Improving Access to Land and Enhancing the Security of Land Rights: A Review of Land Titling and Land Administration Projects

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The Australian Government's
Overseas Aid Program

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The review was undertaken by Dr Ken Lyons (Consultant), and overseen by Deo Mwesigye (AusAID).

The views expressed in this publication are those of the authors and not necessarily those of the Australian Agency for International Development.

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ABBREVIATIONS

A&D	Alienated and disposable (land) – (in the Philippines)
ACLMP	Australian contribution to the land mobilisation project
AIDAB	Australian International Development Assistance Bureau
AMC	Australian managing contractor
ATL	Australian Team leader
AusAID	Australian Agency for International Development
BPN	Indonesian National Land Agency
CARP	Comprehensive agrarian reform program
CBA	Cost benefit analysis
CRS	Customer relations service
CVA	Central Valuation Authority (Thailand)
DAR	Department of Agrarian Reform
DCDB	Digital cadastral data base
DCM	Digital cadastral map
DENR	Department of Environment and Natural Resources – (Philippines)
DOL	Department of Lands
FAO	Food and Agriculture Organisation
GDP	Gross domestic product
GIS	Geographic information system
GOA	Government of Australia
GOPNG	Government of Papua New Guinea
GPS	Global positioning systems
GTZ	Deutsche Gesellschaft fur Technische Zusammenarbeit – German Agency for Technical Co-operation
HBSM	Hainan Bureau of Surveying and Mapping
HFLISP	Hainan fundamental land information system project
HFLRIS	Hainan fundamental land resource information system
HPG	Hainan Provincial Government
HRD	Human resource development
ILAP	Indonesia land administration project (1= phase 1; 2= phase 2)
IT	Information Technology
LAM	Land administration (project - Philippines) (1= phase 1; 2= phase 2)
LIM	Land information management
LIS	Land information system
LIU	Land information unit

LLTP	Laos land titling project
LOC	Land office computerisation (Project – Indonesia)
LRFIS	Land resource fundamental information system
LRIM	Land resource information management
LTP	Land titling project
M&E	Monitoring and evaluation
NBSM	National bureau of surveying and mapping (China)
NGO	Non government organisation
NMB	National mapping bureau (PNG)
NRMDP	Natural resource management development project (Philippines)
PC	Personal computer
PCC	Project co-ordination committee
PDR	Peoples Democratic Republic of Laos
PIA	Project implementation assessment
PID	Project implementation document
PIP	Project implementation plan (World Bank)
PNG	Papua New Guinea
PNGLIS	Papua New Guinea land information system
PNGRIS	Papua New Guinea natural resource information system
ROD	Registry of deeds
RTG	Royal Thai Government
SAR	Staff assessment report (World Bank)
STAG	Standing technical advisory group
TA	Technical adviser
TAG	Technical advisory group
TAP	Technical advisory panel
TLTP	Thailand land titling project (1= phase 1; 2= phase 2)
TOR	Terms of Reference
VLUPO	Vanuatu land use planning office
WB	World Bank
WID	Women in development

CONVERSIONS

A$ = US$0.62

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, topographic, etc., characteristics.
Cadastral index map	a map showing the legal property framework of all land within an area, including property boundaries, administrative boundaries, parcel identifiers, 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, etc.
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 which 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 various processes involved in altering the pattern of land tenure and land use of a specified area.
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 tenure	the mode of holding rights in land.
Land title	the evidence of a person's rights to land.
Land transfer	the transfer of rights in land.
Land use	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.

EXECUTIVE SUMMARY

This is the first comprehensive review of land titling/administration projects and covers projects in nine countries. There are four distinct project types that deal with titling/administration: (i) large scale land titling and land administration; (ii) improving the administration of alienated land in South Pacific countries; (iii) strengthening national agencies concerned with surveying and mapping; and (iv) establishing digital based land information systems (LIS).

Over the last 15 years AusAID has supported about 23 projects in this area at an investment cost of about A$130 million. Over 70 per cent of this cost has gone towards projects dealing with large-scale land titling and land administration. Of this, most has gone into major projects in Thailand, Laos and Indonesia, which have been co-financed with the World Bank. With recipient Government and World Bank funding the total project value of all 'land' projects is about A$925 million of which 95 per cent is associated with the large land titling projects co-financed with the World Bank.

The main objective of the review was to assess the effectiveness and sustainability of project benefits. It sought to identify lessons with a view to incorporating them into the design and implementation of future projects to improve project quality. The experiences of other international agencies were also considered.

Summary of main findings

LAND TITLING AND LAND ADMINISTRATION PROJECTS

- These projects are effective in targeting rural poverty and increasing the security of landholders who might otherwise be at risk of being removed from their land. Effective land administration has a positive influence on partner countries' economic growth, social stability and sustainable resource management. However, while high benefits are possible, there are a number of operational aspects that need to be taken into account to be assured of a high likelihood of achieving these benefits. A major challenge is to ensure that titling and land administration is effective and affordable, both to the landholders and the government, and complies with norms of good governance.
- Improving land administration and completing land titling in many of the partner countries will take decades. It is appropriate for AusAID to focus assistance on increasing the capacity of counterpart staff and organisations so that they have the skills, systems and motivation to continue improving land administration and land titling after project completion. The usual three to five year planning horizon for development programs and projects is often inadequate in terms of promoting sustainable outcomes, particularly for large and complex land administration projects where significant institutional strengthening and change of large organisations is involved. There is a need to develop approaches that can accommodate longer term engagement. A phase-out strategy needs to be developed to allow technical assistance to be tapered off in the latter phases of the project.

- The co-financing of large land titling and administration projects with the World Bank is appropriate provided that aspects necessary for an effective partnership can be met. Australia has the necessary expertise and working with the World Bank achieves leverage of the Australian funding input.
- Although a large amount of land titling has been (is being) carried out in separate projects in Thailand, Lao and Indonesia, there is little detailed information on the costs of initially titling land or on the costs of continuing maintenance of the land administration systems. There is a need to know these costs as they are vital for affordability, self-financing and long term sustainability.
- When considering design options and project scope there are a number of factors to take into account:
  - project success is most likely when only one agency is involved and the prime focus is land titling/administration;
  - it is necessary for the land titling and land administration systems to be affordable by the partner country and to be sustainable in the long term. For example, sustainability can be improved through strategies to ensure a high rate of re-registration of land in the formal land registry. This will ensure that the initial capital investment in land titling does not depreciate and confidence in the security of the title does not diminish;
  - if the claimed economic benefits include improving access to credit, then project activities to increase the probability of it occurring may be necessary, and should ensure that using land as security will not result in loss of that land through defaulting on exorbitant interest repayments; and
  - improving governance will require the difficult areas of appropriate land policy, land law and institutional arrangements to be addressed.

IMPROVING THE ADMINISTRATION OF ALIENATED LAND IN SOUTH PACIFIC COUNTRIES

- These projects can have an impact on poverty reduction if they encourage economic development. The current land administration procedures and systems are largely inherited from the colonial era and there is doubt that the systems are now affordable to these countries. If AusAID is to undertake projects to improve the administration of alienated land, they should be considered in the context of Public Sector reform. There is merit in considering a more long term, low intensity, regional approach. The emphasis should be on gaining commitment to improvement from senior officials and managers in the various countries, together with an assisted self help program focused on continuous incremental improvement and a low use of technology.
- Past projects in the South Pacific countries have all dealt with alienated land that is economically important but is a small part of the total land, with a relatively small proportion of the total population. It is possible that the issues of managing the land rights of customary land (the largest land areas with a large proportion of both

population and natural resources), and its economic development will become more pronounced in the future. AusAID may wish to consider how it might respond if assistance were sought, acknowledging this is an issue which extends into social organisation well beyond land tenure.

STRENGTHENING NATIONAL SURVEYING AND MAPPING AGENCIES

- It is generally stated that benefits from these types of projects come from improved planning for economic and social development. Whilst maps are a necessary input, they are only one of the many inputs required for those purposes. The proposition that strengthening the ability of national mapping institutions to produce maps and that these support economic development is neither straightforward nor direct.
- The need for the products and services (eg maps, digital geographic data etc.) that these agencies supply is acknowledged. If AusAID is to support these types of projects they could be looked at in the context of Public Sector reform. Other project options for the supply of the products and services could be examined. For example, it may be more effective to include an item for the provision of the necessary mapping and geographic products in the design of a particular project, rather than having a separate project aimed at strengthening a mapping agency.

ESTABLISHING LAND INFORMATION SYSTEMS (LIS)

- These projects have no direct link to the rural poor but a case could be made for an impact on the urban poor, although the link would not be direct. They are most effective in large urban areas and are best considered as essential infrastructure. These are complex projects that require many aspects (e.g. land titling and land parcel boundary mapping) to be completed before building LIS can commence. The likelihood of all the required aspects being in place, or being quickly achieved, is low in most of the partner countries, as is the likelihood of sustainability of the LIS.

KEY LESSONS LEARNED

The following suggestions could improve project performance:

- Ensure that: the project rationale and objectives are directed to well articulated and defined development problems; outputs are realistic and achievable; the technical methods and systems introduced are culturally acceptable, affordable and sustainable; and there is a high likelihood of the benefits continuing to be achieved long after the project has ceased. More design time is required to allow the recipient country staff to contribute, to understand the proposed outcomes, and to feel they own the project design.
- The social and gender aspects of land titling should be given more importance in design and implementation to avoid potential adverse impacts on particular socioeconomic groups and to ensure that the target groups, the poor and groups at risk, are beneficiaries. Monitoring of the social and gender aspects through quality social impact studies is required throughout the project and preferably for some time beyond. Quality base line

studies for social and economic evaluation are necessary. As well as monitoring the normal operational indicators, it would be useful to monitor more closely the progress and validity of the assumptions, indicators of sustainability and benefit achievement. The design team should include expertise in development, social and gender issues as well as the technical aspects.

- When co-financing with the World Bank, AusAID should be involved as early as possible and develop a complementary participation strategy (eg an emphasis on building the capacity of people and the sustainability of organisations) rather than the achievement of large production targets. Guidance needs to be given to design teams on the depth of land policy changes, institutional strengthening, and movement towards good governance that AusAID may wish to address in a particular project.
- Much valuable technical material (eg procedures and the like) is prepared during projects. Much of this could be used in similar projects providing savings in project cost and time, particularly in the early stages of a project. There would be merit in retaining this information and developing a series of guidelines/procedures that can be used in all projects of these types.

MAIN RECOMMENDATIONS FOR ACTION

The review has recommended the following:

- The detailed costs of land titling be determined from past and current projects, be compared, evaluated and assessed for appropriateness, affordability and long term sustainability, and be provided to current projects and future design teams. Consultation on the work and results could be undertaken with the other interested multilateral and bilateral agencies active in land titling. For similar reasons the detailed costs of land administration could well be examined.
- A best practice methodology be developed for evaluating quickly the scope, costs, benefits, and trade-offs of large land titling and land administration projects. The list of preconditions (Table A3.3 in Appendix 3) for the development steps to apply and the benefits from land titling and administration to flow, be developed into an operational check list.
- The relevant material from past/current land titling and administration project that can be used to save time and money on upcoming projects (eg Phase 2 of Indonesia, probably the Philippines, possibly Vietnam) be developed into a number of best practice methodologies/guidelines. Other multilateral and bilateral donors would probably be interested in co-operating in this exercise.
- The land administration systems of the various countries in the South Pacific are basically the same and the problems and improvements required tend to be similar. There would be merit in investigating a regional approach to improving the administration of land.

Detailed conclusions and recommendations are in Chapter 6, section 6.2.

Part A

THE MAIN REPORT

1. INTRODUCTION

1.1 Background to the study

AusAID has supported, and continues to support, projects that are concerned with land titling, land administration, surveying and mapping in a number of countries, most particularly in South East Asia, and the South Pacific. All the large projects have involved and continue to involve co-financing with the World Bank.

AusAID has invested about A$130 million in these projects but it has not previously reviewed or evaluated their effectiveness in: (i) achieving their objectives or, (ii) the sustainability of their development outcomes. Moreover, neither the knowledge base and the practical experience nor the lessons learned from these projects are readily available to inform the design and implementation of similar projects. Making this information more accessible should ensure that future project proposals are of a higher technical quality and lower cost and also have more potential bidders. As a first step in developing an evaluation framework, AusAID is undertaking a study of a number of completed and ongoing activities.

The objective is to identify lessons learned from AusAID supported projects with a view to incorporating them into the implementation of future projects. The experiences of other international agencies will also be covered.

The information gained from this review will be useful to various groups: AusAID officers (both at the desk and post) responsible for managing various phases of these projects; contractors (both current and potential) who bid for and implement the projects; recipient governments (as major development partners) will benefit from a greater understanding which will impact design and implementation; and lastly, it will help to bring about more effective collaboration with co-financing agencies in the design and management of future projects.

1.2 AusAID involvement in 'land' projects

There have been about 50 AusAID 'land' projects in the last 15 years. They can be classified as follows (Table 1.1):

- land titling, land administration, surveying and mapping;
- natural resource management using mapping, geographic information systems (GIS), global positioning systems (GPS), and similar;
- geological surveys and mapping;
- planning and development; and
- other.

Some projects fall wholly within one type, while others have various elements of each. A list of these 'land' projects is in Appendix 14.

Table 1.1: 'Land' projects by type and value – overview[a]

Project Type	No. of Projects	GOA	Recipient Govt	Other Donors	Total
				(A$ million)	
Land titling/admin, surveying, LIS	20 & 3 partial	130	332	463	925
Natural resource management	15	47	2	0	49
Geological surveying	6	11	0	0	11
Planning & development	5 & 2 partial	46	55	48	148
Other	1	0	0	0	0
Total	47	234	389	511	1134

a Care should be taken with these figures as they rely on a variety of sources and not all figures were readily available. Some projects were difficult to classify. Natural resource project values are thought to be low.

This review is only concerned with the land titling, land administration, surveying and mapping types of project. These account for 73 per cent of AusAID support of A$130 million.

AusAID involvement in land titling, land administration, surveying and mapping projects.

These projects fall into four distinct sub types (Table 1.2):

- large scale land titling projects and improvements in land administration (generally in Asia and co-financed with the World Bank);
- improvement of the administration of alienated land (mainly in the South Pacific countries);
- strengthening national mapping and surveying agencies; and
- establishment of land information systems (LIS).

Comments on each project type are given in Box A1.1 of Appendix 1.

Table 1.2: Land titling, land administration, surveying and mapping projects – overview[a]

Project Type	No. of Projects	No. in Review	GOA	Recipient Govt	Other Donors	Total
				(A$ million)		
Land titling & administration	11 & 1 partial	5	95	319	463	877
Alienated land administration	3 & 2 partial	2	6	1	0.1	7
National mapping agencies	3	2	27	10	0	37
Land information systems	2	0	2	1	0	3
Total	19	9	130	331	463	924

a Care should be taken with these figures as they rely on a variety of sources. The relative balance is thought to be correct.

The projects selected for this review are shown in Table 1.3. These projects were selected to include both project and country types. In addition, two large land titling projects, in Indonesia and the Philippines, were being considered for funding. It was desirous that any lessons learned from this review be applied to those projects.

Focuses of land titling/administration projects

There are several possible focuses for these projects. They are:

- land reform;
- creation of a market economy from former centrally directed economies (the countries in transition);
- dealing with customary/traditional lands;
- granting title where ownership is largely clear and uncontested;
- granting title where ownership is unclear and contested; and
- major changes to land policy and/or the legislative base.

To date, AusAID involvement has been in projects that dealt with the granting of title where ownership is largely clear and uncontested. A brief comment on each of the other types is provided in Box A1.2 Appendix 1. Much of the current literature deals with land reform and countries in transition.

1.3 Methodology

The activities below constituted the review process:

- The nine projects selected for review represent a cross section by project type and geographic area. Land Information Systems was the only project type not included.
- A qualitative assessment of issues was carried out using design documentation (from AusAID and the World Bank), supervision mission aide memoires and reports (particularly for co-financed projects), and project completion reports, where available. A range of other project material was also examined.
- Views were sought from AusAID desk officers, AMCs (Australian Managing Contractors) and TA (Technical Advisers). Consultation was held with some.
- Information was obtained from the web sites of major development agencies and other related sites and sources.
- Informal discussions were held with the Land Thematic Group at the World Bank in Washington, a GTZ land administration specialist in Germany, a range of specialists at the UN Conference on Land Tenure and Sustainable Development in Melbourne and elsewhere.
- Discussions were held with recipient government officials, World Bank staff, AMC and recipient country project staff and international and national technical advisors while the reviewer was acting as an AusAID STAG (Standing Technical Advisory Group) for both the Indonesia Land Titling Project and the proposed Philippines Land Administration Project.
- Information from all the above was collated and synthesised to determine lessons learned.
- A draft was reviewed by AusAID staff and some external specialists.
- A presentation of the review findings was given at the World Bank Rural Week 2000 in Washington and discussions subsequently held with the World Bank, FOA and GTZ subject specialists.

Table 1.3: Some data on the projects selected for review

Country	Project	Term Used[a] finished	Type	Co-financed with World Bank	Project finished	Remarks
Thailand	Land Titling Project (Phases I, II and III)	TLTP	Land titling & admin	Yes	Yes	Finished 1999; 15 years
Laos	Land Titling Project (Pilot Project and Phase I)	LLTP & admin	Land titling	Yes	No	2 yr pilot complete; Phase 1 current
Indonesia	Land Administration Project	ILAP	Land titling & admin	Yes	No	In last year (yr 7) of Phase 1; Phase 2 of 5yrs being designed
Philippines	Natural Resources Management Development Project	NRMDP	Part was Land titling	No	Yes	Land admin only 1 component; 5 yrs; completed 1993
PNG	Australian Contribution to the Land Mobilization Project	ACLMP	National mapping	No	Yes for mapping part	Current; in yr 4 of 6
China	Hainan Province Land Resource Fundamental Information System	HFLRIS	National mapping	No	Yes	Completed in 1998; 3 yr duration
Vanuatu	Land Use Planning Project	VLUPO	Part was alienated land	No	Yes for land admin. part	Land admin one aspect; Finishes mid 2000; 4 yr duration
Kiribati	Institutional Strengthening of the Lands and Survey Division		Part was alienated land	No	No	Land admin one aspect; Finishes mid 2000; 3 yr duration
Sri Lanka	Land Registration and Cadastral Project		Land administration	No	Yes	Was to be a major project; reduced to stages; phase 1 only done

a Where a numeral is used, such as TLTP1, it signifies Phase 1, commonly 5 years.

1.4 Report Structure

The report contains two parts (A and B). Part A is the main report and each of the four different project types is dealt with in a separate chapter. The large land titling projects are examined in Chapter 2, improving the administration of alienated land in Chapter 3, strengthening national surveying and mapping agencies in Chapter 4, establishing land information systems in Chapter 5. Major conclusions, and recommendations are discussed in Chapter 6.

A similar structure is used for examining each different project type. After an introduction, the development logic and implicit assumptions are examined, followed by an examination of how the particular project type contributes to the AusAID's one clear objective of poverty reduction through sustainable development. The projects are then examined from a variety of aspects, conclusions and issues identified, and recommendations made.

Background and detailed material is contained in a number of Appendices in Part B.

Past Australian Managing Contractors and some known Technical Advisers were invited to provide comments to the review. A summary of comments and an extract of comments are shown in Appendix 2.

2. THE LARGE SCALE LAND TITLING AND ADMINISTRATION PROJECTS

2.1 Introduction

The large land titling projects account for 73 per cent of AusAID funding for all land titling, land administration, surveying and mapping subtype projects; funding is 95 per cent when considering recipient and co-financing funding. Most land titling is co-financed with the World Bank and the projects tend to cover long periods of time: 15 years in Thailand; 7 years in Indonesia and another phase of 5 years being designed; 6 years in Laos with a possibility of another 5 year phase; an initial 3 of a possible 8 to 10 years being contemplated in the Philippines. The recipient country and the World Bank tend to view these as 20 year programs to be implemented in 5 year phases. When considering all sources of funding (GOA, World Bank, Recipient Government), the projects are costly (over A$500 million in Thailand, A$123 million to date in Indonesia). As well as being costly, they can be complex. For these reasons, and as other projects are currently being considered for funding, these particular projects have been reviewed closely.

The review addressed the following questions, but was not limited to them:

- how well do these projects fit the AusAID 'one clear objective' of poverty reduction through sustainable development?;
- how appropriate is co-financing with the World Bank?; and
- is there a 'standard model' and is it appropriate from an AusAID perspective?

2.2 The development rationale and implicit assumptions

A commonly stated development rationale/logic for land titling is: *Land titling provides security to the landholder, reduces land disputes, and contributes to economic development by allowing the land holder to obtain better credit*. The underlying logic is shown in Box 2.1.

While the link between title and economic development is clear it is not direct or axiomatic. There are a number of implicit assumptions that must apply for this logic to be valid. Table A3.1 Appendix 3 lists these assumptions.

Box 2.1: The underlying logic for land titling projects

- A title gives landholders formal rights and security to their land;
- Security of title reduces land disputes;
- The title gives access to (better/more) credit in the formal market by using the title as collateral;

For rural landholders

- More/better credit allows rural landholders to purchase more farm inputs and practice sustainable land use. This, in turn, raises farm productivity and therefore increases household income;

For urban landholders

- More/better credit allows increased investments in housing or industry;
- Investment in industry provides more employment, increases household income, etc;
- Greater household income raises living standards, (some will be raised above the poverty level) and contributes to sustainable development;
- Landholders and families whose income has increased will eventually pay more tax and therefore help generate greater government income;
- The title increases the value of the land so land values and prices rise, and land trading increases;
- Increases in land trading raises government income through fees on the increased number of transactions;
- Increased land values allows more money to be borrowed against the land as collateral;
- Increased unrestricted land trading allows land to reach its most productive economic use;
- Some of the additional government income will be returned to the local area to increase services and infrastructure; and
- All the above contribute to economic growth.

In developed countries the implicit assumptions are largely met; landholders rights are secure, credit is readily available based on the land title as collateral, and the land market is active and effective. The traditional loan to value ratio is about 80 per cent. This ratio can be increased via a combination of secured and unsecured loans, mortgage insurance, and the like. Some quoted figures on the levels of mortgage debt are USA US$5200 billion, Germany US$150 billion, Argentina US$10 billion [private correspondence FAO]. These figures provide positive arguments for those who argue that land titling will stimulate economic growth.

In most developing countries, however, many of the implicit assumptions are not met and projects need to address this. There are differences between countries and between the operational status of the assumptions. The following scenarios are common:

- the laws/policies are unsuitable, contradictory or confusing; not equitable; do not provide sufficient safeguards for landholders, the poor, or minority groups;
- the administration of land does not conform to the principles of good governance, transparency and accessibility, and is not effective or efficient; and
- government land titles/record are incomplete, fake titles exist, unable to provide an accurate and complete record or picture of land holdings and the associated rights.

It is difficult to see how land titling can be effective and sustainable unless all the assumptions are met, at least to an acceptable operational level. A similar situation probably exists in the instances of access to credit and increases in productivity.

PRECONDITIONS, BENEFITS, AND OPTIONS FOR PROJECT SCOPE

Figure A3.1 illustrates the development logic in terms of the flow of benefits and their various stages. Box A3.2 gives comments on each stage of benefits. Table A3.2 details the beneficiaries, the benefits, the benefit type and the stage at which it is received (see Appendix 3).

It is necessary for all the assumptions in Table A3.1 to be met, at least to an operational level, if the flow of benefits is to be achieved. The assumptions can be considered as necessary, but not sufficient, conditions. Table A3.3 expresses the assumptions in Table A3.1 as necessary preconditions that must be present, to an acceptable operational level, in order to achieve a particular development logic step, and therefore, increase the likelihood of achieving benefits. This list of pre-conditions is not exhaustive. A more complete and detailed list could be developed for design purposes.

The above has implications for design. Typical implications could be:

- if the preconditions are not present to the necessary operational level then it may not be possible to achieve a particular benefit stage or, the probability of achieving it may be lowered, or only a few may benefit. What constitutes an 'acceptable' operational level for a precondition? what breadth of activities and resources may be required to achieve an operational level of preconditions?;
- a large amount of activities, resources and time may need to be allocated to raise particular precondition(s) to an acceptable level. Until an operational level is obtained it may not be possible to fully proceed. For example, if the rate of re-registration is very low (say 20 per cent), and 80 per cent is considered the necessary operational level (to ensure the initial capital investment in land titling does not depreciate), then what activities and resources are required to address this?;
- what is the size of the development task in total? What is the exact nature of the development problem and what is the appropriate intervention? If the task is one of decades, what is the best assistance strategy? Building capacity and undertaking pilots so that the partner gains the ability to 'do it themselves'?; and
- where should intervention be focused? where should the boundary lines of the project be drawn? Are some preconditions more important than others? Should the initial focus be on Stage 1 benefits – the social benefits of increased security of land rights? If this is done and the economic benefits left to later then will this endanger long term sustainability of secure land rights?

Conclusion

A large number of preconditions must be present to ensure reasonable probability of achieving any particular stage of benefits. A wide range of activities may be necessary to address critical shortcomings in the pre-conditions. The amount of intervention to address the various pre-conditions could well impact on project scope. The status of the pre-conditions may vary geographically and this may be a factor in design.

It is necessary to ensure a high rate of re-registration of land (Stage 2) to maintain title security, Stage 1 benefits, and the initial capital investment in land titling.

Benefit Stages 1 (social) 2 and 3 (economic) are the core stages. Stage 4 can be addressed over time. Stage 5 (LIS) is more long term and the preconditions are extensive.

Care needs to be taken in design to adequately address the necessary preconditions to achieve a particular stage(s) of benefits, without becoming too large in scope or cost.

RECOMMENDATIONS

- *During the design phase close attention should be given to the necessary preconditions, scope, and which particular stages of benefit flows can be included in a single project.*
- *The list of preconditions in Table A3.3 (Appendix 3) be developed into an operational checklist.*

2.3 The alignment of large land titling projects with AusAID's objective of poverty reduction

THE SIMONS' REPORT

The AusAID focus on one clear objective – 'poverty reduction through sustainable development' was a result of the 1997 Simons' Committee of Review. All of the projects reviewed were designed before the Simons Committee was convened.

The Simons' Report makes a number of statements that are relevant when seeking to determine if the large land titling projects are appropriate. These can conveniently be grouped under the headings of: rural development, economic development, AusAID program priorities, good governance, infrastructure, maximising poverty alleviation, the environment, and gender. Relevant report extracts are shown in Appendix 11. The essence of these extracts is:

- rural development is very important because the bulk of developing country people live in rural areas and derive their living from agriculture. Many live in poverty;
- land tenure is an important factor in rural and economic development. Land tenure issues can be highly sensitive and, if they are a major impediment, must be addressed with the partner country, whilst recognising local conditions, cultures, and politics;
- good governance provides an essential framework for sustainable economic and social development and therefore for poverty reduction. Lack of administrative capacity and institutional weaknesses cause the major development bottlenecks and explain much poor governance;
- recommended program priorities involve: health, education, infrastructure and rural development; increasing productivity of the poor by facilitating access to key productivity assets including land and credit; helping establish good government administration, and provision of essential economic and social infrastructure; and
- to maximize the impact on poverty reduction, preference should be given to projects which promote growth by directly involving and benefiting poor communities.

From the above the important aspects of poverty reduction, and rural and economic development are clear. That land, land tenure, and good governance and administration are important factors is also clear.

THE FUNDAMENTAL IMPORTANCE OF LAND

The literature and reports from many agencies attest to the fundamental importance of land in addressing poverty, and supporting development. The importance of effective land tenure policy and administration is also cited. The general literature supports the Simons' Report.

While the importance of land tenure policy and administration is in no doubt, the ability to achieve appropriateness, effectiveness, and efficiency, coupled with equity, social justice, and good governance is a major challenge. World wide there is a great number of different situations leading to diverse approaches. Mixed results have been achieved.

At the World Bank Rural Week 2000 it was noted that, 15 years ago a greater impact was being made on poverty than is the case now. A renewed effort was deemed necessary. An examination of poverty reduction project results from around the world revealed mixed results and conclusions. It was agreed that more understanding was required. Land tenure, policy, and administration were considered important aspects.

ALIGNMENT WITH AusAID'S OBJECTIVE OF POVERTY REDUCTION

This sub-section deals specifically with the large land titling projects. Whether the other project types (improve the administration of alienated land, strengthen national mapping agencies, establish LIS) contribute to poverty reduction is examined later.

