Undertaking Land Administration Projects: Sustainability, Affordability, Operational Efficiency and Good Practice Guidelines

Quality Assurance Series
No. 26 July 2001

The Australian Government's
Overseas Aid Program

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AusAID
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This study represents the views of the study team and not necessarily those of the Australian Agency for International Development.

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Cover photograph: Resource information system maps, produced from the Vanuatu Landuse Planning Project, are being used for discussion with villagers.

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Study team

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- Dr Satish Chandra—evaluation specialist and AusAID task manager

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Abbreviations

AMB	Activity monitoring brief
AMC	Australian managing contractor
ATL	Australian team leader
AusAID	Australian Agency for International Development
CRS	Customer relations service
FAO	Food and Agriculture Organisation
GIS	Geographic information system
GOA	Government of Australia
GPS	Global positioning system
GRDP	Gross regional domestic product
ILAP	Indonesia land administration project (1=phase 1; 2=phase 2)
IT	Information technology
LAMP	Land administration (project—Philippines) (1=phase 1; 2=phase 2)
LLTP	Laos land titling project
LOC	Land office computerisation (project—Indonesia)
LTP	Land titling project
M&E	Monitoring and evaluation
NGO	Non government organisation
PCC	Project co-ordination committee
PCR	Project completion report
PDD	Project design document
PDR	Peoples Democratic Republic of Laos
PC	Partner countries
PG	Partner government
PIA	Performance information and assessment (section in AusAID)
PID	Project implementation document
PNG	Papua New Guinea
PQC	Program quality committee (AusAID)

RCF	Recurrent cost financing
ROD	Registry of deeds
SILAP	Solomon Islands land administration project
STAG	Sector technical advisory group
TA	Technical assistance
TAG	Technical advisory group
TLTP	Thailand land titling project (1=phase 1; 2=phase 2)
TOR	Terms of Reference
VLPP	Vanuatu landuse planning project
WB	World Bank

Glossary

Adjudication	the process whereby the ownership and rights in land are officially determined.
Alienation	the power of an owner to dispose of interest in land or property. In particular land may be alienated from the State and granted to private individuals.
Boundary	either the physical objects marking the limits of a property or an imaginary line or surface marking the division between two legal estates. Also used to describe the division between features with different administrative, legal, land-use, and topographic characteristics.
Cadastral index map	a map showing the legal property framework of all land within an area, including property boundaries, administrative boundaries, parcel identifiers, and sometimes the area of each parcel, road reserves and administrative names.
Cadastral map	a map showing land parcel boundaries. Cadastral maps may also show buildings.
Cadastral surveying	the surveying and mapping of land parcel boundaries in support of a country's land administration, conveyancing or land registration system.

Cadastre	a type of land information system that records land parcels. The term may include: • Legal cadastre: a register of ownership of parcels of land • Fiscal cadastre: a register of properties recording their value • Land-use cadastre: a register of land use • Multi-purpose cadastre: a register including many attributes of land parcels.
Collateral	the use of property as a guarantee for a loan.
Conveyance	a method whereby rights in land are transferred from one owner to another. The rights may be full ownership or a mortgage, charge or lease.
Customary law	unwritten law established by long usage.
Customary tenure	the holding of land in accordance with customary law.
Deed	a legal document laying out the conditions when land is transferred.
Digital cadastral data base (DCDB)	a DCM which also includes a range of text/attribute data about the land parcel.
Digital cadastral map (DCM)	a digital version of the cadastral index map.
Geographic information system (GIS)	a system for capturing, storing, checking, integrating, analysing and displaying data about the Earth that is spatially referenced. It is normally taken to include a spatially referenced database and appropriate applications software.
Global positioning system (GPS)	a system for fixing positions on the surface of the Earth by measuring the ranges to a special set of satellites orbiting the Earth.
Land	the surface of the Earth, the materials beneath, the air above and all things fixed to the soil.
Land administration	the processes of determining, recording and disseminating information about the ownership, value and use of land when implementing land management policies.
Land information management	the managing of information about land.

Land information system (LIS)	a system for acquiring, processing, storing and distributing information about land.
Land management	the activities associated with the management of land as a resource from both an environmental and an economic perspective.
Land parcel	an area of land under homogeneous property rights and unique ownership.
Land reform	the redistribution of land (i.e. from a single large landholder to many small landholders) as a result of political policy and legal changes.
Land register	a public register used to record the existence of deeds or title documents.
Land registration	the process of recording rights in land either in the form of registration of deeds or else through the registration of title to land.
Land re-registration	the registration of rights in land after transfer.
Land tenure	the mode of holding rights in land.
Land title	the evidence of a person's rights to land.
Land titling	land registration
Land transaction	a transfer concerning land e.g. buying/selling; inheritance.
Land transfer	the transfer of rights in land.
Landuse	the manner in which land is used, including the nature of the vegetation upon its surface.
Land value	the worth of a property, determined in a variety of ways which give rise to different estimates of the value.
Lot	a land parcel.
Mortgage	the conveyance of a property by a debtor (called the mortgagor) to a creditor (called the mortgagee) as security for a financial loan with the provision that the property shall be returned when the loan is paid off by a certain date. In some legal systems there is provision that the mortgagee has the power to sell the concerned property when the interest is not paid in time and the loan is not paid off by a certain date in accordance with the agreed stipulations.

Orthophotograph	a composite aerial photograph from which height and tilt displacements have been removed.
Orthophotomap	a photomap made from orthophotographs.
Parcel	a land parcel.
Photogrammetry	the science and art of taking accurate measurements from photographs.
Plot	a land parcel.
Private conveyancing	the transfer of rights in land without any public record of the transfer.
Registration of deeds	a system whereby a register of documents is maintained relating to the transfer of rights in land.
Registration of title	a system whereby a register of ownership of land is maintained based upon the parcel rather than the owner or the deeds of transfer.
Sporadic adjudication	the determination of rights in land here and there, now and then.
Stamp duty	a levy charged on the transfer of property.
Systematic adjudication	the determination of rights in land on a regular and systematic basis, for example within one area at one time.
Tenure	the method whereby land rights are held.
Title	the evidence of a person's right to property.
Title deeds	documents giving evidence of title to land.
Title plan	a plan especially drawn to show the boundaries of land parcels.

General Information

Notes

The Australian fiscal year is from 1 July to 30 June and is referred to as eg, 1998/99. Calendar years are referred to as eg, 1999.

Currency Equivalents

In this report, $ refers to Australian dollar, AUD. Other currencies are specified in the report.

Exchange rates at July 2001

AUD1.00=USD0.51, Baht22, Kip4110, Vatu72, Rupiah5640

Executive Summary

Good land administration projects in partner countries help to improve the social and economic lives of millions of poor people. Land administration projects breakdown a key development constraint, i.e. allowing land to be owned, protected, and traded. This unlocks an inherent value in land that can be harnessed for improving social and economic growth. Few development projects can claim such a high and wide reaching potential development impact. The benefits of land administration projects are in areas of social, gender, financial, economic, and environment.

This study focussed on undertaking land administration projects in the future, and how their selection, design and implementation could be improved. Three critical generic areas were identified which, if appropriately addressed, could lead to implementing low risk–high payoffs projects. These are sustainability, affordability and operational efficiency. A set of good practice guidelines have been developed for use by practitioners of land administration projects.

Sustainability is critical to good practice development projects. This is even more so in land titling projects which generally are long-term and high-cost. The key test for sustainability are: partner government commitment, simplicity of design, asset maintenance and adequate recurrent cost financing, enabling land laws and regulations, stakeholder participation and ownership, community confidence in integrity and good governance, and landholders' willingness to pay for services.

Affordability is part of sustainability. It is important because partner governments invariably have scarce funds to continue project initiatives post-donor and/or post-loan period. Making services such as land titling and registrations affordable to all, including the poor, is a key challenge for sustainability. Nevertheless there needs to be progress towards cost recovery, and hypothecation of some revenue generated to the implementing agency for asset maintenance and recurrent cost financing, if the land administration system is to become self-perpetuating over the long-term. Opportunities also exist for partnership with the private sector.

Operational efficiency assists sustainability. It needs to be addressed throughout the project cycle. Using the agricultural extension philosophy to establish model land offices to assist replication and diffusion of information and benefits, has considerable merits for future design considerations. Opportunities exist in several large partner countries in South East Asia where model land offices could be established and tested, as a prototype, to gauge success without committing large amounts of inputs initially. If successful in enabling widespread realisation of benefits to rural landholders, the long-term payoffs to the country could be very high.

The good practice guidelines for selection, design, implementation, and post-project period should assist AusAID staff, Australian managing contractors, partner governments, executing agencies, target beneficiaries, and other donors in selecting and undertaking future land administration projects. These guidelines complement the AusGUIDE guidelines which have generic application to all types of projects undertaken by AusAID.

1. Introduction

1.1 Background to the study

This study follows a recent review, *Improving Access to Land and Enhancing the Security of Land Rights: A Review of Land Titling and Land Administration Projects*, (hereafter *Improving Access*) published by AusAID as Quality Assurance Series report No. 20 in 2000.

Improving Access was the first comprehensive account of land titling and land administration projects undertaken by AusAID. It found that projects were effective in targeting rural poverty, increasing security of tenure, and improving the access to credit by the titleholders. Wider benefits included a positive influence on partner countries' economic growth, improved social stability, and more sustainable resource use management. While high benefits were potentially possible from these projects, there still remained a number of operational aspects that needed strengthening to enable unlocking of even more benefits. These were identified in two key recommendations, which the AusAID's Program Quality Committee (PQC) endorsed, for a follow-up study.

First, was a need to develop good practice guidelines for use in future land administration projects that would enable longer-term sustainability and greater development impact. Second, was the need to collect and analyse costs and affordability data from a number of past and current projects that would enable future projects to be designed with a greater degree of resource-input certainty.

1.2 Purpose of the report

This is a study of the two recommendations outlined above. It is aimed at presenting practical and operational guidelines that can be used by AusAID desk and post officers, project designers, other donors, and recipient partners in selecting, designing and implementing high payoff-low risk land administration projects in the future. The terms of reference for the study are at Appendix 1.

The report provides additional guidelines, to those contained in the AusGUIDE guidelines, for undertaking land administration projects. Use of these guidelines will improve the quality of future land administration projects through improvement in the selection, design, implementation, and post-project consideration. Good quality land administration projects have appropriate objectives and design, are professionally managed, achieve their objectives, and have sustainable outcomes.

1.3 Land in the development context

Land is a fundamental resource of a country. Its effective utilisation, administration and management is a major contributor to social and economic growth. Developed countries generally have functioning land markets enabling investments to occur. Poor countries generally have weak land markets and administration resulting in considerable misallocation of scarce resources. When sound economic policies accompany functioning land markets, a prerequisite to development has been satisfied. Titling of land provides owners with security of tenure. Land becomes an asset, a tradeable good in the market place, and capital can be raised from it. Titles provide owners with a secure ownership and a financial incentive to make capital investment, and improve environmental management.

1.4 Approach and method used in the study

The study was undertaken by a two-person team. This consisted of Dr Ken Lyons, consultant technical specialist, and Dr Satish Chandra, evaluation specialist and task manager, Performance Information and Assessment Section (PIA), AusAID.

The approach and method used in this study is similar to that used in other reviews and evaluations undertaken by PIA. It consisted of two phases. The first phase was a desk study of a number of land administration projects assisted by AusAID. This entailed gathering information from files, project design documents (PDD), project implementation documents (PID), mid-term reviews, and project completion reports (PCR). The information was supplemented by information already gathered and analysed in *Improving Access*. AusAID desk and post officers were consulted as necessary. A number of managing contractors of land administration projects, both current and past, were contacted and they provided information and comments.

The second phase was fieldwork. This consisted of visits to three land administration projects in Thailand, Laos and Vanuatu. The Thailand Land Titling Project (TLTP) was selected because this project is the largest cofinanced project (with the World Bank, WB) assisted by AusAID, has been going on for 17 years, is regarded as highly successful, and important lessons on implementation could be learnt. The Laos Land Titling Project (LLTP) was selected because it started from a low base compared to TLTP, is early in its implementation phase with 7 years completed, is also cofinanced with WB, and important lessons on affordability and sustainability could be learnt. The Vanuatu Landuse Planning Project (VLPP) was selected because it has been completed, is located in the South Pacific which has different constraints to land

administration to that in South East Asia, was a small bilateral project, and important lessons on the development impact of the landuse plans generated by the project could be learnt.

The fieldwork employed a rapid appraisal approach to collect data and other information based on the questionnaire at Appendix 2. The field visits also helped to verify and clarify information from the recipient agencies and aid-coordinating units, observe at first hand the workings of the projects, and discuss issues of affordability, operational efficiency, sustainability, and development impact with the Australian team, counterpart staff, post officers and target beneficiaries. The field visits were invaluable in developing the good practice guidelines for undertaking future land administration projects.

The method used for peer review comments on the study was set at the beginning of the study and consisted of two groups. The first group were AusAID officers with experience in land administration projects from various desks, sector groups, and the PIA Section. The second group were three eminent workers in land administration projects from outside AusAID. The two groups provided a high level of incisive and knowledgeable comments on the drafts.

The final report was presented to the PQC for its approval for publication in the AusAID's Quality Assurance Series.

