

## Digitalisation of Revenue Laws in Pakistan

- Muhammad Tahir** Assistant Professor/HoD Law, Dadabhoy Institute of Higher Education, Karachi, Sindh, Pakistan
- Muhammad Shahid** MA, LL.M, Advocate High Court, Pakistan.
- Tahreem Farrukh** Assistant Professor, School of Law, Karachi University, Karachi, Sindh, Pakistan.

### Abstract

*Data The computerization of land records and the introduction of new administrative models have greatly improved public access and control over land records in Pakistan. However, an ongoing problem faced by many landlords on a daily basis is the challenge of 'long distance loading', which could be solved by vertically extending the Arazi Records Center to the union council level. Increase. Research findings show that digitizing land registry services is costly and inaccessible to relevant authorities when needed. In addition, informal payments and lengthy procedures remain prevalent. To address these issues, it is recommended that authorities initiate awareness campaigns at the village level and regularly monitor personnel to improve existing systems.*

### Key Words:

Land Records  
Computerization,  
Administrative Models,  
Public Access, Costly

### Introduction

Land is highly valued as a vital asset for individuals and nations that symbolizes wealth, status and power. It plays an important role in formulating development activities and is determined by a country's land use policy, which has a direct impact on economic growth. Effective land management is essential for the development of a country.

From the state's point of view, clear and well-organized land register entries are of paramount importance. These serve as the basis for generating income through taxes and transactions as well as planning and infrastructure development. At the personal level, land register entries are essential for a variety of real estate-related transactions such as transfers, title agreements, and title determinations.

The operation method of the conventional land management system "LAS" is impossible. It is widely perceived as slow, complex, and expensive. LAS is often seen as favouring a privileged minority in society and ignoring the interests of the less fortunate. It is important to explore new methods and approaches that meet the needs of all social groups. Efficient and accessible data maintenance is essential for effective land management. Land registers contain not only information about ownership but also details about the sale, transfer and cultivation of crops on a particular piece of land. Responsible for filling out land registers, Patois keeps several registers with important information. However, the actual implementation of this system can be confusing.

To meet these challenges, Pakistan's Punjab provincial government has introduced a computerized land registration system. The initiative aims to improve service delivery and resolve common issues related to the land registry. The previous patwari system had high transaction costs and prevented women from claiming legal land rights and possessions. Digitalization (electronic governance) is necessary in the postmodern era. The Government of Pakistan is striving to comply with international standards in the digitization of its land tax authority. It is important to assess the challenges landlords face in digitizing land register entries (Anayat, 2016). The research, therefore, focuses on the computerization of land register entries, which is causing further problems for farmers in Pakistan's Punjab province. Computerized land registry systems are gaining recognition and recognition around the world, especially among World Bank officials. The land registration management information system "LRMIS" is capable of issuing and verifying title deeds (Fards) in as little as 30 minutes, smoothly transferring rights in 50 minutes, and providing rights registration services in 150 districts of Punjab and Tesil (Mahmood, S. et al, 2010). It provides various essential functions such as establishment, to ensure safety when exercising the property rights of landowners. The digitization of property tax authorities aims to simplify the process for individuals, with a focus on digital data collection and record transparency. The ultimate goal is to create a safer, faster and more efficient land capital investment environment in the country. A quasi-title deed, known as a "fard", is typically required for a variety of land-related matters (Ali et al, 2010), such as:

- Judicial Proceedings,
- Residence Verification,
- Acquisition of Residence Certificate,
- Securing Credit through an Agricultural Savings Account,
- Change of Land Ownership at the time of Inheritance,
- Settlement of land issues such as Ownership, Sale, Debt, Leasehold, and Gift.

### **Before Computerization of the Land Records**

The past land administration system can be traced back to the introduction of the land tax administration system by Sher Shah Suri in the 16th century (Vestappen et al, 2012). This system of land management and tax collection was adopted by Mughal Emperor Akbar and was further strengthened under British rule. However, it is important to note that the primary purpose of all these systems is tax generation. When Pakistan gained independence, it inherited all public sector administrative infrastructure, legal procedures and institutional arrangements from Britain. Administratively, the system proved effective for a long time, but the underlying spirit of colonial rule was one of "domination and exploitation" rather than empowering people based on their rights. It has been argued that there was the system introduced during colonial rule imposed strict responsibilities on officials, but those responsibilities were primarily to those in power, not to the people (Van der Molen, P. 2006). Since its independence, Pakistan has gone through various political regimes, including military governments, politically elected governments, and elected governments operating under military rule. Despite these different political backgrounds, the bureaucracy remained highly centralized and devoid of meaningful accountability to the public. This centralized and unresponsive government structure poses several challenges in land management and management (Saxena, N. C. 2005).