The development logic of land titling was examined in a previous section. This clearly showed the logical link between land titling, increased landholder security, rural and economic development, and poverty reduction. It also showed the social benefits of secure titles, and the economic benefits to both government and the landholder. It highlighted the fact that the links are not automatic, and, that while high benefits are possible, there are a range of conditions that need to be taken into account to be assured of a high probability of achieving the various stages of benefits. Benefits are discussed later in this report. Additional points that contribute to the argument that large land titling projects do align with the objective of poverty reduction are that:

- by executing land titling projects which specifically target the poor (who are commonly at high risk of enforced eviction with little legal recourse), structural discrimination is being addressed;
- the rights of women can be protected and enhanced when land titling is conducted effectively;
- land tenure and administration systems are a fundamental infrastructure and essential for social and economic development. (there is a wide acceptance of this view amongst development specialists in this field; the major challenge is to make them affordable, accessible, effective, and to accord with good governance);

- giving government departments that deal with land policy, land allocation, and land administration a high priority for improvement in good governance is important because of the great potential for corruption and the granting of 'favours' by those who control the allocation of large amounts of land. Given the amount of land that still has to be titled, this is vital; and
- the magnitude of the titling task is huge in some countries, about 55 million parcels of non-forested land still to be titled in Indonesia. This does not take into account the millions (probably) who 'farm' land in 'forest' areas (in many forest areas there are no trees). This is a policy issue in several countries in SE Asia.

Other points are:

- including and training NGOs at all levels of the land titling process would be an effective assistance to good governance. They would also constitute an independent group who could work with the people independent of the government agency; and
- it is not uncommon, particularly in the large countries of Southeast Asia, to have multiple departments involved in land administration and for the legal and administrative systems to be overly complex and confusing. Assisting to improve the organizational structure of these departments and clarifying and streamlining the legal basis and responsibilities contributes to good governance. Because 'lands' departments are still custodians of an invaluable and finite resource, the priority to assist them can be argued to be very high. There are also environmental and gender considerations.

Conclusion

There is a very strong case for arguing that large land titling and administration projects can support poverty reduction. The Challenges are to:

- design appropriate projects that will meet the development objectives and deliver the benefits;
- ensure that the AusAID target groups (the poor, minority groups, women etc.) are the beneficiaries;
- devise and execute a suitable complementary AusAID involvement strategy when co-financing with the World Bank; (Bank loans may be over 20 years, the task of titling may take 40 years, and AusAID will probably only want to be involved for some of this time); and
- be able to provide post project evidence of relevance, effectiveness, efficiency, impact, and sustainability.

TARGETING THE POOR AND RURAL DEVELOPMENT — THE NEED FOR MACRO INDICATORS

The Simons' report made a strong case for targeting the poor in rural areas. It follows that there needs to be some systematic way in which to identify these target groups. Co-financiers and the recipient government may not have the same priority as AusAID and may wish to focus titling in urban areas where there is a greater potential for subsequent tax collection increases.

In Indonesia and the Philippines it is known that the magnitude of non-forested land to be titled is huge; (an estimated 55 million parcels in Indonesia; in the Philippines 8 million ha of A&D (alienated and disposable) land (about 60 per cent) requires titling, and 20 to 50 per cent of existing records have been destroyed or require extensive reconstruction). This task will require decades of committed resources. AusAID may only need to be involved for a fraction of the time. (AusAID involvement strategy is discussed in a later section).

Neither Indonesia, the Philippines nor Laos have a set of country wide macro indicators that provide any sort of picture on the status of land tenure and administration or coincidence with the various socio-economic groups, urban, peri-urban, rural, or forest dwellers. Other regional countries are in a similar position.

This is not to suggest that significant care does not go into the selection of areas for land titling in the current projects. What is being suggested is that the collection of a country wide set of macro indicators (down to at least the province level, but to a local government unit where it is possible) is necessary. It should indicate the status of land tenure and land administration, and the correlation with the various socio-economic groups. The reasons why this is suggested are (as applicable to the proposed Philippines project):

- the size and nature of the land tenure and administration challenge/problem in the Philippines is known only in the most simplistic terms on a whole of country basis;
- better macro indicators are needed, down to the province level at least, so that a clearer understanding of the size, nature, complexity, and variations of the development problem can be gained, and intervention planned where the need is greatest and the impact highest;
- unless this is done it can not be known with certainty that the most appropriate development problem is being addressed, nor that the correct intervention is being delivered at the right place, in the right amount, etc.; and
- the development rationale must be clear; at the moment it could be said, 'we don't know what we don't know'.

If this was a health project one would anticipate there being basic macro indicators relating to the geographic distribution of population, disease types, age, infection rates, mortality rates, and the like. High risk areas could be identified from the indicators for particular health problems, (eg malaria, AIDS) and appropriate intervention planned. By monitoring and evaluation (M&E) one could track impact and effectiveness. Such tracking would rely on understanding the causal relationship between intervention/treatment and the problem/disease. If this were not done there is the danger that the most serious life threatening diseases were not being treated, and that the treatment would not necessarily be as effective as wished.

While the above is simplistic it helps to illustrate the point. It also brings out the importance of regular M & E, social assessments, and baseline studies.

There is a FIVIMS (food insecurity and vulnerability information and mapping system) system that is more wide ranging but would appear to be based on the same need.

Some balance will be necessary between what is desired and what is possible. A timely data collection exercise, with some gaps is probably more useful than a long exhaustive exercise, which may not be possible in any case. It may be necessary to derive indicators from non-land administration sources and then extrapolate.

Some possible indicator headings discussed for the Philippines project under design are shown in Table A3.4, Appendix 3. They are not meant to be definitive. The views of key people, including all agencies, and a social impact specialist, should be obtained.

The results should be examined and debated and provide a factual base for identifying the various target groups: poor, rural, not titled, hot spots of land disputes, evictions; groups at risk, high levels of development, little tenure security for land occupiers; land market level of activity, level of the informal transaction, use of credit, and the like.

Conclusion

There is a need to understand, on a whole of country basis down to at least provincial and preferably local government level, the status of land tenure and administration correlated with social and economic data, so that the magnitude and nature of the problem is understood and intervention options can be examined.

There is a need to ensure that AusAID's target group, the poor, minority groups, and women etc. are impacted, particularly in co-financing situations.

RECOMMENDATIONS

- *A set of country wide macro indicators for land tenure and land administration should be recognised as important.*
- *Where AusAID is looking to support a large land titling/administration project, a set of indicators should be compiled either before or during the design process.*
- *The suggested macro indicators need to be further developed after other knowledgeable comment. Comments should be sought from the World Bank.*

2.4 Do the large land titling and administration projects conform to a standard model?

INTRODUCTION

Table 1.3 (Chapter 1) provides some information on each project selected for review. These projects, particularly the three co-financed with the World Bank, account for about 73 per cent (A$95 million) of AusAID support for projects covering titling, administration, surveying and mapping, and LIS. The Thailand project is completed. ILAP1 will be complete in early 2001 and phase 2 is being designed. NRMDP was complete in 1993. Another project in the Philippines is currently being designed and AusAID is being asked to co-finance with the World Bank. Only Stage 1 of Sri Lanka was implemented. It was completed in 1999.

A COMPARISON OF PROJECT OBJECTIVES

A comparison of the various projects' goal/purpose and objectives is shown in Table A4.1 (Appendix 4). All the reviewed projects were designed, and implemented before the Simons' Report (one clear objective - poverty reduction through sustainable development) was released. The only projects designed by AusAID were NRMDP and Sri Lanka.

The Thai, Lao and Indonesian projects constitute a relatively homogeneous group. All were designed to meet World Bank requirements and managed by the World Bank. In some cases AusAID met the design costs through the World Bank Consultants Trust Fund. There has been a high degree of continuity in the personnel of both the companies that designed and implemented the projects and the World Bank technical staff. All the projects have similar objectives and purposes.

The main objective was large scale land titling. There were some variations in how the goal was expressed, for example, facilitate access to credit (Thailand); foster the development of the land market and land rights to strengthen long term sustainable economic development and social development (Laos); to foster land markets, alleviate land conflicts, support poverty alleviation (Indonesia). The emphasis on poverty reduction or targeting the poor was explicitly mentioned in the Thailand and Indonesia projects.

NRMDP was an exploratory rather than operational project of which land administration was only one aspect. The intention was that work done would lay the base for a major operational follow-on project. One was designed but did not proceed. A major 20 year program to improve land administration in the Philippines is being designed for World Bank funding. AusAID has been approached to co-finance the TA (Technical Assistance). Initially, this design was not dissimilar to current World Bank projects but modifications have been made.

The Sri Lanka project was conceived as a large project with AusAID funding only. The emphasis was on changing from a deed to a title system, institutional strengthening and cadastral mapping and titling. A risk management strategy was put in place because of concerns regarding the achievement of the necessary pre conditions. The design was modified to a series of three phases of seven stages (Table A4.2, Appendix 4). The project did not proceed beyond Stage 1 because of institutional problems. The land administration situation in Sri Lanka (Box A4.1, Appendix 4) is suitable for a case study as it has many complex aspects.

A COMPARISON OF PROJECT STRUCTURES

Table A4.3 (Appendix 4) compares the main structural aspects of the selected projects. The anticipated structure of the two projects currently being designed is included to indicate trends.

There was a strong emphasis on titling in geographic areas where ownership was fairly straight forward. The degree to which other aspects such as valuation, geodetic control, policy reviews, are included depends, no doubt, on what was considered appropriate at the time of design. There is a strong and early emphasis on titling and other technical aspects, with a later inclusion of institutional aspects.

PROJECT STRATEGY

Some detailed comments on the strategy of each of the land titling projects is contained in Box A4.2 (Appendix 4). It would be fair to conclude that there has been an underlying, largely implicit and evolving project strategy across the whole family of projects with the World Bank. This strategy could be summarised as:

- plan as a long term (20 year) program and execute in 5 year phases;
- work within one agency and focus early, strongly and throughout the project on operational systematic adjudicated registration of titles in areas where it will be reasonably straight forward. Do the necessary training and changes in land law to support the operational titling; and
- treat the aspects of whole of institution strengthening, and appropriateness of land policy, land law, land tenure, land management, allocation of organisational responsibility for land administration, as strategic issues; approach these aspects cautiously and preferably not in the first 3 to 5 years unless vital to support the operational titling.

This is referred to as the Existing SE Asia Model.

This strategy was strongly influenced by a 1992 World Bank report, Wachter and English (1992) which reviewed a number of land titling projects. Major project problems were identified as: an overall lack of political support; conflicting bureaucratic priorities and/or infighting; lack of institutional capacity or an unwillingness to commit adequate resources; underestimation in the preparation phase, of the complexity and/or cost of the tasks to be carried out; other design weaknesses.

As a result of this report focus was to be mainly on titling, and remaining within one agency. It was noted (Holstein, 1997), that: the World Bank was supporting at least 13 land titling projects and that most were focused on land titling, half had valuation, and few tackled land policy issues directly; the demarcation of private, state and communal land was as a difficult issue because of the diversity of interests; there was a need for more data on costs.

There is also little doubt that the experience in one project phase (for example, Thailand Phase 1) has influenced the design of other phases and other projects. Much of this is owed to the high degree of continuity in personnel and companies as noted previously.

While past and continuing projects have similar strategies and structure the projects currently being designed are showing some modification. For example the direction of Indonesia Phase 2 is anticipated to be:

- continuation of systematic registration;
- assist the institutional central group to change from controlling all resources and programs to being responsible for only policy and standards;
- assist in implementing decentralization;
- assist some decentralized Land Offices (there are about 300); and
- assist in implementing selected policy changes.

It is anticipated that the Philippines Phase 1 project will:

- determine the will of the government to bring about significant changes so that major improvements in the effectiveness of land administration are possible;
- determine and implement the necessary regulatory changes;
- determine if the various agencies with multiple crossing responsibilities can cooperate at an operational level to run an efficient one-stop land administration shop, conduct titling, conduct transactions, in weeks rather than years, and build a high quality record base; and
- gain agreement on, and implement the necessary long term institutional arrangements and regulatory base to allow the remaining 17 years of the project to proceed on a sound basis.

The Philippines is a wider variation than Indonesia Phase 2.

A STANDARD MODEL?

The similar evolution, involvement, influences, objectives, structure and strategy for the Thai, Lao, and Indonesian projects, all co-financed with the World Bank, has been noted above.

A question was – '*Do the large land titling projects co-financed with the World Bank constitute a standard model?*'

If a 'standard model' is taken to mean a similar philosophy, purpose, strategy and structure that is adapted to particular conditions, then it would be fair to say there is a standard model. If a 'standard model' is taken to mean the use of an identical 'blue print' that is automatically used under all conditions, the answer is no. It is more appropriate to conclude that in the projects reviewed a similar underlying philosophy, strategy and structure is used.

The second question was – '*if there is a model, is its use appropriate under all circumstances?*'

The use of the standard model appears most appropriate when:

- the major emphasis is on large scale granting of land titles where ownership and the law is clear and there are few land disputes;
- one major agency is involved;
- there is no need or desire to have major changes in land policy, the legislative base, tenure arrangements, institutional arrangements, or land administration for technical, equity, social justice or good governance reasons; and
- where the emphasis is on providing landholders with the social benefit of security of ownership and protection against forced eviction (Stage 1 benefits of Figure A3.1).

The model would probably need to be modified when:

- there is a broad spread of objectives, for example, titling, policy change, major institutional strengthening, rural or urban development;
- there are several agencies involved that do not have a history of close cooperation;

- where more activities/interventions (not associated with titling) are carried out to improve the likelihood of achieving the anticipated benefits of access to credit, increased farm productivity, increased household income (the stage 2 & 3 benefits of Figure A3.1, Appendix 3); and
- a major aspect is strengthening local decentralized land offices to improve overall service delivery, effectiveness within a national frame work of improving land administration.

OTHER MODELS

Major land projects dealing with tenure or administration are also being carried out in Africa, Latin America, and Eastern and Central Europe. They tend to focus on different types of tenure aspects than those being currently encountered in SE Asia and the Pacific. In Eastern and Central Europe the focus is on the privatization of property and the change from a central to a market economy. In Latin America on land reform, titling and improving the land registries and their operations. In Africa the focus is on the recording, safeguarding and management of customary land rights. The characteristics of these various types of projects were outlined in Box A1.2 (Appendix 1).

To a certain extent each has its own model. Even though they are different there are still lessons and information that can be useful.

IMPROVING THE EXISTING SE ASIAN MODEL

In general, major sustainable changes are not possible in most AusAID partner countries without:

- changes to the land policy and the legal basis (this does not automatically imply legislation; many changes are possible via administrative orders and decrees);
- major changes in institutional arrangements and operations; and
- technical strengthening.

Technical strengthening alone will not bring about the desired long term results. In seeking to improve the current model, a number of factors must be taken into consideration (Table 2.1).

Table 2.1: The interplay of factors for land titling projects

Factor	Pros	Cons
firstly, operational experience indicates that 'success' is easier to achieve when only one agency is involved and when the scope is focused on land titling in an area that is largely non-contentious and dispute free. By itself this will bring the social benefit of a secure title to the affected landholder but may not be sustainable in the long term once Bank loans and TA are withdrawn. This is basically the current model.	Focus on one main aspect (issuing titles) & easier to execute. One agency involved.	May not address financial concerns and 'security of title' sufficiently for long term sustainability & hence the capital investment in land titling may decay. Probably will not address key policy and institutional issues most likely needed for long term equity, good governance etc.
secondly, if the re-registration of land after a subsequent transaction (buy/sell, mortgage registration) is low, then the original capital investment in titling will decay, public and investor confidence in the 'security of the title' will drop, and the original problems before the first land titling could well reappear. Increasing the rate of registration will increase project scope and costs, but also benefits and sustainability.	Long term 'security of title' and financial sustainability improved.	Project scope & cost increases. Another agency may become involved.
thirdly, if the claimed economic benefits include improvements in access to credit, rural productivity, household income and the land market, then activities to increase the probability of these occurring may be necessary eg. educate rural landholders on access to credit and foster techniques for improved farm productivity. Again, this increases the project scope and costs.	Increase the probability of achieving the claimed benefits.	Project scope & cost increases. Activities quite different to land administration included.
fourthly, if there is a desire to manage and administer land in accordance with good governance, equity and social justice, then the more difficult aspects of appropriate land policy, legal basis, tenure, institutional and administrative arrangements, need to be addressed. This is likely to be more difficult and contentious, and take longer than the current approach. Without it, however, long term social and economic benefits for all landholders will be exceedingly difficult to achieve.	Address key policy and institutional issues most likely needed for long term equity, good governance, social justice & sustainability. Scope becoming very wide & costly.	Addressing sensitive policy and institutional issues can be seen as 'interference' Problems in policy discussion may cause adverse impact on the straight forward titling.
fifthly, it is essential that the land titling and land administration systems be affordable and sustainable post project.	Addressing core issues.	Making current systems more affordable and sustainable would require much debate and would probably be contentious.

The operational desirability of keeping the project simple and focused (first point) is understandable and valid, but may be limited. Encompassing points 1 and 2, or 1 to 3, in a project is relatively simple, though the scope and costs will increase.

The fourth point concerns AusAID's policy. Consideration needs to be given whether or not AusAID wishes to assist (in a pro active way, only when asked, or not at all unless the indicators for success look favourable) partner countries to address: land policy, land management, institutional arrangements and movement towards greater alignment with social, economic and gender equity, and good and transparent governance. If the answer is positive then AusAID needs to consider what is the best way to do this. The options appear to be (i) include as part of an existing land titling project, or (ii) keep aspects that could involve major or contentious policy, legal or institutional aspects separate from any major, largely operational project and have as a separate project. The pros and cons are set out in Table 2.2.

Table 2.2: Pros and cons of dealing with major policy and institutional change in land titling projects

Pros	Cons
Option 1: Include as part of an existing land titling project	
All aspects done together. Use credibility gained in operational titling as lever to address the more delicate policy issues.	That any difficulties encountered in the policy area might spill over to the high production titling area. Scope may be too wide, and project and management effort and focus is split; too few good staff to go around.
Option 2: Keep major policy and institutional change as a separate project	
Cleaner; land titling should proceed smoothly. An adverse impact on one project should not spill over to the other.	An examination of necessary conditions may indicate that operational aspects cannot proceed until major policy/legal /institutional changes are in place. Having two separate projects may inhibit the exchange of ideas and experience. Two separate projects may introduce too many administrative overheads.

The fifth point is also important. In a later section, affordability is examined and it is concluded that the cost of the current methods of land titling and land administration may not be affordable and sustainable, hence appropriateness is an issue. This is a core issue that is addressed in the section on affordability. It is a policy element of if and how appropriateness and sustainability can best be addressed with the partner country.

There is no easy answer and much will depend on the particular circumstances. Judgement will be necessary. The option of having a separate project to concentrate solely on policy aspects has some merit. It may need to be a long term project with periodic inputs from high caliber TA who deal directly with senior policy personnel in the partner country. It could be treated as part of a broader public sector reform project.

The conundrum is the relative simplicity of a focus on land titling which, by itself, is unlikely to achieve long term sustainability, full benefits or good governance versus a more complex

and expensive project with better prospects of sustainability, full benefits and meeting good governance. There is no simple solution.

PROJECT LESSONS LEARNED

The Thailand project was awarded one of the two 1997 World Bank Awards for Excellence. It is the only project in the family of Thailand, Laos and Indonesia that has been completed.

Phases 1 and 2 of the Thailand project provide the best record of lesson learned. These have been grouped, synthesised and are shown in Box A12.1 (Appendix 12).

The World Bank operational audit on the Thailand project drew some lessons, (see Table A4.5, Appendix 4).

Conclusion

- Current and past projects, particularly those with the World Bank tend to conform to a standard model of objectives and strategy. This is appropriate for some situations but not for all.
- AusAID will need to have a prior policy position on if, how, and the degree to which good governance, equity, policy, and appropriateness are to be included in a project.
- AusAID guidance on the degree to which good governance, equity, and land policy issues and other fundamentals are to be addressed, is necessary for design teams.
- Design teams need to examine closely the interaction between the various factors discussed above, eg. land titling, re-registration, activities to increase the probability of benefits flowing[1].

RECOMMENDATIONS

- *AusAID should consider if, how, and to what degree it wishes to see addressed aspects of land policy, good governance, and equity in these types of projects.*
- *Guidance on the above should be given to feasibility and design teams.*
- *Design teams should give due consideration to the necessary preconditions and the interacting factors that impact on the achievement of benefits, affordability and sustainability.*

1 In undertaking this, the operational level of the various preconditions (Table A3.3, Appendix 3) will need to be determined and considered in the context of the various stages of benefits. It is also a question of strategy and tactics as to how a particular intervention might best be achieved, bearing in mind the organisational culture, stage of development, and the particular characteristics and status of titling, registration, transactions, valuations, land law, land policy, etc.

2.5 Cooperation and co-financing with multilateral and bilateral agencies

CO-FINANCING PROJECTS WITH THE WORLD BANK

All of the large land titling projects in which AusAID is involved are being co-financed with the World Bank. These projects are costly; over A$500 million in Thailand, A$123 million to date in Indonesia), and long term (Thailand 15 years, 7 years in Indonesia). AusAID's involvement is mainly in the provision of a grant for TA, international education training.

Working with the Bank is a major advantage for AusAID in that it gives greater leverage to its grants, which, in turn, generates larger potential benefits for the project. The Bank loan allows the recipient country to carry out significant activities that AusAID would not normally fund while AusAID grants complement the design by funding TA and international education training. By working together the Bank and AusAID have established a good relationship in land titling projects, and built on Australia's internationally recognised expertise in this area. It would appear that the Bank has not developed similar long term partnerships with any other bilateral agency.

Working with AusAID also has advantages for the Bank. Without an AusAID grant for TA and international training, these types of projects would probably be very difficult to conduct successfully. Current designs require a large amount of TA and foreign governments seem unwilling to use Bank loan funds for this purpose. There is general recognition that past and current projects have benefited greatly from the AusAID funded TA.

To ensure that project outcomes are achieved and the good working relationship with the Bank is maintained, the following issues need to receive attention:

- respect each other, and the partner country, as equal and essential partners;
- work together from the earliest possible time, preferably from project identification;
- recognise that working together will take longer and require more effort and co-ordination than going it alone;
- recognise that an understanding of each other's different values, business drivers, and procedures is necessary;
- maintain regular contact and consult;
- have joint supervision missions; and
- ensure that the project design meets the needs of all partners.

While the above deals with the relationship between the Bank and AusAID, there are several issues that apply mainly to AusAID viz:

- the need for AusAID to control its own funding;
- the need for AusAID to have its own strategy for involvement; and
- the need for AusAID to have its own appropriate bidding documents.

COMMENTS

AusAID involvement as early as possible

AusAID has not been significantly involved in the design of past or current projects, although this is changing with the two projects currently being designed. AusAID's role has tended to be the funding of the TA and education during implementation. There are significant advantages in AusAID being involved from the start of project discussion and in the design. It would ensure that its views are taken into consideration and all partners have some involvement. It is important that AusAID is quite comfortable with the logframe and indicators in the World Bank project appraisal document (PAD) so that when the time comes the AMC deliverables can be correlated with it.

Understanding each other's values and methods of working

The necessity for this should not be underestimated if misunderstandings are to be avoided. The procedures and time frames for appraisal and the various stages of approval are different and need to be understood and accepted.

Ensure that the project design meets the needs of all partners

Past practice has tended to be that AusAID funds the initial design through the Bank's consultants trust fund. The international TA for design is then managed by the Bank and the results conform more to the World Bank project preparation report (PPR) format than to AusAID's (project design document (PDD). Under this practice AusAID has had little opportunity at an early stage to comment on or set the terms of reference (TOR) for the design. In the two current designs with the World Bank AusAID is being involved earlier. Current practice also tends to be for the design of a follow on Phase to be included as part of the main project implementation. There would be merit in considering the design as a separate contract and having the TOR developed jointly by all partners so that all needs are met to the depth required.

The design time allowed by the World Bank is much longer than that normally allocated by AusAID. There was a comment from the AMC/TAs that AusAID should allocate more time to design. This would better allow the development problem, options, and design to be fully examined and understood by all, and for the partner government and agencies to develop 'ownership' and understand the resource commitment. The need for more design time is supported.

Control of Australian funding

Based on past practice and experience, the most appropriate method of administering the AusAID grant would appear to be parallel co-financing. AusAID would contract an AMC to be responsible for supplying a range of services and accounting for the expenditure of all AusAID grant funds. This method has significant advantages over simply making the funds available to be incorporated in the World Bank loan funds, as it gives Australia greater leverage and a continuous voice in project assessment and adjustment.

Supervision missions

AusAID should be represented on all World Bank supervision missions, and indeed, the missions should be joint World Bank/AusAID supervision missions similar to the model used in Indonesia and, it is understood, in Laos. AusAID should be an active participant in these missions. It should have the flexibility to provide supplementary resources to the team so that AusAID's 'points of interest' are adequately addressed. It is recognised that there will be some aspects of interest to only a single co-financier

The need for AusAID to have its own strategy for involvement

The traditional role for AusAID is that of building the human and organisational capability so that on completion of the project and its inputs, ongoing sustainable improvements and benefits continue.

In the projects to date, AusAID has provided a grant for TA, and international education and training, as listed in the design. The emphasis on sustainability tends to be explicit rather than implicit. The TA, changing in focus and in numbers, tends to be present in-country as long as the project is using World Bank loan funds (15 years in Thailand).

Improving land administration and completing land titling in many partner countries will take decades. It is appropriate for AusAID to focus assistance on creating a sustainable capacity of people and organisations so that they have the skills, systems and motivation to continue improving land administration and land titling after the completion of AusAID funded TA. A typical AusAID project (irrespective of sector) is generally between three and five years. For large and complex land administration projects where significant institutional strengthening and change of large organisations is involved, the length of AusAID involvement will most likely need to be longer. The early emphasis could be on technical procedures, then focusing on institutional strengthening, and then gradually withdrawing. It is recognised that it is much easier to build technical capability than address institutional change. The length of AusAID involvement will depend on the particular project circumstances but could generally be expected not to exceed 10 to 12 years.

Loan funds from the World Bank to the partner country could continue without AusAID involvement once the key capability has been created and is sustainable.

An AusAID Development Strategy that complements the composite co-financed project design would provide a stronger rationale for AusAID involvement and make it easier for AusAID to measure the effectiveness of its involvement during implementation. A discussion draft for the Philippines project under design outlined a strategy based over 10 years designed to build capability in a number of areas so that the relevant agencies could progressively 'go it alone'.

The need for AusAID to have its own bidding documents

Past practice has tended to be to use the World Bank SAR (Staff Appraisal document – now replaced by the PAD –Project Appraisal Document) as the main document for AusAID bidding, and presumably appraisal. This has several disadvantages:

- it does not provide the full design document (the PPR –project preparation report in World Bank terms) to potential bidders;
- as the project progresses through the various stages no one document gives all the project information; and
- certain normal requirements of AusAID for a PDD as contained in AusGUIDE will probably not be covered sufficiently.

All the above will require the preparation of an AusAID 'bidding package'. Whether it will also require the compilation of a PDD from a number of documents will depend on the particular circumstances.

Co-operating with regional multilateral agencies – the Asian Development Bank

While many large land titling projects have been co-financed with the World Bank, none have been co-financed with the ADB (Asian Development Bank). The reason for this is not known and it may be worth exploring co-operation with the Asian Development Bank in large land titling/administration projects.

Conclusion

- The advantages of working with the Bank appear to far outweigh the extra time and effort required. While working together can 'drive the AusAID dollar further', this is not to say that AusAID cannot work effectively in these types of projects without World Bank involvement.
- The challenge for AusAID is to ensure it is treated as an equal partner, is respected for its achievements, valued for its input, and that the aspects important to AusAID receive due consideration. The aspects necessary for a good working relationship need to be recognised by both the Bank and AusAID. AusAID should have its own development strategy for involvement, which complements that of the Bank.

RECOMMENDATIONS

- *Working with the World Bank on large land titling/administration projects should be continued subject to all the aspects necessary for the good working relationship being adequately addressed and maintained.*
- *AusAID should have its own development strategy; that in preparing the bidding documents the fullest information be provided to potential bidders.*
- *When designing by itself, AusAID should allow more time for design.*

2.6 Costs, affordability and benefits of large land titling projects

Costs

THE COST OF LAND TITLING

The high cost and long duration of these projects has been previously noted. The significant costs, for all partners, are associated with the systematic first registration of land. However, there appears to be little hard information on the costs of land titling. The World Bank operational audit of the Thailand project noted the need for more reliable cost data.

This information is needed for several purposes: to know what it has cost; to be able to predict future costs; to know the cost of using different approaches (eg. boundaries fully surveyed, or only marked on an orthophoto, or on a sketch map) or different technologies (eg. GPS, total station); to be able to compare with others (different or same methods) for benchmarking purposes; to be able to test affordability.

