

PD-CAG 227

LAND MAPPING, TITLING AND REGISTRATION
PROJECT

~~GT~~

497-0312

TERMINATION REPORT
(Submitted to USAID - August 1, 1983)

Prepared by
Donald D. Waite
Socio-Economist

Introduction

This report has two sections. Section I summarizes the Land Mapping, Titling & Registration (LMTR) project accomplishments. Section II reviews and analyzes project design, implementation and other problems which resulted in the project being terminated (September 30, 1983) 15 months ahead of the scheduled date of December 31, 1984.

SECTION I

I. Purpose

The purpose of this section is to summarize accomplishments and relates these to original objectives. This section also relates the extent to which the project resolved or is resolving the originally identified problems.

II. Background

Bureau of Land Management's (BLM's) technical assistance and actual project start up began the first part of October 1981 with the arrival of Mapping specialist. His tenure was for 20 months. The Team Leader/Systems Analyst arrived the later part of November 1981 and he participated in the project until the end of May 1982 (approximately 6 months) when he was medically evacuated. The Socio-Economist arrived the first part of February 1982 and concluded his assignment the first part of August 1983 (18 months tenure).

Other technical assistance on the project include a Legal Advisor from the United States for four months and a Legal Advisor from the Philippines for approximately three months.

The first 6 months of the project involved work by the BLM project team in general information gathering, researching land laws, analyzing land registration system procedures, analyzing and identifying system problems, classifying socio-economic benefits and formulating tentative observation and recommendations. During this period the three pilot areas were visited and numerous contact were made both within and outside Agraria.

This effort resulted in a draft document titled Land Registration in Indonesia - System Description and Recommendations (see attachment 1). This document provided an excellent description of the existing land mapping/survey titling and registration system in Indonesia.

The document also proposed fifty discrete activities to be undertaken by the Directorate General of Agraria (DGA)/Directorate of Land Registration (DLR) and the BLM project team to achieve the designed objectives of the LMTR project.

Following preparation of the draft three months were spent in marathon sessions with the DLR's staff in reviewing the technical adequacy of the system description and in discussing the specifics of the fifty proposed activities. Many changes were made in activity specifications and at times hours were spent in discussing and rewriting single paragraphs of specific proposals. In these sessions many misconceptions and misunderstanding between members of Agraria as well as the BLM project team were cleared up and much more information concerning the land registration system was brought somewhat belatedly to light. This work was severely hampered by the lack of leadership and input of a key member of the BLM project team, the Team Leader/Systems Analyst.

Nevertheless, this effort resulted in what was believed to be a completely agreed upon course action for the various activities of the LMTR project. Some activities/proposals were to be implemented immediately while others were to be undertaken at later dates and still others were to be undertaken depending upon the success of some of the priority activities. Thus, after about 9 months of project work, it finally appeared that all parties involved were in full agreement with the specific activities/proposals to be undertaken and objectives to be met (management by objective).

In retrospect, though, it appears that this was not quite the case and full agreement had not been reached on all fifty activities. It appears now that Agraria only agreed to undertake some of the activities because of the insistence of the BLM project team and USAID. Moreover, the BLM project team and USAID insisted on some of these activities because they were absolutely necessary to be fully responsive to the objectives of the project as designed. It appears now that Agraria's tactically agreed with some of the activities with the intentions of delaying implementation indefinitely.

It is also apparent now, that Agraria didn't fully understand, even after the length discussions, exactly what was involved in some activities. It was only after some work had been accomplished on an activity that they began to fully comprehend the implications and the commitments that were required on their part.

It is also apparent now that the BLM project team grossly under estimated the time and effort it would take to implement some of the activities. In particular, they over estimated Agraria's ability to carry out their part of the activities/proposals. Agraria's commitment to certain activities was also misjudged. Implementation schedule for some of the activities was based on early replacement of the Team Leader/Systems Analyst. This did not materialize.

In developing the fifty activities the BLM project team fell into somewhat the same trap (discussed in Section II) as the LMTR project design team. In an effort to make the LMTR project broadly significant the implementing activities became excessively ambitious. This created unrealistic expectations for the LMTR project and this apparently caused Agraria to not be fully committed to the all activities.

Perhaps more effort should have been made at this point in time project team, USAID and Agraria to scaling down and changing some of the project objectives. This was suggested for the socio-economic studies but the BLM project team was told by USAID that it was too early in the project to discuss changes in project design/objectives.

In any event, the fifty activities were documented in August 1982 as specific accomplishments to be met by the LMTR project.

The March 1983 evaluation listed these fifty activities and evaluated LMTR project progress against them. Outside of two activities that were dropped, the evaluation continued to propose that all other activities be undertaken during the remainder of the project, although it was acknowledged that some may have to be scaled down in scope and degree of effort.

Subsequent discussions with Agraria indicated that they were interested in undertaking only a few of the activities and this resulted in termination of the LMTR project.

Evaluation and description of the accomplishments of the LMTR project will, therefore, concentrate on what was achieved in the fifty activities. Table I outlines these activities and indicates the status at termination of the project. Activities listed as dropped will not be discussed in the narrative evaluation that follows Table I.

A

Table 1: IMTR Project Accomplishments

Activities	Status September 30, 1983			
	Completed	Partially Completed	Dropped	Agraria to Complete
A. Program Policy Development Organization & Management				
1. Documents on Policy, Goals, Priorities, Obtained and Translated		X		
2. Comprehensive policy, Goals Objective and Priorities of the Directorate General of Agraria Developed			X	
3. Short-term MGT Advisor recruited to join IMTR Team			X	
B. Data for Statistics for Program Analysis				
1. Computer Acquired	X			
2. Program on Pilot Sites and other Areas Tested				X
3. Develop management Information System (MIS)		X		
C. Cost Effectiveness Analysis				
1. Methodology For Analyzing Alternative System Prepared			X	
2. Existing IMTR System Tested Against Alternative Systems			X	
3. Analysis of orthophoto graphic map base vs. terrestrial survey				X
D. Socio-economic Benefits Evaluation				
1. Develop Methodology for Measuring Socio-economic Benefits Developed.		X		
2. Analysis of Socio-economic benefits		X		
3. General land tenure studies			X	X

Activities	Status September 30, 1983			
	Completed	Partially Completed	Dropped	Agraria to Complete
E. Public Information Program				
1. Use of Mass Media in Popularizing IMTR Studies			X	
2. Posters, Brochures, Pamphlets Developed and Distributed in Local Offices.			X	
3. Audiovisual Materials Developed			X	
4. Feasibility of Office on Wheels Studied.		X		X
5. Plans for Conducting Seminars and Workshops Developed			X	
6. Public Information Programs Translated in Local Dialects			X	
F. Legislative Regulatory Study				
1. Legal Advisers Recruited	X			
2. Reports of Legal Advisers on Regulations, Observations and Recommendations Completed	X			
G. Forms and Documentation				
1. Forms and Documentation Procedures Reviewed		X		
2. Revised IMTR Forms Tested			X	
3. Land Office Records and Management Reviewed			X	
4. Design of Forms and Management Procedures Have been Revised			X	
H. Land Ownership Data System				
1. Feasibility Study of Automating Name Card Completed	X			
2. Name Card Automation Tested	X			
3. Expanded to Land Information System				X

6

Activities	Status September 30, 1983			
	Completed	Partially Completed	Dropped	Agraria to Complete
I. Fees and Charges				
1. Fee Structure Analyzed		X		
2. Formula for Calculating Land Measurement Cost Developed		X		
J. Storage of IMFR Records				
1. System for Record Maintenance Devised		X		
2. Microfilm for Data Storage Purchased			X	
3. Staff to Operate and Maintain Equipment Trained			X	
4. Data from GOI Agencies Collected & Stored			X	
5. Uniform Identification Base from Cadastral Maps Developed			X	
K. Cadastral Tie to National Reference System				
1. BAKOSURTANAL Contacted	X			
2. Mathematical Formulation to Readjust New Control System to National Network Completed			X	
3. National Reference System for Cadastral Base Initiated		X		X
L. Orthophotographic Bases				
1. Rectification of Orthophotographic Bases Completed		X		X
2. Limit of Error in Land Measurement Established		X		X
M. Technical Equipment and Software Systems				
1. Inventory of Equipment at Dir. of Land Registration Completed	X			