One of the biggest challenges is the security of land titles and records. The lack of a comprehensive and transparent land registry system creates uncertainty and uncertainty regarding land ownership. Many government agencies lack the capacity and resources to ensure an efficient and corruption-free land registration process. Moreover, there is often a lack of integrity and public participation in critical land management discussions and decision-making processes (Stuedler et al, 2002). These loopholes in the system have led to widespread corruption and fraud, making the situation even more complicated, especially for the marginalized and economically disadvantaged.

The importance of digitization and electronic governance is increasingly recognized to address these issues. As the world moves into the post-modern era, digitization is considered a need of the times. The Government of Pakistan is striving to meet international land revenue standards by digitizing its land management system (Burns, T. 2006). The aim is to simplify the process and ensure transparency and efficiency in real estate-related transactions. However, it is important to assess the challenges landowners face in digitizing land records and ensure that the system meets their needs and protects their rights.

Ensuring uninterrupted and equal public access to information is seen as an important part of people's empowerment. Access to information enables individuals to exercise their rights and make informed decisions about their assets, including land. Contribute to building a safe and advanced society. Furthermore, asset security and a strong legal infrastructure are essential for human security. Citizens should have complete information about their assets, including land titles, and be aware of the remedies available to them if their rights are violated Qazi, M. U. 2006). Which include:-

- records of land ownership,
- A document that facilitates the transfer of land title from one person to another,
- A document used to renew land ownership.

At the village level, Patwari institutions played a central role in the land management system. Patois had an absolute monopoly and control over land-related information and records Gonzalez, M. L. (2016). It contained important information such as land ownership, borders, and transactions. The existing system has been criticized for its lack of transparency and accountability. There have been numerous reports of encroachment on private property, precarious land tenure, and problems based on gender and economic status. These issues highlight the need for a comprehensive reform of the land governance system to ensure fairness, transparency and equal access to land-related services for all citizens (Bhatti et al, 2004).

Patwar institutions wielded tremendous power, giving the patwari complete control over cadastral records, their accessibility and updating. Using this monopoly, Patwari manipulated records to enrich us at the expense of the people. To address this issue, the Government of Punjab has launched an ambitious land informatization project with support from the World Bank (Blue Chip Magazine, 2004). Through this project, rural land register entries in 36 districts of Punjab were computerized, key functions were automated, and responsibility was transferred from Patwari to Alazi Records Management Center at the Tehsil level (Klug, N et al, 2014).

The underlying assumption of this study is that automating land registration will give citizens access and control over important basic data. This ensures the security of the land and ensures that landowners are satisfied with their land tenure (Iqbal et al, 2017). The project aims to improve transparency, efficiency and fairness in managing land registry registrations by eliminating the Patwari monopoly and introducing an automated system to benefit the people of Punjab. Therefore, the basic assumptions after automating land register entries are:

- Computerized land register entries have made it easier for landlords and land managers to access important land data.
- Real-time updates of land records through computerization have reduced the potential for falsification of land records.
- Corruption cases related to land register entries have decreased as the monopoly on accessing and updating records in real-time has been lifted.

Considering these premises, the introduction of automatic land record systems aims to improve transparency, efficiency and completeness in managing land-related information (Hamid Q, et al, 2016). Landlords and managers will have access to accurate and up-to-date data, minimizing the risk of fraud and tampering. Moreover, the decentralized and real-time nature of the system reduces the room for corruption and ensures a more equitable and accountable framework for land management (Khan, I. R. 2008).

## **Computerization of Land Records and Access**

### **Reduction of Transaction-time**

We looked at computerizing land register entries and found that access to a variety of land-related processes and services was greatly improved. The main objective of this project is to minimize the time required to issue title deeds (fard) and verify land transfers (mutation). In the new system, fard issuance occurs within 30 minutes, while mutation proof is expected to take approximately 45 minutes, setting a measurable benchmark for evaluation (Dawes, S. S. 2009). As a result, this modernized approach emphasizes the needs of citizens by ensuring a more user-centric experience.

