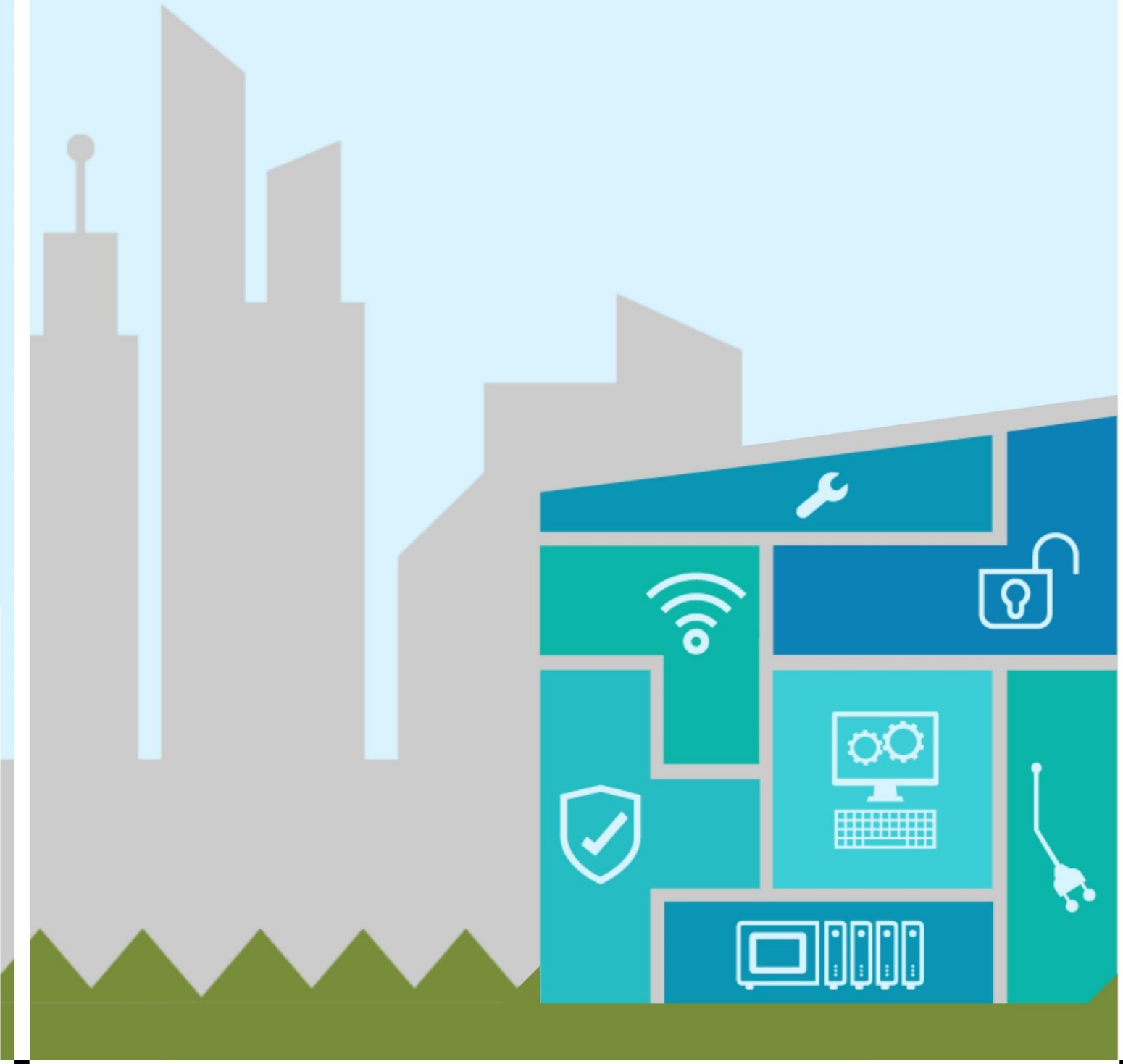
COMPUTERIZED LAND ADMINISTRATION IN PUNJAB AND ITS IMPACT ON LAND RECORD ACCESS AND MANIPULATION OF RECORD



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Abstract

Background

The access to land information and land tenure security are important constituents of day to day life of a huge chunk of Pakistani population. The barriers or facilitators to this access and land security are therefore fundamental governance concerns for any Govt agency and therefore the study of structures and process through which these issues of access and land security are negotiated constitute a vital research concern.

