

# India – Pilot Project Monitoring and Evaluation

## Andhra Pradesh – January 2006

### 1. Introduction

This report has been prepared for the World Bank (WB) and the Government of Andhra Pradesh (GoAP) by Tony Burns, a consultant land administration specialist. The Terms of Reference (TOR) for the report are set out in Attachment 1. The scope of the study was also guided by the email request from the Sri Vinod K Agrawal, the Commissioner of Survey, Settlements and Land Records to Klaus Deininger on 8 January where specific advice for the GoAP funded Integrated Land Information System (ILIS) project was sought in the following four areas:

1. Bringing in international experience and technical support both for survey and titling.
2. Orientation, training and international exposure for the project functionaries.
3. Developing monitoring strategies, tools and methodologies for the project.
4. Preparations towards scaling up of the project for the entire state.

The investigation for this report was undertaken over three days (January 9-11 2006) under a number of constraints. With the short lead-time it was not possible to arrange the input anticipated in the TOR from Kevin Nettle and Sue Nichols. Key ILIS staff were also involved with the technical interviews of potential Implementing Agencies on 9 and 10 January. Meetings were arranged with the Chief Commissioner of Land Administration and the CEO of NISG.

The current status of land records in Andhra Pradesh and the basis of ILIS are set out Attachment 2.

### 2. ILIS

#### 2.1 ILIS Background

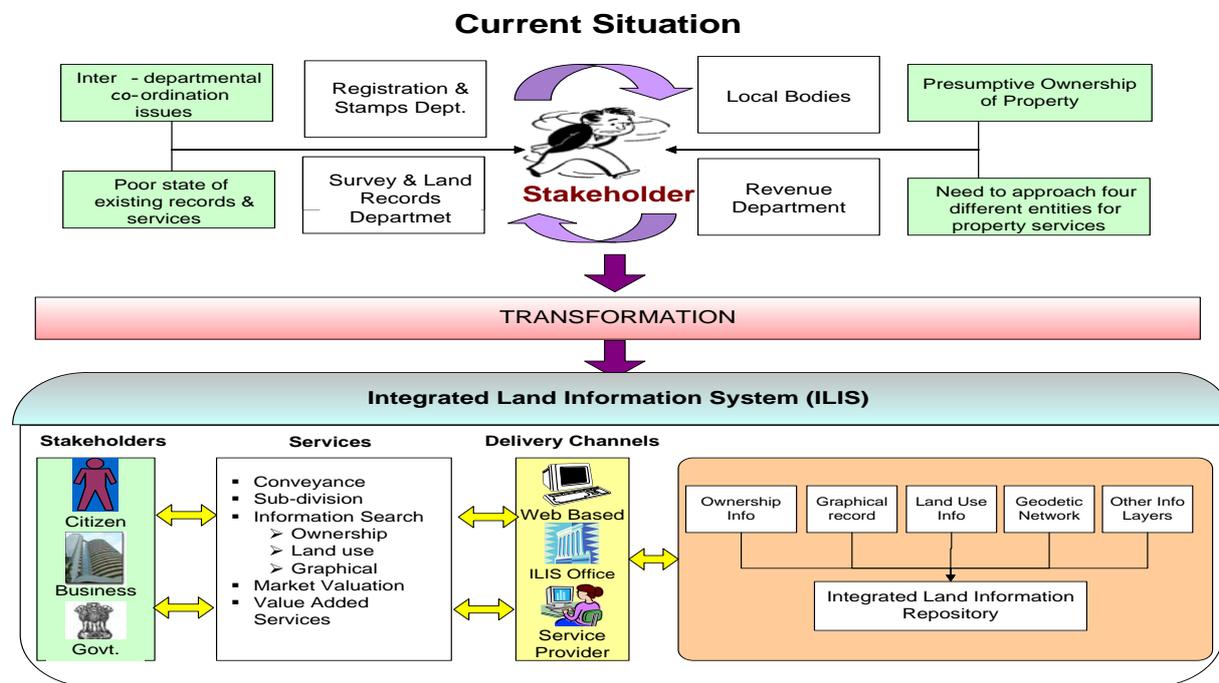
GoAP is presently implementing ILIS as a pilot in the District of Nizamabad. This pilot is funded by GoAP and has a budget of Rs. 20 Crore (about \$5 million). A nodal committee, chaired by the Commissioner of Survey, Settlement and Land Records, has been formed with representatives from: (i) Department of Land Revenue; (ii) Commissionerate of Survey, Settlement and Land Records; (iii) Department of Registration and Stamps; and (iv) Local Bodies. The National Institute for Smart Government (NISG) was appointed as project coordinator for ILIS and PricewaterhouseCoopers (PwC) was contracted by NISG for specific input.

