

## **Thailand's 20 year program to title rural land**

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### **Abstract**

In 1982 the population of Thailand was about 48 million and there was increasing pressure on land resources. This paper describes how the Department of Lands designed and implemented a 20 year Land Titling Program (LTP) to grant secure tenure to agricultural landholders. The success of the land-titling program in Thailand has been due to a number of factors. A major factor has been the clear vision for the project, the long-term plan to achieve this vision and the commitment of RTG and the key stakeholders to project implementation. There was a strong policy, legal and institutional framework for land administration in Thailand. Thailand had a long history of land titling and a well developed legal framework that required minimal changes.

The views expressed are those of the author and do not necessarily reflect official views of the World Bank.

## 1. Background

The land administration system in Thailand has a long history. In 1872 King Chulalongkorn introduced procedures to recognize private rights in land. In 1901 a land titles system was introduced and the Department of Lands (DOL) was established. Land law was consolidated into a Land Code in 1954. Land titling activity concentrated initially in the central rice plains, but gradually expanded to other parts of the country. DOL operates from a central office in Bangkok and provides services to the public through a network of Provincial and District Land Offices.

Under the land administration system established by the DOL, title deeds (NS4s) could only be issued by the Provincial Land Offices after the land parcel had been surveyed and charted on a cadastral map. Initial cadastral maps were produced using plane-table instruments. Later control surveys based on local coordinate datums were established and used to produce cadastral maps. The availability of survey control and cadastral maps was therefore a major constraint for DOL in being able to issue land titles to eligible landholders.

Various strategies were developed. Lesser documents such as pre-emptive rights (NS2) or certificates of utilization (NS3) could be issued without being charted on a cadastral map. These documents were recognized under the Land Code and were administered by the District Land Offices. While the NS2 could only be transferred by inheritance, the NS3 could be sold – although, lacking the certainty of the cadastral map, the DOL would only register the transfer of an NS3 certificate after a period of 30 days public notice - and was accepted as collateral by financial institutions. In the 1960s DOL introduced 1/4,000 scale rectified photomaps as a spatial framework for issuing titles. This increased the DOL's ability to issue titles, but survey control was still required for the rectification of the aerial photography. In the early 1980s titles were therefore largely confined to the central plains and the provincial cities and their environs. In the 1970s a new type of certificate of utilization was introduced, the NS3K. This document had the same legal status as the NS3, but was issued using as a survey/map base a new series of enlarged aerial photographs at a nominal scale of 1/5,000. The enlarged photographs were

used in the field as a map base for the adjudication of NS3K certificates.<sup>1</sup> A major program of systematic registration of rights in rural areas was introduced and in the decade from the mid 1970s about 7.33 million NS3K were issued covering 6.34 million ha (about 12.3% of the area of Thailand).<sup>2</sup> The land registration system established and maintained by DOL is very much a manual system. Although the system is a title registration system, with the ownership rights of the person entered into the register recognised under the Thai Civil and Commercial Code, DOL maintained a dealings file for each land parcel. The dealings file held the records for the transaction history of the land parcel. These readily accessible records, linked to the survey and map records and the title records, provided a strong foundation for an efficient land registration system. Historically there has been little involvement by the private sector in land registration. Deeds of sale are prepared by DOL lawyers in the Land Office. Until recently there have been no private sector cadastral surveyors, and even today virtually all surveys are undertaken by DOL surveyors. By regulation, all transactions have to be registered on the day of application, although there have been backlogs in situations where survey were required.

## **1. The Problem**

In 1982 the population of Thailand was about 48 million and there was increasing pressure on land resources. The Royal Thai Government (RTG) responded to this in an ad hoc manner. In the 1960s more than half the country was reserved as forest. Between 1960 and 1975 the agriculture sector grew at an annual rate of 5%, however much of this increase was a result of the expansion of cultivated areas onto land reserved as forest. Studies for the fifth Five-Year National Social and Economic Development Plan (NSED, 1981-1985) estimated that only about 12% of the 23.7 million ha of occupied agricultural land was held by title deeds, a further 49% was held by lesser documents, 18% was occupied by persons who may have a claim but lacked documentation, and 21% was illegally occupied forest land. The fifth NSED identified the need to improve land productivity in agricultural

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<sup>1</sup> Most NS3K certificates were charted on the enlargements, but some were issued based on larger scale sketch maps prepared in the field and attached to the back of the enlarged aerial photographs.

<sup>2</sup> As documented in the Thailand case study prepared for the Comparative Study. Source, DOL records.

areas. The plan set out a strategy to grant secure tenure to agricultural landholders, noting that secure tenure would enhance access to institutional credit and provide the basis for long-term investment by farmers to improve productivity.