Some costs per title are quoted but these are generally obtained by identifying specific project costs, allocating a per centage 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 approachs 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, once off assistance (eg. the AusAID contribution, training), etc. Care would need to be taken that the costs associated with buildings, institutional strengthening, valuation and the like were treated appropriately. The costing template would need to allow for estimated work rates, and unit cost in local and overseas currencies.

To be of maximum value and to enable comparisons across projects, some agreement between the major agencies and donors on the contents of the cost template would be necessary. Informal discussions between a number of specialists from several agencies at the World Bank Rural Week 2000 indicated support for the development of such a template.

THE COSTS OF LAND ADMINISTRATION SYSTEMS

Very little work appears to have 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 affordability and sustainability.

AFFORDABILITY

The affordability of a country's land titling and the land administration systems and transactions strongly affects its sustainability. It is very difficult to examine affordability unless (i) the base costs of conducting and maintaining the various methods of land titling and land

administration are known, (ii) there is information of the revenue stream from transaction fees, and (iii) 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 value 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 fall within the value. This factor needs to be taken into account in project design.

Some specialists appear to be starting to examine affordability as a function of per capita GDP or as a low multiple of the value of the land. Measures of affordability need further work.

During a field visit to a poor rural municipality in the Philippines, the Mayor and the tax collector stated that their tax collection rate was about 18 per cent, the amount of land titled was about 20 per cent, and that about 90 per cent of title holders paid their annual tax. If this was wide spread there are implications for titling, its cost and economic feasibility.

Benefits

Benefits are of two main types, social or economic. Figure A3.1 portrays the flow of and the various stages and types of benefits. These were summarised in Table A3.2 and comments given in Box A3.1 (Appendix 3).

This section deals mainly with economic benefits while social benefits are covered in a following section dealing with social impacts. Economic benefits fall into the following groups: the benefits that are generally claimed; the data/evidence to support the claimed benefits; the methodologies used to collect data on benefits; the methodologies for cost benefit analysis; and justification, economic and financial feasibility.

THE BENEFITS THAT ARE CLAIMED

The major benefits claimed for the land titling projects are that the title enhances tenure security, increases access to credit, and these improve farm income and land values. The development logic and implicit assumptions were outlined previously.

The data/evidence to support the claimed benefits

Economic studies conducted in Phase 2 of the Thailand Project concluded that:

- farmers without title deed enjoyed reasonably high tenure security;
- 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 input were substantially higher for titled land, except in one of the provinces where the results were not statistically significant;
- titled land was more likely to be improved; bunding 20 to 31 per cent higher; stump clearance 9-14 per cent more frequent; and

- overall productivity was 12-27 per cent higher on titled land; the effects vary substantially in magnitude between provinces; titling did not have a negative impact anywhere.

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. However, the Bank audit noted that the success of the Thailand project owed much to circumstances that may not apply elsewhere.

The evidence from Thailand has been used in the designs of Laos, Indonesia, and the upcoming Philippines project. In the Indonesian project the economic studies carried out in year 6 were not rated well and provided little firm evidence in any direction.

In the literature there is a reasonable amount of debate about benefits, the type, the size, the achievement, how they are best achieved, how to prove they have been achieved, and that a prime cause of the benefit is the title. There is also a range of views on the likely adverse impacts (mainly social) of titling.

The methodologies used to collect data on benefits

The methodology used in Thailand was a socio-economic baseline study followed by other periodic studies. In Indonesia a socio-economic base line study was carried out in year 6. The results were judged not suitable to build on. It is thought that no baseline study has been carried out in Laos. In the proposed Philippines project it seems as if the social and economic aspects will be separated but that an economic base line study will be done. There is no accepted best practice methodology with recommended detailed procedures. There is a need to establish these if reliable and consistent results of any value are to be obtained.

The methodologies for cost–benefit analysis and justification, and economic and financial feasibility

The first conceptual model of the benefits of land titling in rural development was compiled by Feder and Nishio (1999). It has been widely used as the basis for World Bank benefit analyses. This model deals only with the benefit flow from title to increased productivity, i.e. the Stage 3 benefits of Figure A3.1. There have been several publications by World Bank staff commenting on benefits, providing a manual for economic analysis of rural land administration projects, commenting on the effects of land registration, on financial development and economic growth. Some of these rely on a great deal of economic theory as a basis for argument. Appendix 13 gives an extract of some of the papers that deal with benefits, economic analysis and risks/inhibitors.

Pagiola (1999) has developed the World Bank Manual for the economic analysis of rural land administration projects where the results of two cost benefit analyses (CBA) were presented. One was applied to TLTP2. With both projects, it was found impractical to quantify many of the potential benefits due to lack of adequate data.

The models in the Manual do not easily lend themselves to implementation because no account is taken of the constraints and preconditions which affect the likelihood of the achievements of the benefits.

Examining project scope, costs, benefits and trade offs

The impacts, trade offs and interactions of the various factors outlined in Table 2.1 are complex and not easily visualised or estimated. There is a need to investigate a range of alternatives and 'what ifs" during the design process. This must be done with the partner agency to ensure that the appropriate aspects are selected for the project, and that both partners fully understand the reasoning.

A preliminary model to illustrate how scope, costs, benefits, and trade offs can be calculated and examined, and the range of variables that can be incorporated, has been prepared as Figure A4.1 (Appendix 4). It is based on Figure A3.1 (the flow and stages of benefits in land titling) (Appendix 3).

Spreadsheets are not an effective software tool to use for a model such as Figure A4.1; simple simulation or similar software is more effective.

Conclusion

- The costs of land titling and of land administration systems are not known with any degree of certainty. This makes it very difficult to carry out any meaningful comparison of approaches or systems, or to determine affordability for a particular country.
- The benefit evidence from Thailand tends to be used for similar projects in other countries. This is not necessarily valid as different conditions could well apply. There is no best practice methodology for economic baselines and follow on studies. Existing cost benefit methodologies have limitations.
- During design there is a need to consider a number of interrelated factors and to examine a range of alternatives for project scope, costs, benefits and tradeoffs. A model to allow this calculation has been developed. Simple simulation software is considered more appropriate than spreadsheets.

RECOMMENDATIONS

- *Cost estimates templates for initial land titling and for land administration systems be developed; they should be capable of providing data to support comparison of different land titling approaches and different types of land administration systems and between projects; the templates should be applied to the Thailand, Lao and Indonesia projects and the data made widely available; consultation with other interested agencies and donors would be useful.*
- *The concept of affordability for land titling and land administration be researched and some working definitions and values be determined and tested for AusAID partner countries in land titling and land administration projects.*
- *More attention be paid during design, to justifying the claimed anticipated benefits and, post project, to verify that the postulated benefits were obtained.*

- *A standard methodology be developed for establishing and monitoring economic baselines for land titling. The co-operation of other major multi and bi-lateral agencies should be sought.*
- *A working software application of the trade off model be developed and tested*

2.7 Social impacts

Land titling does have a large social impact. It can be positive or adverse if the conditions are not favourable or if care is not taken.

THE POSITIVE ASPECTS

The development logic previously outlined the benefit types and flows. These are the positive aspects. The stage 1 benefit is a social benefit, that of a landholder having increased security in the land by virtue of a title having been issued. There is evidence from the Thailand and Indonesia projects that landholders see real social benefits in the increased security. 'No one can take my land'. A small section of informal interviews for the planned Philippines project report a similar landholder view. Stage 2 and 3 benefits have social and economic benefits. Economic benefits should also cause social benefits to the landholders' household.

A recent social impact study in the Indonesian project was well received. It indicated that, the poor had benefited, landholders believed they had increased security over their land. This study identified many areas for improvement and identified no serious adverse social impacts.

THE POTENTIAL NEGATIVE ASPECTS

Stanfield (1990), examined the rationales and achievements of land titling (in Latin America and the Caribbean) and made a number of points on potential adverse social impacts of land titling (Box 2.2).

Box 2.2: Potential adverse social impacts

- Possession of legal titles on a large scale does not mean that the other conditions for improving security of ownership exists. Highly skewed land distribution patterns in areas where employment opportunities are limited and where population growths are large can lead to constant conflicts over land;
- Some title holders feel insecure when governments place socially desirable limitations (water shed management) on land use;
- If, after titling, there is not adequate access to credit, access to markets, technical assistance, some small landholders may be forced to sell their land after a few years, or abandon it, often to the benefit of financially stronger landholders;
- Under conditions where patronage is strong it is not likely that issuing land titles will alter the incentive structure of a highly dependent and weak segment of the peasantry;
- Sometimes too much is expected from programs of agricultural development through improving the security of land ownership;
- The conclusions in part were that:
  - The effectiveness of customary means for protecting rights of ownership has been underestimated, while the advantages of formal system may be overly praised.

Box 2.2 (continued)

The effects of increasing the negotiability of title so as to stimulate the loss of land by the peasantry may be exaggerated.

- The role of security of ownership and land holder investment behaviour has been misinterpreted.

- The exposure of peasant land to the imperfections of the land markets may lead to their systematic loss of land;
- The substantial increase in the market value of titled land could mean greater difficulty for the smaller farmer in acquiring land through the market;
- Some studies have shown that there is no systematic difference between titled and non titled land;
- Some studies indicate that the expected private benefits of titling have been few and difficult to realise, at least in the short term.

To this list must be added the possible gender adverse impact of a woman's name not being recorded on a title where she already holds rights, and the handling of customary land and its complex system of rights.

STEPS TO MINIMISE POTENTIAL ADVERSE IMPACTS

The importance of social impact has increased significantly as experience in these projects has increased. In the Philippines project, under design, a range of steps have been incorporated to: (i) understand the social, economic, ethnic, and land tenure arrangements and status before titling an area; (ii) ensure that all landholders are aware of their rights and understand what titling entails; and (iii) conduct post titling surveys to ascertain what happened and what the impact has been. This last aspect should be independent of the personnel who did the titling.

THE NEED FOR A STANDARD METHODOLOGY(S)

At the moment there is no best practice method with supporting 'how to' guidelines for carrying out the three stages identified above. There may well be a range of activities that should be undertaken.

In the recent past the emphasis has tended to be on customer relation services (CRS) focused on ensuring that all landholders are aware of their rights and understand what titling entails. Socioeconomic baselines have been used in the past but the emphasis has tended to be more on the economic than on the social side. In some cases the methodology has been left to the individual research group in the partner country. These studies in the co-financed projects tend to be let by contract, (using Bank funds) to an in country organisation. AusAID tends to have no input into the TOR for the study.

Conclusion

There is a need for a range of best practice guidelines to be developed in the area of social impact assessment to raise performance and to minimise the potential for adverse social impact. As this is an area of some concern to AusAID it should consider becoming more involved by influencing the design to raise the overall importance of this area. It should provide specialist TAs, ensure the methods and procedures are appropriate, ensure that all necessary steps are

taken to minimise adverse impact before titling and carry out independent post titling surveys in both the short, medium and long term. In this way it will be able to ascertain that there was no adverse impact and if there was, determine why, and the lesson learned.

RECOMMENDATIONS

- *AusAID needs to increase its influence in the area of social impact and to have more emphasis placed on this area both in design, during implementation, and post project.*
- *AusAID should develop guidelines for social impact analysis; if possible they should be developed in co-operation with suitable specialist from the World Bank and other interested agencies.*
- *Regular monitoring to check for adverse social impacts, should be conducted, preferably by a group independent from those issuing the titles.*

2.8 Retaining and building on the knowledge base

THE IMPORTANCE OF THE KNOWLEDGE BASE

In most partner countries there is a serious lack of documented information about land policy, the laws and regulations, administrative processes, background material and analyses. Project implementation produces a significant knowledge base comprising technical reports, procedures, analyses and similar.

Significant TA effort goes into obtaining and compiling this knowledge base. In most cases it becomes a prime source of information. The reports are considered invaluable and should be retained and accessible for the following reasons:

- they cost a lot to produce;
- they hold very useful information that is mostly time independent;
- they are sometimes the only composite source of information, and often the only source in English;
- they hold information that can be applied to similar projects in different countries or other projects in the same country;
- they provide valuable technical information which, if readily available, expands the knowledge base, lifts the state of the art, and should lead to better and more competitive future bids;
- provide information continuity if a change of AMC occurs during various phases of a long term project; and
- can form the base for the development of best practice guidelines/procedures for wider use.

(Only technical reports are being considered and not the normal contractual administrative reports required by AusAID).

RETAINING THE KNOWLEDGE BASE

Very few of these technical reports are held in the AusAID Canberra library. Table 2.3 summarizes the situation. It is based on a mix of sampling and estimates.

Table 2.3: Technical reports held in AusAID library

Project	No. of Reports Prepared	No. Held in AusAID Library	No. Held in Project Office/ Agency in Country
NRMDP - Philippines	82	5	39
Thailand Land Titling	100+	8	all
Laos Land Titling	119	6	all
Indonesia Land Titling	45	12	all
ACLMP - PNG	15	0	all
Hainan LRFIS	37	0	all
Land Administration- Vanuatu	5	0	all

This indicates that less than 10 per cent of technical information is held in the AusAID library. It is likely that the situation would be no different for other projects. Not included in the tables above are reports generated by the same projects using only World Bank funds; many of these are also useful and should be obtained and retained.

USING THE KNOWLEDGE BASE – DEVELOPING BEST PRACTICE GUIDELINES

Many of these reports could be drawn upon to develop a series of best practice guidelines to be used in subsequent similar projects. Topics such as the following would be useful: adjudication procedures, cadastral surveying procedures/contracts, area selection methodology, communicating with the local landowners, social, gender, and economic surveys and monitoring, training course structures and material. This list is meant to be illustrative only as there are many topics. Even without further development much material would be useful to a similar project. An example is the potential saving in TA and initial implementation time if relevant procedures from the projects in Indonesia, Laos and Thailand could be made available to the upcoming project in the Philippines. Clearance would probably be needed from the World Bank and the partner countries. The base material is available from the projects in Thailand, Laos and Indonesia.

The need to develop best practice guidelines is acknowledged by most subject specialists. Some bilateral and multilateral donors have expressed interest in collaborating in the production of these best practice guidelines.

Conclusion

There is a need to retain the knowledge, transfer it between similar projects, and move towards the development of a series of best practice guidelines.

RECOMMENDATIONS

- *Project technical reports are a valuable resource, and should be retained and made accessible[2] and important missing reports be acquired.*
- *The necessary material from past and current land titling projects be passed to the Philippines project (if AusAID decides to co-finance).*
- *Best practice guidelines, based on project reports, be developed to cover a range of land titling and land administration topics; collaboration with other bilateral and multilateral donors should be sought; priority should be given to material useful for the upcoming Philippines project.*

2 The best way to make these technical reports accessible would have to be determined. Some possibilities are: list of reports and brief description made available via AusAID web site with full reports held in AusAID library; or full reports held as part of a specialized collection in a university/research/ professional collection; or reports held in digital form (where possible) and made available over the net, or some combination of the above.

3. IMPROVING THE ADMINISTRATION OF ALIENATED LAND IN SOUTH PACIFIC COUNTRIES

3.1 Introduction

Projects in the South Pacific are concerned with improving land administration for one tenure type, namely, alienated land. In these countries, while the alienated land usually occupies less than 5 per cent of the land mass, it is held to produce the greater portion of the economic wealth of the country. About 20 per cent of the population live on alienated land. The remaining 80 per cent live in a subsistence manner on customary land, about 90 per cent of the land mass. The number of alienated land parcels is small, generally not above 50,000 and in most cases between 5 and 20,000. The staff responsible for surveying, land records, land policy and management can be in separate departments and ministries even though the total number may be less than 60. Splitting functions with very small numbers across a number of departments, each with its own management, makes co-operation and co-ordination very difficult.

3.2 The development logic and implicit assumptions

The logic for these types of projects tends to rely on the proposition that improving the land administration system will facilitate economic development. The development logic and the implicit assumptions are given in Table 3.1. A diagrammatic representation of the flow of benefits is shown in Figure A5.1 (Appendix 5).

The key assumptions are:

- the use of the very small amount of alienated land (order of 5 per cent) does make an appreciable economic contribution to the country; and
- improvements in the administration of alienated land will improve this economic contribution or, conversely, that if the land administration falls below a certain level of effectiveness it will have an adverse impact both economically and socially (land disputes, increase in poverty).

Projects tend to accept the implicit assumptions and focus on improving the efficiency of the current land administration systems.

Table 3.1: Development logic, implicit assumptions, and comments for projects that improve the administration of alienated land

Development logic	Implicit assumption	Comments
Tenure security of alienated land is important for economic development.	The use of the very small amount of alienated land (order of 5 per cent) does make an appreciable economic contribution to the country.	This tends to be accepted fact. It is understood that some work was done years ago in PNG, which showed this to be true. It is not known if similar work has been done in other Pacific countries.
Effective and efficient land administration of alienated land is an important contribution to the country's economic well being & growth and it: a) encourages economic investment. b) provides income to government (via land transactions fees, stamp duty, land rent, taxes, etc).	Improvements in the administration of alienated land will improve the economic contribution and that if the land administration falls below a certain level of effectiveness it will have an adverse impact economically and socially (land disputes, increase in poverty).	Again this tends to be accepted as fact. It would be useful if it was verified and, in particular, how strong the connection is and the level of land administration efficiency that is required.[a]
	The system of land administration used (essentially inherited from colonial times) is suitable, affordable, and sustainable.	It is debatable that the current systems are suitable, affordable, or sustainable. This would be worth examination. If change was found desirable it would probably not be easy to get agreement or to implement. Institutional reform would probably be required.[b]
	The principles of effectiveness, good governance, equity, transparency and efficiency for land administration are supported by the government and senior management.	Some systems may not meet this standard. Gaining a commitment to address this may be difficult.
	The income and economic development achieved via the alienated land is managed in such a way that the poor benefit in a sustainable way.	The income from land transaction fees generally goes straight to consolidated revenue.

a In many cases the arrears of land rent in Vanuatu (in mid 1998) extended back a number of years; the magnitude of the rent owing was such that it could have funded a significant part of the annual public service's salary bill. It is understand that land rent arrears is also a major problem in the Solomon Is. The project about to get underway there will address this.

b The cost of land administration: In Vanuatu the cost of producing the service, staffing, etc, exceeded the cost of income in fees, etc; since the lease rent is not collected efficiently, this department is, in reality, a cost center for Government; in most countries this department is the provider of significant sources of revenue to the government.

3.3 Alignment with the objective of poverty reduction

Figure A5.1 (Appendix 5) indicates that the flow of benefits to the poor is not direct or automatic, nor is it certain that benefits will foster sustainable development.

AusAID undertakes these types of projects because they lie within the 'essential infrastructure' category. The rationale is that the effective operation of this infrastructure is very important to the country's economy, and that if this effectiveness falls below a certain level this economy would be adversely affected; land disputes would erupt, and poverty increase. The veracity, therefore, of some of the implicit assumptions needs examination.

CUSTOMARY LAND

These projects do not deal with customary land that is widely acknowledged as having its own set of special problems. Typically, in the South Pacific, about 80 per cent of the population live on over 90 per cent of the land mass whose tenure type is customary. The land use is predominately subsistence agriculture with some cash cropping. Many would argue that it is this rural group that has the greater development need. To meet this need geographic information about natural resources and infrastructure is vital. This was noted by one of the past AMC/TAs.

There have been several large AusAID projects that have developed country wide natural resource information systems, eg. PNGRIS in PNG and VANRIS in Vanuatu. These were in natural resource management projects and were not included in this review. It would appear that only one completed project has involved customary land and that was in Fiji. It was not included in the review.

In Vanuatu it is understood that there is a process in which a portion of customary land can be leased and the recording and administration of the lease is handled in the same administrative department as that for alienated land. The reason for the lease is usually economic development.

In many countries, particularly Africa, development agencies and their partner countries are wrestling with the challenges of appropriately administering the land rights associated with customary land, in a way that is affordable and equitable. There is also the ongoing challenge of effectively administering land alienated during the colonial era.

Over time it is likely that the administration of land rights and the economic development of customary land will develop in importance. It could be useful to begin some preparatory work on these issues.

3.4 The projects reviewed

The projects selected for review were the Kiribati Institutional Strengthening of the Lands and Survey Division of the Ministry of Home Affairs and Rural Development, and the Vanuatu Land Use Planning Project. In both of these projects improving land administration was only one component of a broader project.

A description, some information, and an assessment of the Kiribati project is in Appendix 6, and of the Vanuatu project in Appendix 7.

3.5 Discussion

THE REASONS FOR MORE SUCCESS IN THE KIRIBATI PROJECT

The Kiribati project would appear more successful in improving land administration than the one in Vanuatu. The main reasons appear to be:

- improvements in land administration were designed as an integral part of the Kiribati project; if it was not successful, then the other components would be affected, so everyone had a vested interest in ensuring that improvements in land administration were successful. In the case of Vanuatu, land administration was added as an additional component, and, while useful to the land use planning objectives of the main project, was not essential to it. It therefore did not get the necessary interest or attention from senior management;
- the Kiribati project had an Australian volunteer in a key area of technical expertise for three years; also the ATL had previously been in the Department and was 'well bedded in' and accepted; and
- in Kiribati there was a single department located in one building. There were no departmental or divisional barriers of any substance and the managers and staff worked as a team to address common problems. They were also interested in bettering the current situation. In Vanuatu there were four separate departments which operated largely in isolation, they were physically separated (albeit not by a great distance); and the Departmental Heads did not work together to address common problems, neither did they show much interest.

The difficulty in dealing with more than one department was noted in the large land titling projects. The organisational scale here is smaller but the adverse impact is similar.

THE SPECIAL PROBLEMS OF THE SOUTH PACIFIC

The South Pacific countries present special problems because of the small number of parcels of alienated land and the small staff numbers. A single project aimed at land administration may be hard to justify. The pace of implementation can be limited by the ability of staff to absorb and become proficient and confident at sequential improvements. The land administration systems of the various countries are basically the same and the problems and improvements required tend to be very similar. There would be merit in investigating a regional approach to improving the administration of land.

The likely emerging need to be prepared to address customary land rights and economic development has been noted.

THE APPROPRIATENESS AND AFFORDABILITY OF THE CURRENT LAND ADMINISTRATION SYSTEMS FOR ALIENATED LAND

This aspect was raised for the countries where large scale land titling is being carried out and is also applicable for the small Pacific countries. The current systems are essentially those inherited from the colonial past. Where improvements have been made they tend to be modelled on Australia or New Zealand. It is by no means a given that these systems are appropriate, affordable, effective or sustainable. That is not to say that there are any easy alternatives. However, there would be merit in examining the whole question of long term appropriateness, affordability, and sustainability. If this is not done there is a danger that projects will treat recurring symptoms rather than the root cause of the development problem.

The need for good governance and equity applies equally to the administration of alienated land in the South Pacific as well as to countries in SE Asia where the large land titling projects are occurring.

LESSONS LEARNED FROM KIRIBATI AND VANUATU

The following are the lessons to be learned:

- the necessity of having the commitment of senior managers, and for them to set a good example to their staff;
- the desirability of incremental improvements and visible achievements to build confidence, all within the framework of a long term goal;
- the need to have one TA on the ground at all times to foster continued improvement and to act as the 'dripping water';
- sustainability of computer based systems is still a high risk; that no mission critical systems or processes should rely solely on computers until it can be shown that the systems, processes and skills of the staff using them, are sustainable; and
- significant improvements are possible in the paper based system by improving the processes themselves as well as staff motivation and capability. This is due to the relatively small number of parcels of land, and (in relative terms) the large number of staff.

Conclusion

- It is not clear how appropriate, affordable, and sustainable the current systems are for administering alienated land. Involvement in these projects rests more with land administration being 'essential infrastructure' rather than having a direct impact on the poor. The major implicit assumptions could well be verified. There is a danger that these projects could be treating symptoms rather than the root cause of the development problem.
- The problems of managing land rights over customary land and its economic development could well become more prominent in the future. To improve the effectiveness and efficiency of the existing systems there is merit in considering a more

long term, low intensity, regional approach. The emphasis should be on gaining commitment to improvement from senior officials and managers in the various countries, together with an assisted self help program focused on continuous incremental improvement and a low use of technology.

RECOMMENDATIONS

- *Some work needs to be done to gauge the appropriateness, affordability and sustainability of the existing systems of land administration for alienated land.*
- *There is merit in investigating a regional approach to providing assistance in improving land administration.*
- *Some preparatory work be done on the management of land rights over customary land and its economic development, as this may gain more prominence in the not too distant future.*
- *For projects similar to those reviewed:*
  - *Care be taken in the design to ensure that the root cause of the development problem (likely to be the nature of the system and policy) is addressed and not simply the recurring symptom (inefficiency).*
  - *Improving land administration should be a stand alone project, or if not, only included as a component in a larger project where it is an integral part of that project.*
  - *Great care needs be taken in introducing computer based systems and applications, especially if used for "mission critical" systems. Sustainability is paramount.*

4. STRENGTHENING NATIONAL MAPPING AND SURVEYING AGENCIES

4.1 Introduction

The general characteristics of these types of projects were outlined in Box A1.1 (Appendix 1). Many countries have a separate agency responsible for country-wide surveying and mapping. The National Mapping Bureau in PNG has national responsibilities; in Hainan, China, the Bureau of Surveying and Mapping has similar responsibilities but operates within a national system of surveying and mapping bureau. In some of the smaller Pacific countries, the surveying and mapping functions are either small (Vanuatu, Solomon Islands), or non-existent (Kiribati), or may only comprise a few people in a section of a department.

In the last 20 years surveying and mapping organisations throughout the world have undergone profound technological change. This has resulted in a change of business focus and, therefore, organisational change. In developed countries this change is predominantly technical and computer based with a move from standard large volume topographical mapping to the provision of a broad range of specialised low volume digital geographical data and products. National surveying and mapping has changed from people intensive with a large field element, to capital and technology intensive. Staff are fewer but with more IT skills. Field work is reduced. Many public sector mapping agencies in developed countries have been downsized or corporatised.

Surveying and mapping agencies in partner countries generally wish to use this new technology. The technology is usually used to automate the existing mapping processes and products rather than to innovate. There is generally a wish to retain the current business and organisational focus.

The aim of these types of development projects is to improve the capability and capacity, both technically and organisationally, of the mapping organisations by introducing new and appropriate technology, training staff, and assisting the organisations to be productive within the new technology.

4.2 The development logic and implicit assumptions

The logic for this type of project is generally stated that maps and similar products are essential for economic development and best provided by a public sector specialist agency. The development logic, implicit assumptions some comments are outlined in Table 4.1. A diagrammatic representation of the flow of benefits is shown in Figure A8.1 (Appendix 8).

Table 4.1: Development logic, implicit assumptions, and comments for projects that strengthen national mapping and surveying agencies

Development logic	Implicit assumption	Comments
Maps, geographical information and similar products are essential for social and economic planning and development.	The products/ information needed for the various types of development are well defined, accepted by users and can be "pre made" affordably and efficiently.	There is usually an accepted base of data required but other data varies with particular needs.
	A technically specialised national agency/group is the most suitable, affordable and effective institution to provide the required services and products.	There is little debate that the products are required; what can be debated is how the service/product is best provided. The ease and low cost of a lot of technology now makes it possible for previous customer agencies to become their own producers. One argument is that it is best to strengthen the private sector as it is potentially the most sustainable.
	An annual budget exists for the required information to be collected, processed, held, maintained, etc.	The new technology, on the scale needed for a national agency, is costly to maintain. Experience shows that it can be very difficult to obtain the necessary annual funds from government, thus making long term sustainability suspect.
	• The required products can be delivered to the customer in the right form and time. • A good working relationship exists between the producer agency and the customer agencies.	Historically national mapping agencies do not have a good reputation as 'service conscious'. A culture change is often necessary.
	• The products are suitable for social and economic planning and development. • The developments provide a positive impact on the poor.	Usually there is a great need for co-operative design between the producer and the customer.

There is no shortage of statements indicating that mapping is essential for planning economic and social development. It could be better stated that maps are a necessary input but are only one of the many inputs required for those purposes. The proposition that strengthening the ability of national mapping institutions to produce maps and that these support economic development is neither straightforward nor direct.

The key implicit assumption is that an existing national mapping and surveying agency is the most suitable group to provide the necessary products and services. There may well be a number of other options that should be examined during the feasibility and design process. Some of the factors that should be taken into account are the:

- development need;
- actual user agencies' needs for maps and geographic based products;
- options for the provision of the required products;
- status of alternative sources: expertise, technology, track record, staffing levels, the likelihood of adequate annual maintenance funds being available, sustainability;
- likely contribution and impact of a strengthened national mapping and surveying agency; and
- recipient government's views on the use of the public and private sectors.

4.3 Alignment with the objective of poverty reduction

The staged flow of benefits resulting from strengthening a national mapping organisation is shown in Figure A8.1 (Appendix 8). The Stage 1 beneficiaries are the staff of the national mapping institution itself. There are further stages before development actually occurs and benefits flow. If the poor are to benefit it will take some time for the impact to be felt and it will be an indirect benefit through influences on economic growth.