A comprehensive plan and RFP for ILIS was prepared and finalised late in 2005. The RFP sets out the following Vision Statement for ILIS:

*'To establish and manage a comprehensive and sustainable Land Information Management System, which serves as a record of conclusive Title of all land parcels and provides related services in an integrated, efficient and cost-effective manner.'*

ILIS is being approached in a systematic manner and will involve a significant policy, legal and institutional reform. The scope of this reform is indicated in Figure 1 (from the RFP).

Figure 1 - ILIS Vision (from ILIS RFP).



## 2.2 Pilot Area

The District of Nizamabad has been selected as the pilot area. The RFP states that the district has been selected on the basis that it ‘...caters to all kinds of variations of land-use and land-cover including urbanization and industrialization, yet compact enough to render the pilot manageable for timely completion.’

The records in Nizamabad are based on the Telangana system (the Bombay system, the same as in northern Karnataka). The district has a total area of 7,956 square kilometers, 1,690 square kilometers of which are preserved as forest land. The district has 6 towns and 922 villages in 36 mandals and 3 revenue sub-divisions. The RFP estimates that there are 970,000 property holdings in Nizamabad (450,000 agricultural holdings, 400,000 village properties and 120,000 urban properties). About 47% of the total area of the district is cultivatable, and 40% of the cultivatable area is irrigated.

## 2.3 ILIS Schedule

The RFP sets out an indicative IT infrastructure. This includes the establishment of 12-14 ILIS centres in Nizamabad district, web-based access for ILIS users using a thin-client solution, internet access for citizens, external portal access for service providers and integration with other departments, including interface to the GoAP gateway. The proposed timeframe for key activities is set out in the table below (noting that there has been a little slippage in the activity).

**Table 1 - Schedule for Key ILIS Milestones.**

	<b>Major Milestone</b>	<b>Completion Date</b>
1	Issue of RFP	November 2005
2	Selection of Implementation Agency	January 2006
3	Aerial Photography	November 2005
4	Preparation of Draft Bill	February 2006
5	Commencing of field work	March 2006
6	Commencing of title enquiries	June 2006
7	Development of application software and testing	June 2006
8	Completion of field adapt on survey and title aspects	October 2006 – May 2007
9	Preparation of electronic title register	November 2006 – July 2007
10	Completion of preparation of sites for ILIS centres	May 2007
11	Operationalization of first ILIS unit	February 2007
12	Operationalization of land ILIS unit	August 2007

## **2.5 Major Current ILIS Activity**

Three main activities are presently being undertaken by the ILIS staff:

- NRSA has been contracted to undertake aerial photography (1/10,000 scale in rural areas and 1/4,000 in urban areas) and aerial photography is expected to be complete by late January 2006. NRSA will then produce photographic enlargements to enable field work to commence whilst digital orthophotomapping is undertaken. NRSA plan on producing the first orthophotomaps in May 2006 and completing the task in the following 60 weeks (that is by about July 2007);
- A tender to appoint the ILIS Implementing Agency is currently underway. The bids closed on 22 December 2005 and 6 bids were received. Five bids were accepted as conforming to the RFP and a decision on the preferred contractor is expected by late January 2006. It is expected that field activity will commence by late March 2004, initially using paper enlargements from the NRSA aerial photography;
- Amarchand & Mangaldas & Suresh A. Shroff & Company, advocates and solicitors have been contracted to draft a new law to support title registration. This firm will commence work on 16 January 2006 and is expected to have a draft bill by mid 2006.