### **Reduction in Processes**

Unfortunately, issuing a title deed (fard) involves several complex steps, making this seemingly simple process lengthy and susceptible to abuse.

### **The Formality of the Process Increases Responsiveness**

This process redesign focuses on electronic monitoring, where each step is instantly recorded and uploaded to ensure transparency and accountability. This improvement has brought great benefits to the general public. You only need to get 1 token and get fast support in 30 minutes for fard issuance and 45 minutes for mutation (Durand-Lasserve et al, 2009).

### **Simultaneity and Singularization of the Processes**

All transactions in the system are mathematically linked. Once the mutation is confirmed and the sale is completed, the parties involved in the transaction provide biometrics (Bennett et al, 2008). This ensures that not only are mutations entered and validated, but also the corresponding rights records are updated in real-time.

The introduction of time-bound processes, redesigned processes, and simultaneous updating of transactions and records have greatly improved access to national records (Klug, N. et al, 2014). The intrusion of technology into record keeping and updating has empowered the public and facilitated access to records

## **Computerization of Land Record and Manipulation of the Record**

Respondents cited a variety of reasons for the decline in falsification cases, as the digitization of land register entries has made them more transparent.

### **The Monopoly of the Record led to Manipulation**

Previously, the Patwari tribe had absolute control over the land register, which was closed to the public and could be manipulated at will. But with the introduction of electronic records, everything is now digitally documented. In addition, it has made land registers more accessible to the general public, especially the poor. Oversight of land register entries is now carried out by the PMIU (Project Management and Implementation Unit), and the Anti-

Corruption Authority (AC) can also audit any activity (Magnier et al, 2018). These measures make it virtually impossible for anyone to cheat or falsify entries in the land register.

### **Automated Auditory Checks and Enhanced access of Authority to the Record**

All activities performed by SCO (Special Communications Organization) or ADLR (Automated Digital Land Record) are recorded in a central database. This means they are aware that complaints and discrepancies can be tracked through the entire record and related activities (Govt. of Pakistan, 2017). This makes it very easy to identify those responsible for fraud. Fear of potential audits and ease of traceability are major deterrents, making it a major challenge for anyone to exceed approved limits or commit fraud.

Digitization not only ensures a reduction in file manipulation but also has a big impact. An important implication is the traceability of actions taken by officials in relation to files (Kedogo, et al, 2010). Each activity is electronically recorded through a specific officer's portal so that backup data associated with that activity is always available. This allows you to identify the officers responsible for the initiation and execution of activities (Lemmen et al, 2015). Not only the ability to trace deeds but also the fear that illegal activity will not be tolerated prevents police officers and officials from falsifying records. This impact has a significant impact on our governance structure. The effectiveness of a system to curb fraud increases when there is evidence that the system takes a firm stance against fraud and imposes penalties.

### **Computerization of Land Record and Corruption**

Another assumption is that digitalization has reduced corruption. Previously, the Patwari were corrupt due to their unlimited power over the land register (Sapru et al, 2014). Now computers/software have that power and ADLR and SCO don't, making corruption difficult.

People funded the Patwaris because they believed they had the ability to manipulate land records. However, perceptions of ADLR and SCO have changed. People no longer see them as powerful, they understand the consequences of filing serious complaints, and their anxiety is reduced (Dawes, S. S. 2009).

Corruption still exists, but the ADLR may manipulate the status quo for personal gain or choose not to overturn it even if it is overturned. Nevertheless, the district examination system prevents such measures.

### **Conclusion**

Research results show that the introduction of computerization through business process reengineering has had a significant impact on improving the accessibility of land-based data to the general public. It is important to recognize that the positive results observed in land management systems are not solely due to the automation of land records. Rather, they are the result of a holistic approach that includes various factors such as policy and legal reform.

The integration of technology and process transformation has given rise to citizen-centric land management systems, empowering individuals with greater access to their land information. This change goes beyond mere digitization and requires careful consideration of the legal framework and operational policies surrounding land management. By streamlining business processes and taking advantage of technological advances, the system was able to bring tangible benefits to the public. Easy access to country-related data has promoted transparency and accountability, empowering individuals to exercise their rights and make informed decisions about their countries. The success of citizen-centred land management systems can be attributed to a holistic approach that combines technology, policy reform and legal reform. This radical transformation contributed to a more efficient and effective land management process, ultimately benefiting the public and improving overall land management.

