru	Trinidad & Tobago
Area (km ²)	29,800	198,500	64,589	33,843	1,098,581	21,040	1,285,215	5,128
Population	3.3	4.8	2.4	4.4	8.3 m	6.3 m	26.7 m	1.262 m
Estimated number of land parcels	not available	not available	not available	5 million	0.65 m	1.8 m	6 m	0.5 m (approximate, with some overlap)
Registered land parcels	2.5m	not available	0.58m	3.08m	not available	not available	3.2m (deeds registry) 0.8m (title registry)	±250,000 parcels registered under traditional registry system; another 50,000 registered under new system
Annual transfers	not available	not available	not available	not available	not available	not available	not available	not available
Annual registered transactions	30,228 (2000) – excl. systematic	33,374 (2001) – Sporadic 131,901 (2001) – Systematic	121,010 (2001)	714,000 (2001) – systematic 187,000 (2001) – sporadic	not available	284,920 registrations on average for 2000/01	471,000 (deeds registry) 1999 82,784 (title registry)	±30,000 transactions registered annually (deeds system)
Annual registered transfers	19,774 (2000) – (sales, mortgages & leases)	31,161 (2001) – (sales, leases, gifts)	44,801 (Sales- 2001) 26,290 (Mortgages- 2001) Leases on average 1,000 p.a.	71,000 (2001) (sales, mortgages & leases)	not available	313,355	133,530 (deeds registry) 26,356 (title registry)	33,526 (sales, mortgage and lease transactions) ± 2,000 sale transfers registered annually under RPO

Parameter	Armenia	Kyrgyzstan	Latvia	Moldova	Bolivia	El Salvador	Peru	Trinidad & Tobago
Annual registered mortgages	Only above total available	17,407 (2001)	26,290 (2001)	7,346 (2001)	not available	not available	5,749 (deeds registry) 26,356 (title registry)	not available
Annual budget for registry	Nil	U\$471,768 (2001)	U\$1.25 million	Nil	not available	Nil (self-sustainable by law)	not available	U\$1,369,380 (2001)
Annual budget for cadastre (if separate)	Nil	Nil	U\$9.1 million	Nil	not available	not available	not available	U\$637,000 (2001)
Annual revenue	U\$2,250,000 (U\$1.39 m from fees, U\$585,000 from EU and U\$275,000 from WB project)	U\$604,738 (includes estimated revenue for 2002 for all offices that are not self-financed) + 8% of the revenue at self-financing offices	U\$26.9 million	U\$ 1,293,000	not available	not available	44,790,272 (deeds registry) 3,226,365 (title registry)	U\$15,022,000 (registry) 1997 U\$920 (cadastre) 1998
Number of registry staff	not available	128	160	700	not available	±800	1376 (deeds registry)	not available
Total number of staff (registry/cadastre)	not available	not available	not available	not available	not available	not available	174 (title registry)	not available
Number of registration offices	1 central office (HQ); 47 local level offices throughout the country that hold the legally valid records.	1 central office (HQ) plus 50 local registration offices (24 of these are already self-financing)	8 regional offices for cadastre	1 central office (HQ), 12 regional offices, 17 local level offices Copies of registers are kept centrally.	not available	not available	60 (deeds registry) 20 (title registry)	not available

Table 37 Land administration parameters for selected jurisdictions with well-developed registries