1.5 Report structure

The report contains six chapters and appendices. Chapter 1 is the introduction. Chapter 2 describes the rationale for land administration projects as a precursor to social and economic development. The costs, affordability and benefits of land projects are discussed in Chapter 3. Chapter 4 examines the issues of sustainability and development impact. In Chapter 5 a set of good practice guidelines for undertaking future land projects are developed. Chapter 6 is the conclusions.

2. Strengthening Land Administration in Partner Countries Through Development Assistance

2.1 How land administration assists development

Good land administration projects in partner countries (PCs) can help improve the social and economic lives of millions of poor people. Enabling ownership of land unlocks a fundamental constraint to development. The enabling environment includes land and property laws that recognise the rights and obligations of individuals and legal entities, supported by an administrative system that accords with good governance. Prosperous countries promote widespread and secure private ownership of land and property. This is a foundation for their social stability and economic development. A key reason for this is their ability to raise capital from land ownership. In some developed countries 70 per cent of the properties are mortgaged for productive purposes, using the security of land titles as collateral.

Improving Access summarised the development rationale for land projects: land titling provides security to landholders, reduces disputes, contributes to economic development, and provides improved access to credit. The link between the title and economic development, while clear, is not direct or axiomatic. De Soto (2000) argues that most of the poor already possess the assets they need to make a success of capitalism. The key constraint is the inability to produce capital from these assets because the ownership rights are not properly recorded. De Soto calculated that in the Philippines the informal land and property assets of around USD133 billion accounts for 60 per cent of total land and property assets. He argues that turning these informal assets into formal assets would produce significant social and economic benefits.

Donors and lending agencies are increasingly examining land administration projects, landuse planning, and land valuation and taxation, as vehicles for development. Some land administration projects have been highly successful and are referred to as models for the design of new projects. One such project is the Thailand Land Titling Project (see Box 1).

In land administration projects the potential achievable and sustainable benefits flow from two sources: first, from the continuous benefits from the titles issued during the project (generally millions); and second, from the titles and re-registrations that will be issued post-project (potentially many more millions). These flows of benefits are achieved through:

a. a strengthened land institution where titling continues;

b. affordable land titling by the agency/country; and

c. effective and efficient land administration.

Box 1 The Thailand Land Titling Project

Beginning in 1984 and after an expenditure of around USD275 million, the Thailand Land Titling Project (TLTP) is a remarkable success story. It has already delivered over 8 million titles to Thai landowners, with another 5 million titles remaining to be issued. The project has exceeded its targets.

This project was a joint partnership between the Royal Thai Government, the World Bank, and AusAID. It was implemented by the Thai Department of Lands. In recognition of its success the project was presented with one of the two 1997 World Bank Awards for Excellence.

What accounts for the project's success, and what can we learn from it?

- TLTP followed 20 years of investment by the World Bank in Thai agriculture.
- The TLTP is solely about land titling—there is one clear objective.
- The project is implemented by one agency only—the DOL.
- The DOL has a highly educated and competent staff distributed in a country-wide network throughout the 73 provinces in Thailand.
- Thailand has a long history of land titling with well-developed land laws.
- The DOL is responsible for the administration of rights in all non-forest lands.
- The administrative procedures of DOL are responsive to public demand.
- There has been a strong and sustained commitment to the project by the successive Governments.

The TLTP is still continuing. The more difficult areas are now being implemented. Projections are that the project will continue to deliver massive social, financial and economic benefits to Thailand for a very long time.

Adapted from V. Rattanabirabongse *et al.* (1998) The Thailand Land Titling Project—Thirteen Years of Experience, *Land Use Policy*, Vol. 15, No. 1, pp 3–23.

Whilst the development rationale for land administration projects is clear, the major challenge for the future is in "getting more bang from our bucks" i.e.:

a. selecting the right project to assist development;

b. producing an appropriate design; and

c. implementing the project with a focus on long-term flow of benefits.

To achieve these aims, considerations of affordability and sustainability are critical. In this Chapter an approach to address these issues is developed. Chapter 3 focuses on affordability, Chapter 4 on sustainability, and Chapter 5 on good practice guidelines for undertaking successful land administration projects.

2.2 What is land administration?

Land administration is the regulatory framework, institutional arrangements, systems and processes that encompass the determination, allocation, administration, and information concerning land. It includes the determination and conditions of approved uses of land, the adjudication of rights and their registration via titling, the recording of land transaction, and the estimation of value and taxes based on land and property. The term, land includes the structures and improvements thereon.

There are three components of land administration:

a. land rights registration and management;

b. land use allocation and management; and

c. land valuation and taxation.

The purpose of land administration is to ensure the integrity of the record of rights and interests in land and property. Integrity ensures that:

a. transactions in land and property market can occur efficiently and effectively;

b. information concerning the rights, restrictions and responsibilities of land are readily available to all;

c. the systems support the formation of capital, based on land and property;

d. land disputes are minimised; and

e. there is a contribution to social stability, economic development, and environmental management.

Supporting financial services, while not part of land administration, are necessary if credit, using the title as collateral, is to be accessed. Financial services are generally weak in developing countries and transitional economies, creating a serious constraint to development.

The first component of land administration, land rights registration and management, is critical for development and provides a base for the other components. It is, has been, and is likely to remain an important development assistance area for many of AusAID's partner countries, and therefore the main focus of this report. Projects that seek to redistribute land (e.g. from large

landholders to poor farmers) are land reform projects rather than land administration projects. AusAID has not been involved in land reform projects.

The glossary included with this report explains terms used in land administration projects. Users of the guidelines in Chapter 5 would find these useful when assessing project documents.

2.3 Assessing the status of land administration for development assistance

Identifying and focusing development assistance in areas that are likely to generate high returns in proposed land administration projects is sensible aid. Such an approach would ensure that technical assistance (TA) is appropriately targeted, and that the probability of attaining potential benefits is maximised.

Land administration can be examined in terms of both its structural completeness and its operational efficiency. Structural completeness is how complete and appropriate are the elements of land rights registration and management, such as:

- policy, regulation and governance;
- institutional arrangements; and
- services, procedures and records.

Operational efficiency is how well the land administration system operates. Key operational efficiency indicators are:

- percentage of land registered;
- re-registration rate;
- incidence of land disputes and appeals;
- service completion and customer satisfaction;
- levels of malpractice and corruption;
- levels of incorrect records; and
- mortgages being registered, and levels of land transactions.

These have been developed further from Baldwin and Dale (1999).

The above elements of structural completeness and indicators of operational efficiency have been used to develop the ratings shown in Table 1. As discussed in Chapter 4 the selection of development assistance areas is important for promoting sustainability.

Table 1 Rating scale for assessing the status of land administration

Rating	Explanation
Good practice	All structural elements and all operational efficiency indicators accord with international good practice.
Fully satisfactory	All structural elements and all operational processes are in place; agencies have the potential capacity to achieve a good practice rating without further development assistance.
Satisfactory overall	Most important structural elements are in place; operational processes have commenced; no major obstacles to sustainability foreseen; development assistance required to achieve a fully satisfactory rating.
Marginally satisfactory	Some structural elements and some operational efficiency processes are in place; significant obstacles to sustainability foreseen; significant development assistance required.
Weak	Little or no structural elements and/or operational efficiency processes are in place; major obstacles to sustainability foreseen; significant development assistance required over a long period.

The level and duration of development assistance would be based on the degree of structural completeness, operational efficiency and sustainability considerations.

The rating scale can be modified to take into account particular country circumstances. Factors such as the right policy settings, political commitment, interagency cooperation, good governance, community confidence in land administration, and access to financial services, also need consideration.

2.4 Applying the rating system

The above rating scale was applied to six past and current AusAID projects. The results are shown in Table 2.

Table 2 Ratings for six AusAID projects

	At start	Current or end	Comment	Background
Thailand (TLTP)	SO	FS	The start rating for the TLTP was much higher than for other projects. Over 17 years of TA, sustainability was achieved except for valuation. At start financial services were reasonably established.	Focus was on land titling with some valuation. Duration 17 years. Co-financed with WB.
Indonesia (ILAP)	MS	MS	Indonesia started at a lower base than Thailand. After 7 years progress was made but some significant problems remain. Sustainability was achieved in the technical capacity to undertake land titling, but there was no recurrent cost financing (RCF) to continue systematic registration. If the project had gone for 20 years, as originally envisaged, the final rating may have been higher.	Focus was on land titling with some institutional strengthening. Duration 7 years. Co-financed with WB. A planned phase 2 did not proceed, but may. During implementation there was major social and economic uncertainty.

	At start	Current or end	Comment	Background
Laos (LLTP)	W	MS	The start point for Laos was at a lower base than for any other project, reflecting recent socialist structures. Significant early effort was in establishing the regulatory base, institutional strengthening and PG commitment. Operational land titling and valuation was established.	In year 5 of 7 for phase 1. Co-financed with WB.
Philippines (LAMP)	MS	na	The Philippines project is commencing at about the same base level as Indonesia. The first 3-year phase aims to achieve agreement on overcoming major legal, institutional, and structural impediments. If changes can be agreed upon, a further phase is envisaged.	Phase 1 duration is 3 years. Main AusAID TA to commence in mid-2001. Co-financed with WB. A long-term project of perhaps 20 years is envisaged.
Solomon Islands (SILAP)	W	na	Focus is on improving operational efficiency and institutional strengthening.	In year 1 of 4. The Solomon Islands is undergoing civil unrest affecting all development projects.
Vanuatu (VLPP)	W	SO	Primary focus was on development of landuse planning. No national or provincial landuse plans existed pre-project. One aspect was improving the operational efficiency of land lease processing with a duration of 1.5 years.	Duration 5 years. Project completed in 2000.

Key: Weak (W); Marginally Satisfactory (MS); Satisfactory Overall (SO); Fully Satisfactory (FS); Good Practice (GP); not applicable (na).

Information to derive the ratings in Table 2 was obtained from wide sources, including PG land staff and users of the information, AMCs, technical specialists, AusAID staff, and the World Bank/AusAID LLTP supervision mission staff. While structural completeness tends to be established nationally, with standard laws and regulations, considerable variation can occur in operational efficiency because services are usually delivered by decentralised land offices in provinces/districts.

Generally the lower the start base the more development assistance will be required and for a longer duration. The success in Thailand is attributed to its long duration, significant amounts of TA and loans, and strong political commitment. Its primary focus was large-scale land titling. It started from a higher base than any other project listed in Table 2. This has major implications for projects that start at a much lower base, and with less commitment and

capacity. Therefore an initial assessment of the start base becomes critical to designing more targeted TA. This will enable a more efficient use of TA, i.e. "working smarter not harder".

2.5 Generic assistance areas in land administration and their characteristics

Project assistance in land administration is typically aimed at improving one or more of the elements of structural completeness and/or operational efficiency listed below:

- *Improving structural completeness:*
  a. improving policy or legislation/regulation;
  b. strengthening the institution (e.g. mandate, structure, capacity, capability);
  c. improving governance;
- *Improving operational efficiency:*
  d. obtaining the initial coverage (e.g. doing initial land titling);
  e. increasing the participation rate (e.g. increasing the rate of subsequent land re-registration;
  f. improving records quality; and
  g. improving service delivery.

Each generic assistance area has a typical set of characteristics such as inputs, costs, benefits, beneficiaries, implementation challenges, and sustainability issues. These are shown in Appendix 3 for land rights recording and management. The key points are summarised in Box 2.

The above indicates that a number of conditions are required if the high potential returns from development assistance in land administration projects are to be realised. These not only include assisting with initial land titling, but also focussing on re-registration rate, service delivery, transparency, records quality, and institutional capacity building.

Box 2 Generic assistance areas: key points

Customer focus: Land titling and improving customer services directly and immediately benefits landholders. Major improvements in service delivery may be dependent on improvements in interagency co-operation, particularly where a number of agencies are involved in service delivery.

Costs: Land titling is by far the most costly area. Records improvement is the second most costly since it requires a large number of staff with associated salary costs. Other areas are relatively low cost.

Benefits: Large social benefits flow immediately from land titling. Benefits from improved procedures and customer services also flow early. In general, economic benefits flow slowly and build-up over a long period of time. The value of land increases with titling.

Task interrelationships: Some operational aspects are interrelated and may need to be addressed concurrently, e.g. the benefits from initial land titling will not be sustainable in the long-term if the rate of subsequent land re-registration is low. Increasing the rate of subsequent land re-registration depends on landholders believing that the service is value for money and effort, and that they will not be exploited. Improving customer services involves improvement in processes, productivity, transparency, access, records integrity, customer and community confidence, and charging only official fees that are affordable.

Governance: Improved governance and institutional strengthening improves services and records. There is merit in linking the less quantifiable improvements in governance and institutional strengthening to the very tangible and measurable improvements in productivity and customer service.

Commitment: Major improvements in land administration are strongly dependent on political and resource commitment by the PG and the executing agency. This commitment needs to include asset maintenance and RCF support. Improvements may be required in agency mandates and budgets, policy and regulatory base, and in fees and charges.

2.6 The major differences between South East Asian and South Pacific partner countries

The major difference in land administration between the large South East Asian and the small South Pacific countries is essentially one of scale and types of land to be administered. Scale applies to the number of:

a. land parcels to be administered;

b. transactions; and

c. land offices.