Activities	Status September 30, 1983			
	Completed	Partially Completed	Dropped	Agraria Complete
2. Theodolites and Associated Terrestrial Measurement Equipment Purchased	X			
3. Assessment of the Ability of Private Contractors to Conduct Aerial Photography Completed	X			
4. Program to Use Private Contractors for IMFR Development				X
N. Training: Administration				
1. Program for Administrative Training Completed				X
2. Training Course for Use in Capital Cities Developed				X
O. Training: Technical				
1. Number of Existing Technical Personnel at DGA Determined			X	
2. Cadre of Trainers to Train Staff on Routine Operations Established				X
3. DGA Personnel to Graduate Schools Admitted				X
4. Local Universities to Give Special Courses Contracted			X	
5. Orientation/short term training to U.S A. completed	X			

III. Narrative Discussion of Accomplishments

A. Program Policy Development Organization and Management:

1. Documents on Policy, Goals
Priorities obtained and
Translated.

- Numerous policy documents outlining program objectives and priorities were translated and reviewed. It was pointed out to Agraria that these were too general to be of value in program planning. The response was that it was not possible to be more specific. Methodology was developed to rank priority registration areas. This was not well received because it conflicts with overriding political considerations.

B. Data for Statistics for Program Analysis:

1. Computer Acquired.

- An Apple III computer was acquired with appropriate accessory equipment and package programs. Ten Agraria personnel trained to operate the Apple III and they will be able to use it in future program analysis, word processing, statistical analysis, etc.

2. Program of Pilot Sites
and other Areas Tested.

- Agraria will continue to carry out activities in pilot sites. A new pilot site near Jakarta was eventually dropped from consideration.

3. Develop Management Information System (MIS).

- Methodology on how to develop an MIS was prepared. Further work on this by the BLM project team was dropped on the recommendation of Agraria.

C. Cost Effectiveness Analysis.

3. Analysis of Orthophotographic Map Base vs. Terrestrial Survey.

This activity will be carried on by Agraria but as of the termination date Agraria had not let the orthophotographic contract.

D. Socio-Economic Benefit Evaluation:

1. Methodology for Measuring
Socio-economic Benefits Developed

- Methodology for measuring socio-economic benefits was developed consisting of a classification system rating

land registration against private, public (state) and special project benefits.

2. Analysis of Socio-Economic Benefits

- The socio-economic benefits of land registration were evaluated for a typical "adat" village, riceland conversion, small holder nucleus estates (NES), rural agricultural credit and land taxes. See report Land Registration Socio-Economic Benefits and Priorities in Rural Indonesia (attachment 2). Further studies of benefits were dropped on Agraria's recommendation.

3. General Land Tenure. Studies.

- A great deal of work was undertaken to try to develop a broad program of contract studies. Some of this effort resulted in the development of a proposal to research the materilinal land ownership, communal landownership and relationship of "adat" land law to Basic Agrarian law in West Sumatera. This research was to be contracted to Andalas University. Agraria eventually recommended that this research be dropped presumably because of political conflicts.

E. Public Information Program:

4. Feasibility of Office On Wheels studied.

- A concept paper on this activity was prepared. Information on use of this technique in other countries was also researched and documents have been made available to Agraria. Agraria will probably carry on some of this activity in the future.

F. Legislative Regulatory Study:

1. Legal Advisors Recruited.

- A legal advisor from the United States and one from the Philippines spent 4 and 3 months respectively preparing legal studies.

2. Report of Legal Advisors on Regulations, Observations and Recommendations completed.

- Reports are attachments 3 and 4.

G. Forms and Documentation:

1. Forms and Documentation Procedures Reviewed.

- As part of the legal studies some of the legal forms were reviewed. Suggested changes are included in these reports. Agraria did not want to test forms.

H. Land Ownership Data System.

1. Feasibility study of Automating Name Card completed.
 - Personal Filing System PFS: File and PFS: Report (package programs) for the Apple III were found to be the best programs to carry out the various functions of automating the name card register.
2. Name Card Automation Tested.
 - Using PFS, forms were designed and data from 50 certificates of landowners/leasees in Jakarta were entered in the data base. The test was very satisfactory. It allows for name search, date of birth search, less than/more than or equal to x square meters of land search, etc. Any or all of this information can be updated with one operation and printed out in the desired format.
3. Expanded to Land Information System.
 - Agraria wanted to expand this activity to a total Land Information System but with the project terminating, this was not possible.

I. Fees and Charges:

1. Fee structure Analyzed.
 - As part of the socio-economic analysis some of the land registration fees were analyzed. Agraria recommended that no further studies be made of the fee structure. Part of the reason for not wanting any more study was because of the political sensitivity of the issue and the fear that unofficial fees (bribes) would also be investigated.
2. Formula for Calculating Land Measurement Cost Developed.
 - Formula was developed and Agraria is considering its application.

J. Storage of LMTR Records:

1. System of Record Maintenance Devised.
 - Work was completed on microfilming land records and storing this information in indexed files. Agraria decided later that microfilming was not feasible because it is not legal to use copies of documents.

11

K. Cadastral Tie to National Reference System:

1. Bakosurtanal Contacted.
 - Contact was made.
2. National Reference System.
Cadastral Base Initiated.
 - Survey and Mapping Report (attachment 5) discusses tie to national control network and establishing national grid net. This still needs considerable study and planning on an interagency basis with Bakosurtanal and others, as indicated on page 14 of the report.

L. Orthophotographic Bases.

1. Rectification of Orthophotographic Bases completed.
 - Aerial photographic base completed but Agraria has yet to let the orthophotographic contract. Agraria will continue work on this activity.
2. Limit of Error in Land Measurement Established.
 - Survey and Mapping report discusses survey accuracy standards and recommends those established by the Federal Geodetic Control Committee USA. Standards are attached to report. A great deal more work is needed on this and Agraria will need to attempt to complete specification of standards.

M. Technical Equipment and Software Systems:

1. Inventory of Equipment
At Directorate of Land Registration Completed.
 - Inventory completed.
2. Theodolites and Associated Terrestrial Measurement Equipment Purchased.
 - Two electronic distance meters (EDM's) with accessories, two digital theodolites (3 second) and 8 theodolites (60 second) with accessories were purchased from the United States.
3. Assessment of the Ability of Private Contractors to Conduct Aerial Photography Completed.
 - Assessment completed with verbal report.

O. Training: Technical

1. Existing Technical Personnel at DGA

12

- Determined.
- Number documented in Survey and Mapping Report (attachment 5).
4. Local Universities to Give Special courses contract.
 - English language training for 33 Agraria employees for 80 hrs each was completed.
 5. Orientation/short term Training to U.S. Completed.
 - Three senior level and three junior level Agraria employees attended 3 weeks and 5 weeks orientation/short term training sessions, respectively. Orientation/short term training was in the United States and included BLM cadastral survey and public land records procedures, county land record systems, private survey and mapping operations, USGS Mapping, private land title and insurance operations and BLM land administration activities.

SECTION II

I. Purpose:

The purpose of this section of the LMTR Project Termination Report is to (1) present a summary analysis of the Land Mapping Titling and Registration Project (LMTR) and (2) draw certain conclusions regarding "lesson learned" which, hopefully will be of benefit to AID in designing other projects of this nature. The socio-economic, cultural, political and legal aspects of land tenure systems vary considerably from country to country. Nevertheless, there are certain basic relationship that are common to all systems. Therefore, relating the Indonesian experience could be very beneficial to the future design & implementation of similar projects in other countries. Most assuredly there will be a continuing need to undertake LMTR type projects in developing countries. This is because land registration is a critical part of the legal infrastructure required to modernize and develop rural areas and agriculture.

II. Historical Enviroment

In order to understand the LMTR project and its relationships to land registration in Indonesia it is

13

necessary to understand the historical and present environment of land registration¹⁾. Land registration was initiated by the Dutch colonial government in the 1800s.