Parameter	South Australia	Western Australia	New South Wales	Victoria	Queensland	Northern Territory	Aust. Capital Territory	Tasmania	Hong Kong	New Zealand	England & Wales	Singapore	Scotland
Area (km ²)	0.984m	2.525m	0.801m	0.227m	1.727m	1.346m	2,400	67,800	1072	0.268m	0.151m	636	78,772
Population	1.5m	1.9m	6.5m	4.8m	3.6m	0.2m	0.3m	0.5m	5.9m	3.9m	50m	3.5m	5.2m
Estimated number of land parcels	not available	not available	not available	not avail.	not available	not available	not available	not avail.	not avail.	not avail.	not avail.	not avail.	not avail.
Registered land parcels (Title and/or deeds registration)	0.82m	0.96m	3.66m	3m	1.7m	0.06m	0.16m	0.3m	2.5m	3m	22.3m ¹	0.26m	2.59m
Annual transfers	not available	0.10m	0.27m	0.28m	not available	not available	not available	0.02m	0.230m	not avail.	2.70m	not avail.	0.16m
Annual registered transactions	0.20m	0.34m	0.98m	0.80m	0.83m	0.02m	0.04m	0.09m	0.6m	0.67m	4m	0.45m	0.49m ²
Annual registered transfers	not available	0.10m	0.27m	0.28m	not available	not avail.	not available	0.02m	0.230m	not avail.	2.70m ³	not avail.	0.16m
Annual registered mortgages	not available	0.11m	0.30m	0.24m	not available	not avail.	not available	0.018m	0.149m	not avail.	1.72m	not avail.	0.18m
Annual budget for registry ⁴	\$16.81m ⁵	\$33,74m ⁶	\$72.34m ⁷	\$67.26m ⁸	\$34.94m ⁹	\$0.59m ¹⁰	not available	\$16.42 m ¹¹	\$39.9m ¹²	\$33,46 ¹³	\$425m ¹⁴	not avail.	\$66,56 ¹⁵
Annual budget for cadastre (if separate)	not available	not available	not available	not avail.	not available	not avail.	not available	not avail.	not avail.	not avail.	not avail.	not avail.	not avail.
Annual revenue	\$35.50m	\$28.32m	\$72.03m	\$77.30m	\$34.94m	1.58m	not available	not avail.	\$52m	\$31.81	\$535.6	not avail.	\$75.76
Number of registry staff	274	236	not available	280	223	14	16	49	525	not avail.	8,600	117	not avail.
Total number of staff (registry/cadastre)	not available	not available	920	not avail.	Not available	not avail.	not available	not avail.	not avail.	647	not avail.	not avail.	not avail.
Number of registration offices	1	3	1	1	6	2	1	1	9	6	25	1	2

Appendix 3 Endnotes

¹ There are 17.3 million computer titles, and an unknown but estimated number of 5 million old system parcels.

² Comprising 335,406 dealings with registered title and 160,965 Sasines.

³ These figures are a projection based on data for 6 months.

⁴ Australian figures have been converted into US\$ at the rate of 0.58.

⁵ Annual Report for the Department of Administrative Services and Information

http://www.landservices.sa.gov.au/pdf/Annual_Report_2001.pdf

⁶ Annual report for the Department of Land Administration 2001-2002

[http://www.slp.wa.gov.au/publications/tabledpapers.nsf/displaypaper/3620440a3bcd138e36fa82a048256c68002741f3/\\$file/dola_annual_report_lowres.pdf](http://www.slp.wa.gov.au/publications/tabledpapers.nsf/displaypaper/3620440a3bcd138e36fa82a048256c68002741f3/$file/dola_annual_report_lowres.pdf)

⁷ Includes the cost of cadastre and valuation functions. Expenditure information from the DITM Annual Report for 2001/2002 -

<http://www.ditm.nsw.gov.au/department/publications/ar2002.pdf>

⁸ Department of Natural Resources Annual Plan for 2000/2001.

http://www.nre.vic.gov.au/web/root/domino/cm_da/nrenar.nsf/frameset/NRE+Annual

⁹ Annual report of the Department of Natural Resources and Mines 2001-2002 – Land Services

http://www.nrm.qld.gov.au/about/pdf/annual_report/annual_financials-02.pdf

¹⁰ Department of Justice Annual Plan 2001-2002

<http://www.nt.gov.au/justice/docs/depart/dojannrep0102.pdf>

¹¹ Annual report for Department of Primary Industries, Water and Environment 2002

[http://www.dpiwe.tas.gov.au/inter.nsf/Attachments/LBUN-5GF3JX/\\$FILE/Annual%20Report%20FinState.pdf](http://www.dpiwe.tas.gov.au/inter.nsf/Attachments/LBUN-5GF3JX/$FILE/Annual%20Report%20FinState.pdf)

¹² Hong Kong Land Registry Annual Report 2001-2002

<http://www.info.gov.hk/landreg/en/public/annual.htm> converted into US\$ at the exchange rate of 7.80.