The case for AusAID supporting these types of project lies more with the 'essential infrastructure' classification than direct poverty alleviation. However, this case is more difficult to make than for improving the administration of alienated land.

It may be more effective to include an item for the provision of the necessary mapping and geographic products in the design of a particular development project, rather than having a separate project aimed at strengthening a mapping agency.

4.4 The projects reviewed

The projects selected for review were:

- Australia's Contribution to the Land Mobilisation Project (ACLMP) in PNG. This involved institutional strengthening of the National Mapping Bureau; and
- The Hainan Land Resources Fundamental Information Systems Project (HFLISP) in Hainan, China. This was a technology and training upgrade of the Hainan Bureau of Surveying and Mapping, together with the development of a range of base data sets.

The Zimbabwe LIS, which had a large element of mapping, did not proceed beyond the design stage because of institutional aspects.

Initially ACLMP was to be complementary to a World Bank Land Mobilisation Project. Because of public PNG concerns about 'land mobilisation', the two projects were split and the Australian component became stand-alone and focused on strengthening the National Mapping Bureau. The ACLMP name was retained. The design was adjusted after 1 year of implementation. This was necessary for several reasons:- the length of time between the identification and implementation (5 years) during which circumstances had changed; a realisation that some of the initial objectives and indicators (some were high production targets) were either inappropriate or unachievable.

The Hainan project was also subject to some adjustments during feasibility. Initially, there was a land titling and administration component which was subsequently deleted. It is understood that this was because the scope was considered too wide and there were institutional problems between the two participating agencies.

The objectives of these two projects are compared in Table A8.1, the components and outputs are compared in Table A8.2 (Appendix 8). The projects are very similar. The major differences are that in the PNG project there was a major geodetic adjustment undertaken and greater emphasis on institutional strengthening.

A discussion of the Hainan LFRIS Project is contained in Appendix 9, and of the ACLMP Project in Appendix 10.

4.5 Discussion

The reasons for more success in Hainan

In terms of capability attained and the likelihood of sustainability, Hainan was more successful than PNG. However, it must be noted that Hainan started from a higher base and that the capability of the staff of the PNG NMB has greatly increased.

In Hainan, the risks were manageable; in PNG, most occurred at high levels, and their resolution in some cases, was very difficult if not impossible.

The reasons that Hainan was more successful appear to be:

- senior management of the Bureau of Surveying and Mapping, at provincial and national level, wanted the project, were committed to it, and devoted considerable resources, attention, and energy to it;
- staff were dedicated to the project, saw it as a significant learning opportunity, and as a result worked very hard; and
- cultural differences impact on what can be achieved.

The type of technology is not considered a relevant factor. Both had the same 'brand' of mapping technology implemented. There was local support in Beijing and, in the case of PNG, in Brisbane.

SIZE OF PRODUCTION TARGETS

In both projects high production targets were set initially. In the case of PNG they were scaled back by approximately two-thirds. This was in order to allow emphasis to be placed on increasing both institutional and individual capability and capacity, to get systems and procedures in place, tested, and bedded down, and for the staff and the organisation to become proficient. In the case of Hainan, there was some slight reduction. The Hainan project achieved a very credible production performance.

In design, there would be merit in having the primary focus on building capability that is sustainable and not to be overly ambitious with production targets. The rationale for AusAID involvement is sustainability. This means that when the TAs are withdrawn the organisation should be able to continue to attain the same numerical targets at the same quality and using the same process. Unless sufficient attention is given to this then the sustainability probability could well be reduced.

SOCIAL IMPACTS

These types of projects have virtually no broad social or gender aspects. The direct beneficiaries are the staff of the mapping organisations. The history of the organisation will dictate the gender balance. In general there is an imbalance towards male representation. Total staff numbers are generally relatively small. The new work direction of these organisations make them more friendly to female participation now that technology has removed the need for long field seasons. An increase in the female participation rate should be sought.

LESSONS LEARNED

Some lessons particular to each project have already been listed. Looking at the projects as a whole and taking into account other aspects, the following could be considered as overall lessons learned:

- a key indicator for success is a high level of ongoing interest from senior management and the manifestation of that in ensuring the provision of counterpart staff and funding;
- the development emphasis be on building the capability and capacity of the organisation and staff, and post project sustainability, rather than on the achievement of large production targets;
- more attention should be given to ensuring the assumptions for the goal and purpose become valid, if these types of projects are undertaken. The key assumptions are: that the products being produced are what the user wants; the user has a need, knows how to use the products; can obtain them, and is willing to use them;
- very careful attention needs to be given to ensuring that any technology provided, together with associated staff and systems, is appropriate and has a high probability of sustainability; and

- during feasibility and design a wide range of options be considered for the provision of geographic products and services, besides the obvious one of strengthening the existing public sector mapping organisation. This could well be looked at in the broader context of public sector reform.

Conclusion

The primary issue is whether or not AusAID should continue to support these types of projects, ie. strengthening an existing national mapping and surveying group, or whether it should look at these projects in the broader view of public sector reform (which is happening in many partner countries, some with AusAID support); while accepting the need for maps, surveys, and geographical products and services, examine a range of possible alternative options for their effective provision, e.g. the private sector.

RECOMMENDATION

- *During the feasibility stage, these types of project should be examined under the broader view of public sector reform, and all other options be considered.*

5. ESTABLISHING LAND INFORMATION SYSTEMS

5.1 Introduction

An outline of these types of projects was given in Box A1.2 (Appendix 1). They are usually aimed at converting and integrating land parcel maps and related text information from paper to digital format. This information, usually the province of a lands department, is then provided to other government agencies responsible for planning natural resource management, taxation, transport and public works. Individual agencies integrate the land data into their own systems, and all agencies then exchange composite data so that queries and analyses can be carried out.

LIS is used differently to GIS (geographic information systems). LIS is used to denote a system with core data based on land parcels. GIS can operate without the land ownership information as core data. Both use geographic information and associated technologies. A distinction is also made between LIS and DCM (digital cadastral maps) or DCDB (digital cadastral database). DCM and DCDB tend to be used synonymously. A DCM is the end result of mapping the legal boundaries of land parcels and allocating a parcel identifier. A DCDB is the output where additional information about land rights or parcels is added to a DCM. A DCM and a DCDB are generally products of a Lands Department, or several departments where the responsibility of administering different tenure types is split. An LIS is a much broader undertaking where a range of data from different departments is integrated, after registering to the DCDB, and then the composite data is made widely available. An LIS entails much interdepartmental co-operation on a wide range of policy and technical issues.

There were no projects of this type designated for the review but brief comments are included here for completeness. Of the projects supported by AusAID, three could be considered to fall within this category: the Namibia Land Information System Project, concerned with investigating the planning requirements needed before implementing an LIS; the Bangkok Land Information System Project; a land information system component of the Zimbabwe Land Information System Project. This latter did not proceed beyond design.

5.2 The development logic and alignment with AusAID's objectives

The logic for these types of projects is that when land related data from several agencies is integrated and made widely available this allows data sharing, subsequent cost reduction to the agencies, and allows them to better meet their charter. Importantly, using GIS and database technologies, it provides a very important planning and management tool for both urban and rural environments.

There is no direct link to poverty reduction. These projects, if undertaken, are best tested against the 'essential infrastructure' argument. The scale, complexity, reason for, and economics of these projects, tend to favour urban areas.

5.3 Discussion

Figure A3.1 (Appendix 3) shows that an LIS project represents Stage 5 of the benefits flowing from land titling and land administration projects.

One of the essential conditions is that a land titling and land administration system is of acceptable quality and is complete over the selected geographic area. This condition can only exist after land titling has taken place and the records base is of a sufficiently high quality, ie Stages 1, 2, 3, and 4 of the land titling benefit chain (Figure A3.1) must be complete and effective before LIS can start.

Besides all the preconditions of Table A3.3 (Appendix 3) having to be met it is also necessary for agencies to be willing to share data and work closely together. A wide range of policy and technical protocols need to be agreed upon and then used; all the required data must exist, be of operational quality, and will be maintained; the technology, skilled staff, and facilities must be available and sustainable.

In most developing countries these preconditions require time, energy and commitment to attain. The probability of successfully implementing an LIS in developing countries is considered small, given that the range of preconditions required. This is not to say that an LIS cannot be a goal. However it needs to be worked towards by putting the basic building blocks in place.

Conclusion

LIS projects have no direct link to poverty reduction. A large number of preconditions must exist before they can be undertaken. Most preconditions would not exist in partner countries. Successful implementation can be long and challenging even in developed countries. If considered they should be examined against the 'essential infrastructure' requirement.

RECOMMENDATION

- *If LIS is being considered for support then, during feasibility and design, careful attention must be given to the preconditions, risk, affordability, and sustainability.*

6. CONCLUSIONS AND RECOMMENDATIONS

6.1 Main conclusions and recommendations

THE RELEVANCE OF DIFFERENT PROJECT TYPES

When considering the relevance of these projects i.e. the alignment with AusAID's objective of poverty reduction through sustainable development, it was found that:

- The projects dealing with *large scale land titling and administration* aligned most closely. There is a demonstrable direct link (of many steps) to the impact on poverty and economic development, particularly in rural areas. Co-financing with the World Bank was found to be appropriate provided that aspects necessary for an effective partnership could be met. Improvements in design and implementation of these projects are possible.
- Projects aiming to *improve the administration of alienated land in the South Pacific* have a less direct link to poverty reduction via the influence of economic growth. These projects might best be considered as essential infrastructure rather than focusing directly on poverty reduction. There is a danger of treating symptoms rather than root causes of the development problem.
- For projects dealing with *strengthening national agencies responsible for surveying and mapping* no direct linkage to poverty reduction could be established. They may be considered as essential infrastructure but the argument linking this infrastructure to poverty reduction could be tenuous depending on circumstances. Other options for the supply of the products and services produced by these organisations (eg maps, digital geographic data etc) could be examined. These could be looked at in the context of Public Sector reform.
- For *establishing land information systems* no direct link to the rural poor was established. These projects are most economical and effective in dense urban environments. A case could be made for an impact on the urban poor but the link would not be direct. If undertaken they are best considered as essential infrastructure. To undertake these projects successfully, a large number of preconditions must exist (eg land titling and land parcel boundary mapping should be completed before building LIS can commence). The probability of all the required aspects being in place, or being quickly achieved, is low in most partner countries, as is the probability of sustainability of the LIS.

MAIN LESSONS LEARNED

Considering all projects types, the major lessons learned can be identified as follows:

For design

- Ensure that the 'true' development problem is identified and a range of intervention options and impacts, with the associated costs and benefits, is evaluated.

- Close attention is needed to the following: the development rationale, the implicit assumptions, the status of pre conditions, the probability of achieving objectives and purpose assumptions, the probability of achieving the claimed benefits.
- In many cases more design time is required and the design team should include expertise in development, social and gender issues as well as the technical aspects. More time needs to be allowed for the recipient country staff to contribute, to understand the proposed outcomes, and to feel they own the project design.
- Some guidance from AusAID needs to be given to design teams on the depth of land policy changes, institutional strengthening, and movement towards good governance.
- When co-financing with the World Bank, AusAID should be involved as early as possible, preferably from project identification, and should have a complementary participation strategy for its involvement. A possible emphasis for AusAID could be on building the capability of people and the sustainability of organisations, rather than the achievement of large production targets.
- More attention needs to be given to social and gender issues (particularly in the large land titling projects), the appropriateness and affordability of the systems, and the achievement of benefits and sustainability.

During implementation

- As well as monitoring the normal operational indicators, it would be useful to monitor more closely the progress and validity of the assumptions, indicators of sustainability and benefit achievement.
- More attention needs to be paid to the social issues of land; monitoring of the social aspects through social impact assessments and studies is required throughout the project and preferably for some time beyond, particularly in the large land titling projects.
- Wider monitoring is required so that the status of critical assumptions can be monitored together with the achievement of objectives.
- For co-financed projects, the World Bank and AusAID should continue to have joint supervision missions. AusAID should be an active participant. It should have the flexibility to provide appropriate supplementary resources to the mission to ensure that AusAID's points of interest are adequately addressed. On occasions consideration could be given to rotating the leadership of the missions.
- When change to objectives, outputs, indicators or milestones are judged necessary, they should be carried out quickly.

Post project

In recognising that in particular the large land titling projects have the potential to impact both positively and negatively on landholders and that these impacts may not be apparent for some time, it would be prudent to:

- Check the achievement of impacts, benefits and sustainability, perhaps in five years intervals after completion.
- Retain and transfer the knowledge base between projects, donors, recipients and contractors.

Lessons learned relating to each particular project type or, to an individual project, are listed in the report.

MAIN RECOMMENDATIONS FOR ACTION

- Cost estimation templates, for different land titling approaches, and for different types of land administration systems, should be developed; using data from past and current projects, the concepts of affordability and sustainability should be examined for the particular circumstances of partner countries. A project scope, costs, benefits and trade off software application should be developed and tested as a feasibility and design tool. The list of preconditions should be developed into an operational check list.
- The social impact of land titling should be given more importance, in particular the avoidance of potential adverse impacts and assuring that the target groups are beneficiaries.
- For the large land titling projects a number methodologies need to be further developed. Aspects to be covered are:- pre and post social impact analysis; pre and post economic impact analysis; design cost benefit/justification; macro indicators for land tenure and land administration correlated with social and economic data.
- Best practice guidelines, covering a range of topics should be developed based on the large amount of material from previous and current land titling projects. These guidelines should be made widely available.
- A regional approach should be investigated to improve land administration for the South Pacific countries.

6.2 Detailed conclusions and recommendations

The detailed conclusions and recommendations are spread throughout the report. For convenience they are grouped here.

6.2.1 THE LARGE LAND TITLING PROJECTS

The development rationale and implicit assumptions

A large number of preconditions must be present to ensure reasonable likelihood of achieving any particular stage of benefits. A wide range of activities may be necessary to address critical shortcomings in the pre-conditions. The amount of intervention to address the various pre-conditions could well impact on project scope. The status of the pre-conditions may vary geographically and this may be a factor in design.

It is necessary to ensure a high rate of re-registration of land (Stage 2) to maintain title security, Stage 1 benefits, and the initial capital investment in land titling. The benefit Stages 1 (social) 2 and 3 (economic) are the core stages. Stage 4 can be addressed over time. Stage 5 (LIS) is more long term and the preconditions are extensive.

Care need to be taken in design to adequately addresses the necessary preconditions to achieve a particular stage(s) of benefits, without becoming too large in scope or cost.

It is recommended that:

- during the design phase close attention should be given to the necessary preconditions, scope, and which particular stages of benefit flows can be included in a single project; and
- the list of preconditions in Table A3.3 be developed into an operational checklist.

The alignment with AusAID's objective of poverty reduction

There is a very strong case for arguing that large land titling and administration projects can support poverty reduction through sustainable development. The challenges are to:

- design appropriate projects that will meet the development objectives and deliver the benefits;
- ensure that the AusAID target groups (the poor, minority groups, women etc.) are the beneficiaries;
- devise and execute a suitable complementary AusAID involvement strategy when co-financing with the World Bank; [NB: Bank loans may be over 20 years, the task of titling may take 40 years, and AusAID will probably only want to be involved for some of this time]; and
- be able to provide post project evidence of relevance, effectiveness, efficiency, impact, and sustainability.

Targeting the poor and the at risk

There is a need to understand, on a whole of country basis down to at least provincial and preferably local government level, the status of land tenure and administration correlated with social and economic data, so that the magnitude and nature of the problem is understood and intervention options can be examined.

AusAID should ensure that target group, the poor and at risk are beneficiaries, particularly in co-financing situations.

The study recommended that:

- a set of country wide macro indicators for land tenure and land administration should be recognised as important; and
- where AusAID is looking to support a large land titling/administration project, a set of indicators should be compiled either before or during the design process.

The suggested macro indicators need to be further developed after other knowledgeable comment. Comments should be sought from the World Bank.

A standard model?

Current and past projects, particularly those with the World Bank tend to conform to a standard model of objectives and strategy. This is appropriate for some situations but not for all. AusAID will need to have a prior policy position on if, how and the degree to which good governance, equity, policy, and appropriateness are to be included in a project. AusAID guidance on these issues should be given to feasibility and design teams. Design teams need to examine closely the interaction between the various factors (eg. land titling, re-registration), that impact on the achievement of benefits, affordability and sustainability.

Co-operating and co-financing with other multilateral and bilateral agencies

The advantages of working with the Bank appear to far outweigh the extra time and effort required. While working together can 'drive the AusAID dollar further', this is not to say that AusAID cannot work effectively in these types of projects without World Bank involvement.

The challenge for AusAID is to ensure it is treated as an equal partner, is respected for its achievements, valued for its input, and that the aspects important to AusAID receive due consideration. The aspects necessary for a good working relationship need to be recognised by both the Bank and AusAID. AusAID should have its own development strategy for involvement, which compliments that of the Bank.

It is concluded that:

- working with the World Bank on large land titling/administration projects should be continued subject to all the aspects necessary for the good working relationship being adequately addressed and maintained;
- AusAID should have its own development strategy; that in preparing the bidding documents the fullest information be provided to potential bidders;
- When designing by itself, AusAID should allow more time for design.

Costs, affordability and benefits

The costs of land titling and of land administration systems are not known with any degree of certainty. This makes it very difficult to carry out any meaningful comparison of approaches or systems or to determine affordability for a particular country. The benefit evidence from Thailand tends to be used for similar projects in other countries. This is not necessarily valid as different conditions could well apply. There is no best practice methodology for economic baselines and follow on studies. Existing cost benefit methodologies have limitations. It is recommended that:

- cost estimate templates for land titling and for land administration be developed. They should be capable of providing data to support comparison of different approaches and across projects, and should be done in consultation with other interested agencies and donors. These templates should then be applied to the Thailand, Lao and Indonesia projects and the data made widely available.
- the concept of affordability for land titling and land administration be researched and some working definitions and values be determined and tested for AusAID partner countries in land titling and land administration projects;
- more attention be paid during design, to justifying the claimed anticipated benefits and, post project, to verify that the postulated benefits were obtained;
- a methodology be developed for establishing an economic baseline and for follow on studies. The co-operation of other major multilateral and bilateral agencies should be sought; and
- A software application, based on the model for examining a range of alternatives for project scope, costs, benefits and tradeoffs, be developed and tested as a feasibility and design tool.

Social impact and adverse impact minimization

The social and gender aspects of land titling should be given more importance in design and implementation, as this is an area of some concern to AusAID. Monitoring of the social and gender aspects through social impact assessments and studies is required throughout the project and preferably for some time beyond, particularly in the large land titling projects. Base line studies for social and economic evaluation are necessary. As well as monitoring the normal operational indicators, it would be useful to monitor more closely the progress and validity of the assumptions, indicators of sustainability and benefit achievement. The design team should include expertise in development, social and gender issues as well as the technical aspects. It is recommended that:

- AusAID needs to increase its influence in the area of social impact and to have more emphasis placed on this area both in design, during implementation, and post project;
- AusAID should foster the application of a number of standard methodologies and associated methodologies for social impact analysis; the guidelines should be developed in co-operation with suitable specialist from the Bank and other interested agencies if possible;
- as part of the information gathering in design there needs to be a study of the current status re tenure, social and economic structures and custom;
- regular monitoring, by a group independent from those issuing the titles should be carried out regularly, to check for adverse impacts.

Retaining and building on the knowledge base

There is a need to retain the knowledge, transfer it between similar projects, and move towards the development of best practice procedures/guidelines. Project technical reports should be recognised as a valuable resource, retained and made accessible, and important missing reports should be acquired. The necessary material from past and current land titling projects should be passed to the Philippines project (if AusAID decides to co-finance).

The desirability of developing best practice methodologies/guidelines (initially for land titling) based on project reports, should be accepted and AusAID should foster their production, in collaboration with other bilateral and multilateral donors if possible. Priority should be given to material useful for the upcoming Philippines project.

6.2.2 IMPROVING THE ADMINISTRATION OF ALIENATED LAND IN SOUTH PACIFIC COUNTRIES

It is not clear how appropriate, affordable, and sustainable the current systems are for administering alienated land. Involvement in these projects rests more with land administration being ‘essential infrastructure’ rather than having a direct impact on the poor. The major implicit assumptions could well be verified. There is a danger that these projects could be treating symptoms rather than the root cause of the development problem. The problems of managing land rights over customary land and its economic development could well become more prominent in the future.

To improve the effectiveness and efficiency of the existing systems there is merit in considering a more long term, low intensity, regional approach. The emphasis should be on gaining commitment to improvement from senior officials and managers in the various countries, together with an assisted self help program focused on continuous incremental improvement and a low use of technology. The review concluded that:

- some work needs to be done to gauge the appropriateness, affordability and sustainability of the existing systems of land administration for alienated land;
- there is merit in investigating a regional approach to providing assistance in improving land administration; and
- some preparatory work be done on the management of land rights over customary land and its economic development, as this may gain more prominence in the not too distant future.

For projects similar to those reviewed:

- care be taken in the design to ensure that the root cause of the development problem (likely to be the nature of the system and policy) is addressed and not simply the recurring symptom (inefficiency);
- improving land administration should be a stand alone project, or if not, only included as a component in a larger project where it is an integral part of that project; and
- great care needs be taken in introducing computer based systems and applications, especially if used for 'mission critical' systems. Sustainability is paramount.

6.2.3 STRENGTHENING NATIONAL MAPPING AND SURVEYING AGENCIES

The primary issue is whether or not AusAID should continue to support these types of projects, ie. strengthening an existing national mapping and surveying group, or whether it should look at these projects in the broader view of public sector reform (which is happening in many partner countries, some with AusAID support) and, while accepting the need for maps, surveys, and geographical products and services, examine a range of possible alternative options for their effective provision. The study concluded that:

- during the feasibility stage, these types of project should be examined under the broader view of public sector reform and all other options be considered; and
- the causal linkage between the goal and the outputs be defined more clearly and the likelihood and risk be examined closely.

6.2.4 ESTABLISHING LAND INFORMATION SYSTEMS

A large number of preconditions must exist before LIS projects can be undertaken. Most preconditions would not exist in partner countries. Successful implementation can be long and challenging even in developed countries. If considered these projects should be examined against the 'essential infrastructure' requirement. It is recommended that:

- if LIS is being considered for support then, during feasibility and design, careful attention must be given to the preconditions, risk, affordability, and sustainability.

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Part B

APPENDICES

APPENDIX 1 INFORMATION ON PROJECT TYPES

Box A1.1: Comments on each project type

The large scale land titling and/or land administration projects. (generally in Asia and co-financed with the World Bank)

These have been mainly carried out in populous SE Asian countries where there are millions of parcels of land and where ownership has not been formally registered. In the areas where the projects have worked, ownership is generally undisputed and the aim is to determine the owners and boundaries of the individual parcels, have those adjudicated, measured, and titles issued and registered in the relevant State organization (equivalent of a Lands Title Office). The National 'lands departments' charged with the responsibilities for this are usually very large – 14,000 staff in the case of Thailand, 26,000 staff in the case of Indonesia. The number of land parcels to be registered can also be very large (in Indonesia an estimated 55 million land parcels). The time taken to register all these parcels may be in the order of 20 to 50 years depending on the resources allocated. 15 years of AusAID support was provided in Thailand.

Improving the administration of alienated land (mainly in South Pacific countries)

In such countries as PNG, Vanuatu, Solomon Islands, and Kiribati approximately 90 per cent of the land mass is held under customary title. Projects in these countries have not been concerned with this customary land. They have dealt with land that has been alienated (generally taken over by the colonial power and then 'reissued' in the form of ownership or leases). The number of land parcels is usually small (10,000 in the case of the Solomon Islands, 50,000 in the case of Vanuatu, 4,000 in Kiribati) and occupies about 5 per cent or less of the total land mass. The emphasis in these projects is largely on improving the administration of the land that has been leased. In some cases large amounts of land rent are outstanding. The number of staff in a lands department can vary from 40 to 200. Typically about 80 per cent of the population live on customary land with the remainder on the alienated land. The small amount of alienated land is reported to produce much of the country's GDP and export earnings.

Strengthening the capability and capacity of national mapping and surveying agencies

In some countries there is a separate organization charged with surveying and mapping. The National Mapping Bureau in PNG has national responsibilities; in Hainan, China, the Hainan Bureau of Surveying and Mapping has similar responsibilities but operates within a national system. In others, eg some of the smaller Pacific countries, the surveying and mapping functions are either small (Vanuatu, Solomon Islands) or non existent (Kiribati), or comprise a few people in a section of a department. In the past 15 years surveying and mapping organizations have undergone profound technological changes. In developed countries this change is both technological (sophisticated computer based equipment), and institutional (corporatisation, some functions sold off, shift from traditional products and markets). The purpose of these projects is to improve the capability and capacity, both technically and organizationally, by introducing new and appropriate technology, training staff, and assisting the organizations to be productive with the new technology.

Establishing land information systems (digitally based)

These types of projects aim to convert paper based land parcel records to more widely useful digital information systems in which complex queries and analyses can be carried out. The base data is usually land ownership together with comprehensive graphics of land parcel boundaries (commonly called a DCDB – digital cadastral database). Over time, other 'layers' of graphic and attribute data are added. Several institutions are typically involved in pooling their individual data and sharing the resulting integrated information.

Box A1.2: Brief comments on the different types of land tenure projects

Land reform

These projects tend to address the social and economic objective of land distribution to the poor from wealthy large landholders in a rural environment. There are many projects of this type in South America. Reports indicate that there can be large problems in executing these projects. The CARP program in The Philippines is of this type. These projects can be quite controversial.

Creation of a market economy from former centrally directed economies (the countries in transition)

These projects tend to be in the former eastern bloc countries where there is a large number of current projects designed to establish suitable land administration systems to record the distributed former central government land and property and to foster the development of land markets.

Dealing with customary/traditional lands

These projects, often part of a normal titling project, attempt to formalise land held and used according to traditional norms. Often the existing legal and administrative systems are mot suitable for recording the appropriate rights.

Many countries in which AusAID works have this type of land tenure. It is common in Melanesia where 80-90 per cent+ of the land mass can be of this tenure type, containing about 80 per cent of the population generally in subsistence agriculture and some cash cropping. Typically, 5 per cent of the land is alienated or freehold and this is reported to account for a significant amount of the country's GDP and export earnings. In SE Asian countries this land tends to be held by minority groups and their legal entitlement to the land is not usually very secure. In the Indonesian project some studies of the issue have been carried out. A pilot is planned in the year 2000. In the main, the strategy appears to have been to avoid customary land as the problems in titling are large, and the drivers to develop a land market or protect rights are not high. In SE Asia customary land is likely to come increasingly to the fore as land titling progresses and this land or its boundaries become involved.

Granting title where ownership is largely clear and uncontested

This usually occurs where landholders have been using land for a long time and/or have a variety of evidence to show usage and entitlement. The land is classified such that title can be legally granted. Landowners could generally have claimed title before but for a variety of reasons (fees too high, no perceived need or benefit, etc.) have not. In the projects where AusAID has been involved with the World Bank, large scale systematic title adjudication and registration has been carried out with generally lower (a government subsidy) fees. Even though there are substantial challenges in implementing this type of project, they are the least controversial, and the most straight forward. The projects in Thailand and so far in Indonesia, Laos and probably in the Philippines are largely of this type.

Granting title where ownership is unclear and contested

The reasons for unclear ownership and contested claims tend to be many and varied. Some can be very complex and very difficult to resolve. Examples occur in Indonesia where people (generally the poor and less powerful) claim they were forcibly removed from their land to make way for a development by some well connected person. In some cases a court decision may not be accepted by one party, and the dispute may not be actually settled. The project in Sri Lanka, if it proceeds, would seem to have a lot of disputes to contend with. These projects tend to be difficult and can be controversial.

Formation or change of land policy

This may be a project in its own right or a component of a larger tenure/titling project. This generally involves examining the current land policies and laws against a range of principles such as relevance, effectiveness, good governance, equity, international best practice, etc., and recommending changes to a ministry and government. If the changes are acceptable in principle, assistance is usually provided with the drafting of the new policies and legislation, and after the policy and laws are in place, assisting with their implementation and the subsequent administrative, system and training changes.

Proposals to change policy can be controversial depending on the circumstances and the amount of change being proposed. If conformity with equity, transparency, etc is being sought, some powerful existing interests may consider that they are under threat. There was a large policy review component in ILAP1 but it was handled as a separate contract by the World Bank and AusAID was not directly involved. The proposed Philippines project has a land policy component, which is also proposed to be handled by a separate World Bank contract without AusAID involvement. AusAID has funded TA for policy and legal change but it appears to have been in areas that have raised little/no controversy and have been more of a streamlining nature rather than making fundamental changes.

