5.2 Computerisation in Registration Department "SCORE"

Highlighs

User requirement specification was not properly assessed. As a result manual intervention continued in the process of registration of the documents.

(Paragraph 5.2.6.1)

Agreements made by the district level societies were not according to the best trade practices which facilitated recurring profitable source to vendors.

(Paragraph 5.2.6.2)

Security policy was inadequate and made the computer systems vulnerable to manipulations or unauthorised deletions/modifications.

(Paragraph 5.2.13)

Lack of input controls resulted in incomplete database and due to the deficient system design with regard to categorisation of the documents, identification of executants and prevention of double registration of the same property, the benefits of computerisation could not be achieved.

(Paragraphs 5.2.12, 5.2.14 and 5.2.15)

5.2.1 Introduction

The Government of Bihar had decided (March 2005) to computerise all the registration offices in the State. The objectives of the computerisation was to make registration process simple, transparent and fast and to ensure that stamp duty, registration fees and all other fees are deposited directly into bank by the parties through *challans* and verify the same from the bank account online. Then, the registered deed would be delivered within 20 to 25 minutes.

For implementation of the project, the entire computer system was obtained from the suppliers on rent basis and the work started from May-June 2006 in all the districts. Under Section 69 of the Registration Act, 1908, the Bihar Government had framed the Bihar Registration Rules, 2008. The activities of the computerisation were envisaged through the societies at the State level and one each at the district level. These societies were registered under the Societies Registration Act, 1860. The society at the State level was responsible for providing low cost computerised services ensuring smooth functioning of the computerised system of registration, preservation, maintenance of the software, guidance and supervision to the district level. The software was provided by the department to the societies while the hardware for the system was hired by the district level societies under the overall guidance of the State level society.

Business process was re-engineered (2006) in the computerised system by the department. The stamp duties, fees, valuation of the properties were calculated through the computerised system.

An information technology (IT) audit of the computerisation in Registration Department was conducted which revealed a number of deficiencies as discussed in the succeeding paragraphs.

5.2.2 Organisational setup

At the State level, Secretary, Registration Department was the chairman, Assistant Inspector General (AIG) of Computerisation was the secretary and AIG Stamp, Inspector of Registration department, Patna and district sub registrars of Patna and Muzaffarpur were the members at the headquarters level society (BISCORE). The district registrar *i.e.* district magistrate was the chairperson, Inspector of the registration offices was vice-chairperson, district sub-registrar was the member secretary and all sub-registrars of the districts were the members in the field establishments (SCORE).

5.2.3 Scope of audit

The scope of audit included the evaluation of the general and application controls and the effectiveness of the system in achieving organisational objectives and monitoring the activities of the societies for supply/installation/ maintenance of the computer hardware/software for running the computerised system. The data pertaining to May-June 2006 to March 2009 of 10[105] out of 38 district sub-registrar offices were selected based on probability proportionate to size with replacement (PPSWR) sampling method for analysis and checking of data using CAAT[106].

5.2.4 Audit objectives

The audit objectives were to evaluate and assess whether

∗ the department had a sound IT policy;

∗ the input controls and validation checks available in the system were adequate so as to ensure that the data captured in the system was complete and correct in all respects;

∗ the department had incorporated relevant business rules in the application software;

∗ the internal control framework and the monitoring mechanism were adequate; and

∗ adequate security controls and business continuity plan were in place.

5.2.5 Audit findings

Audit findings arising from the review of the computerisation in ten district sub-registrar offices are discussed in the succeeding paragraphs.

5.2.6 Planning and organisation

5.2.6.1 User requirement specifications

The Bihar Registration Rules, 2008 provided that the manual registration should not be undertaken after the registry office adopts the computerised process of the registration. The registration of the document was dependent

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[105]   Begusarai, Bhagalpur, Bhojpur, Darbhanga, Gaya, Katihar, Muzaffarpur, Patna, Rohtas and Samastipur.

[106]   Computer assisted audit tool.

on the check with reference to the provisions relating to the ceiling[107] of land and minimum value register[108] (MVR).