¹³ Expenditure for 2001-2002 from the LINZ Annual Report

(<http://www.linz.govt.nz/staticpages/pdfs/linzpublications/0203annualreport.pdf>) converted to US\$ at the rate of \$0.4816, the rate published by the Reserve Bank of New Zealand for July 2002 <http://www.rbnz.govt.nz/statistics/exandint/b1/hb1.xls.Expenditure> includes functions such as valuation, hydrographic survey and Crown land management.

¹⁴ Annual report for 2002 lists the total costs at UK 291.9 million pounds

(<http://www.landreg.gov.uk/ar2002/default.asp?id=13>) which is converted into US\$ at the exchange rate of 1.5546 for July 2001 as published by the Bank of England

http://www.bankofengland.co.uk/mfsd/rates/MEx_02jul.xls

¹⁵ Registry of Scotland Annual Report 2001-2002

<http://www.ros.gov.uk/pdfs/general/annualreport2002.pdf> which is converted into US\$ at the exchange rate of 1.5546 for July 2001 as published by the Bank of England http://www.bankofengland.co.uk/mfsd/rates/MEx_02jul.xls

Appendix 4 – Formal Land Administration

Effectiveness Indicators

- Land Administration Indicators for Africa and Asia - Tables 38
- Land Administration Indicators for Europe and Central Asia
- and Latin America and the Caribbean – Table 39
- Land Administration Indicators for Selected Jurisdictions with Well-Developed Registries – Table 40

Table 38 Indicators of Formal Land Administration Effectiveness for the country case studies (Africa and Asia)

Indicator	Ghana	Mozambique	Namibia	South Africa	Uganda	Indonesia	Karnataka	Philippines	Thailand
Percentage of total parcels registered	No Data Available for African Countries					23%	not avail. likely to be high	30% ¹	63% ²
Percentage of transfers that are registered						<i>not available</i>	not available but likely to be high	15% ³	not available but likely to be high
Annual registered transactions as a percentage of registered parcels						5.82%	3.9%	11%	21.2%
Annual registered transfers as a percentage of registered parcels						not available	not available	3.7% ⁴	13.1%
Annual registered mortgages as a percentage of registered parcels						not available	not available	not available	not available ⁵
Ratio of annual registry running costs/registered parcels						0.79	0.16	1.17	not available ⁶
Ratio of annual registry running costs (including cadastre if separate)/registered parcels						not available	not available	not available	2.1
Registration staff days/registration						0.9	0.56	1.56	0.5 ⁷
Total staff days/registration						not available	not available	0.5	0.66 ⁸
Time to produce certified copy of title						1 day	1 day	2 days	30 min.
Time to complete registration of transfer						14 days	20 days	14 days	2.5 hrs.
Total ongoing land related court cases as a percentage of total registered parcels						not available	not available	15% ⁹	0.15% ¹⁰
Average time to resolve ongoing court cases						not available	7 years ¹¹	not available	3 years
Number of registries per 1 million population						1.48	3.77	1.96	5.89 ¹²
Number of registries per 100,000 square kilometres in country land area						15.79	103.76	54.00	70.94
Average working days to pay for average transfer cost						not available	not available	24	12
Transfer cost as a percentage of value						0.5	13	8.2	4.5 ¹³
Unit cost of systematic title (US\$)	24.4	not available	not available	24.21					
Level of government where registration is undertaken	not available			Provincial level ¹⁴	not available	District	City & Taluk	District	Provincial & Sub-Provincial
Ratio of revenue/expenditure	No Data Available					not available	20.68 (reg.) 9.84 (Registry+ Survey Dept.)	2.37	5.08

Table 39 Indicators of Formal Land Administration Effectiveness for the country case studies (ECA and LAC)