## **3. SUMMARY OF MEETINGS**

### **3.1 Meeting with Chief Commissioner**

A meeting with the Chief Commissioner for Land Administration was arranged in the afternoon of 10 January. In this meeting the following key points were made by the Chief Commissioner:

- GoAP had the objective of putting in place a whole new legislative framework for ILIS. This required significant effort and this level of effort would be the same regardless of the scope of the pilot activity. As such, the selection of a full district for the pilot was seen as appropriate;
- It was anticipated that it would take about a year to get the new legislative framework in place;

- It was essential that a judicial approach be adopted in determining conclusive title. There were alternatives to the existing civil court system. Reference was made to the quasi-judicial tribunals that had been used to implement urban and rural land ceilings.

### **3.2 Meeting with NISG**

A meeting was arranged with Sri J. Satyanarayana, the CEO of NISG on Wednesday 11 January. NISG was established about 2 years ago as a private company with 49% government equity. NISG focuses on providing services in: strategic planning; program/project development; and capacity building in policy development. NISG has been involved in an impressive range of largely e-Governance projects and became involved in ILIS in May 2005. NISG has been responsible for much of the conceptualization of ILIS. Sri Satyanarayana has a strong background in land administration. He was the Inspector-General of Stamps and Registration responsible for the development and implementation of CARD.

NISG has recently submitted a proposal to ILIS to cover the next phase of ILIS implementation. This proposal covers the areas of: program management and program monitoring and evaluation; design of the capacity building program; design and implementation of a comprehensive community awareness program; and the design of a roll-out program.<sup>1</sup> NISG proposes to identify local partners to implement these strategies on the ground in Nizamabad district.

NISG is also developing strategies to take the experience from AP to other states and has had preliminary discussions with the Department of Land Resources in MRD.

## **4. PILOT ACTIVITY**

### **4.1 Resurvey Procedure**

Significant investigations have been undertaken by the ILIS staff (much of this is documented in the annexes to the RFP). The new records for ILIS will be prepared by a re-survey of the District. The resurvey procedure proposed (from RFP annex V) is based on the existing survey procedures set out largely in the AP Survey and Boundaries Act 1923. This procedure involves the formal publication of notice in State and district gazettes and publication in the community. The process also involves dispute resolution procedures.

However, it is proposed that the map base for the survey be orthophotomaps, with boundaries identified and certified by land owners on the photomaps. Where boundaries cannot be identified on the orthophotomaps then detail will be surveyed with a range of ground techniques (DGPS, ETS, cross-staff/chain etc.).

### **4.2 Micro-Pilots**

The scale of the proposed activity in Nizamabad is significant. The field activity will have to be broken down into smaller pilots – mini or micro-pilots – that will test and

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<sup>1</sup> The Chief Minister, in a public address at a recent ceremony to mark the start of the aerial photography program for ILIS, stated that he wanted to extend ILIS throughout the state before his current term ended in 2008.

evaluate specific aspects of the proposed activity. ILIS has already undertaken some key micro-pilots. These are summarised below.

**Micro-Pilots – June 2005.** In late June 2005 the Commissioner of Survey, Settlement and Land Records commenced three micro-pilots in Nizamabad District with the objective of:

- Assessing the difference between the record of rights and the actual situation on the ground;
- Exploring methodologies and records that might be used in verifying title;
- Assessing how much land can be incorporated into a new title system;
- Understanding reasons why titles might not be able to be issued;
- Broadly estimating the level of effort of timeframe required for titling; and
- Better understanding the local dynamics of the community to a titling program.

Three villages were selected for the micro-pilot:

- Deaipet, a predominantly wet land area with about 677 households;
- Tekrial, a predominantly dry land area with about 437 households;
- Gaggupally, a predominantly urban area with about 346 households.

In Gaggupally, where no passbooks had been distributed, the pilot would involve an initial survey of land parcels and the field investigation of rights. In the other two villages where passbooks had been distributed the planned activity was to be restricted to the investigation of rights. Two survey teams equipped with electronic total stations (ETS) were assigned to Gaggupally and one title enquiry team was deployed in each of the three villages. Under the pilots no formal notice was given to participants and no change in the land records was anticipated. The field survey in Gaggupally took 11 days and the major lessons were:

- Due to the multitude of unregistered transactions in the urban area it was virtually impossible to directly correlate the settlement survey numbers to the actual parcels occupied on the ground;
- A substantial number of the re-surveyed areas of the land parcels (159 of the 281) differed substantially from the area set out in the record of rights areas (72 in excess of the ROR and 87 less than the ROR). In virtually all cases (151 cases) the farmers refused to accept the result.
- A clear policy needs to be developed to address this problem.