It was designed to secure Dutch "Western" rights. Land registration took place mostly in the urban areas and no attempt was made to register native Indonesian land rights. These land rights were and in practice still are largely controlled through "Adat" law (i.e. unwritten customary law). The diversity in "adat" land law among the various social-cultural group of Indonesia is tremendous. It varies from a fairly well define concept of matrilineal land ownership in West Sumatera to a vague nations of group use and control among the primitive tribes of Irian Jaya.

After Indonesian independence and finally with passage of the Basic Agrarian Law (BAL) of 1960 the "Western" law was abolished and all "adat" land rights were technically made subject to BAL. Thus, all lands in Indonesia were made subject to one law with one set of implementing acts and regulations administered by the National Government.

An important goal of the 1960 BAL was to disenfranchise western land rights, through land registration. Westerners were given 20 years to convert their here-to-fore fee simple land rights to a lease (Hak Pakai) from the Government of Indonesia (GOI).

The law also outlined a program of land reform. The land reform program was carried out quite vigorously in many of the densely populated areas of Java, Bali, etc. starting in 1960 until the Communist coup attempt of 1965. Land reform for better or worse became a platform for the Communist party (PKI) and was used to stir up unrest in the rural areas.²⁾

The land Reform program was carried out through a system of inventorying land ownership by using informers, village officials, etc. to identify landowners who were in violation of hectarage limitations, absentee ownership, number of parcels, etc. limitations. Land registration did not take the lead in landownership inventory, it followed the decisions to redistribute the land by officially sanctioning the redistribution through title registration. The land redistribution moved very fast and land registration fell far behind the redistribution decisions.

¹⁾ In this report land registration is defined as the entire process of survey/mapping boundaries, adjudicating land rights and publically recording land rights.

²⁾ Comments by Home Affairs Minister Amirmachmud to the Indonesia Times April 20, 1982.

14

After the Communist coup was forceably put down and with the New Order (Soeharto) in control, land reform became an unspeakable issue. The ultimate goal of providing all farmers with a minimum of two hectare was unrealistic anyway (especially in Java and Bali). It created tremendous false expectations on the part of the landless and the near landless. For example, it is estimated that if all rice land in Indonesia were equally distributed between existing landowners, each household would only end up with one-sixth of a hectare. This is to say nothing of equity of access to land, for the millions of landless rural poor concentrated primarily in Java and Bali.

Land reform and related land tenure continues to be very real and unsettling problem, but it has only been in the last few years that the Government has been willing to publically acknowledge the issue.

In all fairness though, equal distribution of land is not the significant issue in Indonesia that some land reformers would make it out to be. This is especially true when it is compared to other countries.

Indonesia does not have vast areas of underutilized land, owned by a few private individuals. In 1973 only two percent of farm households owned five ha or more.³⁾ Also 46 percent of the farm holdings were less than 0.5 ha and another 25 percent were between 0.5-1.0 ha. Overall, the Gini coefficient of size distribution is 0.55 compared to 0.58 for the Philippines and 0.947 for Peru. With respect to tenancy, in 1973, Indonesia had only 3.2 percent of its farms operated by persons who owned no part of the land they operated. This is contrasted to the Philippines where in the early 1970s, 39.9 percent of the farms were operated under some form of tenancy.

This is not to say that excessive land holdings are not a problem. Individuals familiar with local land ownership patterns can point to many people, some of whom are high government officials that hold hundreds of hectares. The ownership and control of large plantations is also of concern. Although these plantations may be leased by Agraria, the income and control may well be in the hands of a few high government officials and their families.

³⁾Growth and Equity in Indonesian Agricultural Development, Mubyarto, 1982 Page 236.

Although, it is literally impossible for outsiders to get a complete picture of the land tenure situation, it is quite common knowledge at the local level as to who owns and controls the land. Poor farmers and the landless are, for obvious reasons, quite reluctant to publically point out the people that are in violation of land reform regulations.

III. The Land Registration Program.

In order to understand how the LMTR project was to intervene in land registration it is necessary to understand the nature of the on going program.

The rural land registration program breaks down into basically three categories. These are (1) sporadic (on demand) registration (2) service to national projects and (3) Agraria initiated registration of "adat" rural lands.

The sporadic program involves responding to applications from individuals to register their land. These individuals are motivated to register their land so they may be afforded security of ownership (i.e. strong evidence), such as it is, under BAL. If land transactions are contemplated, a landowner may apply for a certificate in order that the transaction can be consummated under BAL. It is interesting to note, though, that unregistered land sometimes sells for more than registered land because it does not, in effect, carry with it the many Government controls.

Although it is not illegal to sell land without a certificate and many parcels change hands without a certificate (through the land deed system), a certificate provides the new owner with "strong evidence" of ownership. Inherited land must be registered under the BAL, but this requirement does not seem to be enforced and compliance seems to be largely voluntary.

Landowners also apply on a sporadic basis for certificate in order to use the documents as collateral for loans. Only about eight percent, though, of the total certificates issued are used for this purpose.

Agraria officials are not very responsive to sporadic applications unless the applicant pays unofficial fees (bribes). Politically weak individuals such as Chinese born in Indonesia and foreigners are especially vulnerable to these unofficial charges. Without registration, these landowners live in fear that politically powerful people (e.g. Government Officials, Village Chiefs) will take over their land and houses. Indigenous Indonesian "Adat"

16

landowners do not share this fear and in fact, many do not feel that land registration is worth their time and cost. In any event, bribes, corruption and special favors for signatures are especially prevalent in land registration because a single certificate may require the signature of no less than 10 officials.

The land registration program also services large national projects such as transmigration, nucleus estate small holder (NES) and rice land conversion. Lands acquired by the Government for warehouses, irrigation facilities, etc are also registered by Agraria before purchase. This service, though, is paid for by the Government Agencies carrying out the projects (e.g. Transmigration, Agriculture, Public Works). Priorities for land registration are set by these agencies and Agraria simply responds to their requests.

The third category, is Agraria initiated registration (systematic approach) and this at the present time is the Prona Program. Agraria surveys and maps areas on their own initiative and the cost is paid out of the state budget. The issuance of the actual certificate is paid for by the landowner but at a reduced rate. This program is directed at providing certificates to low income landowners. It is largely politically motivated. It is an attempt to demonstrate to poor landowners that their Government is trying to do something for them in terms of land tenure security.

As mentioned before, many indigenous Indonesian "adat" landowner do not feel that land registration is worth the cost or of great value to them. This attitude makes it very difficult for Agraria to get these rural landowners to participate in land registration programs.

IV. Major Premises on Which LMTR Project was Based

The LMTR project was based on a number of premises, some of which turned out to be very somewhat false. Some should have been foreseen, others could probably not have been foreseen but in any event, they resulted in premature termination of the project. The following is an analysis of how these premises effected the success of the LMTR project.

A.1. Premise 1: The present registration system is basically unsound, and the LMTR project is needed to develop and test, a completely packaged new system.

2. Analysis: The present land registration system in Indonesia is basically sound. The basic system was developed by the Dutch, and it has been shaped and reshaped by GOI over the years. The most drastic changes that could

be made in the system would be to convert it from a negative to a positive system. A positive system would make registration compulsory with the Government guarantying the land right. However, Agraria for various reasons, did not have, nor does it have now, any intentions of making a drastic change to a positive system. This should have been recognized by the design team, or perhaps it was, but in the pressure to get a project going it might have been ignored.

The new packaged system was to consist of numerous changes in forms, regulations, laws, etc. Following up on this, the BLM project team proposed activities to effect these changes. After 20 months of addressing these factors, it is quite evident now, that Agraria is not committed, at least not at this point in time, to having the BLM project team assist them in making major changes in regulations, legal requirements of title evidence, fees and charges, forms, legal document format or basic laws.

The reasons for this are probably three fold. First, Agraria over the years has made some changes in these areas and generally feels satisfied with the changes they have made. As for future changes, they prefer to discuss, evaluate, and work these out within their own policy group. Part of the reason is because these type changes (i.e. regulations, fees) have many policy and legal implications and are very political and highly sensitive.