South East Asian countries have parcels that run into millions, yearly transactions running into tens of thousands, and land offices in hundreds. In the South Pacific countries these numbers are small; tens of thousands of land parcels, hundreds of transactions, and one to five land offices.

In South Pacific countries the land formally administered is generally less than 10 per cent of the landmass; the remainder is customary land and likely to remain so for a long time. Whereas in the South East Asian countries the administered land can be up to 50 per cent of the landmass; the remainder being classified as “forest” and administered under different regulations. Customary land in South East Asian countries can be small in percentage terms but still large in area.

2.7 Customary land and unlocking economic benefits by diffusion

Customary land is land whose allocation and use is governed by traditional tribal laws. The great majority of land in the South Pacific is customary. A feature of customary land is the wide variation in customs within a country, let alone between countries. Customary land presents major challenges for land titling or leasing. The western concept of land ownership and its attendant benefits are generally alien to customary land. This is a fundamental constraint to unlocking potential economic benefits from customary land. Alienated and leased customary land in the South Pacific is administered similar to “Western” style land administration. Some literature on land titling indicates that if individuals have long-term secure access to land and the customary social structure and land systems are working well, and there is little demand for “western” land titling system, then formal land titling can be inappropriate.

In many South Pacific countries, e.g. PNG, Solomon Islands, Vanuatu, and Fiji there are high levels of land disputes. Many of these disputes involve customary land that has never been titled, while other disputes involve land where titling is being considered for the purpose of economic development. In Vanuatu,

population 196,000, it was reported that there are between 3,000 to 5,000 land disputes registered with the national court alone, and probably an equal number with the island courts or lower jurisdictions. The establishment of a special tribunal is being examined in Vanuatu, but while this may remove the backlog of disputes, the root cause may not be addressed. Examples exist of local and foreign investors "walking away" from negotiations because of land disputes, and the inability to obtain secure and long-term use of land. In addition, there are cases of "hidden/formerly unknown" land claimants suddenly appearing to lodge a claim when an investor appears. Registration cannot proceed until disputes have been resolved satisfactorily and with little chance of reoccurring.

Another source of increasing land disputes in customary land is the population pressure competing for scarce cultivable land. This is already a significant problem in some areas of PNG, Fiji, Cook Islands, Kiribati, Tuvalu, and Niue. Population pressure poses a threat to traditional land tenure systems. There are some traditional solutions, however, which could form the basis of more inventive land registration eg. communal/land group title registration, with a traditional user rights registration operating within that broader registration. In PNG, for example, the legislation allows for clan/group registration. Whilst the constraints to development on customary land are widely recognised, strategies to address these have not been forthcoming. Customary land issues are complex and will not be solved quickly.

Discussions in Vanuatu indicated that certain groups have begun to consider the need for formal/legal recognition and registration of both individual/family land rights and community rights. One such group comprises villages close to major urban centres, which are starting to recognise that their long-term social and economic prosperity may be best served by formally registering family land holdings as distinct from community land. Another group is the emerging middle class who left their villages some time ago and unlikely to return for some considerable time. This group remains unsure if their, or their children's traditional access to land will be recognised, if and when they return. A third group is low income workers in urban areas who have left their villages for better economic life and, like the emerging middle class, have concerns about their future access to land when they return from urban employment. A case was reported where a large number of family groups, who had been in one area for nearly 70 years, may have to move back to their original island as the traditional owners wished to reclaim that land.

South Pacific countries' land administration is generally conducted under legal arrangements and surveying standards based on former colonial times. Most have problems effectively administering the small amounts, mostly less than 10,000 parcels, of alienated land. In these cases affordability and RCF become

major concerns and are addressed further in this report. If there is likely to be an increasing demand for the selective registration of customary land, then alternative approaches will need to be explored. Some approaches used for traditional lands in Africa may have applicability in the South Pacific.

There is merit in exploring pilot land registration in villages where there is a high consensus and demand as a means of gaining greater understanding of the issues and workable approaches. Issues that need exploring are:

a. the legal requirements;

b. how family parcels could be agreed upon and then described/marked;

c. who are the family members;

d. what is community land?;

e. where do primary and secondary rights occur and how will they be handled?;

f. how and where the results would be recorded;

g. how further changes in parcel location and size, and in family membership, would be recorded;

h. how much it might cost;

i. who would conduct it;

j. who would pay for the initial registration; and

k. the RCF support.

If one or more successful sites of stable, dispute-free customary land registration which results in social and economic enhancement to the community could be established, then these may be able to act as diffusion centres worth replicating elsewhere. Customary owners from other villages could visit, observe, discuss, learn, and then adapt the system in their own villages, if applicable.

Access to customary land by non-customary owners, whether for development or for other purposes, is a highly emotional issue that goes to the “being” of traditional landowners. The issues are well recognised, but long-term workable solutions are few. There is merit in supporting exploration of approaches where there is a high degree of consensus and interest/demand by particular groups of customary owners. The issues are complex and care needs to be taken to ensure that the situation is not made worse.

3. Costs and Affordability

3.1 Why costs and affordability are important in land administration

The relative magnitude of cost for each generic assistance area for land rights registration and management is shown in Appendix 3. The cost and duration of land administration projects varies widely, depending on the number and type of assistance required, the start base, and the degree of improvement sought. The highest cost by far is for land titling. Records improvement is the next most costly, where the cost is mostly in PG staff salaries. The costs for all other areas are relatively low.

Large scale land titling is a high-cost operation, particularly in South East Asia, due to:

a. the need to improve various elements of structural completeness;

b. the need to improve several areas of operational efficiency;

c. the large numbers of parcels to be titled; and

d. the high unit cost of land titling.

To undertake improvements, a loan and long-term TA are usually required. The quantity and duration of TA mainly depends on the number and type of elements that need improving, and their start base. In the South Pacific, low-cost projects may involve improving a small number of operational processes, or some aspect of the policy or regulatory framework.

Significant PG resources are usually required post-project to continue land titling, assuming land still remains to be titled. In addition, PG resources are required to maintain, at an adequate operational level, those parts of the land rights administration which allow subsequent land transactions to be recorded, and hence the value and benefits of the title to be retained. Because of the high cost and large number of parcels to be titled, affordability is a major consideration for sustainability, and for achieving successful projects.

3.2 Cost components and their assessment

The costs associated with land titling and the on-going land rights administration are outlined in Table 3.

Table 3 Cost components of land titling and land rights administration

Cost component	Comments
Once-off establishment costs	Establishing the structural elements (policy, regulations, institutional strengthening, physical infrastructure, equipment supply, and training), and the operational procedures, systems, and services.
Once-off titling costs	These are the actual cost of conducting titling and cover field adjudication, surveying teams, community involvement, management, training, and maintenance. Three time periods are involved; up to TA completion, to loan completion, and the post-loan period.
On-going costs to maintain land rights management and services	Covers maintaining and updating the structural elements, and ensuring that good practice operational efficiency is achieved and maintained. The aim is to maintain the value and integrity of the title, and the associated benefit stream.

Figure 1A indicates the phases for the various costs. Figure 1B indicates the typical build-up of titled land. Figure 1C indicates the income stream from fees for transactions due to increased titled land and a more active land market. The use of part of this increased income stream to support the on-going running costs is considered in more detail in Section 4.5 on sustainability. Comments on the figures, on the length of TA involvement, and on the sustainability of land titling post-loan, are included in Appendix 4. Project costs generally only cover specific once-off establishment costs, and a certain amount of once-off titling.

Figure 1A Land Rights Administration Cost Components

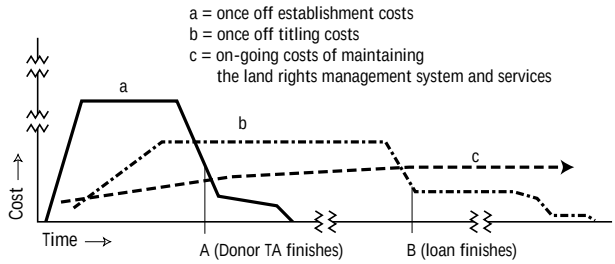


Figure 1B Titles Issued

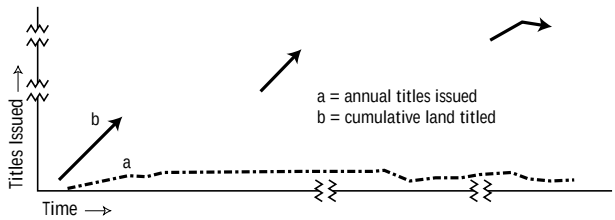
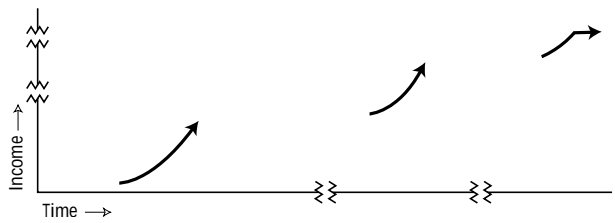


Figure 1C Income



An analysis of the ILAP project costs indicated that:

a. about 35 per cent of total project costs was for establishment costs, and this was heaviest in the early years; and

b. the remaining 65 per cent was for operational titling costs.

The operational titling costs were broken down as follows:

a. about 25 per cent for overhead costs such as procurement, training, management; and

b. about 75 per cent was for adjudication, boundary measuring, and mapping.

Of adjudication, boundary measuring and mapping costs, about 50 per cent was for the boundary measuring and mapping. In the first two years the number of titles issued was very low, with a high per unit cost because of the time required to establish and test operational procedures, and to recruit, train, and mobilise field teams. The ILAP project cost, from all sources, was AUD170 million over 7 years, while the TLTP project cost was AUD575 million over 17 years.

The real unit (per parcel) cost of operational titling is around AUD60 per parcel, but can be higher. The amount of land to be titled in most South East Asian countries is enormous and generally beyond the scope of even a 20 year project. Annual budgets for the land administration agencies are normally not sufficient to cover total operational costs. All PG have used loans to finance projects and to subsidise the cost to the landholder (in the order of 90 per cent) during the project. Affordability and financing of on-going titling are key elements of sustainability.

3.3 Affordability

During design or early implementation most of the important long-term decisions will be made with respect to:

a. the policy and regulatory framework;

b. institutional mandates, structure and staffing;

c. services and how they will be provided;

d. appropriate technology, technical methods, procedures and supporting equipment;

e. physical infrastructure;

f. human skill development; and

g. capacity building.

These decisions will have once-off cost and RCF implications. It is vital that affordability and sustainability be fully considered at major decision points during design and implementation.

It is important to ensure that establishment costs, commonly 35 per cent, are not excessive. The rating scale in Table 1 would assist in identifying the structural and operational aspects requiring improvement. This would enable estimation of what is required, and the amount and duration of TA necessary for improvement. In *Improving Access* it was noted that information from previous projects could assist the reduction of establishment cost and time.

Affordability can be looked at from the perspective of two key stakeholders, the agency, and the landholder.

3.3.1 Agency affordability of once-off land titling

The land agency needs to consider:

a. the once-off costs of land titling, particularly when the loan finishes and there is still land to title; and

b. the on-going costs of maintaining the land rights management system and services.

The total cost of land titling is the per parcel unit cost of titling multiplied by the number of parcels to be titled. As a large number of parcels are typically involved it is necessary to examine how the unit cost can be lowered. To ensure full landholder participation, including the poor, a PG subsidy of 90 per cent to unit cost is common. The concern is that post-project, the PG may not be able to offer the same level of subsidy. An example, from ILAP, illustrates the magnitude of the problem and this is shown in Box 3.

3.3.2 Reducing the unit cost of land titling

The following possibilities exist to lower the unit cost:

a. reduce management, procurement and training costs (about 25 per cent of costs);

b. reduce the costs of adjudication (about 35 per cent of costs); and

c. reduce the costs of boundary surveying and cadastral mapping (about 40 per cent of costs).

Management, procurement and training costs: The potential for reduction is small. A 5 per cent reduction may be possible through a more targeted training and procurement, and streamlined management.

Box 3 The problems of funding land titling post-project: an example from ILAP

Expenditure required to conduct land titling post-project

In a land office area (there are about 300 land offices in Indonesia) there could well be in the order of 500,000 parcels of land to be titled. Five adjudication teams, of 16 persons per team, and about the same number of survey teams and surveyors, would title approximately 25,000 parcels per year. The unit cost of adjudication and surveying, and other titling activities, is approximately Rp130,000. Thus an annual budget of Rp3.25 billion would be required for about 20 years. If a less costly method of boundary surveying was used (see Table 4) the budget could be significantly reduced. If a sketch map was used then the total cost could be reduced by about 40 per cent, indicating an annual budget requirement of about Rp2.0 billion.

Income sources

A titling fee from each landholder of Rp10,000 (a 92 per cent subsidy) would contribute Rp250 million annually. About Rp300 million annually (currently lost to the government) might be obtained if: (a) 200,000 previously registered parcels, now in the informal system, could be brought back into the formal system; (b) 5 per cent of those were bought or sold annually; and (c) 10 per cent had other transactions. These fee income sources could generate about Rp500 million, about one-quarter of the required annual budget. Some transactions, e.g. selling, would also attract a 5 per cent tax based on land value as part of the transaction charges which, together with the fees, would go direct to the government. This tax could be Rp4 billion, more than sufficient to meet the budget requirement. However, it is generally extremely difficult for the executing agency to convince a central government Ministry of Finance (MOF) of the need to retain any income for continuation of titling and system maintenance. Around 5 per cent retention of revenue generated may be the best that could be argued for along the lines of "don't kill the goose that lays the golden egg". These arguments, vital to sustainability, need to be made strongly and very early in design or implementation.