The major conclusions from the investigation of title in the three micro-pilots were:

- There is little institutional memory of resurvey and settlement processes;
- Emphasis should be placed on making sure that all farmers participate in the initial demarcation of boundaries;
- ETS cannot be used productively in villages;
- Important land categories include: private patta land (alienable and heritable); Inam lands (alienable and heritable); lands registered in the names of beneficiaries (alienable, heritable, but the corporation maintains control); assigned land and ceiling surplus lands (not alienable, but heritable); lands

owned by Nazim sugar factory; Government lands under encroachment with the encroacher having occupation rights.

- The basis of revenue records useful in the title enquiry were: Form-I A ROR; Form-IB; ROR acquittance register; ROR mutation register; Khasa pahani; 1980-81 pahani; current pahani. The records of less use included: Government land register; assignment register; and the Inam register. The sethwar, chowfasla and fiscal patti were practically useless.
- There should be 4-5 persons in a title inquiry team and it takes about 11 days to complete title inquiry in a village;
- There should not be more than one dedicated team in a mandal due to complications in coordination and the difficulty in locating field assistants;
- The number of civil disputes in rural areas is low (< 1%);
- Unregistered sale deeds and their regularisation will be a major issue in the titling and on-going maintenance of the records;
- It is important that the title inquiry is linked to a survey/map record;
- Wide publicity is important to encourage participation;
- There needs to be a time-schedule and this needs to be followed;
- Procedures should be clear and simple and there needs to be close monitoring;
- The involvement of responsive NGOs can facilitate participation and provide credibility;
- There was strong interest from the community in participation.

**Survey Pilot – Shadnagar Mandal.** ILIS has recently completed a pilot in Shadnagar mandal to evaluate the proposed strategy of identifying property boundaries on orthophotomaps. The pilot area covered 5-600 acres and was undertaken over the past 2-3 months. The results of the photo-identification will be compared with ground survey with ETS. ILIS does not have the report on this micro-pilot yet, but expects that it will be available in the next few weeks.

## **5. KEY ISSUES**

A number of issues are being discussed by the ILIS team. These issues are summarized in a discussion paper prepared in June 2005. The key areas include:

- The definition of the term 'conclusive title'
- The development of transition strategies to move from the current 'presumptive title' to 'conclusive title'
- Acceptable forms of documentary evidence
- The specification of the base data that the adjudication teams will be relying on;
- Procedures to handle unregistered transfers;
- Dispute resolution mechanisms;
- The Jurisdiction of the Courts;

- The Legal framework for ILIS and the changes necessary to existing laws;
- The status of digital and manual records;
- Sourcing information on land disputes from the courts;
- The identification of parties during title transfer.

The scope of these topics is indicative of the thought that is going on in preparing for ILIS. The approach to clarifying rights – either administrative or judicial – is a key issue. It would seem that the judicial approach is favoured at present. However, the current weaknesses in both the Revenue Court and Civil Court systems are recognized. Various alternative models are being discussed, including: the creation of a new tribunal that might either be purely judicial or a joint judicial/revenue structure; a new type of court based around the summary inquiry procedures set out in the Civil Procedures Court; and the ‘lok adalat’ or people’s court as an alternative dispute resolution mechanism. The administrative approach has not been ruled out, but ILIS is seeking more information on this approach.