DOL faced a number of difficulties in supporting this policy objective. There were major inconsistencies in the geodetic control in the 29 local origins, leading to errors in the mapping and charting of titles. There was insufficient control to support the issuance of titles in much of the country, particularly in rural areas. In Bangkok and many major cities DOL had been unable to maintain accurate, up-to-date large-scale cadastral mapping to support the title registers. There were inconsistencies in the land registers maintained by DOL at Province and District levels. The photographic detail on the enlargements that supported the NS3K documents was becoming increasingly dated and the paper maps themselves were degrading over time with use in the field. DOL also had limited systematic registration capacity – only about 48,000 new titles a year could be issued by systematic registration. It was estimated that it would take DOL with its then resources and capacity over 200 years to complete the issuance of titles to all eligible landholders.

## **2. The Project**

As indicated above, DOL had a history of flexibility and innovation in responding to increasing demand for services. The senior management in 1982 also had a clear vision of what they wanted – the issuance of titles to all eligible landholders - and a realistic assessment that it would take time to achieve this vision. A detailed 20 year plan was prepared for the Land Titling Program (LTP), breaking the program into four discrete five-year phases. The RTG was successful in obtaining World Bank and Australian government support for the first five-year phase, which began in late 1984. This support continued in the second and third phases. The RTG is continuing implementation of the fourth phase of the plan with RTG funding.

A key emphasis in phase one was in strengthening and extending the survey and map infrastructure and building a strong systematic registration capability. Recent DOL experience from the NS3K systematic registration program was invaluable. The systematic registration program included both field adjudication and the office conversion of many of the NS3K certificates to titles. Other activities undertaken during the first phase included a review of DOL organization and management operations, strengthening of DOL headquarters and land registration services, including the construction of a network of new branch provincial land offices, an urban mapping program to compile a new series of large scale cadastral maps in urban areas from existing survey/map records, support for the newly formed Central Valuation Authority and support for the tertiary education sector. In phases two and three there has been a continued emphasis on the systematic registration activity, but a shifting emphasis from technical aspects to a focus on aspects such as strategic planning, IT planning, human resources management and development and improved service delivery. The imposition of a ceiling on the hiring of new staff and the continuing and increasing need to staff the systematic registration field teams was a driving force for much of this change. Late in phase three of LTP, with staff levels reduced from a peak of about 14,000 to about 12,000 and with the title register of about 4.5 million in 1984 increased to about 19 million titles, the average time taken to register a transfer was about two and a half hours. Even so, DOL was re-engineering processes to further improve this world-class benchmark. The program of systematic registration and conversion of NS3K certificates to titles was managed and implemented by the DOL Land Document Division (LDD) based in Bangkok. All systematic registration activity has been undertaken by DOL officials and the Land Code sets out procedures. Systematic registration is only possible on non-forest land and uncertainty in forest boundaries has been a major issue. Systematic registration could also not be undertaken in districts declared as land reform areas, even though any land reform activity in the district was usually confined to limited localities. Planning for systematic registration was undertaken in Bangkok and formal notice given to Provincial authorities prior to the mobilization of field teams. Notification of field activity is posted in the Province, District,

sub-District Land Offices and in the residence of the Village Head at least 30 days prior to field activity. The field team makes contact with the Village Head, who is an active participant in the adjudication process. Systematic registration is undertaken on a village-by-village basis, in an open and transparent process. Participation by landholders is voluntary and it is rare that a landholder does not participate. The project provides concrete corner marks that are emplaced by the landholders under the supervision of Village and DOL officials. Adjudication forms are used to collect evidence of rights. These forms are certified by adjoining landholders, village officials and adjudication staff. The corner marks are surveyed or identified on rectified photomaps. In the early years of the project corner marks were surveyed as square offsets from minor control traverses and manually plotted on cadastral maps and title records. In later years, total stations and computers were often used to speed and improve the process. The results of the adjudication in a village are publicly displayed for at least 30 days. No documents are issued for a parcel where the rights are subject to an unresolved dispute. Any appeals against the adjudication are initially considered by the adjudication staff with the support of village officials. Any disputes that cannot be resolved in the field are referred to the Provincial Land Officer. Parties to a dispute can appeal to the court system, but in practice very few disputes arose that could not be resolved in the field.

Staff in the field adjudication office prepare the title and map records for transfer to the Provincial Land Office. These records are transferred in batches. Staff in the Provincial Land Office check the records and the titles are signed. In the early years of the project the titles were signed by the Provincial Land Officer. In later years the Head of an Adjudication Centre could sign the titles. One of the strengths of the Thai system is the short time between the initial contact with landholders and the final distribution of owner's copies of titles and the transfer of records to the land office. This interval is routinely less than 90 days, which includes the minimum 30 day period of public display. Once the records are in the land

office, subsequent dealings can be registered – although there are legal restrictions in some cases<sup>3</sup> - and as noted above, these registration processes are very efficient.