If the cost/effort of duplicated mapping of tax and legal parcels could be combined, then a saving of around 20 per cent might be possible. This could contribute another Rp20 million annually in the medium-term.

This example illustrates the importance of addressing sustainability and RCF for on-going land titling, post-loan.

Adjudication cost: Adjudication is of paramount importance. It must be done carefully and transparently with full community participation and support to ensure that the correct land rights are recorded, and the basis for any future land disputes are minimised. This process is person and time intensive, and competent and ethical teams are required. A small cost reduction in the order of 10-15 per cent may be possible due to better training, organisation, and procedures. In addition, greater use of trusted community members in adjudication could also assist cost reduction. Recent project experience reinforces the importance of wide community participation, and the need for improvements in transparency and participation. Addressing these could increase costs.

Boundary surveying and cadastral mapping cost: Major possibilities for cost reductions exist. At least ten technical options are available for boundary surveying. Indicative cost ratios for these methods, as they might apply in partner countries, have been calculated and are shown in Table 4. Caution should be used in applying the ratios as they are orders of magnitude only and will vary from country to country, and in particular circumstances. The option of only marking and not measuring the boundary, whilst not normal, could be considered in certain circumstances.

Table 4 Cost ratios for different boundary surveying methods in partner countries

Using EDM		Using GPS			Using Aerial Imagery				
1 measure to 1 cm or better	2 measure to about 10 cm	3 to about 1 cm	4 to about 0.1 m	5 to about 1 m	6 single unrectified air photo	7 ortho photo	8 high resolution satellite	9 sketch map	10 group title for an area
2000	1500	1500	1000	800	100	500	400	1	50

Key: EDM Electronic distance measuring;
GPS Global positioning system.

Each method has advantages and disadvantages. Some observations are:

- Method 1 was used in ILAP and is planned for LAMP. Method 6 was used in TLTP and in flat areas of LLTP;
- Highly accurate boundary measurement, such as method 1, is very expensive but in many countries is the only legal method;
- Method 9 is by far the cheapest but suffers from the disadvantage that an accurate series of cadastral maps cannot be compiled, and the exact boundary is not defined, and cannot be exactly reinstated;
- Methods 6 and 7 overcome this latter disadvantage at a higher cost (but still considerably lower than method 1). Method 7 has the added advantage that the digital orthophotographs could be used by a number of other government and private agencies, possibly under some cost sharing or commercial arrangement. Method 7 will be trialed in LAMP;

- Method 8 is not thought to be in operational use;
- Methods 7, 1, 2, 3, 6, 8, 4, 5, in decreasing order of cost, require reasonably large technology investment costs, and ongoing annual maintenance costs, by either public agencies or private companies; and
- Methods that require the most intensive use of human resources, in decreasing order, are 1, 2, 3, 4, 5, 7 and 6.

When considering the most appropriate method of boundary surveying the following should be considered:

a. how land titling would be afforded and sustained post-project;

b. the boundary surveying accuracy required;

c. the likelihood of changing the current legal method;

d. the social desirability for providing employment;

e. the use that would be made, by the land agency and others, of any derived product such as cadastral maps or digital orthophotographs, and

f. the trade-offs between lower cost producing more titled land, and any reduction in boundary precision or cadastral mapping. In addition, consideration should be given to increasing precision in the future. Cost-benefit analysis could assist evaluation of alternatives.

3.3.3 Agency affordability of maintaining the land rights management system and services

To maintain the value of the title and the flow of resultant benefits, it is necessary for the supporting systems for land rights recording and their management to work effectively and efficiently. The ratings, for important structural elements and key operational performance indicators, need to approach good practice. The structural elements normally apply nationally, while the operational performance indicators only need to apply over individual land office service areas. The strategy of focusing on individual land offices is discussed in Section 3.5.

The cost of maintaining the land rights management system was depicted in Figure 1A and discussed in Appendix 4. The technology used would have an important bearing on affordability, RCF requirements, and sustainability. Considerable project effort is normally required to increase effectiveness and efficiency, and when achieved, the characteristics tend to be:

a. strong community confidence;

b. a large amount of titled land;

c. high land re-registration rates;

d. efficient, transparent and affordable customer services (supply meets demand);

e. capable administering organisation; and

f. adequate operational budget.

The overall effect attracts rather than deters customers. Regulation requiring re-registration has been shown not to work by itself.

Without sufficient RCF it is extremely difficult to maintain effectiveness and efficiency approaching good practice values. Asset maintenance for land records, strong rooms and field vehicles is particularly important. It is reasonably common, even with low effectiveness and low efficiency, for a land agency's income to exceed its costs. In some developed countries with very effective and efficient systems, the difference can be tens of millions of dollars. The need of a land agency is not simply to cover its costs and provide a small surplus to government, but rather to provide the land administration services that people want and are willing to pay for. With few customers there are few fees, low income to government, low agency budgets, little RCF; all leading to weak sustainability. To overcome such difficulties consideration should be given to establishing a small number of model land offices as outlined in Box 4.

Box 4 Establishing a model land office

Many land agencies in partner countries have large numbers of staff who receive low salaries. This is not conducive to productivity, transparency and a customer service ethos. The MOFs are unlikely to provide sufficient RCF unless they believe the government is getting value for money (i.e. increased income) from the land agency. Increased income depends on increasing customers, which in turn depends on good service, productive staff, and adequate salaries. It is necessary to break this cycle. A land agency model with a service, effectiveness, affordability, and cost recovery focus, could be sought. This model would include adequate salaries, based on productivity, and increased income from charges through a higher participation rate. Improved staff productivity in land offices could release staff for land titling.

Such a model may not be easy to gain agreement to, let alone implement. However, experience indicates that retaining the *status quo* will not provide sufficient RCF to maintain an effective and efficient land administration system, and hence maintain the benefit stream. The model works in many developed countries. In partner countries the challenge is organisational rather than technical. The option of using TA in assisting to develop a model land office, to show that benefits can be achieved, could be applicable in some countries. Therefore opportunities to prototype such a model, without the risk of establishing precedence or undertaking a high-risk venture, should be considered in project designs.

How such a model land office can provide the impetus for replication, diffusion and adaptation, is discussed in Section 3.5.

Consideration needs to given to increasing the role of the private sector in land administration. In many PCs they already have a role as notaries/lawyers and surveyors, and in funding, operating and maintaining some infrastructure. A greater involvement of the private sector could reduce the necessity for large government bureaucracies with the resultant staff and cost reductions. Special care, however, needs to be taken with land rights and records management because of the political, social and economic context of land. Where the private sector has a large role is generally in the area of service provision, with the regulatory/compliance and policy functions being retained by government.

3.3.4 Landholder affordability

The main issue in landholder affordability is the level of fees charged for initial land registration and subsequent land transactions at a government land office.

It is a common practice for the PG to set a very low (a subsidy of about 90 per cent) initial land titling fee, to encourage participation, and to ensure complete geographic coverage. This strategy has been very successful. The concerns are that for post-project titling the PG may not be able to afford the same or any subsidy, thus jeopardising systematic registration or making it unaffordable to the poor. This would negate the aims of complete area coverage and social equity.

Common subsequent land transactions are for conveyancing, inheritance, and mortgage registration. Charges commonly contain a cost of service and a tax component. The tax is usually based on a percentage value of the land. Common landholder/customer reasons for not registering subsequent transactions are:

a. charges are unaffordable;
b. charges not seen as value for money;
c. access to a land office is difficult;
d. higher than official fees are charged;
e. lack of confidence in the integrity of the system;
f. lack of knowledge of the services; and
g. the old informal way works and everyone uses it. A common informal method is for the transaction to be witnessed by a notary or village head.

International best practice is 100 per cent re-registration for changes of ownership. Failure to achieve a very high level of re-registration means that:

a. the correctness of the land records slowly deteriorates, and with it community and business confidence; and

b. the anticipated government revenue, and ideally an amount towards RCF, is not achieved.

This leads to a downward spiral in the integrity of land rights. The overall long-term effect is a significant depreciation of the investment in land titling, and in the land administration system.

In Indonesia re-registration is very low, about 10 per cent, while in Thailand it is very high, over 95 per cent. Too few parcels of land have been titled in Laos to be able to estimate the re-registration rate. The re-registration rate in the Philippines may be between 50 to 70 per cent.

Determining an affordable fee for land services is a complex issue as shown in Box 5.

Box 5 Affordability of fees for land services

In Indonesia the 1994 gross regional domestic product (GRDP) was 10 times higher in Jakarta than in the poorest region. The ILAP fee for a land title was Rp11,000 (a 92 per cent subsidy) and field comments indicated that the very poor were happy to pay even if it meant borrowing. In Jakarta the average civil servants monthly wage was about Rp300,000 but about Rp600,000 per month was required per household to meet expenditure. When conducting a subsequent transaction the fee component may be quite modest, about Rp20,000, but the tax component, based on the value of the land, could easily amount to an additional Rp300,000. For many, the payment of even low or modest fees is a significant issue. This scenario is common in many partner countries.

An ideal fee structure would recover a higher proportion of costs from those who can afford to pay, while providing a subsidy to those with a low ability to pay. However, designing and administering such a system, based on social equity would be very complex, and would create economic distortions in the allocation of scare resources.

3.3.5 Improving affordability

Affordability has important sustainability implications. Determining affordable charges to encourage subsequent registration in the formal sector, whilst ensuring an adequate revenue stream, is very difficult. Improving affordability requires consideration of the following:

- Attracting customers by offering a quality, value for money, transparent service where the customers perceive that the benefits far outweigh the costs/effort;

- Using appropriate but low-cost methods of land titling and carefully examining the boundary measuring options;
- Examining the operations of a land office to determine how procedures/services may be improved to release staff for on-going land titling;
- Using less high-cost professionals and more trusted community members;
- Achieving high land transactions and re-registration rates to increase income to put towards land titling and maintaining land administration;
- Examining the role that the private sector can play;
- Examining a sliding fee scale based on the landholders' ability to pay; and
- Identifying specific target groups who are in the greatest need of land titling. This could be based on the need for land security (i.e. the delivery of social and gender benefits), and the need to produce quick and tangible economic benefits, both to the landholder and to the government.

If land titling is required post-project but appears unaffordable, then the desirability of undertaking the project should be questioned.

3.4 Achieving and retaining benefits

Each of the generic assistance areas has both social and economic benefits of different magnitudes as indicated in Appendix 3. The benefits are:

a. the operational improvements of land titling and improved customer services, directly and immediately benefit landholders/customers;

b. large social and gender benefits flow immediately to landholders from land titling; and

c. economic benefits tend to flow slowly and build-up over long-term.

Benefits were discussed in detail in Improving Access, with a number of useful references included.

The increase in land value upon titling only becomes realizable to landholders if there is an active land market. Increased land values should increase government revenue where land re-registration charges have a tax component based on land value, assuming a high subsequent registration rate. The full charge will only be recovered if there is a transparent and effective method for land valuation and recording sale prices, and there is little opportunity to understate the selling price.

3.4.1 The benefits

Initial land titling is a means to an end. The end is to achieve a benefit stream that results from secure land and property ownership. Full benefits occur when all three components of land administration are effective. Benefits can be grouped into social, gender, financial, economic, and environmental, as shown in Table 5.

Table 5 Benefit types

Benefit type	Comment
Social	Landholder and family "own their land", and feel more secure against eviction as they have legal and enforceable rights. Community land is secure. Inheritance can be registered.
Gender	Land titling, conducted in a gender sensitive manner, ensures that women's land rights are formally registered and hence safeguarded. Improves women's ability to access credit.
Financial	Increased revenue to government via fees and taxes from increased land transactions, and a wider and fairer land and property taxation system.
Economic—stage 1	Ownership security provides incentive to landholders to improve land and property without accessing formal credit.
Economic—stage 2	Landholders can obtain access to credit from financial institutions using the title as collateral, if credit is available, and if they wish to access it.
Economic—stage 3	The establishment of land information systems and the sale and use of digital parcel related data.
Environmental	Landholder security leads to more sustainable landuse practices as they now have a greater incentive for the land to retain its productivity and value.

The start of the benefit stream occurs at the issuance of the initial land title. The maintenance of the benefit stream depends primarily on:

a. community confidence in the integrity of the land administration system, such as the title, the quality and transparency of services;

b. a high re-registration rate;

c. an effective and capable land agency with sufficient budget; and

d. equitable land policy and regulations.

3.4.2 Design considerations

Land administration project designs commonly have goals or purposes to improve social and economic development. It is reasonably easy to design outputs and to measure improvement in land administration from the supply (agency) side, using internal efficiency data. However, it is more difficult to design outputs that meet demand side contributions to social and economic development. As well as designing appropriate outputs, it is necessary to devise suitable verifiable indicators, and the means of measuring these.

When a decentralised land office reports to the provincial government and from which it obtains it budget, then the provincial government becomes a very important stakeholder and needs to be included in the project design. However, having another level of government involved would make the project more complex.