## **6. POTENTIAL BANK SUPPORT**

There are a few constraints in attempting to identify areas where the Bank might provide assistance to ILIS. ILIS is an existing project with GoAP funding and there are a range of activities already underway. There are existing contracts with various suppliers and new contracts are imminent. However the ILIS team is keen to have input from the Bank, both in the short-term and downstream. The following areas were discussed as a framework for further discussions between the Bank and ILIS:

1. ILIS is seeking information from the Bank and other sources on the various land projects, particularly those in Asia which are most relevant to ILIS. I provided copies of technical reports from the Philippines and Laos, but it would be good if other relevant reports could be provided. These reports could include: ICRs for land projects in Thailand, Indonesia, the Philippines and Sri Lanka and information on the current Bank activity in Indonesia, and perhaps Cambodia.
2. A second area is possible Bank participation in a 2-3 day workshop to discuss key issues such as those listed above – but perhaps focused on providing information on experience in other countries with administrative approaches to formalizing rights in land. This workshop would also help guide the planning for the initial program of field activity. The optimal timing for this workshop would be after the appointment of the IA and after the law firm has conducted its initial investigations of the legal questions. Mid-February might be the best timing, with the main constraint being the planned Study Tour in the first half of February.
3. ILIS is in the later stages of planning for a senior delegation to visit Thailand, Australia and New Zealand in the first half of February 2006. This tour is funded by GoAP and will be lead by the Chief Commissioner for Land Administration. ILIS had initially proposed that 10 staff travel but it seems that funds for only 5 will be made available. This means that only the 5 senior members will go (ranging down to the ILIS Project Director). It may be a little late, but additional funding of about Rs. 5 lakh (about \$US12,000) would mean that some key technical staff would be

able to share in the tour experience. This first Study Tour is focused on titling issues. There will be a need for further tours to investigate other issues as they arise (issues such as the licensing of private surveyors, data access policy etc.). This may be an area that the Bank might consider for possible support.

4. ILIS would be interested in Bank support in the area of establishing a monitoring and evaluation framework for ILIS. At this stage, the strategy for this framework would involve the identification of suitable local NGOs and providing training and material for these NGOs to act as local facilitators for the community and to provide a framework for community oversight of the field teams. ILIS expects that the NGO will be the people's representative and is not proposing that the NGOs be contracted or paid by the government. The Bank has some experience in mobilizing NGOs on land projects in AP and elsewhere and might be able to offer assistance in this area.
5. The last area that arose in the discussions was possible Bank assistance in designing a scaling up of the activity. It was thought that by about August 2006 there such be enough experience to know what is working and what is not and to start looking at designing a program to scale up the activity.

The first 4 areas of possible Bank assistance focus on the immediate short term. However a key outcome from the proposed workshop in mid-February would be a better definition of areas where on-going Bank input would be beneficial.

## REFERENCES

ILIS, "**Providing Conclusive Title to Property Holders: A Discussion Paper**", June 2005.

ILIS, "Brief Discussions on Title-Related Issues on ILIS", minutes of a brainstorming meeting held on 17 June 2005.

ILIS, Request for Proposal for Providing Professional Services in Design, Development, Implementation and Maintenance, in three volumes, plus supporting annexes, December 2005.

Santhi Kumari, "Micro-Pilot Study in 3 Villages – Nizamabad District", ILIS project report, August 2005.

## India – Pilot Project Monitoring and Evaluation

### Terms of Reference

#### 1. Background

The Government of Andhra Pradesh (GoAP) is presently undertaking a pilot project called the Integrated Land Information System (ILIS) in the District of Nizamabad. This pilot is funded by GoAP and has a budget of Rs. 20 Crore (about \$5 million). The project has the strong support of the Chief Minister. A nodal committee, chaired by the Commissioner of Survey, Settlement and Land Records, Sri Vinod K Agrawal, has been formed with representatives from: (i) Department of Land Revenue; (ii) Commissionerate of Survey, Settlement and Land Records; (iii) Department of Registration and Stamps; and (iv) Local Bodies. The National Institute for Smart Government (NISG) was appointed as project coordinator for ILIS and PricewaterhouseCoopers (PwC) was contracted by NISG for specific input. A comprehensive plan and RFP for ILIS was prepared and finalised late in 2005. Three main activities are presently being undertaken:

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There has been discussion over the past 12-18 months between the World Bank and Commissioner Vinod K Agrawal. Commissioner Agrawal was an active participant in the National Workshop on Land Policies and Administration for Accelerated Growth and Poverty Reduction in the 21st Century held in Delhi from 5-6 January 2006. Following discussions in the workshop, Commissioner Agrawal has formally requested Bank support for technical assistance to provide guidance and monitoring for the ILIS pilot.