A second reason, is probably that Agraria does not believe that foreign technical assistance can be of much help in these legal, policy and political areas. To some extent they are probably right. It is very difficult for foreign legal advisors for example, to propose changes in the present jungle of regulations when they come from a different legal system and are not able to grasp the precise legal meaning of existing regulations written in Bahasa Indonesia. Also, because they lack a broad background in Indonesian law, they cannot possibly appreciate and understand, in a short period, the social - political framework in which laws and regulations are promulgated.

A third reason for lack of commitment is because of the impact that certain changes would have on certain political powerful vested interests outside Agraria.

Governors (heads of Provinces), Bupaties (heads of Kabupatens), Camats (heads of Kecamatan) and Lurahs (heads of Villages) all have a vested interest in the Land Registration and "land deed" system.

Depending upon the nature of the registration case, two and sometimes more of these non-Agraria officials must approve certain documents. They are paid both official and unofficial fee for their services. These officials, of course, do not want changes that would effect these approval requirements.

In order to make major and significant changes, Agraria must take them to the highest level of Government. They are apparently unwilling to do this, at least not at this point in time.

In retrospect, though, this task area did not get a comprehensive review because of the absence of the Systems Analyst. The legal consultants made some progress in these areas, but they were hampered by not having counterparts and not being able to do field research until it was too late. Again, this is a reflection of Agrarias lack of commitment. Also, since the Team Leader/Systems Analyst position was not filled, the legal advisors had no one to guide and direct an overall systematic approach to this component of the project.

The design team could probably not have anticipated Agraria's total lack of commitment to making major changes in laws, regulations, legal forms, etc. More investigation, though, into Agraria's attitude in this respect would have cast a cloud over the feasibility of this component of the project. This would have, inturn cast a cloud over the feasibility of improving the registration system as a whole because these factors are an integral part of a successful system.

A better approach to attacking the legal aspects of the land registration system would have been to provide in the project design, for an Indonesian Institute of Law, University or a qualified Indonesia lawyer to do this task under contract. The contractor would have had to be totally acceptable to Agraria, though, or this approach would not have been very effective either.

B.1. Premise 2: Agraria needs better organization, improved administrative management, and program procedures to accelerate land registration.

2. Analysis: This is a valid premise and Agraria definately did and still does need help in this area. This is one of the primary constraints to an accelerated registration system. Once again, though, this task area was never really investigated in an indepth and comprehensive fashion, because of the absence of a Team Leader/Systems Analyst. Also since the Team Leader /Systems Analyst was not here to work on this area, the

Management Advisor and Information Systems Specialist were not brought in to assist.

The Socio-Economist developed methodology for selecting priority areas, but this was not well recieved because it conflicts with the "shared program" and highly political approach of Agraria. It would have forced Agraria to conduct the flexible part of the land registration program where it would have had the greatest socio-economic benefits, whereas Agraria, seems to be mostly interested in rewarding politically favored areas.

It is hard to judge how successful this part of the project would have been. One thing is for certain, it would have been successful only if the management/administrative consultants would have had close working arrangements with and the confidence of, top level management in Agraria.

Even at that, though, the management/administrative consultants would have had a very difficult task because Agraria is steeped in a long tradition of litterally thousands of petty bureaucratic administrative procedures. Also, there is a tremendous reluctance on the part of Agraria to change these procedures, at least at this point in time, for fear that field personnel will become more confused and less effective in carrying out the program.

Poor work habits and work attitudes are a big part of the problem. Consultants cannot be very effective in changing this behavior. It must be attacked from within the organization. In addition, Agraria is very reluctant to give consultants information on their management and administrative activities. In the end, Agraria stated that they were not able to receive (i.e.did not want) consultant assistance in this area and thus they asked that the Systems Analyst not be replaced. This also included not bring in a Management Advisor and Information Systems Specialist to consult.

The design team could probably not have improved the design (i.e.consultants, budget) of this part of the project, but their expectations of accomplishments were probably unrealistic given the attitudes, work habits and management environment in Agraria.

C.1.Premise 3: Agraria needs a great deal (at least 23mm) of technical assistance in mapping.

2.Analysis: At the top level Agraria has very well qualified people in the technical aspects of survey and mapping. There are, though, a few highly specialized areas of survey and mapping (e.g. geodesy, orthophotographic

20

mapping) where they need expert assistance. As for equipment, Agraria already uses some of the best and most advanced survey and mapping equipment or is able to contract in country for this service.

At the generalist technical assistance level Agraria needs help and has asked for help, in developing survey accuracy standards which are appropriate for their rural environmental conditions. The mapping specialist was not able to help substantial in this area because he was not an experienced management level land surveyor.

The design team should have recognized that the generalist job to be done in this component related more to cadastral survey and not mapping. It is somewhat understandable, though, because Agraria uses the term mapping for the entire mapping/cadastral survey process.

Test of the orthophotographic map base was not completed because the mapping specialist did not provide Agraria with adequate assistance in design/contract specifications. Also, Agraria has move very slow with this activity and they have yet to let the orthophotographic contract.

The net result of all of this is that very little new technology was transfered and Agraria is still left with many needs in survey and mapping, particularly from the standpoint of survey standards.

D.1. Premise 4: Agraria needs socio - economic analysis of the benefits of land registration, and they will support contracting with Universities to carry out this research as well as research related land tenure issues.

2. Analysis: This task area was always the most controversial and nebulous part of the LMTR project. Agraria, from the very beginning of discussions on the LMTR project, did not see any need for this component. There was never a meeting of the minds between AID and Agraria on this task area. It was left to the ELM project team to develop a viable approach that would meet the needs of AID and be satisfactory to Agraria.

The objective of AID was to evaluate how land registration improved access to land and improved the income and productivity of farmers. This data was to be used to further justify this project as well as any follow on project. There was also a nebulous objective of doing basic research in land tenure issues such as optimum size and distribution of land ownership and relationship of man to land. This research was to help add to the general data on land tenure and hopefully provide information for rural land policy analysis.

21

There was some inconsistency in this objective because the LMTR project had already been sold on the basis that it would produce many socio-economic benefits. Also, in the LMTR project time period, it would have been impossible to empirically measure the benefits of this particular project. The benefit would not have accrued, until at least 2 or 3 years after implementation of the project.

Some of these problems were overcome by evaluating socio-economic benefits, in a general way and doing case studies where registration had already taken place. Agraria placed many constraints on these studies and they turned out to be largely descriptive and non-quantitative.

A great deal of work was undertaken to try to develop a program of research into general land tenure issues. This was difficult because there was no consensus as to what issues to study or any tangible prospects as to how the research information would be used by the Directorate of Land Registration (DLR). These land tenure issues are mostly the responsibility of the Directorates of Land Use and Land Reform and unfortunately the project was established under only one Directorate (DLR). Also, most of this type research is carrying on, not in Agraria but in a separate Director General office in the Department of Interior.

Since the LMTR project was established under the DLR, he was very reluctant to coordinate and share the project (budget) with other offices. Attempts by the BLM project team to elevate and coordinate the project with other office were thwarted by the DLR's staff.

Throughout the project, the DLR and staff resisted evaluating the benefits or need for their program. This was partly because they knew it would raise many questions regarding benefits to cost, especially since they were and still are having a difficult time convincing rural landowners of the value of registration. After a great deal of discussion the DLR finally agreed to study the benefits of land registration as it relates to support of national projects such as nucleus estates small holders (NES) and riceland conversion.

After the March 1983 LMTR project evaluation, Agraria finally stated that they did not want any more socio-economic studies. Even at the project design stage there was some passive and some not so passive resistance to including these studies in the LMTR project. At one point, the DLR stated that the research was not desirable, but if AID insisted on it, that perhaps this component could be called monitoring of land registration progress.

22

Another reason for Agraria's reluctance to do research on the benefits of land registration is because they are absolutely committed to registering all the land in Indonesia and it is the Law. They argue, why question and evaluate whether something should be done when the Law states that it is to be done eventually. This is the policy and controlling attitude of Agraria despite the fact that they were advised many times to set priorities and that socio-economic evaluation could help them set priorities.

The assumption that Agraria would agree to have Universities in Indonesia carry out this research was not well founded. The objective of USAID to force Agraria to cooperate with and use University assistance was laudable and could have been beneficial but again it ignored political and bureaucratic reality.