Good monitoring and evaluation (M&E), built into the design, is essential for the success of land administration projects. It should include the identification and quantification of benefits. Regular, and perhaps six-monthly M&E, by a sector technical advisory group (STAG), or a technical advisory group (TAG), or a joint supervision mission, such as between the WB and AusAID, would provide independent technical and management advice towards achieving the project objectives.

3.4.3 Retaining benefits

The primary beneficiaries in PCs are the landholder/customer/community and the government. Theoretically the land administration agency is a service provider on behalf of the government rather than a stakeholder per se, but in practice it is a very powerful gatekeeper/stakeholder and may see itself adversely affected by improved operations, structure, and governance. Without a committed executing agency the delivery of benefits to the primary stakeholders is impossible. During the preparation phase it is necessary to gauge the commitment of the major land agencies that would be involved, and to have a strategy to increase commitment and to foster sustainability.

An effective project design will seek to improve the required structural and operational elements in such a way that benefits are achieved and are sustainable. In land administration many of the structural elements are national in nature (i.e. policy, regulations, organisational structures, and staffing) while most of the operational aspects are conducted at the provincial or lower level. Since land titling and customer services are conducted at this lower level, and this is where benefits will flow to the landholder and generate increased revenue to the government, it is important to concentrate on operational activities at the local land offices. This would be particularly so, if as well as land titling, subsequent land re-registrations were to be increased, transaction services improved, and community confidence increased.

To achieve full benefits it is not sufficient to solely improve the supply. The supply must meet the needs of the demand, for both the existing and potential landholders/customers, who want effective land services.

3.5 Replication and diffusion

The role of TA is to only stay until sustainability has a high probability of being achieved, and the PG agency can "go it alone". While TA can substantially assist in improving or establishing many of the structural elements that apply nationally, it is beyond the role and capacity of TA to improve the operational efficiency of each and every decentralised land office. Using TA to assist the partner agency to develop some "model" land offices, where benefits have been achieved and are demonstrable, can be a powerful way of building confidence and commitment, and providing a base for replication to the other land offices. As part of the model land office, trained teams would need to be established and deployed so that further replication and diffusion could occur.

Whether diffusion happens or not will depend largely on the commitment of the different provincial administrations. The model land offices can serve as a "look and see" function for senior provincial administrators, enabling them to determine if there are benefits to their jurisdictions.

For decades agricultural development has relied on the principles of replication and diffusion, through extension services, to assist farmers achieve good practice and raise income. Many landholders are unaware of the range of land administration services, the benefits, the responsibilities of a title, and how a title can be used to access credit. Whilst a title has advantages, there are also severe ramifications on loan defaults. There is also a need to work closely with national and local financial institutions. As part of improving land rights management, the development of a land extension service would have merit. There are also merits in linking the land extension service with the agricultural extension service, or other approaches like community-based models, as a way of maximising the use of land titles to increase land productivity and income.

Summarised, the development scenario of land administration is:

Development benefits =
social + gender + financial + economic + environmental

Benefits require:
community confidence + titled land + high re-registration rates
+ efficient and transparent customer services (supply meets demand)
+ capable administering organisation + adequate operational budget
+ extension service.

4. Sustainability

4.1 What is sustainability?

Sustainability is the continuation of benefits after major assistance from a donor has been completed. Sustainability is a key attribute of high-quality aid. The AusAID publication, *Promoting Practical Sustainability, September 2000*, provides guidance on how to analyse sustainability in projects throughout the activity management cycle. The section in AusGUIDE on *Project Quality Standards and Guidelines for Project Assessments* is also relevant for assessing sustainability.

The key points to note in this definition of sustainability are that:

- The focus is on sustaining the flow of benefits into the future rather than on sustainable programs or projects. Projects, are by definition, not sustainable as they are a defined investment with a start and finish date. The concept of sustainable benefits does not necessarily mean the continuation of donor-funded activities. Rather, sustainability means that donor-funded initiatives, systems and processes will continue to generate a flow of benefits after donors have finished their inputs to the project.
- Managing sustainability is a process aimed at maximising the flow of sustainable benefits. It should be an on-going process, and needs to be monitored, reviewed and updated as circumstances change and new lessons are learnt from experience.

Sustainability is a key attribute of risk assessment in projects. A project that is assessed as having a weak sustainability at selection, design or implementation, will be riskier in achieving its objectives than a project that is assessed as likely to have a high sustainability.

4.2 Considering sustainability in land administration projects

Land administration projects that have extensive land titling are generally long, some over 20 years. This makes the assessment of sustainability at selection and design even more critical than otherwise be in determining whether a project is likely to be sustainable. The critical determinant of whether to invest in a project or not should be whether or not it is sustainable. Sustainability considerations can be included in *Country Strategies* to ensure:

a. an early focus;

b. a strategy for progressive engagement; and

c. mechanisms for building absorptive capacity.

The following sections outline what, where, when and how sustainability should be tested. Adherence to these guidelines could make the difference between a successful project and an unsuccessful project.

A sustainability checklist, presented in Appendix 5, would assist the selection, design and implementation of sustainable land administration projects.

4.3 Sustainability consideration during selection and design

The critical tests for sustainability when selecting a project are:

- Is the PG committed to land titling and/or land administration as a way to overcome a fundamental constraint to development that it wants addressed?
- Does this political commitment extend to the PG's acknowledgement of the need for a long-term commitment to RCF after the donor inputs finish?
- Is there a large stakeholder demand for the project?
- Are the target beneficiaries likely to participate and "own" the project?
- Are the target beneficiaries willing to pay for the services, be they small?
- Is there sufficient capacity building of all stakeholders, and is their absorption capacity recognised?

If the answer to one or all of these questions is negative, donors should be extremely careful in supporting land administration projects. If still undertaken, the chances are the project will be a poor investment and likely to fail.

4.4 Sustainability during implementation

If the above conditions for selection have been satisfied and the project is underway, additional measures could be applied to maintain and improve the likelihood of sustainability during implementation and beyond. These include:

- Undertaking regular M&E, which would have been established in a good project design;
- Establishing and promoting stakeholder commitment to improvement;
- Identifying and providing incentives to stakeholders to bring about improvement themselves;
- Promoting stakeholder ownership of the project;
- Replicating and diffusing the accepted improvements quickly to other areas in the country;
- Analysing any mistakes for their lessons and disseminating this information to all stakeholders; and
- Promoting the philosophy that improvements to the project initiatives need to continue after donors finish their inputs so as to continue to realise the long-term benefits of the project.

Additional practical measures for sustainability during implementation could be promoted by:

- Establishing affordable (to the executing agency and the landholder) and appropriate land titling methods, preferably before the project commences or at least during early implementation; and
- Harnessing stakeholder commitment to change, especially those activities linked to sustainability.

Strong stakeholder ownership of the change process during implementation is a key test for whether that commitment would continue post-project.

4.5 Sustainability after donor funding has finished

Projects often fail or are weakened because insufficient attention has been given to the maintenance of assets and the need for RCF post-project. This is probably the single-most common reason for failure of aid projects. A recent review by AusAID *Asset Maintenance: The Impact of the Underfinancing of Recurrent Costs*, Quality Assurance Series report No. 13, 1999, highlighted this important issue for sustainability.

Asset maintenance and the allocation of enough RCF post-project, are particularly important in land administration projects because of their long-term nature. It is useful to distinguish at least four classes of assets that require maintenance and funding support post-project:

- Physical infrastructure, such as buildings: typically fixed assets;
- Equipment, such as computers and vehicles: typically movable assets;
- Human capital and various form of intellectual assets, such as technically qualified and experienced staff: typically highly movable assets; and
- Processes and systems: typically procedural assets.

Maintenance of all these assets is important if the flow of benefits is to continue for a very long time. Buildings need maintenance, computers and vehicles need to be replaced, staff need continual and refresher training, and the incorporation of improvements into procedures must be retained. The funds for these activities need to be sourced regularly through annual budgets so that proper maintenance can occur.

Land services generate revenue. This provides opportunities to hypothecate (pledge) some of the monies collected to asset maintenance and provision of RCF. Whilst this may be a difficult concept in some countries, where all revenue collected by the line departments automatically goes to the treasury by law, there may be a good case to establish changes to the *status quo* if there is a strong political commitment to the project. Hypothecation of part of the revenue

collected in services and their use for asset maintenance and RCF, would greatly improve the sustainability of land administration projects, provided other supporting conditions exist.

In addition to hypothecation, it may be possible to develop user-pay arrangements. Commercialisation, corporatisation, and privatisation of public sector activities to remove funding responsibilities for operations and maintenance from government receipts, and thereby enhance incentives to properly maintain facilities held in private ownership, are some avenues for consideration.

4.6 Other factors to consider in improving sustainability

Other factors to consider in improving sustainability are:

- *Longer projects:* the need to consider donor assistance beyond the normal 3 to 5 years for some generic assistance points, particularly land titling, institutional strengthening, and improving governance. Pre-project activities, such as a pilot phase and/or a 1 to 2 year inception phase, may be a useful design approach in some instances. Post-project, small amounts of assistance in specific areas may still be required;
- *Partner government commitment:* funding support is essential;
- *Support of users:* the strong support of landholders and customers is essential for initial land titling, and for increasing subsequent land transactions, and improving service delivery;
- *Good governance:* good governance and transparency are necessary to achieve customer and landholder support and to ensure there is no exploitation;
- *Dissemination of information:* wide dissemination of information on land laws, regulations and decrees to customers and landholders is necessary;
- *Access to services:* if landholders/customers cannot easily access the formal government services there will be a strong tendency to continue to use the informal system;
- *Policy and regulatory framework:* the necessity to gain agreement to policy and regulatory changes from all key stakeholders and powerful interest groups, and for agreed changes to be authorised and implemented;
- *Organisational integration:* awareness of the danger in having project activity off-line rather than integrated into the normal institutional and management structure;
- *Focussed technical assistance and capacity building:* the necessity for TA to focus on building the capacity of all stakeholders, skill transference and fostering commitment, rather than “doing” the actual tasks;

- *Benefit identification:* the need in all cases, but particularly for land titling, for careful consideration to be given to ascertain the type of benefits that are anticipated, which stakeholder groups are the beneficiaries, in what time frames the benefits are estimated to occur, and how realistic are the underlying assumptions relating to the quantity and probability of benefits occurring;
- *Monitoring and evaluation:* consideration should be given to establishing a M&E culture within the executing agency, and for it to extend beyond the life of the project;
- *Training:* training, training of trainers, and training manuals are needed;
- *Technology:* new technology may be required in some circumstances but careful attention is necessary to ensure that it is appropriate, can be easily maintained locally, and that RCF is likely to be available for hardware, software, training, and specialised services. A very cautious approach should be considered where computer systems are to be used for "mission critical" processing;
- *Social and gender:* it is important to understand the cultural, gender and social aspects and to ensure that they are taken into account, particularly in land titling. Land titling improves women's social advancement. The M&E needs to ensure that there is no adverse social and gender impacts during titling; and
- *Environmental impact:* the rights and restrictions allowed by land tenure and rights certificates/titles can indirectly affect, positively or negatively, the environment.

4.7 How sustainability strengthens with prolonged demand for services

Demand-led land titling, and the executing agency's ability to supply the services at a reasonable cost, is a safe guide as to whether project initiatives would be sustainable post-project. The key checks are:

- A strong government and agency commitment to land titling and effective land administration,
- A strong user (landholder, community, and business) demand for land titling and subsequent transaction recording (ie. the demand side is strong); and
- A capacity to establish an effective land agency and private sector (where the private sector supplies some services); ie. the supply can meet the demand.

For donors it is necessary to see that the project establishes:

- Affordable (to the executing agency) land titling methods and financing mechanisms so that the PG can continue land titling and offer efficient, affordable and "valued" (to the customer) land transaction services, post-project;

- A training plan, trainers and budget to provide the required skills;
- Capable middle and senior managers committed to the program objectives and their continued improvement;
- A transition plan and a phasing-out arrangement towards project completion; and
- Access to financial services where the title can be used as collateral.

For the full range of economic benefits to be achieved it is important to have the title retain its value. Title value largely depends on user confidence in the integrity of the rights recorded, and their enforceability, together with efficient land administration.

4.8 How affordability affects sustainability

Sustainability would improve if the fees and other charges paid by users are widely affordable by the community. There are two important issues here that bear on sustainability. First, in Chapter 3, it was shown that at the beginning of a project initial per unit costs are high, which gradually fall over time as higher volumes of titling are achieved. This has been the case in the TLTP. Second, affordability needs to be considered in terms of the income of the users, which is generally low in PCs. Usually the majority of people seeking titles have a meagre cash income. Affordability can be improved if the following are closely examined early in the project cycle:

- Appropriate low-cost methods of land titling;
- Technical options for measuring parcel boundaries and compiling parcel maps;
- The necessity for a high level of subsequent land transactions to increase revenue to assist the financing of land titling, and to preserve the original titling investment;
- The potential for improving land office procedures and allocating staff savings to land titling;
- The potential of having a sliding subsidy scale based upon the landholders' ability to pay, or a system of progressive payment spread over a number of years; and
- Prioritised target groups based upon the greatest need for land security, and the need to produce quick and tangible economic benefits, both to the landholder and to the government.

If the initial cost of land titling is not sustainable post-project, then the desirability of doing the project in the first instance should be questioned. This should be particularly so if there will still remain many years of land titling post-project.