#### 2. Specific tasks to be performed

Following a request by the GoAP, Tony Burns, Kevin Nettle and Susan Nichols will travel to Hyderabad on Jan. 9 and 10 to have meetings with the relevant agencies, including NISG, to provide strategic advice to GoAP and the Bank on how to best implement ILIS in a way that yields relevant lessons to improve land administration in AP and would allow scaling up in the short to medium term. Based on this, they will discuss with the project unit options for providing follow-up technical assistance within the next 6-12 months, particularly with regard to legal and policy reforms, the implementation and monitoring of pilot activities on the ground, and the identification of triggers that would allow the Bank to contemplate a larger-scale involvement. Specific areas to be discussed would be the following:

*Pilot design and implementation:* The consultants would discuss with the project team how the pilot be structured in a way that would yield information needed to be able to scale up in a minimum amount of time. Specifically they would explore the option of defining sub-pilots within the district (or in neighboring districts if needed) with the goal of developing procedures and identifying mechanisms and legal/institutional changes needed to deal with typical issues (e.g. assigned land, rural areas where updating of existing records might still be an option, peri-urban lands) and associated feedback-mechanisms that would allow to obtain conclusions faster and in a more systematic way than by aiming to cover the whole state. Together with associated feedback

mechanisms that would allow an assessment of demand for and benefit from improved land tenure arrangements, as well as triggers that would signal the possibility of scale up quickly based on results on the ground.

*Legal issues:* Based on international experience, the consultants would identify, with the project team, legal and institutional reforms that will need to be completed before any award of new certificates takes place and others that can wait until later which would form the basis for developing a list of key legal reforms that need to be accomplished.

*Links to ongoing initiatives:* The consultants will explore options to link up with ongoing initiatives that could provide support in project implementation. Specifically, they would explore the scope for the IKP project to help in design and implementation of dissemination campaigns and legal assistance to the individuals concerned and the scope for the national e-governance project/CARD to support infrastructure development.

## **Andhra Pradesh – August 2005<sup>2</sup>**

### **1. Institutional Arrangements**

Administratively Andhra Pradesh (AP) has 23 Districts, 81 Sub-Divisions, 1,127 Mandals, 26,586 inhabited villages, 1,414 uninhabited villages and 264 towns. There is 1 Cantonment Board, 7 Municipal Corporations, 109 Municipal Councils, and 21,934 gram panchayats. There are about 10.6 million operational agricultural land holdings. The Chief Commissioner of Land Administration (CCLA), a position created in 1999, is the controlling authority for the Revenue, Survey Settlement and Land Records and Urban Land Ceilings Departments.

The Revenue Department is structured into Collectorates at the District Level. In each District there is a Collector who is also District Magistrate and is responsible for a range of duties including planning and development, law and order, scheduled areas, general elections, arms licensing etc. There is also a Joint Collector who is Additional District Magistrate and is responsible for Revenue administration including land matters and a District Revenue Officer who assists the Collector and Joint Collector. In each Sub-Division there are Deputy Collector and Tahsildars. Mandals were formed in 1985 from previous Taluks and are headed by a Mandal Revenue Officer, assisted by Deputy Tahsildar/Superintendants and Mandal Revenue Inspectors. Panchayat Secretaries were formed in 2001 with responsibility in the Revenue hierarchy. The Panchayat Secretaries replaced part-time Village Administrators who were introduced in 1981 to replace the Village Patwaris/Karnams who ran the village administration up to 1981.

The Commissioner of Survey, Settlement and Land Records is responsible for surveys and land records. This includes the Town Surveys under the AP Survey and Boundaries Act of 1923. There are Survey and Land Record staff at Regional, Sub-Divisional, Mandal levels, but at the Mandal and Sub-Divisional Levels the Survey and Land Record Department are an integral part of the Revenue Department.

The Office of the Inspectorate of Registration and Stamps is responsible for the overall direction of the Computer Aided Administration of Registration Department (CARD) which commenced in 1998. There are six zones in the state, each administered by a Deputy Inspector General, and 28 Registration Districts. The 387 Sub-Registrar Offices (SROs) in AP have been computerized for the past five years.