Granted, the approach was somewhat innovative but with the political sensitive nature of the issues and with the history of Universities and politically active academicians severely criticizing Agraria policies, it should have been realized that this approach was not feasible. Perhaps a better approach would have been for USAID to contract directly with Universities. This would have satisfied some of the objectives of the political activist, academicians and certain USAID design team members but it would have put USAID between Agraria and Indonesian Universities.

Closely tied to the objective of promoting cooperation between Agraria and Indonesian University was the assumption that Agraria would support field surveys and research. Agraria, again because of the political sensitivity of land ownership, absolutely refused to support a foreign government's involvement in field research into these issues.

Although the field surveys proposed were directed at gathering socio-economic data, Agraria took them as an attempt by outsiders to uncover and publicize violations of land reform regulations and to track down why certain hectareage limitations, etc had not been enforced.

There is evidence that the design team was quite aware of the sensitive nature of the land tenure/reform in Indonesia. In retrospect, though, this awareness appears to have been rather academic and it did not fully appreciate the political depth of the issues. They apparently thought, that, in spite of the politics they could force Agraria into implementing this component. In this way, they apparently felt that the LMTR project could form the basis for a follow on project to force equity in

23

access to land, crop sharing agreements, etc. This proved to be extremely naive. Perhaps there is a lesson to be learned. Unless the action Agency in charge is fully behind research in this politically sensitive area, no amount of effort from the outside will achieve the objective.

The government has spent a great deal of time since the coup of 1965 in trying to play down and defuse the land reform /tenure issue and foreign government's involvement in studies is seen as meddling in internal affairs and publically stirring up trouble among the rural poor and landless.

In addition, it appears that there was not a good appreciation for the political fact that the central government uses land registration as a means of gaining "control" over the local people and their land. This is a very explosive issue in some areas (e.g. the Minangkabau in West Sumatera).

E.1 Premise 5. Land registration has many socio-economic benefits and the LMTR project will contribute a great deal toward furthering these benefits.

2 Analysis

The LMTR project was justified under the broad USAID sectorial goal of increasing access to land. Even if some other problems of this project had been overcome there would still have been the basic question as to whether this project would have increased access to land.

The project paper outlines a number of direct linkages between land registration and increasing access to land and producing certain socio-economic benefits.

Throughout the justification of LMTR project, there were a number of misconceptions as to what land registration can and cannot do.

It is absolutely paramount that one understands that land registration in and of its self does not increase access to land nor does it produce socio-economic benefits. Land registration must be a part of larger programs or projects which are designed to reach these goals. This basic fact was either overlooked or not thoroughly understood in justification of the LMTR project.

Land registration is basically a legal system. It's primary benefit is to legally document man's right to land and thus provide security of land ownership. It is legal infrastructure. It only facilitates rural and agricultural development.

JA

Examining the benefit of land registration as put forth as justification for the LMTR project reveals a number of misconceptions.

As stated earlier, one of the major benefits of land registration and thus the LMTR project was to increase the rural poor's access to land. In Indonesia land registration can assist in this effort through support of land reform and land settlement projects.

At the present time, land reform is not being pursued with any vigor and as stated earlier this seems to be a conscious decision on the part of the Government. Land registration follows up land reform by legally documenting the redistributed land rights. It therefore follows, that land registration cannot be beneficial to increasing the rural poor's access to land without an effective land reform program. In addition, the pilot areas did not involve high priority land reform areas so there was no possibility for the LMTR project to demonstrate its direct effect in furthering land reform. In fact, it appears now that Agraria deliberately selected pilot areas that did not involve significant land reform problems. This was brought out later while discussing a closer, more convenient pilot area near Jakarta. Many influential people in Jakarta are suspected of owning and manipulating agriculture land just outside the city, in violation of land reform laws. For this and several other reasons Agraria decided that these areas could not be used for LMTR pilot activities.

Land registration is helping to increase the rural poor's access to land by supporting land settlement projects (e.g. transmigration, small rubber holder estates, rice land conversion). Agraria, though, is being paid by the Government Agencies developing these projects. Many of these projects, in turn, are being financed by World Bank loans. The pilot areas selected for the LMTR project did not involve any of these land settlement schemes, so it was not possible for the LMTR project to directly assist in increasing settlers access to land.

The design team should have linked at least one of the pilot activities to a land settlement scheme and emphasized the objective of actually producing land certificates. Unfortunately, this was not done and thus LMTR could not demonstrate, through producing tangible outputs (i.e. land mapped & certificates issued), the direct link between land registration, land settlement and increasing access to land.

Other benefits of land registration and thus the LMTR project that were identified in the project paper were;

jb

increased access to farm credit, indirect increase in agricultural production, facilitation of land transfers, identification of rural and agricultural development beneficiaries, increased land tax collection and establishment of a land tenure data base.

The benefits of land registration to increasing access to credit are not of large magnitude. Small agricultural production loans, the largest volume of agricultural loans, do not require certificates, nor should they. The mortgage of agricultural land in connection with purchases/sales has not developed in Indonesia. Therefore, at least at the present time, registration is not needed for this purpose.

There was a great deal of emphasis placed on the hypothesis that farmers were not willing to develop and invest in their land because they did not have formal proof of title. This hypothesis proved to be largely false. In Indonesia most rural land owners feel secure with their "adat" ownership and this right has been upheld by the Supreme Court in the face of the lack of registration. With just a little field research by the design team it would have become evident that this is not a wide spread issue. Land boundaries and ownership rights in the intensively developed agricultural areas have been established and have been stable for many years. Contrary to some South American countries for example, most Indonesian farmers do not live in fear that some one is going to take their unregistered land away from them or that they will not enjoy the fruits of developing their land.

Although formal land registration can facilitate land transfers, the benefits are not of the magnitude as described in the project paper. This is because Indonesia essentially has a dual system of documenting transfers, the "land deed" system & the registration system and a great number of people use the "land deed" system.

Reference was made concerning the abuses of land speculators, local officials and larger landowners against small landholders and/or tenants in buying and selling land outside the registration system. The inference was made that LMTR would help correct this situation. Land registration cannot arrest these basic economic forces. In fact, registration might accelerate the trend of small farmers selling their land because it can make the land more negotiable.

Also, reference was made to the fact that landless poor and tenant could benefit from land registration. Land registration in and of its self cannot benefit someone that has no land to register. Tenants are not particularly effected by land registration because it simply formally

26

recognizes the owners rights to the land. Also, crop sharing agreements are not formally registered in Indonesia.

The benefits of land registration and thus the LMTR project were greatly exaggerated with respect to identifying beneficiaries of donor assisted projects and providing a land ownership data base. It is true that if landownership is publically documented that it is much easier to implement development projects (e.g. irrigation projects) and identify the beneficiaries. But, simply because the land is not registered does not mean that no one knows who owns the land, as was inferred by many statements in the project paper. Further more, the job of surveying/mapping and registration still must be undertaken by the Government and the landowner. There is no overall saving by having the registration done before the project verses as part of the project. The key here is to provide enough lead time in project planning to identify landowners before the "dirtwork" starts. Thus, the donors will not be caught in the embarrassing position of starting to dig an irrigation canal without knowing who owns the land. This apparently has happened in the past.

The project paper stated that it is difficult, if not impossible, for GOI to collect land taxes in a fair and equitable manner without LMTR. This statement is based on a superficial understanding of the relationship between the "tax cadastre" and the "legal cadastre". In reality the "tax cadastre" is far ahead of Agraria's "legal cadastre" and the tax authorities don't care who owns the land, only that the taxes are paid.

F.1 Premise 6: Computers and other high technology equipment can be of great benefit to accelerating land registration.

2 Analysis

From the background information on the LMTR project and from subsequent discussions it is quite evident that Agraria had great expectations that computers and other high technology equipment would help them accelerate land registrations. In fact, it is evident that this is really the only area where they wanted the technical assistance. Agraria's expectations were built up by observing operation the Philippines of issuing in mass, computer printed temporary land titles in support of the land reform program.