5. Good Practice Guidelines

5.1 What is good practice?

Good practice is something that works well and is successful. Good practice land administration projects are well designed, professionally managed, achieve their objectives, and are sustainable.

5.2 Attributes of good practice land administration projects

Good practice land projects will have the following attributes:

- A clear development objective;
- Simple design;
- Minimum cost of operations;
- High level of asset maintenance and RCF support post-project;
- Appropriate technology;
- High affordability by users;
- High structural completeness;
- High operational efficiency;
- High sustainability;
- Transparent operations;
- Highly satisfied landholders and other user stakeholders;
- Equity and fairness in adjudication;
- Certainty in outcomes;
- Preservation and enforceability of legal rights in land;
- Minimal regulations and state interventions;
- Opportunities for the private sector;
- Highly committed executing agency; and
- High PG political support.

Donors and PGs should consider the above attributes in their selection, design and implementation of land administration projects. Whilst it may be difficult to reach or achieve all attributes in all projects, nevertheless the intent in approach and method, should heed these attributes. Adhering to these attributes would lead to low risk–high payoff projects.

5.3 Good practice guidelines at selection and design

At selection and design, the key consideration should be testing whether the following apply at a high level:

- Strong political support from the PG;
- Good understanding and strong support from the proposed executing agency;
- Strong commitment by the PG and the executing agency to post-project asset maintenance and RCF support;
- A strong user/landholder demand;
- A simple project design with a clear development objective;
- Interest by the private sector; and
- A strong case for the selection of the proposed and appropriate technology.

At appraisal of the draft project design by an independent team, these attributes should again be thoroughly tested. The project should be recommended for implementation only if all of the above conditions are satisfied at a high level.

5.4 Good practice guidelines at implementation

Once the project is underway a number of measures can be taken to ensure success during the life of the project, while donor funds are still available, and afterwards in the post-project stage. During implementation, the focus should not only be on achieving outputs and outcomes, but also on the larger and more difficult issue of sustainability (post-project). The stage needs to be set for sustainability before and during implementation. At implementation, apart from maintaining the interest and support of the PG and the executing agency, the following are important:

- Focussing on sustainability;
- Maintaining assets, including human skills, and focussing on future recurrent costs;
- Minimising per unit costs;
- Achieving high structural completeness and operational efficiency;
- Creating opportunities for all stakeholders to “own” the project;
- Ensuring that the operations are transparent, equitable and fair; and
- Liaising with other government departments in simplifying legal and procedural requirements concerning land.

Regular, and perhaps six-monthly M&E, should be the key tool in assessing the progress of the project. It is important that during project achievements also focus on setting the stage for sustainability. A common failing in poorly designed M&E is to focus only on achieving physical outputs, whereas the more important but less tangible achievements, such as reducing risks towards a sustainable project, are entirely ignored. Good M&E in land administration projects is particularly important for assisting sustainability because of the long-term nature of these projects.

5.5 Good practice guidelines post-project

Post-project, when the donors' inputs have finished, is the most difficult stage in managing sustainability of land administration projects. Yet this is the stage that should have had the greatest focus during selection, design and implementation. Throughout the life of the project all inputs have gone into making the project sustainable, ie. making the system self-perpetuating and successful. If the project is not found sustainable after many years of implementation than it has failed the key test of success. For example, the TLTP is regarded as sustainable when the above test is applied.

The checklist for sustainability in Appendix 5 should be used as the good practice guidelines for sustainability post-project. The guidelines focus on all aspects of the project cycle and are summarised under the following headings:

- Demand and commitment;
- Structure and standard;
- Benefit assessment (social, gender, financial, economic, environment);
- Policy and regulatory;
- Executing agency;
- Staffing;
- Training and capacity building;
- Technology;
- Budget and financial support; and
- Services.

Adherence to these guidelines would ensure that all measures have been taken to improve sustainability post-project. This way the chances of achieving sustainable land administration projects would be greatly improved. The ideal should be to achieve low risk–high payoff projects.

The responsibility for sustainability post-project lies with the PGs and the executing agency. Their total commitment and support in all the areas outlined above would assist in achieving sustainable projects.

6. Conclusions

AusAID assists partner countries to reduce poverty through sustainable development. Land administration projects are ideally suited for this. They have the potential to improve the social and economic lives of millions of poor people. At the same time land administration projects make a substantial contribution to a partner country's economic growth.

This study focussed on sustainability, affordability and operational efficiency of land administration projects. A set of good practice guidelines was developed so that AusAID can undertake future projects more effectively. Sustainability is critical to the success of all development projects. In land administration projects sustainability becomes even more critical because of the long-term nature of these projects, with some lasting over two decades.

The initial registration of land rights through land titling, and improving land rights management, is a high-cost long-term operation. In some countries projects start from a very low base and improvements in both structural completeness and operational efficiency are required. Undertaking land titling projects require a long period of TA, perhaps seven years or more, and usually a much longer loan period, perhaps 20 years.

Generally the PG obtains a long-term loan from a multilateral lender. This is then co-financed with TA support from a bilateral donor, such as AusAID. The TA usually finishes well before the loan term. This implies that before the TA and the loan finishes all requirements for sustainability have been addressed and the PG can "go it alone" thereafter. This is a critical assumption.

The amount and duration of external inputs required to achieve sustainability would primarily depend on the country's start base, and the number and types of areas to be improved. These are in turn determined by an understanding of the complexities, the development assistance options, PG affordability, and the executing agency commitment, all underpinned by sustainability considerations.

The loan for land titling enables the PG to provide a subsidy to landholders of up to 90 per cent. Post-loan there will still remain large areas of land to be titled. The difficulty is how to continue affordable land titling and land services, both to the executing agency and the landholder, to ensure that the full benefits of titled land are retained. If the PG cannot afford to continue land titling and maintain efficient land services post-project, then the benefits stream and the value of the initial investment would be significantly reduced.

Affordability to the landholder is a key determinant in attracting landholders to register their land, and to keep it registered in a government land office. Other factors that affect this are: services seen as value for money, official fees being charged only,

easy access to a land office, and transactions completed quickly. Affordability needs addressing throughout the project cycle to achieve successful projects.

Sustainability is critical to good practice land administration projects. The major areas for sustainability consideration are:

a. continued commitment by all stakeholders,

b. achievement of affordability,

c. maintenance of the improved capacity, and

d. provision of sufficient RCF for:

    i. land titling post loan;

    ii. effective operation of the land rights management systems and services;

    iii. retaining and building staff knowledge and skills; the intellectual capital;

    iv. maintaining the land services procedures and systems; the organisational "know-how";

    v. maintaining and replacing technology and equipment;

    vi. provision of specialised services; and

    vii. maintaining assets and other physical infrastructure.

Improving structural completeness occurs at the national level. Improving operational efficiency is undertaken at the decentralised land offices in provinces/districts. The establishment of a number of "model" land offices to test new approaches and demonstrate benefits, has considerable merit for future designs. Successful models could be used for replication and diffusion.

Customary land has a large share in the South Pacific countries. Unlocking it for social and economic development is a major challenge. Customary land has significant disputes, even when not titled or leased. This is exacerbated when investments are mooted. Secure family and community land rights are needed by the urban middle-class who are unlikely to return to their villages, or the low income urban workers who cannot afford to go back to their villages after employment ceases. Testing alternative approaches to register family and community land rights has considerable merit where there is a strong demand and consensus. Customary land issues are complex and unlikely to be resolved easily or quickly.

Good practice guidelines have been developed to improve sustainability considerations during selection, design, implementation, and during the post-project period. These guidelines should assist all stakeholders, such as AusAID staff, AMCs, PG, executing agencies, target beneficiaries, and other donors in undertaking sustainable, low risk–high payoff land administration projects in the future.

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Improving Access contains a large bibliography.

Appendices

Appendix 1: Terms of Reference

A follow-up study of AusAID's land titling and land administration projects with a focus on sustainability, affordability, and operational efficiency, with a view to developing best-practice methods and guidelines for undertaking future projects.

1. Background

Over the last 15 years AusAID has supported around 23 projects in the area of land titling and land administration at an Australian cost of about AUD130 million. Over 70 per cent of this amount went towards projects dealing with large-scale land titling and land administration reforms. The major projects supported were in Thailand, Laos and Indonesia co-financed with the World Bank. Together with recipient government and World Bank funding the total project value of all 'land' projects is about AUD925 million of which 95 per cent is associated with the large land titling projects co-financed with the World Bank.

AusAID recently published a review of land titling and land administration projects covering projects in nine countries. This report *Improving Access to Land and Enhancing the Security of Land Rights: A Review of Land Titling and Land Administration Projects, Quality Assurance Series, No. 20, September, 2000*, focussed on project effectiveness, and identified lessons for incorporation in future project designs. The experiences of other international agencies were also assessed. The report identified the need to assess the costs, benefits and affordability of land titling and land administration projects as a logical next step towards developing best-practice methods and guidelines for application in future projects.

At the Program Quality Committee (PQC) consideration of the above report a recommendation to undertake a follow-up study, based on the issues arising out of that review, was approved. It was thought that the follow-up study would assist further policy development and program improvement in the sector. The details of the follow-up study are outlined below. This study was funded through the Agency's Development Research Activities facility.

2. Issues and Scope for the Follow-Up Study

2.1 Cost of Land Titling and Land Administration

The main cost for all recipient partners is for the systematic first registration of land. However, there appears to be little hard data on the cost of land titling. For example, the World Bank operational audit of the Thailand project noted the need for more reliable cost data for application to other projects.

For AusAID (and other donor agencies) the cost information would be useful for several reasons:

- To predict with some certainty the recipients' affordability and their implementation costs in projects;
- To test a key element of project sustainability by predicting the future recurrent costs by partners and their ability to maintain project-supplied assets, both physical and human capital;
- To assess the cost of using different approaches or different technologies at project design and thereby ensuring an appropriate design selection; and
- To compare with other donors' costs for benchmarking purposes. Cost per title are sometimes quoted in documents but these are generally obtained by identifying specific project costs, allocating a percentage of other project costs as overheads, and dividing by the number of parcels. The resulting figures are of limited use for comparative or predictive purposes.

It would be relatively simple to develop cost estimates for land titling depending on the technical approaches used. The project cost could be broken down so as to clearly identify those costs associated with field adjudication, boundary definition surveying, mapping, office work, support work, and once-off assistance (eg. the AusAID contribution, training, etc.). Care would need to be taken that the costs associated with buildings, institutional strengthening, imputed valuation etc. were treated appropriately.

Also very little work has been done on the costs of establishing and maintaining effective and efficient land administration systems. There is a need to know these costs in relation to particular types of systems as they have major implications for recipients' affordability, recurrent cost financing and project sustainability.

2.2 Affordability

The affordability of a country's land titling and the land administration systems and transactions strongly affects its continued sustainability. It is very difficult to examine affordability unless:

- The base costs of conducting and maintaining the various methods of land titling and land administration are known;
- There is information on the revenue stream from transaction fees; and
- Some criteria and acceptable values for 'affordability' for a particular country and in a particular set of circumstances are developed. It is assumed that if it is affordable then this will be an important aspect of sustainability.

If a range of values of affordability can be determined for a particular country then it should be possible to determine if present or proposed methods of land

titling and land administration are appropriate. This factor needs to be taken into account in project design.

2.3 Benefits

Both economic and social benefits flow out of land titling and land administration projects that can have a major long-term impact on development. The major benefits claimed for the land titling projects are that the title enhances security of tenure, increases access to credit, enables capital improvements to occur, and enables greater environmental conservation of the land resources. Good land titling and land management results in increased productivity, higher incomes, and better pricing of land values, creating an enabling environment for investment and economic growth to occur.

Economic studies conducted in Phase 2 of the World Bank's Thailand project concluded that:

- Farmers with title deed enjoyed reasonably high security of tenure;
- Depending on the province, farmers with title who provided land as collateral were offered between 52 and 521 per cent more bank credit than farmers without;
- Untitled land was 43 to 80 per cent less valuable than titled land;
- Capital stock and inputs were substantially higher for titled land, except in one province where the results were not statistically significant;
- Titled land was more likely to be improved; bunding was 20 to 31 per cent higher; stump clearance 9 to 14 per cent more frequent; and
- Overall land productivity was 12 to 27 per cent higher on titled land.

The World Bank operational audit noted that these results provided powerful evidence in support of the project's relevance to Thailand's development needs. It also noted that the findings have been internationally influential. The data from Thailand has been used in the designs of Laos, Indonesia, and the upcoming Philippines project.

2.4 Best-Practice Methods and Guidelines

Land administration and titling projects produce a great amount of useful technical material that can be applied elsewhere in other project designs. Much of this material is reasonably country independent. Most of this information, however, is not a "deliverable" to AusAID by the managing contractor and hence not held within AusAID. Each new project essentially has to recreate this knowledge base at considerable time and cost.

AusAID would benefit if the material from various past and present projects could be drawn together into best-practice methods, and made available in a form easily accessible to users, including AusAID staff, managing contractors, individuals and other donors. Apart from helping to disseminate this knowledge, it would also raise the competency level of more companies and make the bidding for managing AusAID's land projects more competitive.

The material could also be synthesized to produce a number of guidelines for undertaking new projects. The FAO has produced a good practice guideline for agricultural land leasing arrangements which could be used as a model. The FAO is interested in collaborating with AusAID on the development of land titling guidelines.