In 1985 the title register held about 4.5 million titles throughout Thailand and in the year to the end of September 1985 there were about 1.6 million registered transactions. The LTP had issued 8,506,929 million titles over about 4.87 million ha to the end of September 2001. Most of the 8,506,929 new titles produced under the LTP to the end of September 2001 were produced by field adjudication, but 3,092,355 were produced by the office conversion of existing NS3K certificates.<sup>4</sup> In phase three nearly 4.8 million titles were produced at a unit cost of US\$26.93.<sup>5</sup> At the end of September 2001 the title register held 18,029,088 titles over about 11.3 million ha (about 22% of the total area of Thailand)<sup>6</sup> and in the year to September 2001 there were over 4 million registered transactions. The increased number of titles indicates the growth of the register through sporadic processes and the increasing efficiency and responsiveness of DOL service delivery.

There have been a number of studies of the socio-economic impact of the LTP, both cross-sectional studies prior to the project<sup>7</sup> and a series of longitudinal studies during project implementation.<sup>8</sup> Key lessons that can be drawn from these studies include:

- Legal title is the main factor in explaining differences in land prices (titled land was 75% to 197% more valuable than land without any documents);

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<sup>3</sup> Where a title has been issued to a landholder who has no documentary evidence of rights, there is a 10 year period before any transfers can be registered.

<sup>4</sup> Not all NS3K were converted. Only NS3K charted on the nominal 1/5,000 scale maps were converted, and only those NS3K certificates that met clear quality criteria were processed.

<sup>5</sup> Data from the Thailand case study. Source DOL records.

<sup>6</sup> Data from the Thailand case study. Source DOL records.

<sup>7</sup> Documented in Feder G, Onchan T, Chalamwong Y, Hongladarom C, "Land Rights and Farm Productivity in Thailand", published for the World Bank by the John Hopkins University Press, Baltimore, 1988.

<sup>8</sup> Various reports from researchers at Kasetsart University in Bangkok, including:

- CENTER FOR APPLIED ECONOMIC RESEARCH, "Socio-economic Evaluation of the Land Titling Project: main Report of the case Studies", Center for Applied Economic Research, Kasetsart University, June 1990.
- CENTER FOR APPLIED ECONOMIC RESEARCH, "Socio-economic Evaluation of the Land Titling Project: Final Report", Center for Applied Economic Research, Kasetsart University, July 1993.
- CENTER FOR APPLIED ECONOMIC RESEARCH, "Land Titling Project: Phase III. Socio-Economic and Environmental Impact Studies. The Final Study: The Comprehensive Final Evaluation", Center for Applied Economic Research, Kasetsart University, January 2002.

- Land titles are related to the demand and supply of credit (access to institutional credit increased by 27%, interest rates were cheaper with more formal lending sources, and borrowers received between 75% and 123% more credit than those without);
- The incidence of land transactions increased for titled land;
- For titled lands there was an increased use of farm inputs such as seeds and chemical fertilizers;
- The value of production per unit area and the yield per unit area was higher for titled land; and
- The project led to an increase in cultivated areas.

### **3. Success Factors**

The success of the land-titling program in Thailand has been due to a number of factors. A major factor has been the clear vision for the project, the long-term plan to achieve this vision and the commitment of RTG and the key stakeholders to project implementation. There was a strong policy, legal and institutional framework for land administration in Thailand. Thailand had a long history of land titling and a well developed legal framework that required minimal changes. The land administrative procedures that had been developed by DOL were efficient and very responsive to public demand. There was public confidence in the land administration system and active participation by the public. In Thailand various vested interests that complicate projects in other countries – such as public notaries, private lawyers and private surveyors – were not present. The DOL was a strong organization with a large number of reasonably well-educated staff distributed in a network of offices throughout Thailand.

### **4. Unfinished Agenda**

Despite the success of the land titling project in Thailand it should be noted that task is incomplete and a significant number of Thai citizens have not been able to directly benefit from the project. The systematic registration activity under the project was restricted by law to non-forest land. Individual landholders who live in forest land and are entitled to titles can apply for titles under a sporadic process.



Over 50 percent of Thailand has been reserved as forest land and there has been significant encroachment of forest land. Various studies have shown that tree-canopy only covers 20-30% of the country and perhaps as many as 12 million people live and work on land deemed forest land. This segment of the Thai population includes the various hill tribes and communities living under forms of communal tenure arrangements which have no legal recognition. These people have not and cannot benefit from land titling activity until there are some fundamental changes in the policy and legal framework. However the project has strengthened the DOL and land administration in Thailand so that it is better placed to support future changes in RTG policy.