APPENDIX 2 INFORMATION FROM AMCs AND TAs

Background

An invitation to provide comments was sent to all past AMCs and to some personnel known to have worked as TAs. AMCs were asked to pass the letter to previous TAs. Comments on any aspect were sought but the following were noted to be of particular interest to AusAID:

- the degree to which past projects were aligned with AusAID's 'one clear objective' of 'poverty reduction through sustainable development'; and what, if any, adjustments needed to be made to future project objectives;
- the development rationale for these projects and how provable it is;
- the appropriateness, advantages and disadvantages, of co-financing large projects with the World Bank;
- the sustainability of these projects once inputs have been completed. The major constraints to sustainability. The probability of sustainability being increased; and
- the lessons learnt from conducting these projects.

The responders and their comments

There was a total of ten responses, four from previous team leaders, five from previous technical advisers, and one from an AMC. The gender balance was eight males and two females. The respondents had experience in Samoa, Vanuatu, Fiji, Solomon Islands, Kiribati, PNG, Indonesia, Laos, Thailand, Philippines, China, Vietnam and Namibia. Project positions included team leader, valuation, natural resource information systems, information systems and information technology, geographic information systems, surveying, mapping, institutional development, urban and rural planning, cadastral systems, land administration, land policy, and land management.

Extracts from and grouping of the responses are in Box A2.1 in this Appendix. The essence of the comments is:

- land titling, administration, surveying and mapping projects are in line with AusAID objectives;
- land policy, classification and management should be included, when appropriate, with land titling and administration;
- more time should be allowed for project design and a development specialist should be included on the design team;
- co-financing with the World Bank on land titling and land administration is appropriate, but care needs to be taken to ensure that macro-economic objectives do not displace social objectives, and that AusAID objectives are achieved;
- more attention, in both design and implementation, needs to be given to ensuring that the use of IT and computer based solutions is appropriate and sustainable, post project;

- project sustainability needs more attention during implementation; and
- flexibility in milestones, project extensions, and more consideration of alternatives by the TAP are needed.

These comments have been taken into account when formulating the lessons learned.

Box A2.1: Extracts from AMCs' and TAs' comments

Alignment with the AusAID objective of poverty reduction through sustainable development

Improving land administration is a key to poverty reduction through sustainable development. Without appropriate land administration, economic development, social stability and environmental management are not possible.

Melanesia is different from Southeast Asia. In Melanesia about 90 per cent of land is in customary use for about 80 per cent of the population. Poverty reduction is required for this 80 per cent and this is directly related to land resources, particularly through cash cropping, subsistence food and shelter, and access to transport health and education. Of fundamental importance is spatial information (and maps) on the infrastructure services, population, topography, land use (actual and potential), census information, village locations, natural resources, health facilities, etc. The land that is titled (about 3 per cent) of accounts for most of the country's economic development. Effective land administration of this small amount of titled land is essential to this economic development.

Project development rationale

The technical TAs, who largely implement projects, tend to have a poor understanding of the relationship between the three primary elements in development economics, land, labour, and capital, and the development issues.

An important issue is the extent to which the aid recipient wants to 'grow' and embrace change.

Opportunities exist, but rarely seem to be taken, to link formalized land titling and administration to improved land classification and land management, in the interests of generating longer term sustainable development.

Project design

More time and resources are necessary to be allocated to project design if the issues are to be fully understood. The design teams need development specialists as well as technical specialists. The importance of cultural acceptance needs more attention, as well as an understanding that Australian solutions are often not appropriate.

Where IT is involved a person with that expertise should be included on the design team, and projects that require IT should treat it properly, and not as a minor 'add-on', if sustainability is required.

The appropriateness of co-financing with the World Bank

Working with the Bank is appropriate. It is difficult for Australia to do large projects by itself. However, Australia has the expertise and working with the Bank achieves leverage of the Australian funding input.

There are significant differences in emphasis between the fundamental objectives of the World Bank and those of AusAID. The World Bank focuses on the macro-economic benefits of land, whilst AusAID has a clear objective of reducing poverty through sustainable development. These objectives may overlap to some extent, but, in practice, are not balanced. Almost inevitably, the World Bank's primary focus prevails, aided by the beneficiary government's need to raise revenue. As a result, initial emphasis for land titling is oriented towards higher land/property value urban areas which tend to be occupied by the better educated and more affluent sectors of the community instead of on baseline studies of customary practice in rural areas, squatters rights, awareness raising amongst the urban poor, or related measures that may facilitate a reduction in poverty. There

are a number of important social issues, particularly those affecting the land ownership aspirations of the urban and rural poor, that are effectively ignored or 'glossed over' by the World Bank's macro-economic emphasis on land titling These include:- squatters and unauthorized encroachment, gender issues, foreign ownership, customary rights, illicit transfers, affordability. Land titling projects that fail to adequately address social issues of this kind may result in social injustice or at least an increase in social tension, and, accordingly, will not contribute to poverty alleviation.

Appropriateness of technology

There is a place for both manual systems and backup digital technology. Digital technology is appropriate providing it is simple and there is sufficient training. The training must be done regularly, emphasizing on-the-job training.

IT and computer based systems should be treated properly, and not as a minor 'add-on', if sustainability is required.

Use of GIS, GPS and remote sensing technology has often done more harm than good; but it is how they are used and how the technology is transferred that matters.

Appropriateness, long term maintenance (of hardware, software, applications, consumables), local support, and sustainability, needs to be addressed very early in the project.

More lateral thinking re appropriate technology is required and less acceptance of the solution from an Australian state.

Project Sustainability

Sustainability can be increased by having:- the local project staff 'own' the project; post project plans for training, maintenance, and work; a transition over the last 6 months; training foster career development to enhance staff involvement; the project woven into the cultural requirements; clear government commitment; sufficient trained staff, on going training, staff retention; sufficient funds and staff where IT and computer based systems are involved; data maintenance occurs and there is a good map base.

Lessons Learned

These were identified as:- learn from previous project; identify the true needs of the recipient in the design and address appropriately; flexibility re milestones and project extensions required; more attention to sustainability issues. For co-financed projects with the World Bank, investigate customary 'rights', include social economic impact studies, include land policy analysis, ensure that recipient government has the necessary commitment.

Project Bidding

The current AusAID bidding and TAP system encourages the status quo and rejects initiatives and alternatives.

APPENDIX 3 INFORMATION ON THE DEVELOPMENT LOGIC

Table A3.1: Implicit assumptions for each development logic step – land titling projects

A Title gives landholders formal rights and security to their land
• the tenure law(s) are appropriate for the rights involved, unambiguous, enforceable, available to all, and allow equitable and 'easy' first registration • the title is registered in an official registry • the registry is efficient, records are correct, secure, and no duplicates/fakes exist • land titling is affordable and accessible & the great majority participate
Security of title reduces land disputes
• all tenure types can be titled • the law is perceived as fair and the registered rights are uncontestable • the land titling process involves all stakeholders and is perceived to be fair • there is a respected mechanism for dispute resolution • people have access to information about land • land administration is carried out in accordance with the principles of good governance
The title gives access to better/more credit in the formal sector
• the bank/formal sector is willing to lend (particularly to small rural landholders) • there is more money available for lending to the increased numbers who have titles • the land has value, that it can be foreclosed on, that there are other 'willing' buyers • the title does give security
For rural landholders: More/better credit allows rural landholders to purchase more farm inputs which raises productivity and household income. This, in turn, enables the land holder to practice sustainable land use in the interests of long term productivity
• other farm inputs (besides credit) are available • markets, transport, etc. are available • prices and seasons are 'good' • farm and household income actually does increase • security of tenure and access to long term credit will in fact cause the land owner to practice long term sustainable land use
For urban landholders: More/better credit allows better investments in housing or industry: Investment in industry provides more employment, increases household income, etc.
• the bank/formal sector is willing to lend (particularly to small landholders) • there is more money available for lending to the increased numbers who have titles • the land has value, that it can be foreclosed on, that there are other 'willing' buyers • the title does give security • urban holders will use credit for non-consumer type spending • industry/business is attracted and does provide employment • there is a demand for land
Greater household income raises living standards, (some will be raised above the poverty level) and contributes to sustainable development
• the increased income will be sustainable and be used for betterment • the poor will be participants

Landholders and families whose income has increased will eventually pay more tax and hence government income increases

- government tax collection is equitable and efficient

The title increases the value and price of land, land trading increases

- land owners and traders have confidence in the security of the title
- a transparent and reliable system of valuing land is used effectively and broadly
- there are no unwarranted artificial restrictions on land trading

A rise in land trading increases government income through fees on the increased number of transactions

- subsequent (after first registration) transactions continue to be registered in the formal system rather than the traditional informal system
- the formal system is perceived to be fair, efficient, affordable, accessible, and the benefits of the formal system are shown to be superior to the informal system
- fees are fair, affordable, value for money, and a customer service focus is used
- re-registration fees are not seen as a 'cash cow' and are set at a level that will make re-registration attractive
- those trading land outside the formal system will be attracted to it by its perceived benefits

Increases in land trading allows land to reach its most productive economic purpose

- there are no unwarranted artificial restrictions on land trading
- economics alone should/will determine 'most productive' land use
- the goal of land use should be the most economical use and not the most sustainable use or some other aim

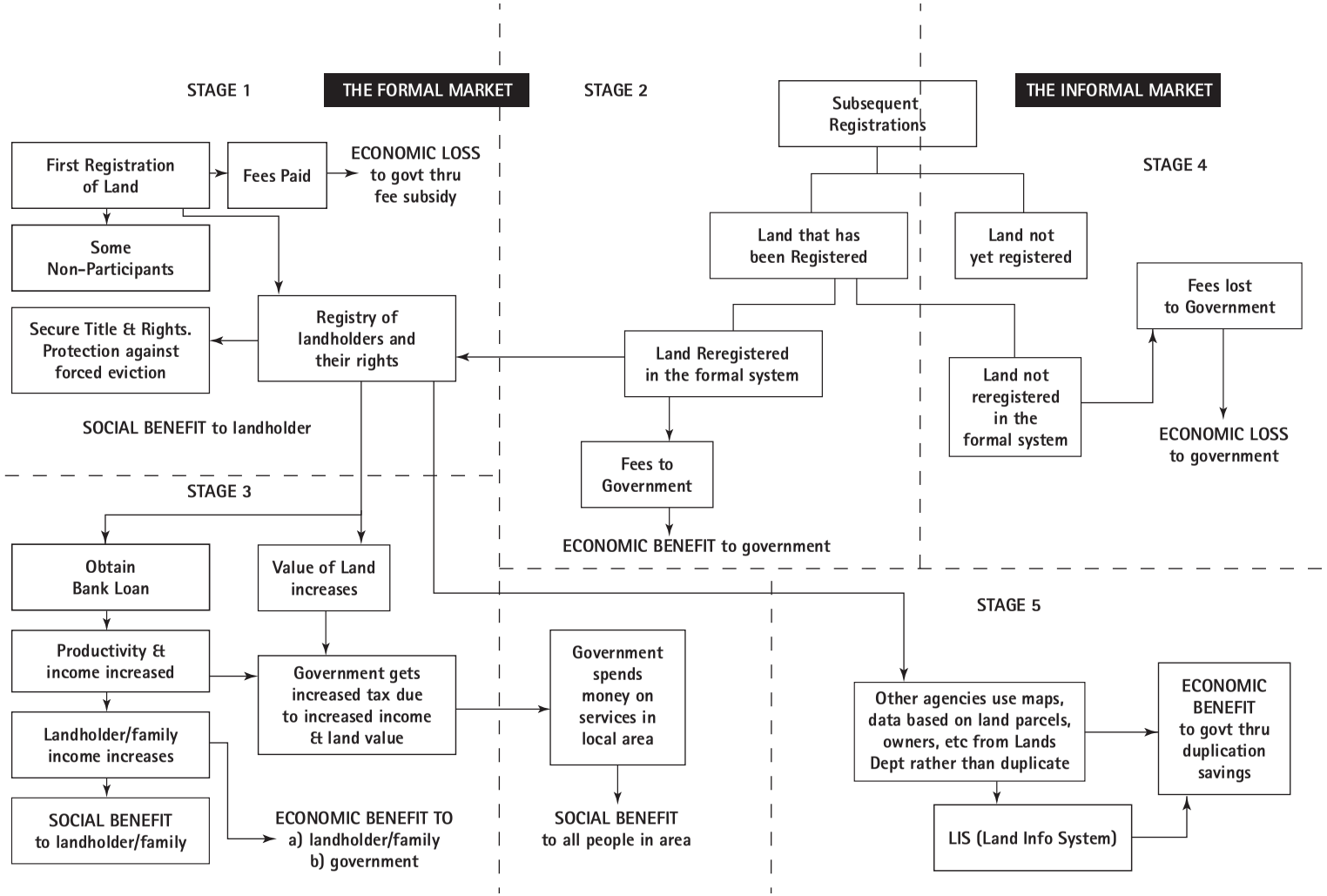
Some of the additional government income will be returned to the local area to increase services and infrastructure

- the government has a policy and practice of fair grants to regions and that it is in fact spent on basic services

All the above contributes to economic growth

- all the above does contribute to economic growth

Figure A3.1: Illustration of the flow and stages of benefits – Land Titling



Box A3.1: Comments on each stage of potential benefits for land titling

Stage 1 represents the process of first registration and the direct social benefits of a secure title for the landholders. As soon as the land is registered and the title issued the benefit flows. This stage has been the primary area of operation for the major land titling projects with the World Bank. The increased protection to the landholder against forced eviction and similar transgressions is analogous to immunisation against a particular disease.

Stage 2 represents the re-registration of subsequent transactions, ie. buying and selling land, gifts and transference by inheritance, in the formal (using the government land registry) system. *Unless land is re-registered in the formal system then the registry does not contain up-to-date and accurate records and its holdings cannot be completely relied upon. If this happens the security and integrity of the issued title is reduced. The rate at which land is traded and the per centage that is re-registered in the formal system will largely determine the rate of retention of the capital investment in land titling.* An early and high turnover of initially registered land outside the formal system will cause a rapid loss in the capital investment in land titling. There is some evidence from the Indonesian project that the rate of re-registration is very low, in the order of 20 per cent. Low registration in the formal system, as well as causing a loss in the initial capital investment, also causes an economic loss to the government through lost fees as depicted in Stage 4. To date Stage 2 has not been significantly included in any of the projects but it will probably be included in Phase 2 of the Indonesian Land Titling Project.

Stage 3 represents the flow of benefits gained from access to better credit and increased productivity and income; Table A3.1 lists the assumptions that must be fulfilled before these benefits can be achieved. All of the large land titling projects have Stage 3 benefits postulated but none have activities that increase the probability of the assumptions being valid.

Stage 4 represents an economic loss to the government due to fees missed because land is either not registered, or if registered, landholders choose not to re-register subsequent transactions in the government land registry. The loss can be quite large. (An annual figure of US$15 million has been reported for one land registry in Sri Lanka).

Stage 5 represents potential benefits (generally savings of duplication) that could occur if other agencies could access and use the land records of the lands departments. The essential condition is that the records are complete, reliable and current; this condition is usually missing but is essential if public and investor confidence in the security of tenure is to be high. A LIS project usually addresses this area.

Table A3.2: Beneficiary, benefit type and stage – land titling

Beneficiary	Macro Benefit	Benefit Type	Benefit Stage
Landholder	• Security against forced eviction	Social benefit	Stage 1
	• Increased land value	Economic	Stage 3
	• Increased income via increased productivity		Stage 3
Government	• Increased fees from increased land transactions	Economic	Stage 2
	• Increased taxes due to rising income, land value and land use	Economic	Stage 3
	• Reduction of duplication of information; better provision of information	Economic & Social	Stage 5
The populace	• Increased access to services provided by the government, funded by the increased tax revenue.	Social	Stage 3
	• Better access to information	Economic & Social	Stage 5

Table A3.3: Preconditions for the achievement of development logic and benefits – land titling

Benefit Stage	Development Logic	Necessary Conditions
Stage 1 – Social Benefit – Secure Title		
	A Title gives landholders formal rights and security to their land Security of title reduces land disputes	*Legal and Policy* Land policy and law (regulations, decrees etc) are comprehensive, equitable, clear, unambiguous, enforceable, known, respected, and in accordance with transparent good governance. The Land Administration Organisations • The laws and regulations, processes, etc. are administered effectively and fairly by government agencies; there is an independent grievance mechanism; good governance and transparency apply. • The government agencies administrating the land are respected, efficient, effective, and provide accurate and comprehensive information and services to the community/citizens when required. There are no informal fees required. *Titling* • The title recipients, neighbours and other interested parties see the titling process as just and affordable, that the rights bestowed are secure, gives value above the costs involved and indicates the current situation. • The titling covers complete geographic areas (systematic) rather than spot (sporadic) titling. • The titles and all supporting documentation are registered in the 'land title registry' with no undue delay • No persons, particularly women, are worse off or suffer a loss of rights as a result of titling *The Land Title Registry* • Registered titles are issued to the land holder with no undue delay • The registry operates effectively and in accordance with good governance and transparency; its records are secure, comprehensive, 'truthful'; users, investors, and landholders have confidence in the registry organisation, its titles, products, operations, and fees. Correct and comprehensive information is accessible to anyone as required. • Land, once registered, stays registered during subsequent transactions (buying, selling, recording inheritance, mortgages, etc.) which should be conducted with certainty at an affordable cost in a short time. • That the title does give REAL security to the land holder against forced removal by the State, or other power group

Table A3.3 (Continued)

Benefit Stage	Development Logic	Necessary Conditions
Stage 2 Economic Benefit to government	A rise in land trading increases government income through fees on the increased number of transactions	• Each transaction has a fee (cost of the provision of the service) and tax (eg stamp duty – a revenue source for the government) component. • The benefits of the service/transactions attract customers; the size of the formal market increases and the informal market decreases (ie. titles once registered are re registered when subsequent transactions occur). Holders whose land is not registered seek voluntary registration.
Stage 3 –Economic Benefits to Landholder & Family and Government	*For rural landholders:* More/better credit allows rural landholders to purchase more farm inputs, practise more sustainable land use, and hence raise farm productivity and in turn increase household income: *For urban landholders:* More/better credit allows better investments in housing or industry: Investment in industry provides more employment, increases household income, *Tax:* Landholders and families whose income has increased will eventually pay more tax and therefore government income increases	*Access to Credit in the Formal (banking) sector* • The landholder knows how to access the formal credit institution. • The formal sector has an interest in a particular new type of client (eg. small poor rural/urban/peri urban landholder) • The title is acceptable as collateral, the land has value, that the land can be repossessed, and there are other willing buyers. *Household/Personal Income Increases* • Other farm inputs, including technical skills are available. • inputs, seasons, etc. combine to increase output/productivity, that markets and transport are available, prices are appropriate & household income increases. • some part of the increased income is used to rise above poverty levels. *Tax* • government tax collection is effective. • a tax based on land values is supported by a suitable valuation system and is applied equitably and effectively.

Table A3.4: Possible country wide macro indicators for land tenure and land administration

Data is required for all areas of Philippines (including 'forest' land) down to at least the Province level and, where possible, the Local Government Unit. Data such as the following would be useful.	
Area (1,000 sq km)	• total • amount under different tenure systems ('legal' forest land; state, private, customary , has/can be titled, A&D) etc; • land use urban, peri urban, rural, agriculture, forest (physically got trees), plantation, etc
Population (millions)	Whatever picture can be developed from census or similar data; age, gender, income, employment, etc; preferably aggregated to the types of 'area' identified above
Parcels of land (estimates to 10,000 parcels)	Order of magnitude number in each type of area
Presence /absence of customary land	Some indicator of amount, location and system
Presence /absence of land disputes	Some indicator of amount, location, type, seriousness, cause, etc.
First registration (to 10,000 parcels)	Number of parcel registered in total and annual rate. By different agency (DENR, DAR, ROD, etc);
Subsequent Registrations (in formal land office system)	Annual rate by type of transactions and by agency (DENR, DAR, ROD etc);
Transactions in the informal system	Annual rate (to include estimate of parcels not under BPN/land office jurisdiction eg forest land, as well as parcels on 'titleable' land that has not been registered at the land office.
Land offices	By different agency (DENR, DAR, ROD, etc); Size type, no. of staff actually in position, key indicators as to adequacy and condition of office and record space; amount of computerisation, presence of LOC, etc.

Notes

1. Approximations and extrapolations will be necessary and all assumptions should be listed.
2. Ideally this would be collected in a database and linked to a simple country wide GIS to facilitate effective analysis. The geographic background should be simple and contain the main country and island outlines, all cities, major roads and administrative boundaries. A digital base, perhaps without the administrative boundaries, should be readily available from a number of commercial sources at a low price.
3. The results should be able to be shown in thematic form, examined and debated.

APPENDIX 4 COMPARISON OF PROJECT OBJECTIVES - LAND TITLING PROJECTS

Table A4.1 – Objectives of the land titling projects selected for review

Thailand	Laos	Indonesia	Philippines (NRMDP)	Sri Lanka
AIM GOAL/PURPOSE To grant secure documented tenure to rural landholders, thereby facilitating their access to institutional credit, improving investments in the land, and increasing agricultural productivity and family incomes **OBJECTIVES** • To provide secure land tenure to eligible landholders • To improve land administration • To develop an effective national property valuation function • To develop the long term sustainability of DoL's institutional capacity (additional for Phase 3) **TARGET GROUPS** • (Phase 1) 700,000 landholders in the poor north and north east of whom about 50 per cent may be below the absolute poverty line; 2.1 million titles issued • Phase 2: 1.8 million parcels for undocumented land; 1.2 million parcels for various types of pre ownership • (Phase 3) 1.1 m landholders of 3.4 million parcels	**AIM GOAL/PURPOSE** • To strengthen the basis for long term sustainable economic and social development • To foster the development of efficient land markets by • Providing a system of clear and enforceable land rights • Facilitating the release of constraints to investment and more equitable and economic growth • Improving domestic resource mobilisation **OBJECTIVES** • To accelerate land title issuance • To strengthen land administration infrastructure • To increase revenue from land registration services equitably **TARGET GROUPS** 149,100 land use rights issued in 6 yrs impacted on 900,000 people	**OBJECTIVES** 1. To foster efficient and equitable land markets and alleviate conflicts over land by • Acceleration of land registration • Improving the institutional framework for land administration which is needed to sustain the program • To support the development of land management policies • To support poverty alleviation through increased tenure security and collateral opportunities to land owners and to provide incentives for long term investment and sustainable land use (via the accelerated land registration) **TARGET GROUPS** 1.2 million parcels of land; about 4 million people in Java incl about 1,000,000 families estimated to be below the poverty line	**AIM GOAL/PURPOSE** • To establish a standard reference grid across the country to facilitate the accurate surveying and mapping of land and natural resources • To provide a basis for speedier and more efficient land titling to support the land disposition and agrarian reform programs, for more comprehensive land taxing, to provide a cadastral data base for a land and resource information system	**AIM GOAL/PURPOSE** • Phase 1: to assist the Sri Lankan Government to establish land tenure reform legislation • Phase 2: to assist the Sri Lankan Government to implement an effective new method of land title registration based on new land tenure legislation in 2 pilot areas, the outcome of which will be replication throughout Sri Lanka **OBJECTIVES** Phase 1: to gain approval in stages • Stage 1- primary legislation • Stage 2 secondary legislation and regulations • Stage 3 office procedures

Table A4.2: Phases and stages of Sri Lanka project

Phase 1	Phase 2:	Phase 3
Stage 1 – establish the legislative framework *Stage 2* – establish the regulatory framework *Stage 3* – establish the procedural framework	*Stage 4* – test and validate the procedures in the first pilot area. *Stage 5* – retest and revalidate the procedures in the second pilot area. *Stage 6* – appraise outcomes and design projects for national implementation	*Stage 7* – national implementation (by Sri Lankan Government, with or without international assistance).

Box 4.1 - Sri Lanka – Outline of major problems, their status and contributing factors

As an ex British colony Ceylon inherited a registration of deeds system. The first problems were reported about 120 years ago and since then there has been a long history of many Land Commissions and Judicial Enquiries and various government attempts to introduce a system of registration of titles. None has succeeded. In the early 1900s a small pilot project was attempted but failed through bureaucratic ineptitude. Because of cost efficiency measures that were inappropriate the system started to collapse administratively about 30 years ago. This resulted in the deterioration and loss of records, the non maintenance of indices and cross indices and related aspects. Due to the collapse of the land administration system the following outcomes have occurred:

- Land disputes are common (reported about 140,000 cases before the Courts with many disputes remaining unresolved for generations. Litigation is the norm and it has, therefore, evolved into a cultural characteristic of land.
- The land disputes manifest in serious crime with the Bar Association reporting that about 75 per cent of all murders in the country are attributable to land disputes.
- Large tracts of land all over the country lie idle while litigation continues. Former wealthy families have become poverty stricken through the exorbitant legal costs of defending their land. The migration of farming communities to the urban areas in search of employment has exacerbated urban squatting problems and contributed to urban decline.
- Land degradation and soil erosion from deforestation is attributable to ineffective land use controls. In many cases it pollutes the rivers and water catchments. Encroachment and squatting on state land is also wide spread.
- Inefficient land registry office procedures provide opportunities for fraudulent transactions. This has resulted in substantial loss of stamp duty revenues on land transfers (in the Colombo Land Registry alone this loss is calculated to be US$15 million per year).

Another significant factor which impacts upon the land problems is the existence of various religious inheritance laws and customs which are long standing and fully enforceable. When a parent dies the estate, including all land assets, must be divided evenly between the descendants. As far as land assets are concerned, this requires a paper subdivision of the land that is not registered in the land registry, thus adding significantly to the inadequacy of the current system. After several generations of divisions it is not unusual to find small tracts of land well below the minimum economic size for agricultural production. There are also cases reported where a single land parcel can have many (in some extreme cases a few thousand) co-owners many of whom do not know each other and many are uncontactable. Disputes between co-owners and between co-owners and neighbours are common. It is not uncommon for these disputes to be carried from one generation to the next. In this climate it is not surprising that lending institutions such as banks find it very difficult to accept land as collateral. The AusAID consultant identified a number of factors contributing to past failures:

- The low level of knowledge within the public and private sectors on what was involved in the registration of titles system.

- Legislative drafting which generally does not provide for public consultation prior to the tabling of draft legislation in Parliament.
- A propensity to not adopt a collaborative and structured approach to project management.
- An absence of cooperation, and more particularly, animosity and mistrust between the public and private sectors.
- An institutional structure within the public sector which is not conducive to functional change and an administrative structure with entrenched demarcation and self preservation along professional or career service lines.
- An absence of financial accountability in the public sector.

Table A4.3: A comparison of project structure – land titling

	Thailand		Laos		Indonesia		Philippines			
	Ph 1	Ph 2	Ph 3	Pilot	Ph 1	Ph 1	Ph 2[a]	NRMDP	LAM1[b]	LAM2[b]
Aspect										
Technical										
Major geodetic control					X			X		
Land titling & initial registration	X	X	X	X	X	X	X	p	x	X
Land transactions/records		x	x				X	p	x	X
Land valuation	X	X	X		X			p	x	X
Institutional strengthening										
Organisational change			x				X		x	X
Policy & legal										
Policy review & change		X	X			x	X	p	x	X
Legal review & change	x	x	x			x	X	p	x	X
Types of land										
Urban	X	X	X	X	X					?
Peri urban					X	X	X	X		?
Rural	X	X	X		X	X	X	X	X	?
Purpose										
Land Reform										
Customary land							x			
Areas with major land disputes										
Areas of government land where ownership generally clear & few disputes	X	X	X	X	X	X	X	X	X	
Length (yrs)	5	5	5	2.2	5	7	5	6	2.5	5
Time Period	84-89	90-94	95-99	94-96	97-01	95-01	01- 05	86-92	00-02	02- 06

a. Phase 2 design is incomplete so detail may change

b. The design for LAM1 is incomplete so detail may change; the entries for LAM2 are indicative and derived from the long term program design and the LAM1 design both of which are incomplete.

- p= partial (NRMDP was an exploratory project rather than an operational project; land administration was only one aspect).
- A small 'x' indicates a small amount; a large 'X' indicates a large amount

Box A4.2: Comments on the strategy of each land titling project

Thailand

During the first 5 years, Phase I, of the Thailand Project the emphasis was on the development of technical and management strengthening for the large scale issuance of titles. As this expertise was gained more attention was given over the succeeding phases of the Project, (years 6 to 15) to improving land records, to valuation, and to the necessity for major changes in institutional arrangements. This project was awarded one of the two 1997 World Bank Awards for Excellence, making it then, one of only four World Bank projects to receive this recognition.