## References

- Adam, A. G. (2014). *Peri-Urban Land Tenure in Ethiopia*. KTH Royal Institute of Technology.
- Ali, Z., Tuladhar, A., & Zevenbergen, J. (2010). Developing a Framework for Improving the Quality of a Deteriorated Land Administration System Based on an Exploratory Case Study in Pakistan. *Nordic Journal of Surveying and Real Estate Research*, 7(1). Retrieved from <https://journal.fi/njs/article/view/3661>
- Amir, J. (2003). *An Investigation into the Adoption of Improved Broiler Production/Management Practices by Poultry Farmers in Tehsil Samundri*. M. Sc. (Hons.) Agricultural Extension Thesis, Univ. of Agri., Faisalabad.
- Anayat, R. (2016). *Land Verification in Pakistan Computerization of Land Records*. Property Right.
- Bélanger, F., & Carter, L. (2009). The impact of the digital divide on e-government use. *Communications of the ACM*, 52(4), 132. doi:10.1145/1498765.1498801
- Bennett, R., Wallace, J., & Williamson, I. (2008). Organising land information for sustainable land administration. *Land Use Policy*, 25(1), 126–138. doi:10.1016/j.landusepol.2007.03.006
- Bhatti, M. S., Ajmal, M., Saeed, A., Ahmed, M., Khalid, R., & Arshad, N. (2013). Smart Land Record Application Using Web GIS and GPS. In Á. Rocha, A. M. Correia, T. Wilson, & K. A. Stroetmann (Eds.), *Advances in Information Systems and Technologies* (Vol. 206, pp. 893–900).
- Blue Chip Magazine. (2004). Land Record System in Pakistan. *Blue Chip Magazine, Islamabad*, 1(3).
- Burns, T. (2006). International Experience with Land Administration Projects: a Framework for Monitoring of Pilots, 30. Retrieved From <https://www.researchgate.net/publication/228744867>
- Dawes, S. S. (2009). Governance in the digital age: A research and action framework for an uncertain future. *Government Information Quarterly*, 26(2), 257–264. doi:10.1016/j.giq.2008.12.003
- Deininger, K., Ali, D. A., & Alemu, T. (2011). Impacts of Land Certification on Tenure Security, Investment, and Land Market Participation: Evidence from Ethiopia. *Land Economics*, 87(2), 312–334. doi:10.3368/le.87.2.312
- Durand-Lasserve, A., & Selod, H. (2009). The Formalization of Urban Land Tenure in Developing Countries. In S. V. Lall, M. Freire, B. Yuen, R. Rajack, & J.-J. Helluin (Eds.), *Urban Land Markets* (pp. 101–132).
- Gashu Adam, A. (2014). *Peri-urban land tenure in Ethiopia. Architecture and the Built Environment*. KTH Royal Institute of Technology, Stockholm.
- Gonzalez, M. L. (2016). *Land records go digital in Punjab, Pakistan*. The World Bank.
- Govt. of Pakistan. (2017). *Digital Pakistan Policy 2017*. Ministry of Information Technology, Govt. of Pakistan, Islamabad, Pakistan.
- Hamid, Q., Chaudhry, M. H., Mahmood, S., & Farid, M. S. (2016). Arc GIS and 3D Visualization of Land Records: A Case Study of Urban Areas in Punjab. *National Academy Science Letters*, 39(4), 277–281. doi:10.1007/s40009-016-0442-4
- Holden, S. T., & Otsuka, K. (2014). The roles of land tenure reforms and land markets in the context of population growth and land use intensification in Africa. *Food Policy*, 48, 88–97. doi:10.1016/j.foodpol.2014.03.005
- Iqbal, M. Z., & Faiz-ul-Hassan. (2017). *Delivering land administration services at scale, Punjab province of Pakistan. Paper prepared for presentation at the "2017 World Bank Conference on Land and Poverty"*. The World Bank - Washington DC.
- Kedogo, J., Sandholz, S., & Hamhaber, J. (2010). Good urban governance, actors' relations and paradigms: Lessons from Nairobi, Kenya, and Recife, Brazil, 16.
- Kennedy, A., Coughlan, J. P., & Kelleher, C. (2010). Business Process Change in E-Government Projects. *International Journal of Electronic Government Research*, 6(1), 9–22. doi:10.4018/ijegr.2010102002
- Khan, I. R. (2008). *Analysis of the Farmers' Current Socio-Economic Status, Problems faced and Training Needs in Institute of Applied Research and Technology Transfer (IARTT) Area Faisalabad*. M. Sc. (Hons.) Agricultural Extension Thesis, Univ. of Agri., Faisalabad.
- Klug, N., Rubin, M., & Todes, A. (2014). *The north-western edge*. In P. Harrison, G. Gotz, A. Todes, & C. Wray (Eds.), *Changing space, changing city: Johannesburg after Apartheid* (pp. 418–436). Johannesburg: Wits University Press.
- Lemmen, C., van Oosterom, P., & Bennett, R. (2015). The Land Administration Domain Model. *Land Use Policy*, 49, 535–545. doi:10.1016/j.landusepol.2015.01.014
- Mader, M., Matijević, H., & Roić, M. (2015). Analysis of possibilities for linking land registers and other official registers in the Republic of Croatia based on LADM. *Land Use Policy*, 49, 606–616. doi:10.1016/j.landusepol.2014.10.025