3. Objectives of the Study

The study will examine the following:

- Assess the costs, benefits and affordability of land titling and land administration projects; and
- Develop best-practice methods and guidelines for application in future projects, with a view towards improving the selection rigour, design quality, and the longer-term sustainability of project outcomes.

Overall the findings if this study will contribute towards better approaches to land titling and land administration projects undertaken by AusAID. The information will assist the design and implementation of higher quality projects, and assist the sustainability and the development impact of Australian and recipients' investments.

From a preliminary analysis some of the more significant past and current activities/projects that may provide useful information for this study are listed in Annex 1.

4. Justification for the Study

AusAID's undertaking of this study is justified under four grounds:

- A review of current and future country strategies in a number of key partner countries, including Indonesia, Philippines, Vietnam, Laos, PNG, Solomon Islands, and Kiribati, all reveal a clear focus on the development of the rural sector (in addition to a focus on other key sectors) as a means of alleviating poverty. Effective land titling and land administration projects breakdown rigid land ownership and land management structures, and create an enabling environment for rural development to occur. In the development literature this issue is cited as a critical constraint to development. Strong positive correlation exists between landlessness and poverty;

- The current and planned land titling and land administration projects have a total project value of AUD268.3 million of which the Australian contribution is projected to be AUD54.7 million (the remainder to be contributed by partner donors such as the World Bank and recipients). This volume of investment is considered significant in the Agency's portfolio. It also indicates the recipients' priorities and commitment to future projects in the land titling and land administration sector;
- The planned projects are to be implemented in Indonesia, Philippines, Laos, PNG, Solomon Islands and Kiribati. All are important partner countries for Australia. In addition, AusAID plans to undertake longer duration projects than previous projects, indicating a longer-term policy and programming commitment. For example, at the completion of the current land administration and management project in the Philippines (total project value AUD17.2 million), a phase 2 is planned to run for around 20 years; and
- The follow-up study will assist AusAID to focus on and deliver higher quality projects and programs in land titling and land administration than previously. There will be more dialogue and interaction within the Agency in developing best-practice methods and guidelines. These will assist country program managers in the development of appropriate designs, setting-up better selection criteria, and provide a more rigorous implementation path, leading to higher quality and lower-risk projects than has been possible hitherto. The wide consultations already undertaken within the Agency and with other donors in the first study, confirmed that this was a worthwhile area for further study.

5. Approach and Method

The focus of the overall study will include countries already mentioned with concentration on Indonesia, Philippines, Laos, PNG, and the South Pacific countries where land titling and land administration projects are current or planned. The approach and method will involve the following key steps with some refinements along the way as the study progresses:

- The costs of land titling and land administration will be determined from past and current projects, both AusAID-funded and that by other donors;
- The information will be gathered from project reports, managing contractors, recipient governments, and other donor agencies;
- The information will be collated, compared, evaluated and assessed against the study objectives;
- Guidelines for the selection of appropriate, low-risk, high-payoff projects will be developed;

- Methods and preparation guidelines for designing a new generation of land titling and land administration projects, to be undertaken by the Agency in the future, will be developed. The underlying principle when developing these will be to maximise the potential long-term sustainability and the development impact that can be achieved from the projects; and
- Consultation on these methods and guidelines will be undertaken with the other donors active in land titling and land administration, including the World Bank and FAO.

The result of the above will be a draft set of best-practice methods and guidelines for assessing the appropriateness, costs, benefits, and trade-offs of large land titling and land administration projects. Following from these:

- A project monitoring guideline will be developed; and
- After in-house approval it is intended that the methods and guidelines will be incorporated into AusGUIDE guidelines.

The study will include the following main phases:

- A comprehensive desk study first which will include a review of documents and consultations with managing contractors and other donors;
- Consultations within AusAID on the draft methods and guidelines which will include selected desk officers and Advisers; and
- A short fieldwork thereafter to a few selected projects, and to consult with recipient agencies and Posts, to confirm evidence, clarify data, observe at first hand the workings of the project, and to test the veracity and validity of the draft best-practice methods and guidelines prepared as part of the desk study.

During the course of the study a number of draft documents will be prepared on which comments and feedback will be sought from:

- An AusAID peer review team of about nine persons from various areas;
- An outside review team of three eminent workers in land projects;
- Other donors such as the World Bank and the FAO; and
- A large number of other Agency staff through consultations and seminar presentation.

As with all Performance Information and Assessment (PIA) Section reports, the final report will be submitted to the PQC for comments and approval. After this the report will be published in AusAID's Quality Assurance Series.

6. Study Team

The team will consist of:

- Dr Ken Lyons, a consultant technical specialist who undertook *Improving Access* study; and
- Dr Satish Chandra, an evaluation specialist and task manager, PIA.

7. Outputs

The main outputs from the study will be:

- An assessment of the costs, benefits and affordability of land titling and land administration projects;
- A set of best-practice methods and guidelines for undertaking future projects in land titling and land administration;
- A report published as an AusAID Quality Assurance Series report and placed on the Internet; and
- An Agency-wide briefing seminar for staff.

8. Timing

The study is expected to begin in March, 2001 when the consultant is expected to be available. The final report is expected be submitted to the PQC for consideration around July, 2001. Once approved by the PQC the report will be published immediately thereafter.

Annex 1: Some of the Activities/Projects Considered for Analysis in this Study

Country	Dates	Activities/Projects	Total Value (GOA+PG+WB, $m)
China	96/99	Hainan Land Use Information System	11.5
Fiji	98/01	Airborne Geophysical Survey	4.3
Indonesia	01/06	Land Administration—Phase 2	90.0
Indonesia	94/01	Land Administration	125.8
Indonesia	99/02	Coral Reef Rehabilitation and Management	10.5
Kiribati	96/00	Urban Planning and Development	1.6
Laos	95/97	Land Titling—Pilot Phase	2.1
Laos	97/02	Land Titling—Phase 1	30.8
Philippines	93/97	Technical Assistance to Physical Framework Plan	4.9
Philippines	89/93	Natural Resources Program	101.2
Philippines	00/02	Land Administration and Management	17.2
Philippines	90/93	Remote Sensing	10.4
Philippines	96/01	Regional and Municipal Development	66.7
Pacific (reg)	96/00	Pacificland—Phase 2	2.0
PNG	94/00	Land Mobilisation	17.3
PNG	93/97	Kandrian Gloucester Regional Development	15.8
PNG	91/95	PNGRIS—Resource Information System	2.8
Solomon Is.	00/05	Institutional Strengthening of Land Administration	4.5
Solomon Is.	94/98	Forest Resource Inventory	4.5
Thailand	90/94	Land Titling—Phase 1	122.5
Thailand	89/94	Land Titling—Phase 2	119.8
Thailand	94/99	Land Titling—Phase 3	333.1
Vanuatu	89/95	Forest Inventory Survey	2.3
Vanuatu	95/00	Land Use Planning	5.0
Vietnam	94/97	Hanoi Planning and Development	3.3
Vietnam	97/99	Land Management (WB)	0.4
Vietnam	93	Land Management (UNDP)	0.7

Key: GOA Government of Australia
PG Partner Government
WB World Bank

Appendix 2: Questionnaire for Field Assessment of Land Titling Projects with a Focus on Sustainability, Affordability and Operational Efficiency

A: Land Titling

Team Composition

1. How are land titling teams organised (ie adjudication, surveying, documentation and registration, customer relations service (CRS))?
2. What is the number and composition of each of the different types of teams?
3. Are the teams all land department staff or are there some contractors?
4. Are they attached to a local land office or are some staff drawn from that land office?

Methodology

5. How is CRS carried out? Is a lot of time and effort spent in ensuring that landholders are fully informed of the process, their rights, answering queries?
6. Before selecting or going into an area was a scan done to ascertain if there were any major land disputes or issues? Or if there was customary land? Or any special social or gender aspects that were unique to the area and needed special attention?
7. How is adjudication carried out? Are respected community members involved? How are disputes resolved?
8. How is boundary measurement carried out and what plans and maps produced?
9. Who issues the title? Do the records immediately become operational in the area land office?
10. Are base maps or air photomaps required before adjudication? Who produces? What is the lead-time?
11. What per cent of parcel might be left untitled because of problems?
12. Are previously titled parcels incorporated into composite land parcel maps?
13. How long does it take for the start of CRS in an area until titles are issued?
14. Is CRS carried out after titles are issued to see if customers are happy?

Productivity

15. How many parcels or titles does each team handle per month?
16. What is the average size of a land parcel?
17. How many month per year is each team operational?
18. How many teams of each type are operational per year and what is the total number of titles issued?
19. How is quality assured?
20. How have the team sizes, composition, and annual number of titles issued varied over the life of the project?
21. Is there some form of reward and incentive system for teams that achieve more than required targets?

Areas Done

22. What are the target groups? eg. urban or rural or peri-urban? Poor and small landholders etc?
23. How are areas selected?
24. How many titles are still to be issued?

Costs

25. What is the full cost of issuing a single title?
26. How is the cost calculated?
27. What are the approximate costs of each part (eg plan, management, training, CRS, adjudication, surveying, etc.)
28. How has the cost varied over the life of the project?
29. What is the landholder charged for a title? Does it vary based on area, value etc?
30. Is the fee affordable by a low income or poor landholder?
31. What per cent of title cost is covered by the government as a subsidy or long-term loan?
32. What is a typical distribution of household income and expenditure in a typical area?

Budget

33. What is the annual budget required for land titling?
34. What is the approximate breakdown of the annual budget?
35. Is it difficult to get the required budget?
36. Is the loan still used to supplement the budget?
37. When will the loan cease?

B: Sustainability

Budget

38. When the loan ceases will it be more difficult to get the required budget? Will it have any major effect on land titling program and the annual number of titles issued per year?
39. How many more years are required to complete titling throughout the country? Is budget allocation seen as a problem?
40. What percentage of the annual budget is now required for non-direct titling activities such as, management, training, procurement, buildings, annual maintenance fees etc?

Institutional Arrangements and Capabilities

41. Is land titling a permanent mainstream function of the Department or a separate project outside the mainstream organisation?
42. If it is mainstream has it always been so? When and how was it changed from an outside project to be an integral part of the organisation?
43. Are staff, both junior and senior, posted in and out of the project?
44. What is the approximate movement of staff in and out of the project per year?
45. What training is provided to staff before joining the project? Who provides the training? Who trains and the trainers?
46. Is being part of the project seen as “good career experience” for staff? Do staff wish to be a part of the project?
47. What monitoring and evaluation procedures are in place to ensure that staff are suitably trained, they perform well, production targets are achieved, and the work is of high standard?
48. What infrastructure had to be put into place to establish the management, trained staff etc. for the project?

49. How necessary was the Australian technical assistance to assist in building up the skill base? Was the total time of Australian support necessary or could it have been shorter?

50. Did the land registries come under the authority of the Lands Department or another ministry or agency?

51. During the life of the project was there a great deal of policy or regulatory changes necessary? Or carried out?

Political and Top Management Support

52. It is understood that there was a strong political and top management support; what was the secret to firstly obtaining this, and keeping it for over the life of the project?

53. As well as obtaining this support at the national level, was it also necessary to obtain and keep it at the provincial and lower levels?

Landholders and the Community Interest and Support

54. Was the level of this support always high? Did it have to be built up? What were the main elements in keeping a strong level of support from this aspect?

55. Were different community groups and areas seeking to have their area included in the project earlier than was programmed?

Benefits

56. What did the landholders think the benefit they obtained were? Were they mainly social, eg. security of land tenure, or mainly economic, eg. improve their house? Were there any changes from the without project situation in the way they obtained a living from the land or borrowed money more easily?

57. Was any CRS effort devoted to explaining to landholders what they could do with their title, and the benefits that could be achieved? eg. How they could use it for security of a loan?

58. Was any CRS effort devoted to explaining to banking and credit institutions, that were in the area were a lot of farmers had obtained secure titles, and who may be interested in obtaining loans?

59. Were any of the credit institutions interested in dealing with small landholders? Were credit institutions active in all the areas being titled?

60. Were any economic analyses done for any phase of the project?

61. Were any other economic analysis done other than the major one during a phase 2 of the Thailand project?
62. Were any economic or social baselines established that were not used?
63. Are any economic analyses planned for phase 4 of Thailand project?
64. What did the Lands Department consider the major benefits of economic analyses to be?
65. What did the Treasury or the Economic Development Department consider the major benefits to be?

Land Registration after Initial Titling

66. Before the large-scale land titling occurred in an area what percentage of previously titled land was re-registered at a government registry when it was bought or sold, or inherited, or a mortgage taken out?
67. Now that large-scale land titling has occurred in an area, has that percentage increased?
68. What are the main reasons for people wishing to reregister or not reregister?
69. How affordable are the fees for the low-income earners?

Linkage of Land Titling with Other Land Administration Activities

70. How closely does the land titling operation work with the land registry?
71. Are composite land parcel maps kept up-to-date in the land registry?
72. Do the land registry and the survey area use the same unique parcel identifier?
73. Are the same cadastral maps used for taxation purposes?
74. Is there a close cooperation between land taxation, and land surveying and registry to share data?
75. Does the agency responsible for land use zoning and its monitoring use the land parcel maps and other Land Department and registry records?