In the early discussions of the LMTR project, Agraria stated that this component was the main reason for wanting

the LMTR project. It is equally evident that the design team did not share Agraria's high expectations for computers and other high technology paper work equipment and tended to play down this component. They apparently did this because some members of the design team had been involved in the Philippines project and knew the many difficulties. They were also aware of the stage of development of Agraria's registration system and their capability with computers and other high technology equipment. Nevertheless, this component was included in the LMTR project.

The viability of using computers to assist in the actual registration process was never investigated in-depth due to the absence of the Systems Analysis and because a Data Processing Programmer was not brought in to consult. The Socio-Economic specialist developed a land ownership data system which uses the Apple III computer but this was the extent of computer application.

Given the environment in Agraria, though, it is very doubtful whether much progress would have been made in computerization of the registration process itself. Even in the United States, progress has been slow in automating land title records because of systems analysis difficulties and cost/effectiveness over card indexing and manual retrieval systems.

Use of computers in land registration in Indonesia appears to be a classic example of a developing country trying to use advance technology to automate something that they have not been able to handle very well even manually. They mistakenly believe that they can substitute high technology for good old fashion hard work. They want to use computers when they do not attend to the simple manual task of filing the land records consistently and correctly in their proper location on the shelf. They wanted to computerize the name card register and a program was worked out on the Apple III computer to do this. But, this application will be fruitless if they continue their laxity in maintaining up to date manual files.

In the United States a great deal of progress has been made in using photocopy and miniaturization equipment to process and store land records. Agraria, though, rejected this technological applications on the basis of the archaic idea that only original documents can be legally used.

Caution is also needed in Indonesia when considering the use of high technology equipment. There are many trained Indonesians who are either unemployed or underemployed and their opportunity cost to the nation is zero. Therefore, it make no sense to import expensive equipment (balance of payments) to do work that can be done manually by the hordes of available workers.

V. Summary

Many of the design and implementation problems of this project are probably no different from other USAID development projects. There never seems to be enough time or information to prepare an adequate design. Part of this is probably due to the severe procedural constraints under which large donor agencies operate. Also, there seems to be a tremendous pressure for a project to demonstrate quick and broadly significant results. This pressure was reflected in the design of the LMTR project.

In retrospect, it is easy to criticize, but it seems that the LMTR project would have been more successful had it been, from the beginning, (1) more modest, not over \$500,000, (2) more flexible in activities, and (3) extended over a longer period of time, perhaps three or four years.

Initial technical assistance should have been a generalist in land survey/mapping and title registration. After this person gained a good in-depth knowledge of Agraria and the land registration system, activities could have been developed which were more thoroughly thought out and acceptable to Agraria. Specialists in the various activities could have then been brought in as specific activities were identified. This incremental approach would have allowed much more flexibility.

This approach would not have involved bringing in five persons to design the critical parts of the project in just six weeks. It is impossible for outsiders, no matter how qualified they are, to gain, in just six weeks, a workable knowledge of a complex legal system such as land registration. Moreover, it is impossible to fully appreciate existing problems, host government commitment and the historical and present environment in which land registration is being carried out. Misconceptions, erroneous information, and false assumptions are bound to be prevalent.

Nevertheless with this background, the project was built up to a projected two million dollars with another two million contributed by Agraria. It became loaded down with many diverse activities. Even if all the activities would have been implemented, the project would probably have been over funded. These types of projects are not capital intensive unless USAID is willing to purchase large amounts of commodities. This, as it turned out, they were not willing to do, nor should they. Commodity purchases should not be the largest component of the LMTR project.

Given the project as designed, the BLM project team tried to implement a broadly significant project and tried to show quick results. In attempting to do this, the project became

29

much too diverse and broad for Agraria to handle. At the same time, the activities were locked in with no room for flexibility. It was either implement the project as designed or terminate it. Since the project could not be implemented as designed, it was terminated.

Too much flexibility is undesirable because it can lead to a project not accomplish the purpose for which it was funded. Broad objectives should not be flexible, but the means/activities to achieving these objectives should be. Too much programmed detail in means and activities to achieve objectives is counter productive.

Having some knowledge of USAID's constraints to identifying programs and justifies projects, it is doubtful that this project would have been funded, had it been proposed as suggested. But then, very little has been gained, at least in this project by following the design and implementation approach that was used.

There were other problems that resulted in early termination of the project. The Bureau of Land Management (BLM) as the Contracting Agency did not take an aggressive and responsive approach to replacing the Team Leader/Systems Analyst. Leaderless and without the core input of systems analysis the project's key component languished for months.

Agraria also contributed significantly to early termination of the LMTR project. It is quite evident now that they did not fully comprehend some of the objectives and activities of the project. They lacked commitment to improving the registration system and at times it seemed that they agreed to the project, only to get the training and commodities. Also, Agraria lacked the ability to agree within their own organization, as to what they wanted out of the project.

In addition, there was the unforeseen change in Agraria's top management. New Management had a totally different idea of what the LMTR project should accomplish. Had the project continued as proposed by new Agraria management, it would have had an entirely different focus. This, of course, was unacceptable to AID as they have an obligation to honor the commitments they made to the Administration, the Congress and the American taxpayers.

Prepared by
Donald D. Waite
Socio-Economist

Donald D. Waite

GI

497-0312

LAND MAPPING, TITLING AND REGISTRATION
PROJECT

TERMINATION REPORT
(Submitted to Agraria - July 29, 1983)

Prepared by
Donald Waite
Socio-Economist

31

PROJECT TERMINATION REPORT

Purpose

The purpose of this report is to (1) summarize the Land Mapping, Titling and Registration (LMTR) project accomplishments (2) provide advice on future actions and (3) express acknowledgements.

SECTION I

I. Summary of Accomplishments

This section summarizes accomplishments of the LMTR project and relates these to original objectives. This section also relates the extent to which the project resolved or is resolving the originally identified problems.

II. Background

Bureau of Land Management's (BLM's) technical assistance and actual project start up began the first part of October 1981 with the arrival of Mapping specialist. His tenure was for 20 months. The Team Leader/Systems Analyst arrived the later part of November 1981 and he participated in the project until the end of May 1982 (approximately 6 months) when he was medically evacuated. The Socio-Economist arrived the first part of February 1982 and concluded his assignment the first part of August 1983 (18 months tenure).

Other technical assistance on the project include a Legal advisor from the United States for four months and a Legal Advisor from the Philippines for approximately three months.

The first 6 months of the project involved work by the BLM project team in general information gathering, researching land laws, analyzing land registration system procedures, analyzing and identifying system problems, classifying socio-economic benefits and formulating tentative observation and recommendations. During this period the three pilot areas were visited and numerous contact were made both within and outside Agraria.

This effort resulted in a draft document titled Land Registration in Indonesia - System Description and Recommendations. This document provided an excellent description of the existing land mapping/survey titling and registration system in Indonesia. It also outlined and classified in comprehensive terms the socio-economic and institutional benefits of land registration.

The document also proposed fifty discrete activities to be undertaken by the Directorate General of Agraria (DGA)/Directorate of Land Registration (DLR) and the BLM project team to achieve the designed objectives of the LMTR project.

Following preparation of the draft, three months were spent in marathon sessions with the DLR's staff in reviewing the technical adequacy of the system description and in discussing the specifics of the fifty proposed activities. Many changes were made in activity specifications and at times hours were spent in discussing and rewriting single paragraphs of specific proposals. In these sessions many misconceptions and misunderstanding between members of Agraria as well as the BLM project team were cleared up and much more information concerning the land registration system was brought somewhat belatedly to light. This work was severely hampered by the lack of leadership and input of a key member of the BLM project team, the Team Leader/Systems Analyst.

Nevertheless, this effort resulted in what was believed to be a completely agreed upon course action for the various activities of the LMTR project. Some activities/proposals were to be implemented immediately while others were to be undertaken at later dates and still others were to be undertaken depending upon the success of some of the priority activities. Thus, after about 9 months of project work, it finally appeared that all parties involved were in full agreement with the specific activities/proposals to be undertaken and objectives to be met (management by objective).

In retrospect, though, it appears that this was not quite the case and full agreement had not been reached on all fifty activities. It appears now that Agraria only agreed to undertake some of the activities because of the insistence of the BLM project team and USAID. Moreover, the BLM project team and USAID insisted on some of these activities because they were absolutely necessary to be fully responsive to the objectives of the project as designed.

