

Computerisation of Land Records

Detailed presentations on the Computerisation of Land Records were made by the various States. It was generally agreed that the 100% Centrally sponsored Computerisation of Land Records programme has been beneficial. Consensus emerged on the following issues:

1. **Facility Management:** Once Land Records project is operationalised in taluks/tehsils/blocks it would be necessary that infrastructure including computers be maintained all the time. The down time should ideally be nil or as less as possible. Provision to avail Facility Management Services from competent parties should be made in the scheme. These parties will be stationed at district and divisional level to maintain the machines properly. SLAs (Service Level Agreements) along with penalties in case of default would ensure quality of service. 10-20% of the machine's cost should be provided for the maintenance of the hardware every year. The above party should also be given the responsibility of supply of stationery for these projects. The District Informatics Officers, National Informatics Centre are over burdened in every district and therefore, to give a thrust to Land Records Computerisation, it is necessary that a Consultant be engaged from the market for a period of one /three years. Provisions should be made in the scheme for engaging a consultant for a period of one to three years and to engage a party for providing FMS on a regular basis
2. **Standards:** For the success of the computerisation it is necessary that standards should be prescribed within States and across States. A National & State level Standard document should be prescribed for all aspects of Computerisation of Land Records. Universal symbols should be extended to include PHC's, Schools, etc.
3. **Training of personnel:** It is very important that the Revenue Inspectors/ Patwaries/ village accountants and other lower level revenue functionaries and other officers should be trained comprehensively on the software to be used in the state. All the State Govts. appreciated the pioneering efforts of the GOI in the financial support extended to the training efforts of TN, Karnataka, M.P. etc. The need for training was emphasised by all the State Govts. Therefore provision should be made in the scheme for this purpose. Training of personnel is very crucial for implementation of the scheme. Institutions in each state can be selected and upgraded/ supported for providing training on CoLR.
4. **Consultancy services for software:** The land records data base is very sensitive and therefore a lot of inputs need to go into the design of the Software. Security considerations are of highest importance. Authentication, non-repudiation, virus management, backups, internal and external hacking, compromise of data etc are to be handled in most professional manner. The Government of India should have a pool of technical agencies whose services can be provided to state governments for these purposes. Alternatively financial support should be extended to State Govts. for engaging consultancy services. These agencies would also help the state governments to have proper Crash Recovery Mechanisms in place. There should be layers of such mechanisms to take care of unforeseen crashes which, if not handled properly result in loss of service and loss of data.
5. **Software prepared for Computerisation of Land Records should include:**
 - **Online mutation:** Any land records software necessarily incorporate concept of online mutation so that data is always in sync with time.
 - **GUI based software:** The software should be GUI based software and should be people friendly as persons in lower hierarchy are not so comfortable with working on the computers.

6. **Infrastructure including Generators:** In rural areas the quality of power supply is very bad and erratic. Most of the time, even exceeding 8-10 hours, electricity is not available. UPS can not work for more than 2 hours. ***It is therefore necessary that 5 KVA Generators should be provided in every taluk/tehsil/block at the cost of roughly Rs.40,000 per Generator.***
7. **Provision of computers to link offices like Sub-Divisional Officers/Assistant Commissioners/Assistant Directors of Land Records/ Tehsildars/ Additional Taluk Offices:** As of today, the scheme does not provide computers to SDO/ AC/ Tehsildars/ ADLRs. This effectively leaves them out of the supervision process. *Therefore, it is necessary that the scheme should have provision to supply computers to these middle tiers.* The unit cost would approximately be Rs.7.9 lakhs per office.
8. **District Office Computerisation :** While the scheme has provision of Rs.10.20 lakh for providing computers to district offices, Government of India has not been releasing the above amount. ***The Government of India should take steps for release of this amount.***
9. **Networking :** The forum felt that the success or failure of Land Record Computerisation depends on a network pipe connecting the District Headquarter, Sub-Divisions and Taluk Offices. The Govt. of India may decide on the appropriate network technology. The database needs to be connected at the taluka, sub-divisional, district and state level to make a more meaningful use of the database. The guidelines will have to be amended to provide funds for this purpose.
10. **Increase in unit cost of tehsil/block/taluk level computerisation :** In every state, the unit cost is highly inadequate to fund the following items: (a) UPS (b) Furniture (c) Wiring & Networking (d) Air conditioners (e) Site Preparation (f) Software (g) Scanners and finger print readers. It is suggested that all states should be allowed to procure within the unit cost and it is recommended that GOI should consider revised unit cost as follows:

Computers & peripherals	450000
UPS	50000
Furniture	25000
Wiring & Networking	40000
Air Conditioners	50000
Site Preparation including front end shop	100000
Bio-matrix finger print reader	5000
Scanner	10000
RBDMS Software	75000
TOTAL	790000

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1. **Front end Land Records Shop :** In the above cost scheme provision has been made for a Front End Land Records Shop where farmers can buy their land records. These shops provide more transparency in land records administration and empower farmers. This has been successfully implemented in Karnataka. To empower farmers, touch screen kiosks should be installed in all taluks/tehsil/blocks in a phased manner during 10th five year plan. The cost of touch screen kiosk may work out to Rs.1.5 – 2 lakhs.

2. **Monitoring Cell** : As the scheme is now growing in size, there is a need to monitor the scheme closely from the State level. Funds for Monitoring Cell should be immediately be provided by Government of India in every state. The details of how exactly the state government would like to do monitoring should be left to them. GOI can just define the minimum requirements.
3. **Obsolescence of hardware** : There should be a mechanism to upgrade the hardware in view of technological advancements and also to take care of new and unavoidable requirements e.g. higher capacity hard disks, new OS, RAID controllers etc
4. **Data capturing at Source for Land Records Updation** : Registration of documents related to Rural Land is the source of data for updation of Land Records. Registration data is converted into mutation and then it is incorporated into Record-of-Right. Keeping this in view, Registration Information System may be formed the part of Land Records Computerization. The process of mutation is mainly due to verification of land data given in the registration document and it takes time. The same can be done on the spot once data is available online. This will reduce the mutation pendencies in the state and manual intervention also.

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Administrative issues & System Re-engineering

1. **Amendment of relevant acts** : Relevant State Acts will have to be amended to make handwritten land records irrelevant and give necessary evidentiary value to digital records. This is very necessary as in any system in which hand written and computerised records are allowed to co-exist, it is bound to make the Computerisation of Land Records scheme redundant.
2. The State Acts should be amended for conferring validity to the computerised data and punishment for interpolation of digital data.
3. **Annual Inspection reports** : The Annual Inspection Reports of Deputy Commissioner/Collectors/ Subdivisional/ Tehsil Level & other officers of Revenue Department should have a separate page on the efforts made by the district administration on land records computerisation.
4. **Reporting in Annual Confidential Reports** : The Department of Personnel and Training in Government of India may be requested to include a paragraph in Annual Confidential Report of Deputy Commissioner/Collectors on the efforts made by them for Computerisation of Land Records.
5. **Recruitment rules** : The recruitment rules of all the States should be amended to ensure that computer knowledge is pre-requisite for new recruitment's at the clerical and officer level. The rules should also be amended to ensure minimal knowledge of computer skills for promotion.
6. **Study Tour** : The Government of India should arrange for study tours to such states where Computerisation of Land Records has progressed well so that the staff and officers can learn from those states and implement land records in an effective manner. The study tours of the state-implementing officers to other countries where land records computerisation is being implemented should be arranged periodically so as to learn important lessons. Similarly, a small team should be constituted at the level of Government of India which should go around to different states and advise state Government regarding various corrective measures required for Computerisation of Land Records. This experience sharing will give better results. The Government of India should fund this.