Service Provision

76. Has extending the area of land that is titled led to better record spaces and a better provision of service to customers and landholders?
77. Has the quality of service improved? Has the time required to conduct services reduced?

Apendix 3: Characteristics of Generic Development Assistance Areas for Land Rights Registration and Management

Development assistance area	Costs			Direct beneficiary	Benefit type		Benefit quantity				Major challenges during implementation	Major elements for sustainability
					Social	Economic	Social		Economic			
	During project	Post project	Overall				During project	Post project	During project	Post project		
Initial land titling	H	H	H	Landholder	Ownership security	Land value increases. Title able to be used as collateral. Household income improves.	H	H	M	H	Establish appropriate and affordable processes that have community support. Establish trained titling teams, manage the processes, produce quality titles.	An affordable process to the Agency, sufficient RCF and staff. Titling is part of normal tasks. Fees affordable to landowner; making re-registration desirable. No/small unofficial fees and high transparency.
Increasing subsequent registration	S	S	S	Agency	Current records assists security.	As above, but not as much. Increased fees to government. Increases confidence in titles as collateral.	M	L	S	H	Making it attractive for landholders to register land transaction in a government land office.	Maintaining the incentive for landholders to re-register.
Improving records quality	M	M	M	Agency	As above	As above	S	M	S	H	Establishing enthusiasm for a necessary job that will be slow and requires attention and skill. Establishing transparent processes and gaining community confidence. Establish process to resolve anomalies rapidly and that offer fair compensation if necessary.	Providing an incentive to an agency/staff to continue this long-term task. Allocation of necessary staff/ budget.

Development assistance area	Costs			Direct beneficiary	Benefit type		Benefit quantity				Major challenges during implementation	Major elements for sustainability
					Social	Economic	Social		Economic			
	During project	Post project	Overall				During project	Post project	During project	Post project		
Improving procedures and service delivery	S	S	S	Landholder	Rights registered quickly, correctly. Customers more satisfied.	Saved customer time. Economic activity can start earlier.	M	H	S	H	Agency/staff acceptance of changed work practices.	Ownership of new work practices by staff/managers.
Improving governance	S	S	S	Landholder	More secure community; less open to exploitation.	Increased community and business confidence in agency, value of title. Encourages investment.	M	H	S	H	Find incentive and agency/staff commitment. Establish transparent processes. Reduce unofficial fees.	Staff receive reasonable salaries. Incentives and penalties to foster good governance.
Improving policy and regulations	S	S	S	Agency	Contributes to better governance and services.	As above.	S	M	S	H	Achieving agreement amongst key stakeholders.	Having policy authorised and implemented.
Strengthening the institution	S	S	S	Agency	Contributes to better governance, services and land rights security.	As above.	S	M	S	H	Achieving agreement of stakeholders and achieving improvements.	Commitment to maintain improvements with ability to continue them. Appropriate asset maintenance and RCF.

S = small; M = medium; H = high.

Appendix 4: Explanatory Notes on Figure 1

Figure 1A

Once off establishment costs (curve a) will build up rapidly. This will continue at a reasonably intense level, but within the absorption capacity of the agencies, and then decrease as the main structural elements and operational procedures are established. Establishment costs may then continue at a low level, mainly for a small number of TA in specific areas and training.

Once off land titling operational costs (curve b) will generally not commence until a certain amount of establishment has occurred. There will then be a gradual increase as the initial titling procedures, community involvement, initial adjudication and surveying teams are recruited, trained and deployed, and procedures tested and refined before the first wave of expansion occurs. As both the technical procedures, and the organisational ability to recruit, train and deploy teams increases, the number of teams will increase and then plateau for some time while the main work of land titling occurs. The main effort of land titling will commonly occur with a loan. Before the loan ceases (maybe after 20 years) there will probably be a rundown in intensity to a level that is sustainable by the PG agency without loan funds. As initial land titling draws to a conclusion, maybe a further 30 years, the intensity of effort is likely to further reduce. Cost is directly related to the number of teams deployed and the surveying and mapping methods used.

The on-going operational costs, necessary to support the land administration system to ensure the title retains its value and utility (curve c), will depend upon:

a. the number of land parcels involved;
b. the number of land offices;
c. the customer size;
d. the level of effectiveness; and
e. the budget provided to land offices before the project commenced.

As land is titled, and records transferred to a land office, the volume of work and costs, will increase. Cost will tend to become stable once the great majority of land in a service area is titled, a land market is established, and the number of land transactions becomes relatively stable. This may take considerable time.

Point A, Figure 1A, depicts the time at which the structural framework and the operational efficiency of the land administration agency is considered sustainable, and capable of carrying out further improvements by itself. The TA task would be completed. The number of years that TA may have to be involved would depend upon:

a. the scope of the project and the number of improvement areas; and

b. base level of land administration, the administering agencies, and the land market.

A very low base in both structural completeness and operational efficiency, similar to the start point for the LLTP, would indicate that significant establishment cost, time, and TA would be required. The exact duration for TA will depend upon particular circumstances, but for a low start base it is unlikely to be less than seven years.

The establishment cost and duration, curve (a) Figure 1A, is not highly dependent upon the size or population of the country. Establishing the policy and regulatory framework, gaining agreement and then authorisation, is likely to take considerable time in all circumstances. Increasing the capacity of the organisation will depend upon the size of the organisation, how decentralised it is, and the number of aspects that need strengthening.

Point B, Figure 1A, depicts the time when the loan finishes, and this may be some considerable time after establishment, and the TA has finished. The duration would depend on the requirement of the PG, the volume of land to be quickly titled, and the level and time sought for benefits to flow.

An important consideration for the PG is likely to be the expected income stream from an increased level of land transactions, and a more active land market. The increased income stream is important to sustainability if some of it can be allocated to finance on-going land titling (curve b after point B refers), and asset maintenance (curve c). The exact amounts required will depend on particular circumstances. These financial aspects are vital to sustainability and must be addressed and implemented before the TA finishes.

Figure 1B

The slope of the cumulative land titled curve will depend on the rate at which titles are issued in an area. The time taken to reach a certain level of land title is important when considering the volume of fees and taxes that are likely to be raised by a land office due to a more active land market.

Figure 1C

The income stream will lag the titles-issued stream, as it will take some time for the landholders/land market to become more confident and active. The availability of and the landholder access to financial services will be an important factor in developing the land market. Depending upon the level of fees charged, there is likely to be a critical mass of land that needs to be titled to achieve a reasonable income stream. It will likely take considerable time for the level of registered land transactions to reach the norms of a developed market economy.

Appendix 5: A Sustainability Checklist for Land Administration Projects

The following checklist would assist the selection, design and implementation of sustainable land administration projects. There may be cases were some points in the checklist are not applicable. The checklist should be used as a guide rather than a prescriptive tool.

Demand and commitment

The stakeholders are committed politically, economically and socially:

- The PG and executing agency are committed to land titling and efficient land administration
- The commitment extends to the PG's acknowledgement to provide RCF after donor inputs finish
- There is a large stakeholder demand for the project
- The target beneficiaries wish to "own" the project
- The target beneficiaries are willing to pay for the services
- There are no powerful interest group opposed
- Landholders want titles and land office services to register subsequent land transactions
- Private sector interests (surveyors, lawyers/notaries, banks/financial institutions, developers) exist or are being developed, are supportive of the project and interested in providing services
- The overall expectations of the project are realistic and likely to be met

Structure

The land titling is building on or has associated activities which ensure:

- A very high registration rate for subsequent land transactions
- A very high integrity of land records
- A good standard of governance
- Landholders and financial institutions know how to use titles to provide credit
- Capacity building of all stakeholders within their absorption capacity

Benefit assessment (social, gender, financial, economic, environment)

There are clearly identified benefits:

- Landholders believe the title is worth having

- People, business and financial institutions have confidence in the integrity of the title and in the land administration. They also understand all the uses of a title
- There are many areas requesting that their land be titled and/or land services be provided/improved
- There is evidence that titling will have a positive impact on the society and gender in particular, and there are mechanisms to provide early warning of any adverse impacts
- There is evidence that titling will have positive environmental impact
- The executing agency and the government believe that benefits are likely to be achieved
- Projections of increased fee income to the agency/government are realistic and likely to be achieved
- Realistic plans exist to ensure sustainability of the value of titles issued, continued titling post project, and RCF for the land administration system

Policy and regulatory

The policy framework and regulatory mechanisms are or likely to be in place:

- Policies promote land administration that accords with good governance
- Required policy areas are being included
- Regulatory mechanisms are suitable and there is an appeals mechanism

Executing agency

The executing agency is committed and supportive:

- The project is or will be integrated into line functions rather than be a temporary organisational “add on”
- The project is considered important by senior management. They have a good understanding of the interrelationship between land titling/administration, financial institutions, and the generation of social and economic benefits
- Respected and committed managers are involved and there are clear reporting lines
- Coordination arrangements in the executing agency, and across agencies if more than one, are clear and working
- There is a transition plan for continuation from the end of donor inputs and the end of any loan funds
- The project design addresses absorptive capacity

- Senior and operational managers have a good strategic and operational management (organisational, human, technical, financial) skills and can readily apply these
- There has been success in meeting project objectives and outputs, and in resolving issues in a reasonable timeframe

Staffing

There are sufficient and skilled staff to undertake the tasks:

- Necessary staff are allocated
- A high number of staff have been trained, are competent, and employed in related positions
- The majority of staff are keen to be involved
- Project time counts for staff promotion, and productivity bonus considered for significant field work
- Staff can grow, and rotate tasks
- Staff can attend training and selection for training is merit based
- Staff positions have a description and selection is merit based

Training and capacity building

Suitable training and capacity building are in place:

- Training is institutionalised and there is an annual schedule of training to cover all aspects
- There are manuals and course notes that are relevant to the tasks
- Training is evaluated and courses and notes revised
- The training budget, facilities and equipment are adequate
- Staff are trained in time, in the required skills, they use the skills
- Trainers to train course instructors exist
- Training has a high probability of continuing when TA and the loan finish

Technology

The technology is appropriate and can be maintained by the resources of the executing agency after project finishes:

- The technology is appropriate
- Asset maintenance (physical infrastructure, equipment and vehicles, and human capital skills) after donor assistance finishes, have been considered by the PG and provision made to address these after project finishes

- Sufficient RCF for asset maintenance will be allocated, and continue into the future
- A sinking fund or equivalent for capital replacement exists
- The desire to provide jobs does not hinder use of appropriate technology when this will be more efficient and effective
- Failure of computer systems in "mission critical" situation has been addressed; backups are kept regularly and off-site

Budget and financial support

Budget and financial support are committed:

- The PG is meeting project commitments
- The PG has a plan and agreed budget to continue titling at a reasonable level and to maintain improvements in the land administration system, post TA and loan funds
- The PG is willing to keep the level of subsidy going to poor landholders when loan funds cease
- Can poor landholders afford the fees for land titling and re-registration? Are they willing to pay for the services?
- Is the land titling method, including boundary measuring and mapping, affordable to the executing agency?
- Is there a history of the executing agency budget requests being severely cut by Ministry of Finance (MOF)?

Land services

Services are appropriate, efficient and effective:

- Titles are being produced in a reasonable time
- Landholders believe the adjudication process is fair and transparent and only official fees are charged
- Subsequent land transaction are carried out in a reasonable time
- A land office is seen as "customer friendly", easy to access, and official fees are the norm
- The private sector provides specified services as appropriate

Quality Assurance Series No. 26

Undertaking Land Administration Projects: Sustainability, Affordability, Operational Efficiency and Good Practice Guidelines

Good land administration projects in partner countries help to improve the social and economic lives of millions of poor people. Land administration projects breakdown a key development constraint, that is, they allow land to be owned, protected, and traded. This unlocks an inherent value in land that can be harnessed for improving social and economic growth. Few development projects can claim such a high and wide reaching potential development impact. The benefits of land administration projects are in areas of social, gender, financial, economic, and environment.

This study focussed on undertaking land administration projects in the future, and how their selection, design and implementation could be improved. Three critical generic areas were identified which, if appropriately addressed, could lead to implementing low risk-high payoffs projects. These are sustainability, affordability and operational efficiency. A set of good practice guidelines have been developed for use by practitioners of land administration projects.

Sustainability is critical to good practice development projects. This is even more so in land titling projects which generally are long-term and high-cost. The key test for sustainability are: partner government commitment, simplicity of design, asset maintenance and adequate recurrent cost financing, enabling land laws and regulations, stakeholder participation and ownership, community confidence in integrity and good governance, and landholders' willingness to pay for services.

Affordability is part of sustainability. It is important because partner governments invariably have scarce funds to continue project initiatives post-donor and/or post-loan period. Making services such as land titling and registrations affordable to all, including the poor, is a key challenge for sustainability. Nevertheless there needs to be progress towards cost recovery, and hypothecation of some revenue generated to the implementing agency for asset maintenance and recurrent cost financing, if the land administration system is to become self-perpetuating over the long-term. Opportunities also exist for partnership with the private sector. Operational efficiency assists sustainability. It needs to be addressed throughout the project cycle.

The good practice guidelines for selection, design, implementation, and post-project period should assist AusAID staff, Australian managing contractors, partner governments, executing agencies, target beneficiaries, and other donors in selecting and undertaking future land administration projects.