Audit of the records/data in the test checked districts disclosed that the information in respect of ceiling of land was not available in the system and the MVR prepared in the system was without *khesra* number[109] which is assigned by the concerned circle offices for identification of the type of land. In absence of the above details, registration without intervention of manual work/check was not possible with the application system adopted by the department.

After the case was pointed out, the department accepted the case and stated (December 2009) that as per the provisions of the Bihar Stamp (Prevention of Undervaluation of Instruments) Rules, 1995, the MVR is to be prepared for each *halka*/wards for different categories of land of that area. In this regard the department had taken its own initiative to obtain the *khesra* wise category of land in order to check the undervaluation by putting the property in lower category from the concerned revenue circles and to incorporate it in the MVR as far as possible.

The department's reply indicated that user requirement specifications were not defined properly by the department while developing the system.

5.2.6.2 Renewal of agreements with vendors by societies

The agreements made between the private vendors and the concerned societies were for a period of one year only and were to be renewed on mutual consent basis. The hire rent fixed in different districts ranged from Rs. 11,500 to Rs. 19,500 per unit at the time of initiation of the computerisation. It was observed that the societies in four districts[110] continued to renew the agreements with the same vendors at the same rate though the vendors were utilising the same old systems in the subsequent years. It was also noticed that in six districts[111], vendors were allowed to continue the work without renewal of the agreements. The societies did not opt for further tendering process or negotiation to reduce the hire rent before renewal or continuation of the agreements.

After the case was pointed out, the department accepted the case and stated (October 2009) that although district level societies were at liberty to negotiate with the vendors at the time of the renewal, these points would be reviewed by the state level society and accordingly the district level societies would be directed. Moreover, the hardware suppliers have been asked from time to time to upgrade the system before further renewal. The department further added (December 2009) that in some districts, upgraded printers/ scanners have been supplied as and when required by the district level societies.

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[107]   The details of persons barred from selling their land under the Bihar Land Ceiling Act.

[108]   Data pertaining to minimum land cost for transactions in accordance with the Bihar Stamp (Prevention of Undervaluation of Instruments) Rules, 1995.

[109]   Part of the plot.

[110]   Gaya, Muzaffarpur, Patna and Rohtas.

[111]   Begusarai, Bhagalpur, Bhojpur, Darbhanga, Katihar and Samastipur.

The Government may consider formulating the terms of agreements with the vendors as per best IT/trade practices.

5.2.6.3   Service tax paid on hiring of computers

It was observed from the statements of expenditure for the period 2006-07 to 2008-09 that payment of Rs. 72.01 lakh made by seven[112] societies during 2006-09 on account of hire charges was inclusive of service tax at the rate of 12.36 *per cent*. As service tax was not leviable on providing computers/peripherals for use in the Government offices, payment of Rs. 8 lakh made to the vendors on account of service tax was irregular.

After the case was pointed out, the department stated (December 2009) that the intention was that the vendors should quote a lump sum amount and if the service tax is leviable department will not have to pay it in addition to the rent. However, the reply is not tenable as the quotation was inclusive of service tax which should have been excluded while making the payment.

5.2.7   Training

The department envisaged operation of the computers by the departmental officials. It was observed that the assessment of requirement of IT staff and their appointment was not done by the department. The department had inadequate IT skilled manpower. The training organised for the departmental officials so far was also unfruitful as only 27 out of 82 trained officials were utilised in the test checked districts. In Patna and Rohtas districts, 10 and six staff respectively were trained and utilised for computerised registration process but the number of hired persons was not reduced. Even after three years of computerisation, the department was fully dependent on the hired persons for maintaining the system.

After the case was pointed out, the department stated (December 2009) that the trained officers were fully utilised and staff could not be fully utilised due to their poor learning ability.