Indicator	Armenia	Kyrgyzstan	Latvia	Moldova	Bolivia	El Salvador	Peru	Trinidad & Tobago
Percentage of total parcels registered	not available	not available	not available	61%	not available	not available	67%	53%
Percentage of transfers that are registered	not available	not available	not available	not available	not available	not available	not available	not available
Annual registered transactions as a percentage of registered parcels	0.8%	3.1%	7.7%	4%	not available	17.8	13.8%	6.7
Annual registered transfers as a percentage of registered parcels	not available	not available	not available	not available	not available	not available	3.9%	not available
Annual registered mortgages as a percentage of registered parcels	not available	not available	4.5%	0.7%	not available	not available	2.1%	not available
Ratio of annual registry running costs/registered parcels	not available	not available	not available	not available	not available	27.47 ¹⁵	not available	2.70
Ratio of annual registry running costs (including cadastre if separate)/registered parcels	49.62	17	7	2.46	not available	not available	not available	not available
Registration staff days/registration	10	0.8	0.6	2.5	not available	not available	0.76 deeds registry	not available
Total staff days/registration	not available	not available	not available	not available	not available	1.2	0.54 title registry	1.8
Time to produce certified copy of title	4 days	2-7 days	1 hr	10 days	not available	8 days	30min	6
Time to complete registration of transfer	15 days	10 days	3 days	3-4 days	not available	8-30 days	4-7days	90
Total ongoing land related court cases as a percentage of total registered parcels	not available likely to be low	not available likely to be low	not available likely to be low	not available likely to be high	not available	not available	not available	not available
Average time to resolve ongoing court cases	3 mths	minimal	minimal	long	not available	not available	not available	not available
Number of registries per 1 million population	19.2	11.1	11.1	6.6	not available	not available	2.3 (deeds) 0.8 (titles)	not available
Number of registries per 100,000 square kilometres in country land area	0.9	0.25	0.4	1.6	not available	not available	4.6 (deeds) 1.6 (titles)	not available
Average working days to pay for average transfer cost	77	228	31	66	not available	not available	not available	not available
Transfer cost as a percentage of value	1.5	5	0.6 - 4	1.5	not available	not available	not available	not available
Unit cost of systematic title (US\$)	18.02	15.76	13 ¹⁶	9.90	181.40	29.74	12.66 Urban 46.68 Rural	1,064
Level of government where registration is undertaken	Local	Local	Region	Local	not available	not available	not available	not available
Ratio of revenue/expenditure	1.6 ¹⁷	0.28	1.6 ¹⁸	not available ¹⁹	not available	not available	not available	not available

Table 40 Indicators of Formal Land Administration Effectiveness for selected jurisdictions with well-developed registries ²⁰

Indicator	South Australia	Western Australia	New South Wales	Victoria	Queensland	Northern Territory	Australian Capital Territory	Tasmania	Hong Kong	New Zealand	England & Wales	Singapore	Scotland
Percentage of total parcels registered (Title and/or deeds registration)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Percentage of transfers that are registered	100%	100%	100%	100%	100%	100%	100%	100%	not available	not available	not available	not available	not available
Annual registered transactions as a percentage of registered parcels	24.4%	30.3%	26.7%	25.8%	41.8%	39.8%	35.8%	30.0%	24.00%	22.61%	20.52%	not available	19.1%
Annual registered transfers as a percentage of registered parcels	not available	10.24%	7.37%	9.26%	not available	not available	not available	7.1%	9.20%	not available	12.11%	not available	6.36%
Annual registered mortgages as a percentage of registered parcels	not available	11.08%	8.19%	7.96%	not available	not available	not available	6.0%	5.96%	not available	7.69%	not available	7.1%
Ratio of annual registry running costs/registered parcels	not available	not available	not available	not available	not available	\$9.83	not available	not available	\$15.96	\$11.15	\$26.23	not available	\$25.64
Ratio of annual registry running costs (including cadastre if separate)/ registered parcels	\$20.50	\$35.14	\$19.76	\$22.72	\$28.55	not available	not available	\$54.73	not available	not available	not available	not available	not available
Registration staff days/registration	0.35	0.22	not available	0.091	0.069	0.18	0.076	0.16	0.21	0.18	not available	not available	not available
Total staff days/registration	not available	not available	0.94 ²¹	not available	not available	not available	not available	not available	not available	0.25	0.59 ²²	0.05	0.92
Time to produce certified copy of title	5 min-2hr	10-45 min	9 min	Instant	Instant	Instant	<15 min	2 min	25 min	< 5 min	1 day	30 min	not available
Time to complete registration of transfer	7 days	5.2 days	Immed. ²³	5 days	2-5 days	24 hrs	24 hrs	24 hrs	20 days	15 days (95%)	25 days (80%)	1 week (85%)	27 days
Total ongoing land related court cases as a percentage of total registered parcels	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available