Indonesia

In Phase I, 6 years, the emphasis was not dissimilar to Thailand. It was on the technical processes and logistics for large scale title issuance. There was an examination of land policy issues (a separate World Bank contract in which AusAID had no involvement) and, towards the end of the first five years, recognition that major institutional change was necessary. There was no involvement in transactions at the Land Office as there was a concurrent project (for computerization) being run by Spanish companies. There is some doubt as to the long term sustainability of this latter project. Valuation was not included. Phase 1 was seen as the first part of a 20 year program consisting of four 5 year phases, with the emphasis changing in Phase 2 to land policy and in Phase 3 to institutional arrangements. Table A4.4 outlines this strategy.

The strategy is based on recognition that changes to land policy and institutional arrangements are usually quite sensitive, and a project attempting to achieve major early change, where the stakeholders are not agreed, and the TA have not yet won credibility and respect, runs a high risk of failure. It seems that the strategy was to focus the first 5 year phase on operational, non contentious issues; to have the project and staff achieve success, win organizational credibility, to allow some of the contentious issues to become more self evident to the institution's senior management, and in so doing, set a better climate for change. At the World Bank Rural Week 2000 some considered that this strategy should not be followed and that no large scale titling should commence until the partner government had agreed to the policy, legal, and institutional changes considered necessary.

Over 6 years about 1.6 million parcels of land were registered. This is no small achievement when it is considered there was little capacity or capability at the start and noting that 1.6 million parcels is about half of all the land parcels in Queensland. However, there are about 55 million parcels of non forested land still to be titled in Indonesia.

The proposed Phase 2, currently being designed, is likely to be different. This has been brought about by a number of factors:- the change of government and the reform influence, the impact of the Asian financial crisis; the implementation of the decentralization law; some recognition that fundamental change in land administration cannot be achieved without a different land policy and changes to organizational arrangements. The thrusts of Phase 2 (currently under design) are anticipated to be:-

1. Continuation of systematic registration;
2. Assist the institutional central group to change from controlling all resources and programs to being only responsible for policy and standards.
3. Assist to implement decentralization
4. Assist some decentralised Land Offices (there are about 300)
5. Assist to implement selected policy changes

Box A4.2 (continued)

Laos

In Laos the situation is slightly different as the country is moving slowly to change from a socialist centralist economy to a market oriented economy. A need was recognized to make more productive use of land, to increase revenue to Government via the land and to make better use of the government assets of land and property. There was an emphasis on the issuance of titles, and the valuation of land for revenue generation. Included was an activity in land law to enable the project objectives to be achieved. Unlike Thailand, Indonesia, and the Philippines, which all had a history of land administration and large departments, there was very little government capability or capacity in land administration before the project commenced.

The Philippines

The previous AusAID, NRMDP project (1988–93) (no World Bank involvement) had one component dealing with land administration. This was never intended to be an operational project. It examined land administration in detail, conducted a number of pilots, and designed a follow on project. At the end of the project the nature of the land law and land administration problems were clearly understood, options were examined and solutions recommended. A major impediment to effectiveness at that time was considered to be the regulatory base and the institutional arrangements. The follow-on project did not eventuate and no substantial change has occurred to the regulatory base or the institutional arrangements

The proposed LAM1 project for the Philippines is seen as the first phase of a 20 year program. It will build on past knowledge from NRMDP and other land administration projects. It is anticipated that the project will be funded by the World Bank. AusAID funding is being sought for the TA. The emphasis in the first Phase is:

- to determine the will of the government to bring about significant changes so that major improvements in the effectiveness of land administration are possible;
- to determine and implement the necessary regulatory changes;
- to determine if the various agencies with multiple crossing responsibilities can cooperate at an operational level, to run an efficient one-stop land administration shop, conduct titling, conduct transactions, in weeks rather than years, and build a high quality record base; and
- to gain agreement on, and implement the necessary long term institutional arrangements and regulatory base to allow the remaining 17 years of the project to proceed on a sound basis.

It is anticipated that the remainder of the 20 year program will be less focused on the technical means of titling and more on end outcomes, both social and economic. Particular attention is expected to be given to:

- ensuring that individual low income rural farmers are targeted and can actually use the title to access better credit and therefore achieve greater productivity;
- achieving greater confidence in the land administration processes and its titles; and
- encouraging the registration of subsequent land transactions (currently thought to be only about 20 per cent).

Box A4.2 (continued)

Sri Lanka

In compiling this section information from the Project Completion Report has been used. Brief discussions were held with the AMC and the ATL.

This project is instructive in that the original proposal was for AusAID funding (without World Bank involvement) to assist in drafting a new legislative framework and then to carry out pilot projects on a new registration system based on titles rather than deeds. Conversion from the old deed system to the new title system is a complex task and may take 15 – 25 years or more. During feasibility and design it was concluded that it was too premature to design a project for implementation, that it was necessary to adopt a more cautious approach to the project design and that it should proceed in seven stages of which the current completed project was Stage 1. Such an approach is in line with the necessary conditions. This appears to be a very sensible approach given a complex situation and the multitude of uncertainty and risk factors that apply.

An outline of the major problems, status and contributing factors is given in Box A4.1. This is almost a text book case of the impacts of inefficient land administration and demonstrates very clearly the myriad of problems that can arise from an inappropriate, ineffective and inefficient system which does not meet the social and economic needs of the country. It also shows the interplay of legal, cultural, administrative, and technical factors and that no solution is going to be quick or easy.

The AMC conducted Stage 1. The situation was exacerbated when the Minister tabled and passed several Acts which the Stage 1 project was to have drafted. The Acts were deemed unsatisfactory and required major amendments, thus creating further problems.

The World Bank is now considering a loan for the continuation of the project. It is not known if AusAID assistance for the provision of TA is being considered. If it is, then many of the lessons learned from the previous involvement, together with the lessons from the other projects, will be relevant.

This project illustrates the necessity for identifying all the underlying assumptions and conditions that need to be applied for each development step to be achieved. This will help to ensure that the project inputs and outputs are designed to address the assumptions and conditions and that, where the risk is high, a staged approach (as used in this project) is implemented. This in turn will lead to a reasonable probability of objectives and benefits being achieved.

Table A4.4: Initial implicit strategy for the various phases in Indonesia

Aspect	Phase 1	Phase 2	Phase 3
Large scale titling	To create the capability and capacity and to carry out with significant TA assistance	Continue land titling with less TA assistance	Continue titling and registration without TA
Land policy	To examine and put forward discussion papers	To discus & start putting in place the new land policy and land law	Implement all the changes to land policy and law
Institutional arrangements	To highlight the necessity for major changes towards the end of Phase 1	To determine the appropriate institutional arrangements	Complete the major institutional changes

Figure A4.1: A conceptual logical simulation model to examine design alternatives and impacts (based on Figure A3.1)

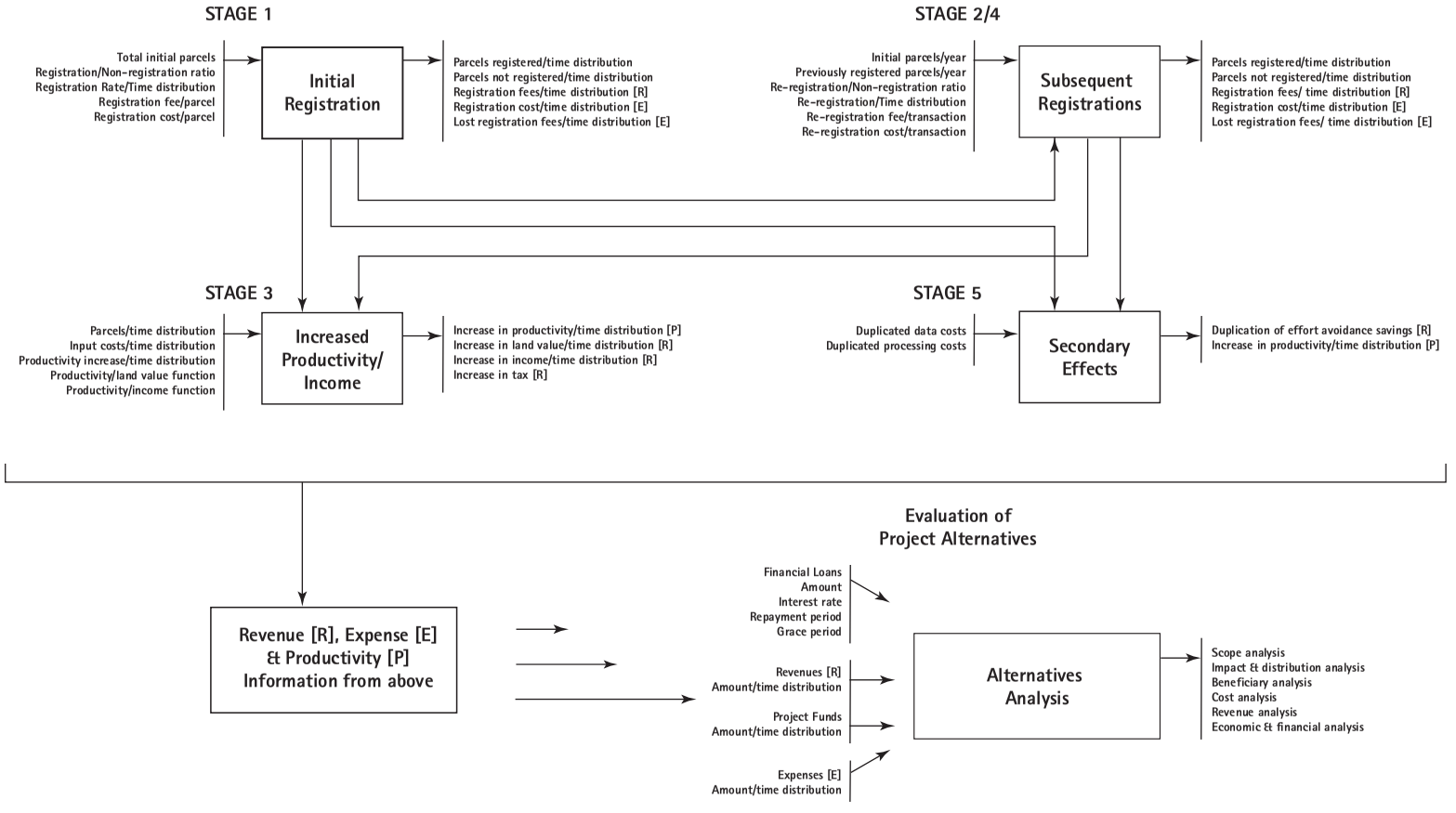
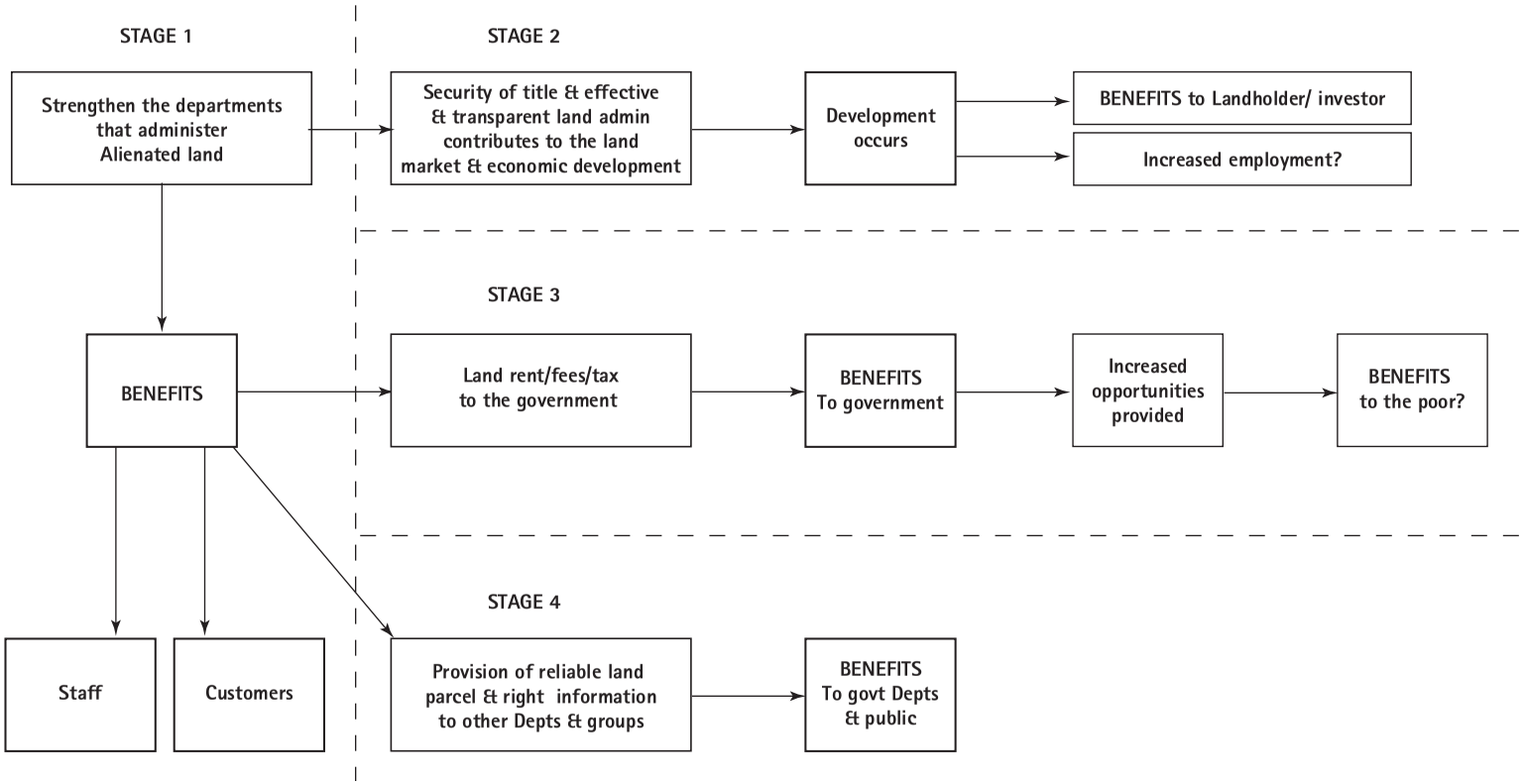


Table A4.5: Thailand phases 1 & 2 – Results of World Bank operational audit

Aspect	Performance Audit	Completion Report
Outcome	Satisfactory	Highly Satisfactory
Sustainability	Likely	Likely
Institutional Development	Modest	Modest
Bank Performance	Satisfactory	Highly Satisfactory
Borrower Performance	Satisfactory	Highly Satisfactory

APPENDIX 5 THE BENEFIT FLOW FOR PROJECTS THAT IMPROVE THE ADMINISTRATION OF ALIENATED LAND

FIGURE A5.1: The flow of benefits for project that improve the administration of alienated land



APPENDIX 6 INFORMATION ON THE KIRIBATI PROJECT

The Kiribati Project

Kiribati, particularly South Tarawa, was experiencing rapid population growth, uncontrolled urbanisation and poor urban planning and management. This was causing: land scarcity; land tenure problems such as boundaries, leases and ownership disputes; increased demand for shelter and housing; emergence of poverty and urban poor; increasing applications for land reclamation; ground water depletion and pollution through leaching of sewerage; increasing garbage and waste disposal issues; increasing pressure on the basic physical infrastructure, especially the reticulated water and sewerage systems; and breakdown of traditional customs. The purpose and objectives of the overall project are show in Box A6.1 in this Appendix.

The project has four components, one of which is concerned with land registration information systems. The outputs associated with this were: more effective and efficient cadastral data base and records; more effective and efficient land registration information, including ownership and sub lease information; improvement of linkages between land registration and divisional financial accounting systems;

An information system on all land ownership information and boundaries was established based on a PC, using off the shelf software. Data validation and the removal of backlogs was undertaken. Staff were trained in its use and this is on going. The use of this land information was built into the daily work processes of the staff in order that it would be seen to make work easier for them rather than actually making work. The land lease information provided a basis for urban assessments and planning.

The Kiribati project does not finish until mid 2000 and a Completion Report will not be provided until after that date. However, it has been possible to obtain information from the TA working on the land administration component, from an exchange of information with the ATL, and from progress reports.

Provisional Assessment

It is difficult to make an assessment of a project using a number of different sources, particularly when the project is incomplete. The results, therefore, should be treated as provisional.

Effectiveness: Appears satisfactory as the objectives are being achieved.

Efficiency: Appears to be satisfactory based on the limited information available.

Sustainability: Appears to be quite promising.

- *Sustainability of the institution* appears to be satisfactory because of the strong involvement and commitment of the senior management and that the various divisional heads are co-operating well.

- *Sustainability of training and staff knowledge* appears to be quite promising because of staff commitment and their day to day use of the knowledge.
- *Sustainability of technology* is rated as a hopeful. The PC based information system that was established, is 'mission critical'; ie if it stops functioning there is no alternative access to the land records. It is essential that this system is sustainable. On the plus side, there has been considerable staff training, a skill base has been established and staff interest is high. Worthy of special mention is that the Department has been very fortunate to have the presence of a dedicated Australian volunteer occupying a local position. This person has good skills in mapping and information systems and the associated software and systems. Undoubtedly this has been a major strength during the absence of the TA. It would appear that the Department is committed to ensuring that annual maintenance funds are provided. The question mark is on whether the skill base and annual funds are sufficient to keep it going and to maintain it through software upgrades that may require a code change in the applications.

Relevance, i.e. alignment with AusAID's objective of poverty reduction through sustainable development, was commented on previously.

Box A6.1 – Purpose and objectives of the Kiribati project

Purpose

To strengthen the institutional capacity of the Lands and Survey Division to allow a rationalisation of land management practices and policies, improve economic opportunities and generally upgrade the quality of life and standards of living for the existing and future populations of South Tarawa.

Objectives

- Improve divisional and office management and planning for these capabilities.
- Facilitate better coordination and liaison with those key players involved in the broader urban management and planning of South Tarawa.
- Upgrade and strengthen surveying, mapping and land registration systems, including the general data needs and demands of the Division
- Promote community change and awareness of the critical functional tasks performed by the Lands and Survey Division
- Ensure the sustainable implementation and success of the project through checks and balances which are professional, consultative and cost effective.

APPENDIX 7 INFORMATION ON THE VANUATU PROJECT

The Vanuatu Project

Land administration was one component (Improving Land Lease Administration) of the Vanuatu Land Use Project. The main project had as its aim, the establishment of natural resource planning maps and processes for Vanuatu. As part of that it was an activity to incorporate land lease data into the information system. Examination of the land records data ascertained that they were of such a state that they could not be usefully integrated within the available budget and that until the data reached a certain standard, there was little sense in integrating it. As a result an additional component, Improving Land Lease Administration, was designed.

The scope of the component was intentionally very restricted. It concentrated on improving the systems for lease processing, and in reducing the backlog. There was no attention to the broader issues of policy, organisational structure or review of legislation.

The objectives are shown in Box A7.1 the main achievements in Box A7.2, areas where further improvement could be made in Box A7.3, and areas needing attention if further significant improvements were to be made in Box A7.4.

The Vanuatu Land Use Planning Project is still ongoing (due to finish in mid 2000) but the land administration component has been completed. A draft Completion Report on that component has been prepared, although a Completion Report will not be submitted to AusAID until the whole project is complete.

PROVISIONAL ASSESSMENT

A similar caveat to that expressed for Kiribati applies.

- *Effectiveness:* the objectives were, by and large, achieved, so it would have to be rated as satisfactory.
- *Efficiency:* inputs appear to have been satisfactory and, therefore, a satisfactory rating would appear appropriate.
- *Sustainability:* marginal. The main reason is the lack of commitment by the senior management in the three departments concerned.
- *Sustainability of the institution.* No changes were made to the institution (as set out in the design). There are reservations about both the effectiveness and efficiency of the structures in the existing three Departments.
- *Sustainability of staff training.* Certain skills will no doubt be retained, but it is doubtful whether the full benefit of the process changes will be sustained because of the lack of interest and motivation of supervisors and managers.
- *Sustainability of technology.* Only a minimal amount of PC based systems and other equipment was provided. The PC network and the office software will probably be

sustainable. One non-mission critical application was written as a test to see if it was sustainable. It was not.

Box A7.1: The objectives of the Vanuatu project re land administration

- To improve the existing land administration processes
- To train staff in the processes
- To ensure that all the records needed for lease administration are reliable, easily accessible, up to date, and available to those who require them
- To ensure that leasehold land transactions are processed quickly and reliably and meet predefined performance standards

Box A7.2: The main achievements of the Vanuatu project re land administration

- Processes were improved
- The backlog was significantly reduced
- The time required to process an application was significantly reduced
- Training was provided to a wide range of staff
- Some of the facilities were improved and refurbished
- There was a reduction in absenteeism

Box A7.3: Areas where further improvement could be made

- Personal productivity of staff
- Liaison between the private and public sectors, (the customers and the approvers)
- Staff imbalances between departments.
- Greater management control and interest in work flow and production
- Change of the present work practices and reducing absenteeism
- Improving management supervision and accountability
- The use of computer based applications in non mission critical aspects

Box A7.4: Major areas (in priority order) needing attention if further significant improvements are to be made:

- Improvements in the will of senior managers to foster and accept change, and be willing to manage and accept responsibility
- Improvement of acceptance by staff of the concept of personal responsibility and individual productivity
- Increase in staff knowledge, skills and proficiency
- The type of Lands Department or organisation that is most appropriate to deliver the required land administration and management service

APPENDIX 8 THE BENEFIT FLOW FOR PROJECTS THAT STRENGTHEN NATIONAL MAPPING AGENCIES AND COMPARISON OF OBJECTIVES AND STRUCTURE – HAINAN AND ACLMP PROJECTS

FIGURE A8.1: A diagrammatic representation of the flow of benefits for projects that strengthen national mapping agencies

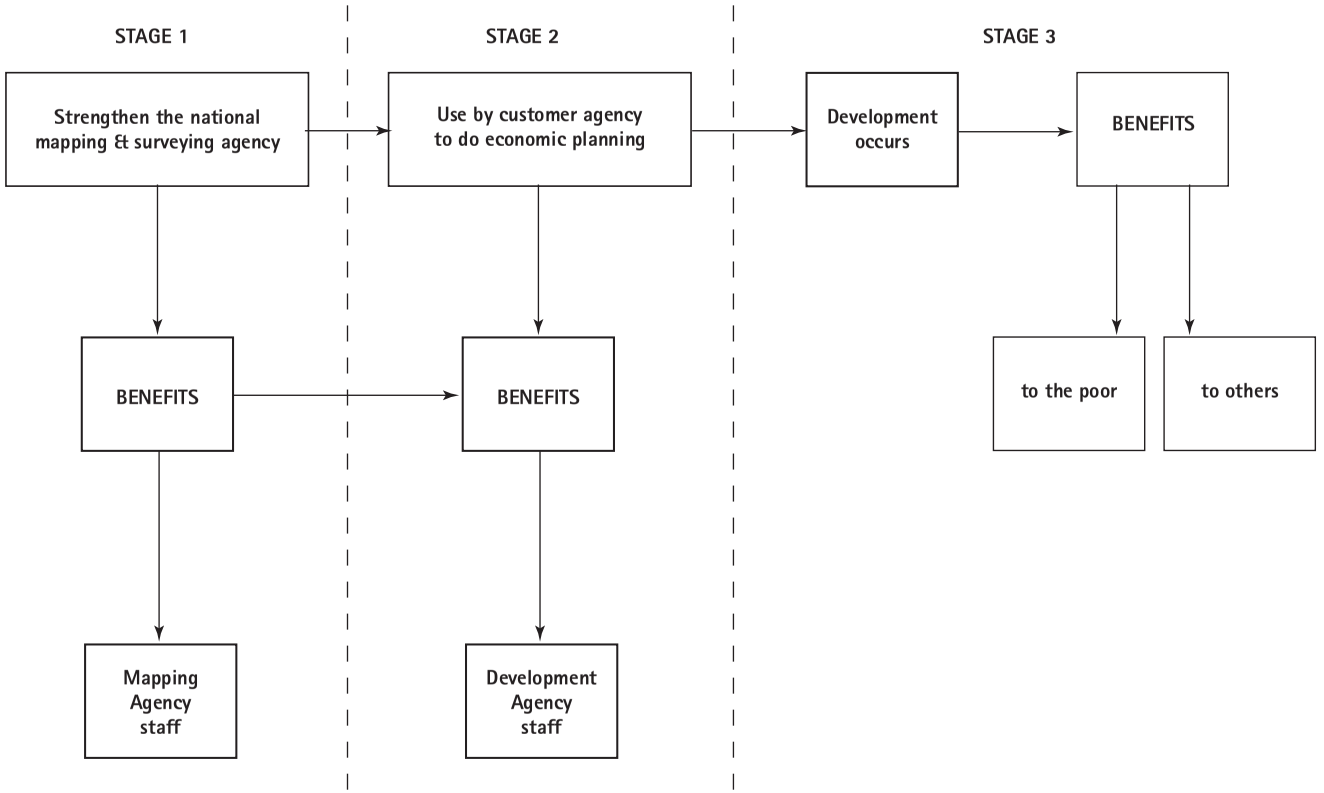


Table A8.1: Purpose and aim of ACLMP and Hainan FLTIS

	ACLMP	Hainan LRFIS
Goal	To contribute to economic growth through more productive use of land resources throughout the country, whilst promoting equity, employment, participation in economic development and social stability	To assist the Hainan Provincial Government (HPG) agencies access basic land resource information for social and economic development planning
Purpose	To establish an LRFIS (land resources Fundamental Information System) to meet the requirements of HPG agencies	
Aims		• To create an efficient LRFIS centre within HBSM • Establish the fundamental databases using modern approaches and technology • Implement a technology transfer and training program • Formulate appropriate land resource information management policies and procedures in order to coordinate related activities across government, and facilitate the broader utilisation of the system in development planning • Assist in the application of LRFIS in two pilot studies • Contribute to the improved planning, management and monitoring of land resource information and related activities within HBSM

Table A8.2: Components and outputs of ACLMP and Hainan FLTIS

ACLMP (orig PID 94)	ACLMP (revised PID 95)	Hainan LRFIS
1. Management (technical) 1.1 Executive management	**1. Institutional strengthening** 1.1 A corporate planning system 1.2 Executive management systems 1.3 Training program 1.4 Facilities refurbished	**1. Develop an LRFIS** 1.1 An operational LRFIS centre 1.2 LRFIS databases established 1.3 Staff trained
2. Geodesy 2.1 Geodetic datum adjustment 2.2 Geoid adjustment 2.3 Cadastral integration pilot project 2.4 National geodetic database	**2. Survey control & geodesy** 2.1 Adjusted primary co-ordinates 2.2 Lower order adjustment system 2.3 Record maintenance system 2.4 Geodetic positioning service	**2. LRFIS Applications** 2.1 Establish information management procedures 2.2 Apply LRFIS to preparation of a regional planning 2.3 Apply LRFIS to local development planning
3 Map production 3.1 Photogrammetry 3.2 Cartography 3.3 Remote sensing & GIS 3.4 Photolitho 3.5 Printing	**3. Geographic information products** 3.1 Digital cadastral map production 3.2 Aerial photographic map production 3.3 Special map production 3.4 Technical support & services	**3 Project Management** 3.1 Management procedures and monitoring systems 3.2 Project reports
4 Products & Publications 4.1 Storage & archiving 4.2 Product information system	**4. Project management** 4.1 Project administration 4.2 Project monitoring	
5 Computer systems 5.1 Systems management 5.2 NMB, PNGLIS, PNGRIS linkages		
6. Capital Works 6.1 NMB Building 6.2 LIU computer room renovation		
7. Project management 7.1 Training review 7.2 Project management 7.3 AIDAB project management		

APPENDIX 9 INFORMATION ON THE HAINAN PROJECT

The Hainan LFRIS Project

The essence of the rationale was that there was a lack of information to guide and support social and economic planning and development. The assumptions for the goal and purpose were as shown below.

Goal & Purpose	Assumption (from logframe)
Goal – to assist the Hainan Provincial Government agencies access basic land resource information for social and economic development planning	That the HPG utilise the information provided from the LRFIS for social and economic development planning
Purpose – to establish an LRFIS to meet the requirements of HPG agencies	• That fundamental land resource information is a basic requirement for development planning. • HPG agencies adopt the LRIM procedures and utilise the LRFIS

These assumptions are in line with those identified in the previous subsection. If these assumptions are not met then the technical achievement of the project will be of limited benefit as its 'products' will not be fully utilized.

This 3 year project was completed in late 1998. From the Completion Report there is little doubt that this project was technically successful. The HBSM capacity and capability were considerably strengthened and they now have a world class facility with trained staff. Given the relatively short time frame, the technical complexity of the introduced technology, and the high production targets, the achievement is very good.