5.2.8   Online verification of receipts

One telephone connection was allowed to each district office of registration for availing internet connection in order to verify the amounts received through *challans* with the bank scrolls online. It was observed that only in Samastipur district internet connectivity was in place and the verification was being done online. In other districts, the verification was continued to be done manually either due to the absence or problem of the internet connection. This practice led to the delay in the delivery of the documents to the parties. Thus, the objective of online verification of the deposits from the bank accounts was not achieved.

After the case was pointed out, the department accepted it and stated (December 2009) that regular monitoring was being done for effective computer connectivity between the banks and the registration offices.

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[112]   Begusarai, Darbhanga, Gaya, Katihar, Muzaffarpur, Rohtas and Samastipur.

The Government may consider providing connectivity between the DSRs and the banks in all the districts for online verification of the receipts.

5.2.9   Change over plan

It was noticed that the department switched over to SCORE 2.0 version of the application software in June 2007 in all the test checked districts from the earlier version SCORE 1.0. However, the data maintained in SCORE 1.0 could not be imported into SCORE 2.0. As a result, it was very difficult for the department to make any search from data of SCORE 1.0.

After the case was pointed out, the department accepted it and stated (December 2009) that all issues would be taken care of in the next version of SCORE and the National Informatics Centre (NIC) was being requested for early updating of the SCORE software.

5.2.10 Physical and environmental control

It was observed that the physical and environmental controls were weak as IT centres of Ara and Muzaffarpur were established in dilapidated buildings and the ceiling of the buildings were having seepages. The fire alarms and automatic extinguishers were not installed in the IT centres to safeguard against fire.

After the case was pointed out, the department accepted it and stated (December 2009) that the proposals for constructing new office buildings had already been approved under the State plan and the work would be started very soon. Further, the department would soon act for installing fire alarms and automatic extinguishers to prevent any such emergency.

5.2.11   Backup policy

The backup policy as envisaged under Rule 39 of Bihar Registration Rules, 2008 provided that each DSR office shall be a central office of electronic data for the district. The backup of the data was required to be prepared in three compact discs (CD) and each one was required to be kept in the office of the Registrar, Inspectors of Registering offices and the Inspector General of the registration offices. However, audit noticed that though the backup was taken in the CDs and hard disks, these were not sent to the other locations for storage and were also not tested periodically.

After the case was pointed out, the department accepted it and stated (December 2009) that the provisions of the Rules would be followed and for this purpose necessary infrastructure was under preparation.

5.2.12   System design

5.2.12.1 Categorisation of documents

The registration of a particular document is categorised as 'original', 'counterpart', 'rectification as major', 'rectification as minor', 'cancellation' or 're-registration'. There was no provision in the system to capture these information.

5.2.12.2 Identification of the executants

As per Rule 12 of the Bihar Registration Rules, 2008, the identification of the executants was to be done preferably by one of his co-villagers and whose identity would be verified by either one of the documents *viz.* voters identity card, ration card, PAN card, motor vehicles licence and licensed deed writers. It was found that the application software was not modified/upgraded to include the identification field to capture the data related to these documents which led to the executants being free from identification.

After the case was pointed out, the department accepted it and stated (December 2009) that SCORE 2 was developed in 2007. At that time there was no provision in the Rules for asking the identity proof of the identifiers, hence it was not incorporated in the software. In the next updated version this would be considered.

5.2.13   IT Security

Though the department had implemented the computerised system of registration, it is yet to the draft and adopt an IT Policy.

The Government may consider preparing an IT policy.

5.2.13.1 Authentication process

It was noticed that access to the system was open, not controlled through user log-in and log-out method and no unique user identification and password system was provided to the users to access the application.

In absence of any security, manipulation of the MVR data which is revised every year by any user of the system for evasion of Government revenue can not be ruled out.

After the case was pointed out, the department stated (December 2009) that the matter had been taken seriously and user ID and the password alongwith the role based privilege were to be provided soon and the security policy of the MVR data would be incorporated in the next version of the SCORE. The NIC, Bihar State Centre had been requested for necessary action.

The Government may consider restricting access to the system through proper user authentication process.