Indicator	South Australia	Western Australia	New South Wales	Victoria	Queensland	Northern Territory	Australian Capital Territory	Tasmania	Hong Kong	New Zealand	England & Wales	Singapore	Scotland
Average time to resolve ongoing court cases	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available
Number of registries per 1 million population	0.66	1.58	0.15	0.205	1.66 ²⁴	2.51	3.093	2.112	1.32	3.78	0.51	0.37	0.39
Number of registries per 100,000 square kilometres in country land area	0.101	0.119	0.125	0.439	0.347	0.148	40.97	1.463	1,315	4.45	16.54	1,515	2.59
Average working days to pay for average transfer cost	40.5	29.9	28.0	39.1	32.3	not available	not available	32.9	not available	not available	not available	not available	not available
Transfer cost as a percentage of value	4.19%	3.28%	3.24%	4.15%	3.31%	not available	not available	3.25%	not available	not available	not available	not available	not available
Unit cost of systematic title (US\$)	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available
Level of government where registration is undertaken	State	State	State	State	State	Territory	Territory	State	National, branch	National, branch	National, & 24 districts	National	National, branch
Ratio of revenue/expenditure	2.11	0.84	0.99	1.15	1.00	2.67	not available	not available	1.30	0.95	1.023	not available	1.135

Appendix 4 Endnotes

¹ Very approximate estimate.

² The total number of parcels in Thailand is estimated at 30 million. Only the titled property has been included in the estimate for registered parcels, even though there are many millions of certificates of utilisation (NS3/3K) which are transferable and accepted by banks as collateral. Many of the current parcels cannot be registered under the current legal and policy framework as the land parcels are considered forest land.

³ Based on a very small sample of a rural pilot in Leyte province.

⁴ The number of registered titles is not known. This figure is based on an estimate of 10 million titles.

⁵ Number of mortgages registered annually is not available.

⁶ Land Office staff include both registry and cadastral staff.

⁷ Includes all Land Office staff.

⁸ Includes Central Valuation Authority staff as well as Head Office staff.

⁹ Based on preliminary information on LAMP.

¹⁰ Based on an estimate of the total number of civil cases that were land related.

¹¹ Estimate only.

¹² The number of registries in Thailand is only the number of title registries (provincial and branch land offices), not the district land offices which maintain the registers for lessor documents.

¹³ Value based on declared price not valuation.

¹⁴ A national function delegated at provincial level to organisations belonging to the National Department of Land Affairs.

¹⁵ Annual running cost (US\$7.335m) divided by annual registrations (267,048).

¹⁶ The titling program in Latvia is a sporadic redistribution program. The unit cost per title under the program is \$13, but in addition the beneficiaries have to contribute \$426 to the cost of the survey.

¹⁷ Budget expenses derived entirely from donor funds.

¹⁸ Includes registry and cadastral office.

¹⁹ Expenses not known, however system is entirely self funded.

²⁰ The data from this table was largely sourced from the Data Matrix produced by the Land Registrars Development Officers Conference, Australia, 2002.

²¹ The total number of equivalent full-time staff is 920, which includes all the staff in titling, survey and valuation, as well as DITM corporate services, and the Office of the Director General.

²² The Data Matrix lists a total number of 8,600 staff, but notes that some are part-time.

²³ The standard registration service is immediate for face-to-face lodgement, or within 2 days for bulk lodgement.

²⁴ Based on the 6 lodgement and processing locations and does not take into account the 34 search locations.

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