- Magnier, V., & Barban, P. (2018). The Potential Impact of Blockchains on Corporate Governance: A Survey on Shareholders' Rights in the Digital Era. *SSRN Electronic Journal*. doi:10.2139/ssrn.3307521
- Mahmood, S., Shahrukh, Nawaz, A., & Zafar, M. (2010). *Emerging Role of Technology for Good Governance in Land Management in developing countries: a case study. Presented at 2nd International Conference on Mathematical Sciences held at Putra World Trade Centre, Kuala Lumpur.*
- Northrop, A., Kraemer, K. L., Dunkle, D., & King, J. L. (1990). Payoffs from Computerization: Lessons over Time. *Public Administration Review*, 50(5), 505. doi:10.2307/976781
- Nuhu, S. (2018). Peri-Urban Land Governance in Developing Countries: Understanding the Role, Interaction and Power Relation among Actors in Tanzania. *Urban Forum*, 30(1), 1–16. doi:10.1007/s12132-018-9339-2
- Qazi, M. U. (2006). *Computerisation of land records in Pakistan: A comparative analysis of two projects from a human security perspective*. LEAD International, LEAD House, F-7 Markaz, Islamabad, Pakistan.
- Ravnborg, H. M., Spichiger, R., Broegaard, R. B., & Pedersen, R. H. (2016). Land Governance, Gender Equality and Development: Past Achievements and Remaining Challenges. *Journal of International Development*, 28(3), 412–427. doi:10.1002/jid.3215
- Sapru, R. K., & Sapru, Y. (2014). Good Governance through E-Governance with Special Reference to India. *Indian Journal of Public Administration*, 60(2), 313–331. doi:10.1177/0019556120140208
- Saxena, N. C. (2005). Updating Land Records: Is Computerization Sufficient? *Economic and Political Weekly*, 40(4), 313-321.
- Stuedler, D., & Williamson, I. P. (2002). A Framework for Benchmarking Land Administration Systems, 13.
- Stuedler, D., Rajabifard, A., & Williamson, I. P. (2004). Evaluation of land administration systems. *Land Use Policy*, 21(4), 371–380. doi:10.1016/j.landusepol.2003.05.001
- Van der Molen, P. (2006a). *The Importance of Enhancing Land Registration and Cadastre: Some General Considerations*. Map India 2006, New Delhi, India.
- van der Molen, P. (2006b). *Unconventional approaches to land administration: the need for an international research agenda*. 5th FIG regional conference for Africa: promoting land administration and good governance, Accra, Ghana.
- Verstappen, L., & Zevenbergen, J. (2012). A Pro-Poor Land Recordation System – Towards a Design. *Uniform Law Review*, 17(1-2), 57–72. doi:10.1093/ulr/17.1-2.57
- Yu, S., Shengcui, D., Bin, F., & Qiuyan, Z. (2014). Public Access to Government Information in the Digital Age: Findings from China. *Korean Social Science Journal*, 41(1), 1–17. doi:10.1007/s40483-014-0010-9