It is also apparent now, that Agraria didn't fully understand, even after the length discussions, exactly what was involved in some activities. It was only after some works had been accomplished on an activity that they began to fully comprehend the implications and the commitments that were required on their part.

It is also apparent now that the BLM project team grossly under estimated the time and effort it would take to implement some of the activities. In particular, they over estimated Agraria's ability to carry out their part of the activities/proposals. Agraria's commitment to certain activities was also misjudged. Implementation schedule for some of the activities was based on early replacement of the Team Leader/Systems Analyst. This did not materialize.

33

In developing the fifty activities the BLM project team fell into somewhat of a trap. In an effort to make the LMTR project broadly significant, the implementing activities became excessively ambitious. This created unrealistic expectations for the LMTR project and this apparently caused Agraria to not be fully committed to the all activities.

Perhaps more effort should have been made at this point in time by the BLM project team, USAID and Agraria to scaling down and changing some of the project objectives. This was suggested for the socio-economic studies but the BLM project team was told by AID that it was too early in the project to discuss changes in project design/objectives.

In any event, the fifty activities were documented in August 1982 as specific accomplishments to be met by the LMTR project.

The March 1983 evaluation listed these fifty activities and evaluated LMTR project progress against them. Outside of two activities that were dropped, the evaluation continued to propose that all other activities be undertaken during the remainder of the project, although it was acknowledged that some may have to be scaled down in scope and degree of effort.

Subsequent discussions with Agraria indicated that they were interested in undertaking only a few of the activities and this resulted in termination of the LMTR project.

Evaluation and description of the accomplishments of the LMTR project will, therefore, concentrate on what was achieved in the fifty activities. Table I outlines these activities and indicates the status at termination of the project. Activities listed as dropped will not be discussed in the narrative evaluation that follows Table I.

11X

Table 1: LMTR Project Accomplishments

Activities	Status September 30, 1983			
	Completed	Partially Completed	Dropped	Agraria to Complete
A. Program Policy Development, Organization & Management				
1. Documents on Policy, Goals, Priorities, Obtained and Translated		X		
2. Comprehensive policy, Goals Objective and Priorities of the Directorate General of Agraria Developed			X	
3. Short-term MGT Advisor recruited to join LMTR Team			X	
B. Data for Statistics for Program Analysis				
1. Computer Acquired	X			
2. Program on Pilot Sites and other Areas Tested				X
3. Develop management Information System (MIS)		X		
C. Cost Effectiveness Analysis				
1. Methodology For Analyzing Alternative System Prepared			X	
2. Existing LMTR System Tested Against Alternative Systems			X	
3. Analysis of orthophoto graphic map base vs. terrestrial survey				X
D. Socio-economic Benefits Evaluation				
1. Develop Methodology for Measuring Socio-economic Benefits Developed.		X		
2. Analysis of Socio-economic benefits		X		
3. General land tenure studies			X	X

Activities	Status September 30, 1983			
	Completed	Partially Completed	Dropped	Agraria to Complete
E. Public Information Program				
1. Use of Mass Media in Popularizing LMTR Studies			X	
2. Posters, Brochures, Pamphlets Developed and Distributed in Local Offices.			X	
3. Audiovisual Materials Developed			X	
4. Feasibility of Office on Wheels Studied.		X		X
5. Plans for Conducting Seminars and Workshops Developed			X	
6. Public Information Programs Translated in Local Dialects			X	
F. Legislative Regulatory Study				
1. Legal Advisers Recruited	X			
2. Reports of Legal Advisers on Regulations, Observations and Recommendations Completed	X			
G. Forms and Documentation				
1. Forms and Documentation Procedures Reviewed		X		
2. Revised LMTR Forms Tested			X	
3. Land Office Records and Management Reviewed			X	
4. Design of Forms and Management Procedures Have been Revised			X	
H. Land Ownership Data System				
1. Feasibility Study of Automating Name Card Completed	X			
2. Name Card Automation Tested	X			
3. Expanded to Land Information System				X

36

Activities	Status September 30, 1983			
	Completed	Partially Completed	Dropped	Agraria to Complete
I. Fees and Charges				
1. Fee Structure Analyzed		X		
2. Formula for Calculating Land Measurement Cost Developed		X		
J. Storage of LMTR Records				
1. System for Record Maintenance Devised		X		
2. Microfilm for Data Storage Purchased			X	
3. Staff to Operate and Maintain Equipment Trained			X	
4. Data from GOI Agencies Collected & Stored			X	
5. Uniform Identification Base from Cadastral Maps Developed			X	
K. Cadastral Tie to National Reference System				
1. BAKOSURTANAL Contacted	X			
2. Mathematical Formulation to Readjust New Control System to National Network Completed			X	
3. National Reference System for Cadastral Base Initiated		X		X
L. Orthophotographic Bases				
1. Rectification of Orthophotographic Bases Completed		X		X
2. Limit of Error in Land Measurement Established		X		X
M. Technical Equipment and Software Systems				
1. Inventory of Equipment at Dir. of Land Registration Completed	X			

151

Activities	Status September 30, 1983			
	Completed	Partially Completed	Dropped	Agraria Complete
2. Theodolites and Associated Terrestrial Measurement Equipment Purchased	X			
3. Assessment of the Ability of Private Contractors to Conduct Aerial Photography Completed	X			
4. Program to Use Private Contractors for LMTR Development				X
N. Training: Administration				
1. Program for Administrative Training Completed				X
2. Training Course for Use in Capital Cities Developed				X
O. Training: Technical				
1. Number of Existing Technical Personnel at DGA Determined		X		
2. Cadre of Trainers to Train Staff on Routine Operations Established				X
3. DGA Personnel to Graduate Schools Admitted				X
4. Local Universities to Give Special Courses Contracted		X		
5. Orientation/short term training to U.S.A. completed	X			

III. Narrative Discussion of Accomplishments

A. Program Policy Development Organization and Management:

1. Documents on Policy, Goals
Priorities obtained and
Translated.

- Numerous policy documents outlining program objectives and priorities were translated and reviewed. It was pointed out to Agraria that these were too general to be of value in program planning. The response was that it was not possible to be more specific. Methodology was developed to rank priority registration areas. This was not well received because it conflicts with overriding political considerations.

B. Data for Statistics for Program Analysis:

1. Computer Acquired.

- An Apple III computer was acquired with appropriate accessory equipment and package programs. Ten Agraria personnel trained to operate the Apple III and they will be able to use it in future program analysis, word processing, statistical analysis, etc.

2. Program of Pilot Sites
and other Areas Tested.

- Agraria will probably continue to carry out activities in pilot sites. A new pilot site near Jakarta was eventually dropped from consideration.

3. Develop Management Information System (MIS).

- Methodology on how to develop an MIS was prepared. Further work on this by the BLM project team was dropped on the recommendation of Agraria.

C. Cost Effectiveness Analysis.

3. Analysis of Orthophotographic Map Base vs. Terrestrial Survey.

This activity will be carried on by Agraria but as of the termination date, Agraria had not let the orthophotographic contract.

D. Socio-Economic Benefit Evaluation:

1. Methodology for Measuring
Socio-economic Benefits Developed

- Methodology for measuring socio-economic benefits was developed consisting of a classification system rating

19

land registration against private, public (state) and special project benefits.

2. Analysis of Socio-Economic Benefits

- The socio-economic benefits of land registration were evaluated for a typical "adat" village, riceland conversion, small holder nucleus estates (NES), rural agricultural credit and land taxes. See report Land Registration Socio-Economic Benefits and Priorities in Rural Indonesia. Further study of benefits was dropped on Agraria's recommendation.

3. General Land Tenure. Studies.

- A great deal of work was undertaken to try to develop a broad program of contract studies. Some of this effort resulted in the development of a proposal to research the materilinal land ownership, communal landownership and relationship of "adat" land law to Basic Agrarian Law in West Sumatera. This research was to be contracted to Andalas University. Agraria eventually recommended that this research be dropped.