What appears to be less sure is that the products that have been produced, and will be produced in the future, are useful and acceptable to the user agencies who have the charter to use the data/products for social and economic planning and development. User pays has been introduced, individual agencies appear keen to have their own similar capability and in house technology. Additional data, still drawing upon the LRFIS, will probably be required for the various user agencies' applications. There is, therefore, some doubt that the assumption relating to the goal and purpose will be fully met, thus restricting project impact and benefits.

The Design and Completion Reports commented on poverty, gender, environment, target groups and beneficiaries, and these are shown in Box A9.1 of this Appendix. As noted in the discussion on development logic and assumptions, the links to poverty and gender are long and not direct and the main beneficiaries are the staff of the national mapping agency. What is also unsure is the degree to which the agencies (assuming they get the products) will use them for development, whether the development will occur and, if it does, whether it will have a positive impact on the poor.

The AMC Completion Report indicates that this was a successful project. The Completion Report had a long section on sustainability. This probably represents 'a best case'. A summary is:

- *Institutional sustainability:* the specialist center set up within the Hainan Bureau of Surveying and Mapping was sustainable subject to a national restructuring which was possible.
- *Personnel sustainability:* a lot of training had been provided and this was effective.
- *Technology sustainability:* no explicit statement was made in the Completion Report. (A considerable amount of the most modern technical equipment had been provided).

Lessons Learned

The following were listed in the Project Completion Report:

- **Agency commitment:** The agencies involved in project implementation must be committed to the Project goals and objectives and ultimately to the success of the Project.
- **Involvement of a national level agency:** the involvement of a national agency that has an interest in either replication or application in other provinces is of substantial assistance in increasing the impact of a project such as this. Such involvement should include financial support. In the case of the HLRFIS Project, clear benefits to other provinces can be seen through the NBSM system of Bureaux. NBSM has been willing to second well-educated staff and to provide substantial funding.
- **Organisation and responsibilities:** Organisational structure, responsibilities and protocols for the co-operation and co-ordination of Land Resource Information need to be well understood, agreed upon and applied early in the implementation of the project to ensure maximum co-operation.
- **Emphasis on training:** in high technology projects of this nature, substantial emphasis needs to be devoted to training and the demonstration of applications to ensure that spatial digital data can be used to solve a wide range of user needs. As has been the experience with other projects, there are always concerns about the impact on the pace of the implementation of a project when key staff are sent to Australia for training.
- **Understanding and targeting user needs:** The benefits of focusing on user needs and including user needs assessment as a step in the project implementation process needs to be strongly emphasised. This will help to ensure that the outputs produced by the project will meet end user needs, make their work simpler and easier, and be integrated into their normal work practice.
- **Resources for maintenance and applications:** for the longer term, greater resources need to be assigned to applications development, system/database maintenance and the development of common technical standards/operations manuals.
- **Flexibility in project implementation:** the implementation of a project needs to be flexible to allow for changing circumstances. An example in this project was the shifting of the local planning application site from Yangpu to Sanya.

- **Business like approach to user pays:** given the 'user pays' approach in China, greater emphasis was needed to develop a business-like culture in HBSM. This should include development of marketing principles, corporate and strategic planning principles and business planning.
- **Funding for equipment maintenance:** funding needs to be allocated to ensure the sophisticated equipment is operational and properly maintained.
- **Provision and maintenance of an appropriate environment for highly sophisticated equipment:** a major lesson learned in this Project was that, as highly sophisticated equipment requires specific environmental conditions, plans should include the provision of adequate environmental controls and monitoring/back-up systems. In this case, the environmental conditions supplied for the Mapsetter 6000 (following recommendations of the relevant Australian expert and the equipment vendor) were not necessarily maintained and were a constant issue of discussion.

Box A9.1: Hainan project – Comments on poverty, gender, environment (from completion report)

Poverty alleviation

It was considered that the project facilitated better development planning, improved infrastructure development and increased investment throughout the island. This should lead to increased employment opportunities and hence have an impact on poverty. No direct poverty link was noted.

Gender

No specific mention was made in the Completion Report. In the PID it was noted that the project complies with AusAID's WID policies and that work force profiles in HPSM indicate that women are represented in the scientific and technical categories with no identifiable barriers to entry or promotion. It was noted that women also have equal rights as holders of land use rights certificates.

Environment

It was considered that the project was able to have a positive impact on the environment by making analytical tools and data available for improved land use planning and management. The greatest constraint was seen to be the level of priority and funding given by HPG to environmental planning.

Target group

This was principally the HBSM staff. A number of other government agencies were identified as receiving some direct and indirect benefit from the establishment and application of the land resource fundamental information system.

Expected benefits and development impacts

A) *On people:* The main target was HBSM staff and associated HPG agencies. In the long term it was considered the general community would benefit as better land resource information became available for social and economic planning.

B) *On the economy:* It was considered that the LRFIS would be an early leading component of the national economic information system and provide a model. It was considered that the LRFIS, when operational and linked with other agencies, would have a role in environmental management.

- Land Information Management (LIM) policy and procedures were an issue for the various agencies and the HPG because they impacted on the way they did business. The report signalled that a more co-operative approach would be necessary if data was to be exchanged and used effectively, without cost duplications, across a large number of agencies, and drawing from the information collected by the HPSM via the project.
- Significantly more time was required to be able to make agencies aware of the importance of the applications and the data collected. There was little skill in HPSM in disseminating the awareness. It was considered that a follow on project would be necessary.

APPENDIX 10 INFORMATION ON THE ACLMP PROJECT

The ACLMP Project

The development rationale from the original PID refers to the need to use natural resources effectively. It noted that the target groups are the staff of the national mapping bureau and that the beneficiaries are other projects that will use the information provided. The goal and its assumptions are shown below.

Goal	Assumptions (from PID logframe)
Original design: To contribute to economic growth through more productive use of land resources throughout the country, whilst promoting equity, employment, participation in economic development and social stability	• That ACLMP technical assistance, training and equipment inputs are appropriate • That GOPNG provides adequate budget support, as required, to meet specified project implementation needs • That qualified local staff are available, or can be trained during the project
Revised PID: as above	• That GOPNG can provide adequate long term funding to support the improvements introduced under the ACLMP and that qualified staff can be attracted to and will stay with the NMB

The goal is general. The assumptions are appropriate but as it eventuated, most were not met eg. there were continuous problems with counterpart staffing and funding. This had a serious impact on the project.

Box A10.1 of this Appendix gives some comments from the PID on social and cultural issues, gender, environment, and poverty. These comments were made with respect to the impact that the World Bank Land Mobilisation Project would have, rather than the ACLMP.

The major inputs for the designed ACLMP were completed in 1998. ACLMP still continues as a project with several other components being added. One included completion of natural resource information systems with a strong mapping focus. This had no impact on NMB. The other was a two year census mapping project which commenced in 1999. This had a significant impact on NMB. It involved NMB working in co-operation with the Census Office to produce a large range of maps and other information to assist in census planning. The status of this component is not known.

Since the total project is incomplete, a completion report on the components dealing with the main institutional strengthening of the NMB is not available.

TAG reports indicate that the project has not been without its challenges, and that there was adjustment throughout the life of the project. Initially, the project was focused on high production targets (essentially converting all of the 1:100,000 paper topographic maps into digital form), which meant there was insufficient allowance for institutional strengthening, and

individual and corporate capability and capacity building. This was addressed in the PID modification. The emphasis shifted to building capability and capacity, training in procedures, lowering production targets, and going through three cycles of production:- once with TAs taking a leading/training role, the second in a partnership role, and the third with the TAs taking no role except when required, to solve a specific problem or offer advice.

Lack of PNG counterpart funding was a problem throughout the project and, it is understood, was not restricted to this project alone. To a certain extent this indicates the lack of interest and commitment by senior officers in the Lands Department and in the funding agencies. They may not have seen the project as very important. There was also a less than enthusiastic interest displayed by the senior management of NMB itself.

There were several strong moves to try to change the institutional arrangements so that NMB could become a state owned enterprise or similar. The idea was that it would go into the market place and earn money (for which there was significant potential) if it could retain some of these funds for essential maintenance and to build a capital and operating base. While this seemed to be agreed in principle by senior management in various departments, the necessary signed approval did not eventuate over a three year period.

Provisional Assessment

As the project is still on going this should be treated as provisional.

Efficiency: this seems passable.

Effectiveness: Would seem satisfactory from a technical strengthening point of view but perhaps not from an institutional and impact perspective.

- *Sustainability:* on the last TAG visit, at the end of the main project, it appears unlikely. However, the additional two year component for the census mapping may well have increased the possibility.
- *Sustainability of the institution* was suspect because of the lack of senior management and higher management commitment, interest, and funding.
- *Sustainability of personnel* was suspect because the lack of career prospects and job satisfaction meant that those who had been trained would leave if an alternate opening became available.
- *Sustainability of the technology* was suspect because there were grave doubts that the GOPNG would supply the necessary annual maintenance or approve the organisation to be corporatised to allow fee earning.

The relevance of these types of project and the questions they raise were discussed in the previous subsection.

Lessons Learned

The following are the lessons to be learned:

- Projects in PNG can be quite difficult;
- If a project does not have the full interest, support and commitment of senior management (as is evidenced by releasing promised counterpart funding and staffing and helping to remove obstacles) achievement of objectives and outputs is very difficult;
- By motivating and gaining the interest of the ordinary staff a great deal can be achieved but is probably not sustainable without the interest and commitment from their senior managers;
- If the probability of sufficient maintenance funds being provided post project is not high then serious consideration should be given to providing only the level of equipment that has a good chance of being sustained;
- In hindsight, the institution of NMB as a public sector mapping agency may not have been worth strengthening. Other options of ensuring the delivery of the required information to user agencies might well have been explored.

Box A10.1: ACLMP – Comments on social and cultural issues, gender, environment, and poverty (from the PID)

Social and cultural

- The benefits were expected to include improved access to land resource information, facilitating better control of the resource.
- Provision of better maps to owners of alienated land, government agencies and commercial organisations supporting better management of land and of resource development projects.

Gender

The direct implications of ACLMP for women were minimal. The activities did not generate specific employment or career opportunities because the number of women involved in technical areas was very small.

Poverty

No direct attribution of positive effects on poverty reduction can be made to the ACLMP.

Environment

It was considered that the activity of linking data sets of the NMB to the PNGRIS will provide access to a technically sound data base to influence the formation of policy and direct investment towards environmentally sound programmes.

Target group and beneficiaries

This was essentially the NMB as an organisation, together with its staff.

APPENDIX 11 EXTRACTS FROM THE SIMONS' REPORT

Rural development

- The bulk of people live in rural areas and obtain their incomes from agriculture, particularly in the poorest countries; helping to meet the needs of people for the minimum amount of nutritious food is a key task for the aid program.
- The development record and World Bank research suggests that the most productive approach is to get the enabling environment right, assist agricultural markets to work, and provide limited direct assistance to farmers
- The ability of farmers to respond to supportive policy environments is partly governed by land tenure
- The World Bank has noted that land reform was important to the success of agriculture in many regional countries
- Insecurity of title, oppressive share cropping regimes and heavily concentrated land ownership can work strongly against agricultural development
- land tenure issues are highly sensitive and calls for a sophisticated understanding of local conditions, culture and politics. If land ownership is a major impediment to development, donors must work constructively with their developing country partners to address the issue.

ECONOMIC DEVELOPMENT

- Development experts now have widespread agreement on two points: --(1) economic development plays a vital role in sustainable poverty reduction in developing countries; and (2) development strategies that focus only on maximizing economic growth are inadequate: the pattern and quality of growth are just as important as its pace.

AUSAID PROGRAM

- The following programming priorities are recommended: --
- establishing a framework for broad based economic growth by helping to develop efficient, accountable and equitable government administration; and by providing essential economic and social infrastructure, with particular attention to the needs of poor communities,
- Increasing the productivity of the poor by facilitating access to key productivity assets, including land and credit
- Overcoming structural disadvantage and discrimination against the poor by removing barriers to participation
- Properly targeted and designed activities in the fields of health, education, infrastructure and rural development can directly benefit the poorest people of developing countries whilst also building of broader base for economic growth and social development. The key tests for appropriateness of programs are effectiveness, equity and sustainability.

GOOD GOVERNANCE AND ADMINISTRATIVE ABILITY

- Good governance is widely considered to provide an essential framework for sustainable economic and social development and therefore poverty reduction
- The importance of good governance and that this in turn entails high standards of public administration, accountability to the community and transparency in government decision making, was noted.
- Lack of administrative capacity and institutional weaknesses cause major development bottlenecks and explain much poor governance. Developing countries frequently have a very thin layer of competent officials, coupled with antiquated and inefficient government systems bequeathed to them by foreign powers.
- Insufficient attention has generally been given to changing the cultures in which officials work. Successful capacity building often involves major reform of government structures, including decentralization of decision-making and service delivery.
- Capacity building and institutional strengthening is complex, long term, and difficult to assess

THE ENVIRONMENT

- That funds be directed only to activities which have close links with poverty reduction in developing countries.

Gender

- Ensuring that men and women have equal opportunity to participate in, and benefit from, development remains one of the most significant challenges facing donors and recipients.

MAXIMISING POVERTY ALLEVIATION

- That the decision about which project to choose to maximize sustainable poverty alleviation should be based on two essential criteria: --
- the likely contribution of the project to economic growth
- the distribution between the various economic groups in society of benefits likely to arise from the project
- To maximize impact on poverty reduction, where the economic returns from alternative projects are broadly equivalent, projects which promote growth by directly involving and benefiting poor communities should be given preference over those which affect the poor less directly.
- *Infrastructure*
- Infrastructure (together with health, education and rural development) is of critical importance to poverty reduction through sustainable development, and are program priorities
- The key tests for the appropriateness are (the same as for other activities) effectiveness, equity and sustainability

APPENDIX 12 THE STRENGTHS AND WEAKNESS AND LESSONS LEARNED – THAILAND LAND TITLING PROJECT

TABLE A12.1 – Strengths and weakness of TLTP 1 & 2 (extracts from AMC PCRs)

PROJECT STRENGTHS	
Thailand LPP Phase 1	**Thailand LPP Phase 2**
• RTG commitment, support by all political and institutional factions, and socio-economic priority in both the 5th and 6th National Social and Economic Development plans. • Strong support from DOL Directors General and senior executive. • A carefully designed project which was well documented and fully funded. • High level of cooperation between participants with a strong commitment to the project objectives. • Large and technically competent team of advisers covering the broad scope of TA for the LTP. • Essential changes to the Land Code enacted as planned, early in the project. • The level of funding to the project increased DOL budget resources by about 30 per cent. • Involvement of the World Bank in addition to being a source of funds, provided rigor in project monitoring of activities and accounts. • TA education and training programme in Australia was well targeted and considerably strengthened middle management level staff of DOL. • Counterparts in the technical sector of DOL were very effective and motivated.	• RTG commitment, support by all political and institutional factions, and socio-economic priority in 6th and 7th National Social and Economic Development Plans. • Strong support from the majority of Directors–General of Lands during the project, and from the DOL senior executive. • Easy transition from Phase 1 to Phase 2 with prudent placement of human and physical resources, flexibility with forward planning building on past experience. • A highly motivated and competent team of advisors allocated to ensure long term stability of the technical assistance component of the overall Land Titling Project. • Effective interpersonal relations between advisers and counterparts, project management and the AIDAB Post, central RTG agencies and the Post, and Project directorship and the AIDAB Desk. • Consistent monitoring and auditing by regular World Bank missions. • A well founded technological base established by Phase 1 of the project. • The Land Administration Development Team could facilitate cross-divisional change as it was empowered to investigate the work of all divisions and to recommend improvements in service delivery. • An adaptable education and training programme responsive to the needs of the project, and able to accommodate a diminishing number of suitably qualified trainees from within DOL. • Commitments to achieve change are now covenants in the World Bank Loan Agreement.

TABLE A12.1 (continued)

PROJECT WEAKNESSES	
Thailand LPP Phase 1	**Thailand LPP Phase 2**
• Low level of authority and status of the LTPO adversely affected project implementation, management and coordination. • Inadequate data on parcel statistics affected project planning and monitoring. • Unclear responsibilities of agencies involved in land related activities and poor mechanisms for cooperation. • Slow growth in the staffing of the CVA and little progress of the valuation legislation. • The most suitable DOL staff to attend tertiary education in Australia sometimes were not competent enough in English. • Counterpart arrangements in the area of land administration, land law and cadastral surveying were not effective. • The high loss rate (55 per cent) of Chulalongkorn graduates to the private sector. • Lack of appropriate human resource management and development policies in DOL.	• Rigidity in DOL regulatory framework hampered the change management process, both in structure and in process. • Inadequate project implementation planning and reporting. • Constraints on DOL boosting staff in critical areas such as CVA and Computing Division through zero growth criterion. • Continuing loss of trained staff to the private sector. • Slow progress on important legislation such as the Valuation Bill. • Multiple responsibilities across Government for critical functions such as forest boundary demarcation, and land tenure certificate issue. • Difficulty in consolidating and updating the assembly of regulations created over the history of DOL. • Little capacity in DOL for horizontal interaction across divisions, compounded by strict vertical reporting arrangements. • Unclear political imperatives competing for project resources, exemplified by the 'four year project'. • Personal liability of land officials continued leading to strict compliance with restrictive regulatory procedures, and impediment to flexible attitudes and the introduction of modern registration practices. • Insufficient skilled resources in DOL to introduce a concerted programme of automation of land offices across Thailand. • Slow recognition and commitment by management led to difficult introduction at short notice of relatively complex management tools

TABLE A12.2 – Lessons Learned from TLTP Phases 1 & 2 (extracts from AMC, & WB Project Completion Reports & WB Operational Audit)

Aust AMC Completion Report Phase 1 LESSONS LEARNED	Aust AMC Completion Report Phase 2 LESSONS LEARNED	WB Completion Report Phase 2 LESSONS LEARNED	AusAID views to WB Completion Report Phase 2 LESSONS LEARNED	WB Operational Audit Report Phase 2 LESSONS LEARNED
• For advisers, the cultural and language barriers are not quickly overcome; long term advisers working closely with well selected counterparts can minimize the effects. • The combination of TA from AIDAB and the World Bank loan has worked well with both benefiting from good cooperation. However, the administration of the TA disbursements by DOL caused many problems and misunderstandings and should be avoided in future. • Greater emphasis could have been placed on preparing DOL scholarship holders in English with in-country courses. This would have been at a lower cost than in-Australia learning and would allow the selection of the most appropriate person.	• Land administration and policy development are not the domain of any one division in DOL leading to the necessity to establish the Land Administration Development Team to provide cross-divisional analysis and linkages, and a vehicle for change management. • Advisors must now change from analysis and recommendations for change to oversighting and guiding the change process. • DOL must recognize that sufficient research and analysis of technology, regulation and process has occurred in Phase I and Phase II, and the steady introduction of change recommended by DOL staff and technical assistance advisers must be implemented for long-term sustainability of the land administration system in Thailand.	• Systematic land adjudication remains the most effective approach to accelerated land titling under Thai conditions. • Targets for land titling under the systematic land adjudication approach must consider constraints such as unclear boundaries with forestry, land reform areas, and lack of clear ownership evidence. A titling rate of 80 per cent of parcels identified by the adjudication teams appears to be a realistic target; • Sustainable institutional changes require a long-term framework and sustained efforts, often beyond the time horizon of one project.	• The Project will have a significant impact on the DOL. To minimise any adverse impact, change will be necessary. This change process will be evolutionary and will require the full support of senior and executive management to be successful. • As the Land Titling program becomes institutionalised, DOL needs establish better mechanisms to coordinate the resources necessary to support the project itself and the process of change. This will also require the full support from senior and executive DOL management.	• Land titling and land reform efforts need to be grounded in an overall rural development strategy that weighs the relative cost and likely impact of various alternatives for reducing rural poverty and improving natural resource management. However, this principle was hard to apply in Thailand at the time when the two audited projects were implemented because the government had very little interest in a broad program of Bank assistance and the Bank's leverage was correspondingly low.

TABLE A12.2 (continued)

Aust AMC Completion Report Phase 1	Aust AMC Completion Report Phase 2	WB Completion Report Phase 2	WB Completion Report Phase 2	WB Operational Audit Report Phase 2
• For senior managers, the group study tours proved most effective. • Training and work experience courses in Australia take a large effort to plan and organize; care is essential for satisfactory results and DOL staff have reported learning a great deal from these 'hands-on' experiences. Evaluation of course participants against course objectives is necessary. Selection of host agencies is important because some may not realize the effort and resources required; fees need to be paid to host agencies. • Good co-operation between DOL, DTEC and the Embassy proved essential and was further improved by the creation of a PCC late in the project.	• The corollary to the above is that no change will occur while the search continues for the perfect system. • The credibility of the project requires that a steady introduction of change occurs leading to improved service delivery by the Department. • An adviser final report is now less important than the impact the adviser has on the system environment covered by his/her Terms of Reference; change will more easily occur while the advocate is present to pursue the cause. • Where possible, responsibility for planning and delivering short-term training in Australia should be arranged under agreement for a fee-for-service with an appropriate organisation in Australia, possibly a non-government organisation or a public sector agency operating under cost-recovery.	• Factors essential to project success, include: strong management, particularly in planning and implementation of systematic adjudication and land titling; continuous TA by a resident team of advisers; and flexibility in project implementation, as was demonstrated by the readiness to shift resources toward more ground surveys to achieve appraisal titling targets.	• Project Management tools such as the Project Implementation Plan (PIP) will only be successful where there is a recognition by DOL of the importance of better planning. Senior levels of AusAID views to DOL must be committed to planning, ensuring that adequate resources are allocated and there are appropriate reward systems for the staff supporting the planning function. • Close attention is required in the coordination of activities that cut across divisional boundaries. Land administration and policy development are not the domain of any one division in DOL, leading to the necessity to establish the Land Administration Development Team to provide cross-divisional analysis and linkages to provide a vehicle for change.	• The success of systematic adjudication in Thailand owes much to circumstances that may not apply elsewhere. In other countries, for example, there may be viable forms of communal land management; and, in the absence of an inflation in property values comparable to 1980s Thailand, the demand for titles may be much less. Nevertheless, Thailand demonstrates that systematic adjudication can be a cost-efficient strategy with powerful development effects. To maximise efficiency, there should be close coordination between all land administration agencies, targets should be established in terms of area covered, not number of titles issued. A focus on area targets will provide titling agencies with an incentive to clarify boundaries between private and state domain and give a clearer sense of the gaps left by a first sweep of systematic adjudication. In

TABLE A12.2 (continued)

Aust AMC Completion Report Phase 1	Aust AMC Completion Report Phase 2	WB Completion Report Phase 2	WB Completion Report Phase 2	WB Operational Audit Report Phase 2
• Six monthly project review missions were effective in highlighting key issues and ensuring that the DOL executive attended to these matters. • Technology transfer almost always requires operational and management change; the former is moderately straight forward and time-scale predictable, but the latter is extremely difficult in a large, conservative organisation and the time-scale is long and unpredictable. • Clear policy direction is needed to bridge the gap between technical change and longer term institutional development.	• An attractive alternative to the above is to bring a trainer to Bangkok where the additional value is to provide training to more people, explore DOL systems before training commences, and reduce the impact of DOL staff absences. • Necessity required that an IS budget plan was prepared before an IS strategy leading to the risks of inappropriate resourcing for IS across the 5 year span of Phase III. • The change process is evolutionary and requires the full support of senior and executive management to be successful. • As in Phase I, clear policy direction is needed to bridge the gap between the introduction of technology and longer term institutional development.		• To support the evolution in the project environment, it is important that the emphasis for technical assistance inputs shift from analysis and recommendations for change to oversighting and guiding the change process. Advisers' final reports are now less important than the impact that the advisers have on their area of responsibility in DOL. Change will occur more readily while the advocate is present to follow up on recommendations.	the absence of data about the size of these gaps it will be difficult for the government to make an informed decision about whether to conduct a second sweep, or simply to leave the areas uncovered to sporadic adjudication. • There is a need to provide farmers in the Land Reform Areas with efficient land surveying services, define and mark forest boundaries to enable the titling of contiguous lands and share land information data more effectively between government agencies. All these undertakings are best programmed and implemented within a common policy and institutional framework for land management and administration. Such a framework would enhance the coordination of policies and programs undertaken by the various agencies responsible for land reform, land titling and registration, forestry and land conservation, property

TABLE A12.2 (continued)

Aust AMC Completion Report Phase 1	Aust AMC Completion Report Phase 2	WB Completion Report Phase 2	WB Completion Report Phase 2	WB Operational Audit Report Phase 2
			• The international training and education program to support the project needs to be adaptable and flexible and must be able to accommodate a diminishing number of suitably qualified trainees within DOL. Where possible, responsibility for planning and delivering short-term training in Australia should be arranged under an agreement for a fee for services with an appropriate organisation in Australia. The alternative of bringing the trainer to Bangkok warrants investigation. • While there are no grounds for concern on adverse gender impact, AusAID would like to see that statistics, such as a breakdown by gender of land title recipients, are maintained by the Project to demonstrate this fact.	valuation and property tax assessment. • The case for freeing up land in state hands should be carefully considered. The return to deregulation, if accompanied by appropriate policing of core reserve areas, will likely generate larger social benefits than titling areas already in the private domain where land rights are not a source of conspicuous conflict. In Thailand, areas in the private domain offered relatively secure tenure to farmers before the titling program. A large number of farmers occupy reserve land that, in many cases, is appropriate for farming; land that does not offer critical environmental services and is, in any case, beyond the means of the government to protect. Farmers on encroached reserve land are deprived of the benefits – principally, improved access to formal credit – extended by the titling program.

Table A12.3: BHP'S Ten Pillars of Land Titling

Abstract from a paper entitled -'Lesson From South East Asian Cadastral Reform, Land Titling And Land Administration Projects In Supporting Sustainable Development In The Next Millennium' – Conference On Land Tenure And Cadastral Infrastructures For Sustainable Development By C Grant, Manager, International Projects BHP Engineering

This paper focused on what makes for a successful land titling project.

Summary of Project Experience

That while the long term goals are similar – a land administration system to foster an efficient land market – the environments in which this goal must be achieved is always different (between countries).

Governments are contributing considerable investment because at the heart of the matter is the recognition that unless there is confidence in the property market, all other development advantages are in danger of imploding.

Only about 25 countries throughout the world have systems in which property is recognised by law and have market systems where these rights can be traded. It is observed that this lack in other countries was the single greatest impediment to their future development (De Soto, 1993).

BHP'S TEN PILLARS OF LAND TITLING

1. Land Titling is a means to an end, not an end in itself

The land titling must be continually demonstrated to be in support of the fundamental quality of life issues confronting developing nations. If not, commitment from government will waver and participation and the confidence of the community will be difficult to achieve. An early failing in land titling was that it delivered a series of technical activities aimed at maximising the distribution of title certificates and the recording of these certificates in a system of registration. While these are important, it is simply the the means employed to achieve the land administration climate where land resources are more effectively managed, people's property rights are secure, transactions are economically and fairly recorded, and social conflict over land minimised.

2. Land titling needs commitment to national reform.

A commitment to change at the highest level is required. Clear and consistent policy and legal framework is important.

3. Land titling is about people, not technology.

While it is tempting to apply information technology to land records, experience in most developing countries, is that the data to be converted is unreliable and the existing systems are gathering and maintaining records are ineffective. No amount of computerisation will help overcome these basic problems. The initial emphasis must be on process improvement and expanding the skill base with a particular emphasis on the development of future leaders.

4. Land titling is more than a project – it is a way of life.

Land titling is generally considered in the host institution as a temporary activity and staff are accordingly assigned on part time basis. Land titling is, however, a long term programme aimed at bringing about reform to the national system of land administration. To be successful people in institutions need to change.

5. Technology provides tools not the standards.

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

Table A12.3 (continued)

6. Successful land titling requires community support.

Land titling needs to be undertaken in a systematic and public way and a whole jurisdiction at a local level. The process has to be public, open to all, actively involve village officials, the fees are transparent and the results of the adjudication are publicly displayed. Formal public ceremonies are held to distribute certificates to the community.

7. Get the runs on the board quickly.

It will reassure policy makers that land titling is viable if some early key results can be demonstrated.

8. Work from the part to the whole in developing land law.

It can sometimes be better in land law to work from the part to the whole, but this is not to say that a basic policy and legal framework is not required. It can take a considerable time to develop and implement high level land law. Lower level legal instruments such as ministerial decrees are very useful.

9. Land titling requires production orientation.

Land titling is a production process that requires a series of coordinated actions. A key element is the setting of output targets. It is important that there be quality control and monitoring.