5.2.13.2 Gaps in the system generated deed numbers

Deed number is an unique field generated by the system after a deed is registered and identifies the complete registration of a deed. Since it is a machine generated number, there should not be any gap. In analysis of the data of the test checked DSR offices, 184 gaps in deed numbers were found. This indicated that it was either unauthorisedly deleted or manipulated after the execution. Log files were also not maintained for ascertaining such deletion/manipulation.

After the case was pointed out, the department accepted it and stated (December 2009) that the NIC would be requested to make provisions for maintenance of the log files to take care of such deletion.

5.2.14 Incomplete database

The registration of the document depended on the details provided by the executants in the documents. Analysis of the data relating to the sale deeds of land disclosed that certain vital information was not captured since data entry of such information was not made mandatory. Such cases are given below:

Details	Plot number	Boundary	*Khata* number	Ward number	Father's name	Address
Numbers	1,291	1,532	6,660	2,225	622	39

After the case was pointed out, the department stated (December 2009) that the *khata* number, plot number, boundary and other parameters mentioned above are dependent upon the document type and system captures these parameters according to the nature and type of the documents. Fact remains that the information of the said fields was vital in case of sale documents.

5.2.15 Validation checks

After the registration of a sale of land in any registry office, a notice for transfer of the property alongwith the scanned deeds was required to be sent to the concerned Additional Collectors (Revenue) offices for *dakhil-khariz*[113]. There was no validation check or restriction designed in the software to prevent the re-registration of same deeds by the same executants for the second time to another claimant/buyer. In case of double registration, the notices for the transfer of the property sent to the concerned circle offices for *dakhil-khariz* would not serve the intended purpose for facilitating the circle officers.

Further, there was no safeguard/validation check to restrain the sale of *Anwad*[114] of Bihar Government.

After the case was pointed out, the department stated (December 2009) that there was no provision in the Registration Act to prevent the registration of the document of the same property to another claimant and the Registration Act would apply to the document presented and not to the transaction. It also stated that disputes of double registration were the subject matter of the competent civil court and the computerised system of registration could not deviate from the provisions of the Registration Act.

The fact, however, remains that as the department had implemented the computerised system, a warning system needs to be developed in case of duplicate registration.
The Government may consider strengthening the input controls and validation checks to make the database complete, accurate and reliable.

5.2.16 Internal controls

The department created the Society (BISCORE) for the purpose of preserving and maintaining the system used in the process of the registration and to provide guidance and supervision to the district level societies. The society officials, however, never visited any of the test checked districts till the date of

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[113]   Transfer of title in register II/Government record (mutation).
[114]   Land of the Government.

audit (October 2009) which indicated that the computerisation efforts were not monitored effectively.

After the case was pointed out, the department stated (December 2009) that steps were being taken to strengthen the inspection system.

The Government may strengthen the inspection system by prescribing specific targets.

5.2.17   Conclusion

The computerisation initiative taken by the department to make registration process simple, transparent and fast was yet to achieve its objective. The registration process continued to depend on manual verification and the delivery time of the deeds has remained the same as in the previous manual system. The department has not utilised its trained manpower effectively and continued to depend on the hired persons for operating the system. Poor change control mechanism has resulted in non-porting of the data in earlier version of the application 'SCORE' into the database of the new version. Access to the system not being controlled through user authentication process has made the system insecure and non-accountable. Deficient input controls and validation checks have made the data incomplete, incorrect and thus unreliable. With such deficiencies, the department was yet to derive complete benefit of computerisation efforts through the system in place.

5.2.18   Recommendations

The registration department should initiate steps to:

∗   prepare document and implement necessary Information Technology policy;

∗   provide connectivity between the DSRs and the banks in all the districts for online verification of receipts;

∗   formulate the terms of agreement with outsourced agencies (vendors) as per best IT/trade practices;

∗   restrict access to the system through proper user authentication process;

∗   strengthen input controls and validation checks to make the database complete, accurate and reliable; and

∗   strengthen the inspection system to improve the internal control mechanism.