### **2. Land Records**

Land records are maintained by the Revenue Department in the villages/Mandals/Sub-Divisions/Districts for most of AP except Telangana. Until about thirty years ago these records were reasonably reliable with an annual reconciliation of the records at the village level (jamabandi). However several changes in village administration have impacted on the maintenance of records and various government programs, particularly land reform, have provided disincentives for land owners to update their information in the land records and in fact provided incentives to falsify their information. The land records are maintained by local officials under a system that lacks transparency. In Telangana there is only one set

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<sup>2</sup> Part of an internal report prepared by Tony Burns as a result of a short visit to Andhra Pradesh in August 2005.

of records at the District level and there are more serious issues with the quality of records in this jurisdiction.

In the early 1990's the Revenue Department implemented a system of passbooks in an attempt to ensure that land holders had a clear definition of their holdings in a form that could be used for a range of purposes including obtaining credit. However passbooks were not issued to all land holders and contrary to regulations the passbook was not always produced when loans were obtained. In any case, banks now generally require extracts from the records and other statements such as income statements in addition to the passbook.

In recent years a program was implemented to computerize the land records (the software system was developed by NIC and is called LRMIS). This project has largely been completed, but there is limited security in the computer records. The manual system of recording changes in the land records ("mutations") continues to be the prime record. In any case, due to changes in the administration of the records and the disincentives for land holders to register mutations the quality of both the manual and computer records is limited.

AP no longer collects land revenue from farmers, but still maintains crop inspection and other historical data in the land records. This data is not updated systematically.

### **3. Registration**

The stamp duty, transfer duty and registration fee in AP has traditionally been high. The maximum transfer costs have been 14% of the property value, leading to avoidance and under-declaration of property values. In the past an amnesty has been implemented in an attempt to capture registrations (for example, from 1992-5). About a month ago the maximum transfer duties/fees were reduced from 14% to 9.5% with a stated Government policy of moving to 4% in the near future. By law mutation of the land records can only occur after registration of the deed. Hence the high duties/fees on the registration of deeds have impacted on the rate of mutations in the land records. The revenue collected by the office of the Inspector General of Registration and Stamps in 1999/2000 was Rs 786 crore.

The CARD system was implemented as a pilot in two SROs in August/September 1997. The system was developed by NIC and basically is a computerisation of the manual process with some new features such as estimation of property values and document scanning. The system was rolled out to 212 additional SROs in late 1998. Under CARD a new automated valuation system and the automated sale of stamps were introduced in late 1998. The manual registration system operated in parallel until February 1999 when statutory effect was given to CARD registrations. CARD can produce encumbrance certificates in 195 offices. CARD has reduced the time for registration from 1-7 days to 30 minutes and the time to produce an encumbrance certificate from 1-5 days to 10 minutes. Significant training has been provided to staff by NIIT and NIC. Between November 1998 and October 2000 1.25 million documents were registered in the 214 computerised SROs. There is no connection or linkage between LRMIS and CARD.

### **4. Survey and Settlement**

Regular settlement surveys have not been undertaken in AP. The date of the latest settlement surveys varies throughout AP, but ranges from 1894 to 1912. It is estimated that a full settlement survey in AP would require about 60,000 person

years on input and cost at least Rs 720 crore, much of which is the cost of boundary stones. It is estimated that 50% of boundary stones are missing (about 90 lakh stones worth about Rs 90 crore without labour. In AP it is estimated that 35% of the stones are missing and in Telangana it is estimated that 65% are missing). The settlement records are old and frail. Many records are missing (it is estimated that 29% of village maps, 31% of tippons and 13% of Field Measurement Books (FMBs) are missing). There are a lot of land disputes. It is estimated that the rights to 2% of rural land parcels, 5% of urban land parcels and 28% of peri-urban land parcels are subject to dispute and disputes over land constitute 7-8% of court cases. The cost to litigants alone of court disputes over land is estimated at Rs 750 crore.

Town Surveys have only been undertaken in parts of 30 urban centres in AP and these records have not been kept up-to-date. There is no provision to map village lands and there are significant problems with records of rights in peri-urban areas. There is a significant backlog in survey requests.