10. An appropriate reward for field staff.

Land titling personnel can spend long periods over many years in the field. There is generally a higher level of responsibility than the normal work. Staff will only do this if they are adequately rewarded. The setting of rewards is not a simple process as there are usually stringent civil service requirements. However a field staff not adequately rewarded there will be repercussions either in quantity or quality or in the manner in which they seek to establish an informal reward system.

Box A12.1: Operational lessons learned – Thailand land titling project

Project Scope and Focus

- Land titling projects need to be grounded in an overall development strategy that evaluates the relative costs and likely impacts for reducing rural poverty and improving natural resource management.
- The success factors for systematic adjudication in Thailand may not apply elsewhere; viz lack of viable communal land management, inflation causing a demand for titles.
- Close coordination between all land agencies is required for effectiveness; all undertakings are best carried out within a common policy and an institutional framework for land management and administration.
- The case for freeing up land in state hands should be carefully considered; if accompanied by policing of core reserves, it would be likely to generate larger social benefits than titling land in the public domain, where land rights are not a source of conspicuous conflict; many farmers had relatively secure tenure on public land before titling; many farmers occupy reserve land (that is appropriate for farming, not critical for environmental purposes; beyond the means of government to protect) and are deprived of the benefits of a title – improved access to credit.

Systematic Titling

- Systematic land adjudication and registration is the most effective method for Thailand to accelerate land titling; cost effectiveness and powerful development effects were demonstrated; must work within constraints of unclear boundaries for forest boundaries and the like; a titling rate of 80 per cent is realistic.
- The project should keep statistics to be able to demonstrate that there are no adverse gender impacts.

Box A12.1 (continued)

- Production targets should be in terms of area covered not number of titles issued.
- Essential legal changes need to be enacted early.

Institutional Aspects

- Across divisional boundaries coordination is necessary and this requires management action.
- Implementation of technology requires technical and management change; the former is easier than the latter; Policy direction is required to implement management change; project credibility requires the achievement of steady change.
- Sustainable institutional development requires a long sustained effort, often beyond the time of the project.
- Strong commitment to planning for & implementing change required from top management as titling becomes institutionalized; inhibitors to change are rigid regulations, process, reporting, personal liability; slow recognition of need & commitment to change.
- Adequate HRD planning & to achieve the required skilled resources is necessary.

Training

- More emphasis on in country English before Australian long term training; Senior managers study tours were effective; work experience needs careful planning & selection to be successful; short term training in Australia is best done under fee for service arrangements; and the alternative of bringing a trainer to conduct courses in country is attractive; the training and education program needs to be flexible.

Project Staff

- Loss of trained staff will probably occur.

Technical Advisers (TA)

- Effective TAs were a key success factor.
- Use of long term advisers can minimize cultural and language barriers.
- Advisors need to move from analysis to assisting in change management & this needs management support.

AusAID and World Bank Co-financing

- Co-financing between AusAID (for TA) & the World Bank was effective but the recipient country should not disperse AusAID funds. (AusAID funds are not handled this way in other current projects).

Project Management

- Flexibility in implementation required (eg. re allocate resources) & the ability to change design targets.
- The project office needs to have adequate authority and status.
- Regular WB monitoring missions are useful.
- Adequate project implementation planning and reporting by the project office is essential.
- Adequate data on parcel statistics, titling and gender impact is very desirable.

APPENDIX 13 BENEFITS AND ECONOMIC ANALYSIS

Introduction

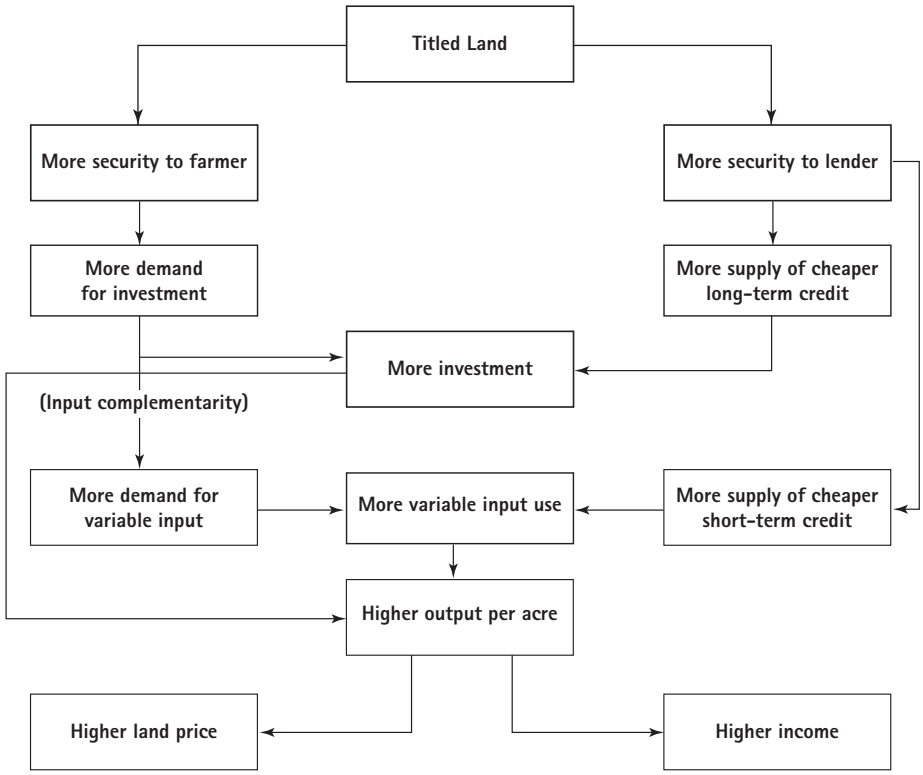
This section reviews some existing papers dealing with the empirical modelling of land registration and titling projects and presents a case for the use of simulation modelling in the development of such projects.

The benefits of land registration and titling: economic and social perspectives (Feder and Nishio 1999)

The paper presents a conceptual framework for the economics of land registration (Fig. A13.1) and discusses the social aspects and policy implications

CONCEPTUAL MODEL

Figure A13.1: Land Ownership Security and Farm Productivity: a Conceptual Framework (Source Feder G and Nishio A, 1999)



BENEFITS

Three main linkages are presented (only the first two are represented in Fig. A13.1):

- titling enhances tenure security (reduces chance of eviction, government expropriation, ownership disputes; enhances investment demand)
- titling increases access to credit (provides collateral for cheaper and higher loans)(formal credit must be available and informal lending must not be present)
- titling promotes an efficient land market (increases land transferability)

The first two encourage the farmer to develop his land in order to increase productivity (increased income) and hence the value of the land.

(the farmer knows he will have the land long enough to see the benefits of financed development (complementary inputs of fencing, drainage, structures, clearing of stones and trees, fertiliser, more permanent and semi-permanent crops, etc.) which can now occur because his recognised ownership can be used as investment collateral)

As registration systems and titling largely eliminate ownership uncertainty, they facilitate more transactions and ultimately induce a better allocation of land and a higher level of economic well-being.

Inhibitors are as follows:

- to title registration
- high costs and wealth-based quantity rationing
- poor physical infrastructure
- ineffective credit systems and marketing institutions
- strong indigenous tenure systems
- low incidence of land disputes
- to increased land value
- poor access to markets
- inadequate financial institutions
- poor land quality

Empirical evidence is presented from studies in Asia, Latin America and Africa.

Application of the model in a particular country depends on such aspects as policies, traditions and culture

For policy implications benefits need to be addressed from the social aspect rather then the farm aspect, and in comparison with the land registration costs borne by society

SOCIAL ASPECTS AND POLICY IMPLICATIONS

The net benefits of land registration can be substantial but do not automatically occur.

Prerequisites for economic viability of land registration

- well-functioning financial institutions which can extend long-term credit and be backed up by efficient enforcement of land as colatteral

- clear incentive to increase production through investment (produce markets must be accessible, land must be fertile, functioning distribution systems for agricultural products and adequate labor supply)
- enabling regulatory framework for land registration (laws should have realistic/socially acceptable evidence requirements, incentives to register, clear dispute resolution procedures, workable procedures for land use approval

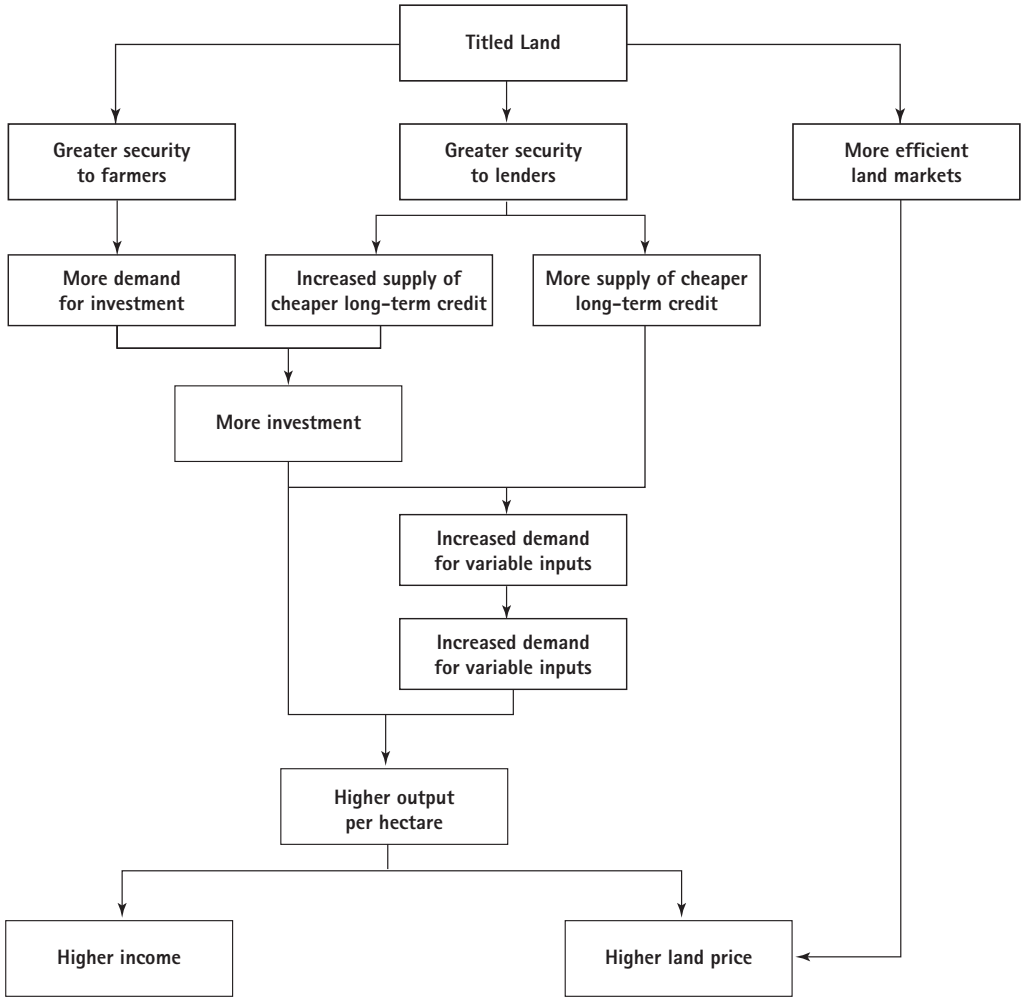
Social aspects of land registration program (formalisation of land rights may instigate land grabbing and corruption of officials)

- land registration administration should be transparent
- landholders should be closely involved in the registration process
- regulations should not discriminate against women
- existing customary rights should be well understood and taken account of in the land registration system
- developments should be monitored on the ground
- cost effectiveness should be a major factor in land registration system design, in particular keeping the intial registration cost low

Economic analysis of rural land administration projects (Pagiola 1999)

The paper discusses the economics of implementing land titles systems in rural areas and draws, in particular, on two World Bank projects in Thailand (a long-settled, intensive agricultural sector with relatively strong institutions and infrastructure) and Guatemala (a recently-settled frontier area with weak institutions and infrastructure).

Figure A13.2: Potential benefits of land titling (Source Pagiola S, 1999)



BENEFITS

The benefits resulting from land registration are:

- Increased security of tenure (decreased government expropriation, land grabbing and disputes)
- Increased access to credit (because of better collateral)
- Improved functioning of land markets
- Improved land use and environment (through better farming practices)
- Information (improves tax collection and land use planning)

Inhibitors

The following are factors which can prevent some, or all, of the benefits from being realized:

- no institutions capable of making loans
- no mechanisms to register liens against property and to foreclose on property
- loan transaction costs are prohibitively high
- farmers cannot overcome their fear of possibly losing their land due to adverse agricultural conditions.
- foreign land ownership not allowed

Results

The paper presents the results of two cost benefit analyses (CBA) – Thailand Second Land Titling Project and Guatemala Land Administration Project.

With both projects, it was found impractical to quantify many of the potential benefits due to a lack of adequate data. As a result each CBA was based on a single benefit as follows:

- Thailand - on estimating the increase in production of rice as a result of land registration
- Guatemala - on the number of titles registered as a result of land registration

Each CBA was done over a 14 year period (Thailand) and a 10 Year period (Guatemala) with estimates of benefits discounted to Present Values

The Effects of Land Registration On Financial Development and Economic Growth: A Theoretical and Conceptual Framework (Byamugisha F. 1999a)

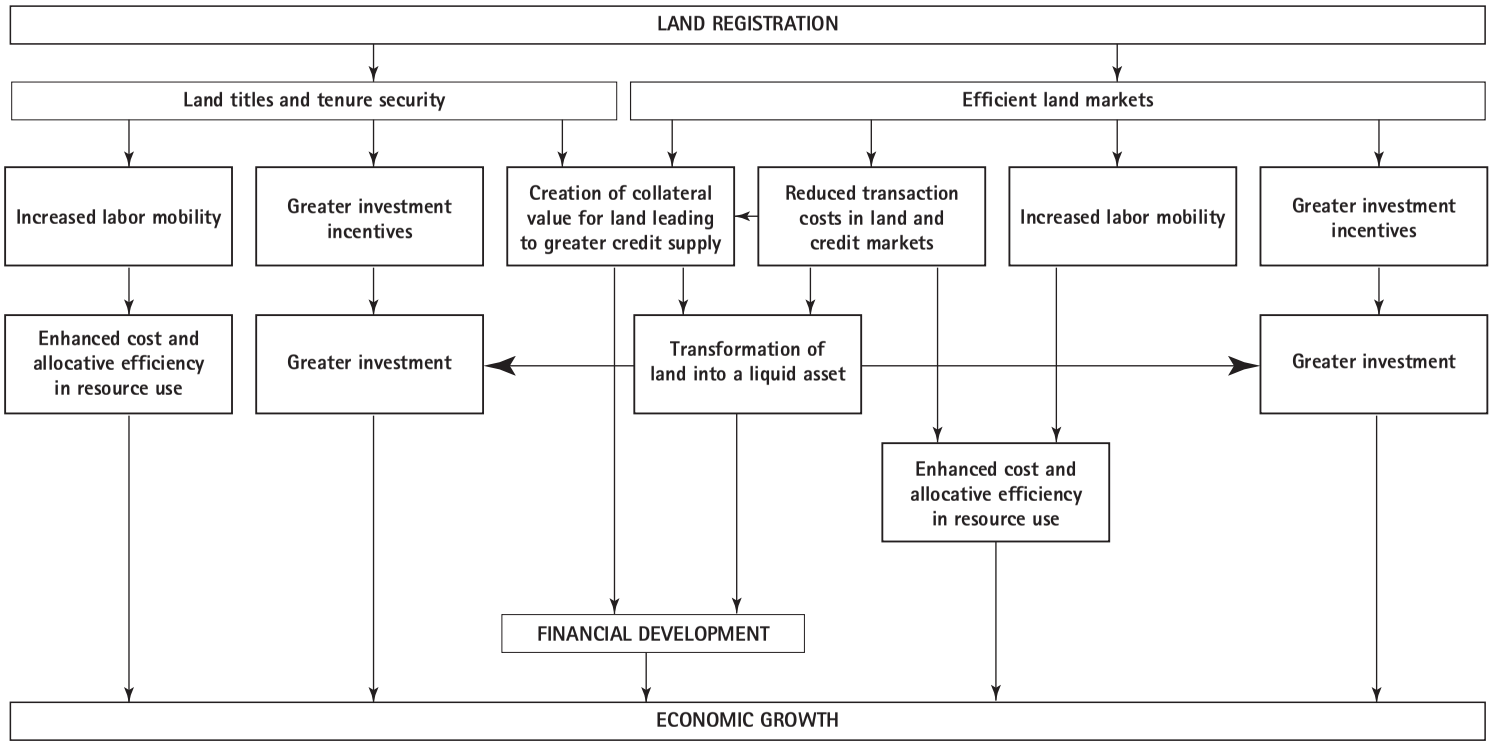
The abstract states:

'This paper develops a theoretical and conceptual framework to guide the empirical analysis of the effects of land registration on financial development and economic growth. Such a framework is necessary to improve upon current and past investigation approaches which have focussed on one sector, contrary to common observations to the effect that land registration affects not just one sector but many sectors and the economy as a whole. It builds upon the well-tested conceptual framework that links land ownership security to farm productivity, (Fig A13.1), and is underpinned by the theory of positive information and transaction costs. It is constructed with five linkages, to map the relationship between land registration and financial development and economic growth, namely (Fig A13.3 refers):

(I) the land tenure security and investment incentives
(II) the land title, collateral and credit linkage
(III) the land markets, transactions and efficiency linkage
(IV) the labor mobility and efficiency linkage
(V) the land liquidity, deposit mobilization and investment linkage

Empirical results from the application of the framework to a single country case study indicate that our framework is sound.'

Fig. A13.3: A Conceptual framework linking land registration to financial development and economic growth (Source Byamugisha F, 1999)



The effects of land registration on financial development and economic growth: experiences from Thailand (Byamugisha F. 1999b)

The abstract states:

'This paper uses an economy-wide conceptual framework to analyze the effects of land registration on financial development and economic growth in Thailand. This particular framework is necessary to improve upon current and past analytical approaches which have focussed on one sector, contrary to common observations which indicate that land registration has economy wide effects. Our study uses contemporary techniques such as the error correction model and cointegration to deal with problems of non-stationarity inherent in time series economic data. We also use the autoregressive distributed lag model to analyze the long lags of output response to changes in land registration. Three key findings emerge from the study:

(i) land titling has positive and significant long run effects on financial development

(ii) economic growth responds to land titling following a J curve, by first registering a fall and recovering gradually thereafter to post a long and strong rally

(iii) the quality of land registration services, as measured by public expenditure on land registration, has strongly positive and significant long run effects on economic growth.'

In the 1999a paper Byamugisha developed a conceptual model and the 199b paper applied the concepts to develop a set of empirical equations (financial development and economic growth). These were then applied to data from Thailand (for the period 1960-1996) after testing and dropping some parameters that were found to be insignificant. The results obtained were as listed in the abstract above.

Comment

The above papers outline the benefits and constraints of undertaking land registration, outline conceptual models, and report on their application to data from previous projects.

Although the article texts discuss constraints, they are not reflected in the conceptual models.

In all cases, the model has been applied after the event. What is required is a model that can be applied before the event that will take into account constraints in the subject country, and be used to guide the development of a land registration project. The implementation of the models above (spreadsheet and empirical equations) do not easily lend themselves to a general case taking into account constraints applying to the benefits. In other words, it would be desirable to shift from an economic model to a development model. A way of implementing a development model is by means of simulation techniques. With these techniques it would be possible to build a general purpose tool that could easily be adapted to a specific situation. Figure A4.1 (Appendix 4) presents a logical model, that can be applied using simple simulation, to examine project scope and alternatives, cost, benefits, and trade offs.

APPENDIX 14 LIST OF 'LAND' PROJECTS BY TYPE, SUBTYPE, AND VALUE

			PROJECT FOCUS				Land admin, surveying projects — sub types				PROJECT VALUE (A$m)				
			Land titling/ admin; surveying/ mapping, LIS	Natural resource management	Minerals	Planning	Other	Large land titling & admin	Alienated land admin in Sth Pacific	National surveying organisations	Land info systems	Total GOA	Recipient Country	WB Loan or other Donor	TOTAL project Value	Remarks
Dates	Country	Activity Name														
1998	CHINA	Hainan Land Resource Applications	X	X		X		X			X	0.1			0.1	did not proceed beyond design
1996-9	CHINA	Hainan Land Use Information System	X							X		5.4	6.1		11.5	
1994	ERITREA	Minerals Legislation			X							0.04			0.0	
1996	ERITREA	Build Capacity in the Minerals Sector			X							0.06			0.1	
1994-99	ERITREA	Mineral Exploration			X							0.5			0.5	
1998-00	FIJI	Native Land Trust Board	X						X			0.3			0.3	
1993	INDIA	Aeromagnetic Survey			X							6.2	na	na	17.6	
1991	INDONESIA	Geological Mapping IAGMP			X							0.06			0.1	
1994-01	INDONESIA	Land Administration Project	X					X				26.0	25.9	73.9	125.8	
1996-00	KIRIBATI	Urban Planning and Development	X			X			X			1.3	0.1	0.2	1.6	other agency was ADB
1995-97	LAOS	Land Titling - Pilot Project	X					X				2.1			2.1	
1997-02	LAOS	Land Titling Project - Phase 1	X					X				7.5	1.4	21.9	30.8	
1995-97	NAMIBIA	Land Information System Strategic	X						X		X	0.8	1.1		1.9	

			Land titling/ admin; surveying/ mapping, LIS	Natural resource management	Minerals	Planning	Other	Large land titling & admin	Alienated land admin in Sth Pacific	National surveying organisations	Land info systems	Total GOA	Recipient Country	WB Loan or other Donor	TOTAL project Value	Remarks
			PROJECT FOCUS					Land admin, surveying projects — sub types				PROJECT VALUE (A$m)				
Dates	Country	Activity Name														
1996-00	NIUE	Niue: Land & Marine Use Planning Project		X								0.4			0.4	
1993-97	PNG	Mapping Agriculture Systems Project		X								1.1			1.1	
1995-96	PNG	Western & Gulf Coastal Zone Management		X								1.1			1.1	design complete; to go to tender; value $12-16 m
1994-00	PNG	Land Mobilisation Project (ACLMP)	X							X		13.2	4.1		17.3	not incl census mapping & other add ons
1993-97	PHILIPPINES	Technical Ass to Physical Framework Plan				X						4.9			4.9	
1989-93	PHILIPPINES	Natural Resources Program (NRMDP)	X	X		X		X				26.0	75.2		101.2	
2000-02	PHILIPPINES	Land Admin and Management Project	X									7.1	2.2	7.9	17.2	
1999-02	THE PACIFIC	PACIFICLAND Phase III		X								0.001			0.0	
1996-00	THE PACIFIC	PACIFICLAND Phase II		X								2			2.0	
1998-00	THE PACIFIC	Melanesian Forest Conservation Program		X								0.1			0.2	
1998	SOLOMON ISLANDS	Village Integrated Rural Development					X					0.1			0.1	
2000-05	SOLOMON ISLANDS	Solomon Is Institutional Strengthening of Land Administration	X						X			4.1	0.4		4.5	
1999	SOUTH AFRICA	Community Based Rural Landcare		X								3.0			3.0	

			Land titling/ admin; surveying/ mapping, LIS	Natural resource management	Minerals	Planning	Other	Large land titling & admin	Alienated land admin in Sth Pacific	National surveying organisations	Land info systems	Total GOA	Recipient Country	WB Loan or other Donor	TOTAL project Value	Remarks
			PROJECT FOCUS					Land admin, surveying projects — sub types				PROJECT VALUE (A$m)				
Dates	Country	Activity Name														
1990	THAILAND	Ubon Land Reform Feasibility Study				X						0.02			0.0	
1990-94	THAILAND	Land Titling Project Phase 1	X					X				14.6	51.3	56.7	122.6	
1992	THAILAND	Bangkok Land Information System	X								X	0.7			0.7	
1984-89	THAILAND	Ubon Ratchathani Project				X						4.4			4.4	
1989-94	THAILAND	Land Titling Phase II	X					X				7.3	65.2	47.3	119.8	
1994-99	THAILAND	Land Titling Project Phase 3	X					X				10.1	133.0	190.0	333.1	
1989-95	VANUATU	Forest Inventory Survey Project		X								2.3			2.3	
1995-00	VANUATU	Land Use Planning	X	X		X			X			5.0			5.0	
1997-99	VIETNAM	WB: Land Management Project	X					X				0.4			0.4	
1993	VIETNAM	UNDP Land Management Study	X					X				0.7			0.7	
1994-97	VIETNAM	Hanoi Planning and Development				X						3.3			3.3	
1998-01	FIJI	Airborne Geophysical Survey	X		X							4.3			4.3	
1999-02	INDONESIA	Coral Reef Rehabilitation & Management	X									9.1	1.4		10.5	
1990-95	PNG	Forestry Inventory & Mapping		X								1.2			1.2	
1993-97	PNG	Kandrian Glouchester regional development (Phases I-III)		X								14.9	0.9		15.8	
1991-95	PNG	PNGRIS PNG natural resource information system (Phases 2 & 3)	X									2.8			2.8	

			Land titling/ admin; surveying/ mapping, LIS	Natural resource management	Minerals	Planning	Other	Large land titling & admin	Alienated land admin in Sth Pacific	National surveying organisations	Land info systems	Total GOA	Recipient Country	WB Loan or other Donor	TOTAL project Value	Remarks
			PROJECT FOCUS					Land admin, surveying projects — sub types				PROJECT VALUE (A$m)				
Dates	Country	Activity Name														
1996-01	PHILIPPINES	Regional & Municipal Development project (PRMDP)				X						14.6	4.5	47.6	66.7	other doner ADB
1998	SRI LANKA	Land Titling and Cadastral Mapping Project	X					X				0.6			0.6	GOSL contribution was >>A$0.1m
1994-98	SOLOMON IS	Forestry resource Inventory		X								4.5			4.5	
1998	SOLOMON IS	Ministry of Lands technical assistance	X						X			0.3				
1999	SOLOMON IS	Forestry Management Plan		X								0.3			0.3	
1990-93	PHILIPPINES	Remote Sensing		X								9.3	1.1		10.4	
2001-06	INDONESIA	Land Administration Phase 2	X					X				10.0	15.0	65.0	90.0	in design
		Total All Types										234.1	389.0	510.5	1133.4	
		Total - Land titling /admin, surveying, LIS										**130.1**	**331.7**	**462.8**	**924.7**	
		Total - large land titling & administration projects										95.0	318.9	462.7	876.6	
		Total - Alienated land in Sth Pacific projects										6.1	0.4	0.1	6.3	
		Total - Strengthen national surveying organisations										27.9	11.3	0.0	39.2	
		Total - Land information systems projects										1.5	1.1	0.0	2.6	
		Total - Natural Resource management										**46.9**	**0.0**	**0.0**	**47.0**	
		Total - Minerals										**11.2**	**0.0**	**0.0**	**11.2**	
		Total - Planning										**45.5**	**55.0**	**47.7**	**148.2**	
		Total - Other										**0.1**	**0.0**	**0.0**	**0.1**	

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Improving Access to Land and Enhancing the Security of Land Rights: A Review of Land Titling and Land Administration Projects

The Australian Government has supported efforts to improve the administration of land in South East Asia and the South Pacific for many years. This support recognises that effective land administration has a positive influence on partner countries' economic growth, social stability and sustainable resource management. All of the large land titling and land administration projects in which Australia is involved are co-financed with the World Bank. This review covers four distinct project types that deal with land titling and land administration: (i) large scale land titling and land administration; (ii) improving the administration of alienated land in South Pacific countries; (iii) strengthening national agencies concerned with surveying and mapping; and (iv) establishing digital based land information systems (LIS).

The review assessed the effectiveness and sustainability of project benefits. It sought to identify lessons with a view to incorporating them into the design and implementation of future projects to improve project quality.

The review noted that land titling and administration projects are effective in targeting rural poverty and increasing the security of landholders who might otherwise be at risk of being removed from their land. Whilst high economic and social benefits are possible, there are a number of operational aspects that need to be taken into account to be assured of a high likelihood of achieving these benefits. A major challenge is to ensure that land titling/administration is effective and affordable, both to the landholders and the government, and complies with norms of good governance.

The co-financing of large land titling and administration projects with the World Bank is appropriate provided that aspects necessary for an effective partnership can be met. Australia has the necessary expertise and working with the World Bank achieves leverage of the Australian funding input. It is appropriate to focus assistance on increasing the capacity of counterpart staff and agencies so that they have the skills and systems to continue improving land administration post project.

The social and gender aspects should be given more importance in design and implementation of these projects to avoid potential adverse impacts on those involved. Design teams should also include expertise in social and gender issues.

The land administration systems of the various countries in the South Pacific are similar and the problems and improvements required also tend to be similar. There would be merit in investigating a regional approach to improving the administration of land in these countries.