E. Public Information Program:

4. Feasibility of Office On Wheels studied.

- A concept paper on this activity was prepared. Information on use of this technique in other countries was also researched and documents have been made available to Agraria. Agraria will probably carry on some of this activity in the future.

F. Legislative Regulatory Study:

1. Legal Advisors Recruited.

- A legal advisor from the United States and one from the Philippines spent 4 and 3 months respectively preparing legal studies.

2. Report of Legal Advisors on Regulations, Observations and Recommendations completed.

- Agraria has reports.

G. Forms and Documentation:

1. Forms and Documentation Procedures Reviewed.

40

- As part of the legal studies some of the legal forms were reviewed. Suggested changes are included in these reports. Agraria did not want to test forms.

H. Land Ownership Data System.

1. Feasibility study of Automating Name Card completed.
 - Personal Filing System PFS: File and PFS: Report (package programs) for the Apple III were found to be the best programs to carry out the various functions of automating the name card register.
2. Name Card Automation Tested.
 - Using PFS, forms were designed and data from 50 certificates of landowners/leasees in Jakarta were entered in the data base. The test was very satisfactory. It allows for name search, date of birth search, less than/more than or equal to x square meters of land search, etc. Any or all of this information can be updated with one operation and printed out in the desired format.
3. Expanded to Land Information System.
 - Agraria wanted to expand this activity to a total Land Information System but with the project terminating, this was not possible.

I. Fees and Charges:

1. Fee structure Analyzed.
 - As part of the socio-economic analysis some of the land registration fees were analyzed. Agraria recommended that no further studies be made of the fee structure, presumably because of the political sensitivity of the issue.
2. Formula for Calculating Land Measurement Cost Developed.
 - Formula was developed and Agraria is considering its application.

J. Storage of LMTR Records:

1. System of Record Maintenance Devised.
 - Work was completed on microfilming land records and storing this information in indexed files. Agraria

A1

decided later that microfilming was not feasible because it is not legal to use copies of documents.

K. Cadastral Tie to National Reference System:

1. Bakosurtanal Contacted.
 - Contact was made.
2. National Reference System. Cadastral Base Initiated.
 - Survey and Mapping Report discusses tie to national control network and establishing national grid net. This still needs considerable study and planning on an interagency basis with Bakosurtanal and others, as indicated on page 14 of the report.

L. Orthophotographic Bases.

1. Rectification of Orthophotographic Bases completed.
 - Aerial photographic base completed but Agraria has yet to let the orthophotographic contract. Agraria will continue work on this activity.
2. Limit of Error in Land Measurement Established.
 - Survey and Mapping report discusses survey accuracy standards and recommends those established by the Federal Geodetic Control Committee USA. Standards are attached to report. A great deal more work is needed on this and Agraria will need to attempt to complete specification of standards.

M. Technical Equipment and Software Systems:

1. Inventory of Equipment At Directorate of Land Registration Completed.
 - Inventory completed.
2. Theodolites and Associated Terrestrial Measurement Equipment Purchased.
 - Two electronic distance meters (EDM's) with accessories, two digital theodolites (3 second) and 8 theodolites (60 second) with accessories were purchased from the United States.
3. Assessment of the Ability of Private Contractors to Conduct Aerial Photography Completed.
 - Assessment completed with verbal report.

AJ

- O. Training: Technical
1. Existing Technical Personnel at DGA Determined.
 - Number documented in Survey and Mapping Report.
 4. Local Universities to Give Special courses contract.
 - English language training for 33 Agraria employees for 80 hrs each was completed.
 5. Orientation/short term Training to U.S. Completed.
 - Three senior level and three junior level Agraria employees attended 3 weeks and 5 weeks orientation/short term training sessions, respectively. Orientation/short term training was in the United States and included BLM cadastral survey and public land records procedures, county land record systems, private survey and mapping operations, USGS Mapping, private land title and insurance operations and BLM land administration activities.

SECTION II

I. Summary of Advice on Future Actions.

It is very difficult to summarize the advice on future actions for a large and complex program such as land registration in Indonesia.

Nevertheless, after studying and analyzing the land registration program for the past 27 months, there are certain actions which the BLM project team feels Agraria should give priority to in the future.

Much of this advice has been discussed in some detail by the consultants in reports which Agraria now has.

The advice will be summarized here to give it emphasis and to show its importance in the context of improving the land registration program.

A. Agraria should set program area priorities.

1. Top priority should be given to assisting national projects such as Transmigration and Small Holder Nucleus Estates.
2. Priority should be given to land registration around expanding cities where there are a great number of land transactions and land use is changing rapidly.

A3

3. Priority should be given to outer islands where land ownership and boundaries are ill defined and there is a high potential for spontaneous land settlement.
 4. Lowest priority should be conversion of "adat" rural land rights to conform with Basic Agrarian Law (BAL) Priorities within these areas should be to register entire Desa's with a high percentage of high value land (e.g. sawah).
- B. Agraria should immediately convert to a positive system of land registration where initial land rights are given by the Government such as in the case of Transmigration.
 - C. Agraria should provide for preparing "land deeds" and land registration for land transfers in a "one stop" operation in the Agraria land office. Buyers/sellers should not be required to use the "one stop" operation but the option should be available.
 - D. Agraria should make maximum use of aerial photography to provide for land parcel identification/description. Photography should be used directly as a legal description and emphasis should be placed on issuing temporary certificates. IPEDA tax maps should also be used for parcel identification. Detailed high standard ground surveys should be undertaken at a later date in order to make available now, the maximum budget and personnel for attaining at least, mass public documentation of the legal land owner. (temporary certificate).
 - E. Agraria should concentrate on making sure that all registers are maintained and that all manual filing is done properly. Computer application to land records should go slow until manual record keeping is of a high standard.
 - F. Agraria should concentrate on improving employee work habits and attitudes. More recognition should be given to highly productive offices. A place to call "hot line" should be established so that land registration applicants can call if they are not receiving satisfactory service. Agraria must get into the "public service" mode.
 - G. Agraria should establish better working relationships with IPEDA particularly in the area of tax records. Procedures should be worked out so that IPEDA tax records are made available to Agraria in mass, rather than having them individually requested from IPEDA.
 - H. Agraria should give serious consideration to reducing the number of official signatures required for registration documents. This will require a change in the law.

AA

- I. Agraria should follow up on the "Office on Wheels" concept in an effort to take land registration to the public.
- J. Agraria should coordinate more with the Land Policy research office in the Department of Interior. Important land tenure research work needs to be undertaken on the relationship of BAL to "adat law".

II. Acknowledgements

The BLM project team wishes to thank Agraria for their excellent cooperation throughout the project. It is impossible to single out an Agraria employee that was especially helpful, all were uniformly helpful.

Agraria officials were untiringly patient in responding to questions and providing information. At times, Agraria personnel may have thought that certain questions were foolish or irrelevant but they were sincerely responded to, just the same. Without this excellent cooperation the team's work would have been much more difficult. As it was, it was a pleasure working with Agraria personnel.

Field trips were especially enjoyable. All were well organized and the BLM team was made to feel at home. Where ever the team went Agraria Offices and others visited were perfect hosts. Food and accomodations were always the best.

We are sorry that Mr. Corrigan could not have been here during the entire period of the project. Had he been here, the BLM project team would have been much more effective in providing assistance.

Even though the project is terminating, the BLM team hopes that this will not be the end of the relationship between BLM and Agraria. Although the two agencies are in different countries, they have many problems in common. It may not be possible to work on these problems through formal arrangements but the BLM stands ready to use its resources to assist informally. From time to time BLM may discover new technology or new approaches to old problems. When this happens, the BLM can, through AID, make them available to Agraria.

Agraria should not hesitate to contact, through AID, the BLM if they have specific questions or want to know more about some new technology, etc.

The BLM did not get to where they are in land survey, mapping, land record keeping, etc in just a few years. In many ways Agraria's job is much more difficult because they are trying to catch survey and registration up, in areas, where the land has already been occupied.

AS

The BLM project team is confident that Agraria is up to the challenge and that great progress will be made in the future. The team wishes Agraria the best of luck in that endeavour.

Prepared by
Donald Waite
Socio-Economist.

Donald W. Waite