Aim

This paper investigates the computerization of the land records in the Province of Punjab with an objective to highlight how computerization of the land records has increased access of general public and land managers to the crucial land information and data and made the service provisions more transparent and corruption free.

Methods

In-depth inductive interviews were conducted of three key stake holders/operators of the land administration system at Tehsil Level of District Sargodha.

Results

This paper holds that, although, computerization of land records and new administrative model of land record keeping, updating and land records provision have considerably enhanced the access and control of general public on their land records and the incidence of manipulation of land record has also decreased but still "long distance-encumbrance" for a large number of land holders is a daily problem, which needs to be resolved through "vertical expansion" of the Arazi Record Centers to the Union Council Level.

Conclusion

A highly elaborate and efficient auditory and monitoring system is vital to bridge the gap between citizens and service providers for accountability and transparency of the system from users' perspectives.

Key Words: Computerization; Access to land records; Distance-Encumbrance.

Introduction

Before computerization of the land records, the erstwhile land administration system had its roots in the land revenue administration system introduced by Sher Shah Suri in the 16th century. This tradition of land administration and revenue collection was followed by the Mughal Emperor Akbar. The British further strengthened this land administration system. It is noted however that the main objective of all these regimes was tax generation. After the Independence Pakistan inherited the whole of the public sector management infrastructure, legal operettas and institutional set up from the Britishers. Although this system paid off for a long period of time in administrative terms, however it has been held that the spirit behind colonial way of governance was "Control and exploitation" rather than "right based" empowerment. The system provided for a very stringent system of accountability of the civil servants, but this accountability was "accountable to masters" rather than accountable to people (Gauhar, 2004). Post-independence, Pakistan has seen various political dispensations including Military regimes, politically elected governments and elected governments working under military rulers. But despite these variety of political dispensations the bureaucratic system remained overly centralized and unaccountable to citizen in meaningful ways. This situation of land titles and record security is further complicated by poor land governance set up as this has not been a key policy or political issue (Nuhu and Mpambije 2017); many Govt. lack the capacity to provide land registration system in transparent and corruption free manner (Toulmin 2008); there is a lack of integrity and participation from the public in crucial land governance discourse and structures (Deininger et al. 2011); rampant corruption and malpractices further complicate the situation for backward and economically disadvantaged people (Nuhu and Mpambije 2017).

This weak framework and bureaucratic monopolized system of governance leads to encroachment in private person's lands, land title insecurities (Klug et al. 2014); people also face multiple issues on basis of gender (Ravnborg et al. 2016) and economic status (Adam 2014).Uninterrupted and equal public access to information have been established as a key component of people empowerment. This access ensures establishment of a society which is secured and progressive. It has been further held that the key components of any human security framework are asset-security and legal infrastructure to support this security. However, the legal paraphernalia can only be evoked if the citizens have complete information about their assets, the tenure of their assets and how can they

invoke legal remedial processes when their tenure is infringed (Ali, Tuladhar, & Zevenbergen, 2010).

Taking this people empowerment perspective and how access to information can infringe the citizenship of citizens, I have premised this study around various core assumptions: Firstly, this study is premised around one fundamental citizenship frustration of denied access to vital land information: The state structures, both infrastructures and operations, have not been able to facilitate the citizens to have access to land information, which although (legally and theoretically speaking) is in public domain but practically speaking this access has been monopolized and controlled by various actors to pursue their individual or group interests. Secondly, in specification to above general assumption, this study focuses on one access controlling Patwar institution. W hold that land administration is a grass-root level administration in the sense that vital interactions are situated at village level between citizens and village-level bureaucratic networks. In erstwhile land administration at village level the institution of Patwar had absolute monopoly and control over land related information and record. This essential land information included:1) The documents pertaining to land titles; 2) The documents through which these land titles were mutated from one person to another person; 3) The documents through which land-titles were updated. Now because of this enormous power vested within the institution of Patwar, the holder of this institution, the patwari, became unbridled as an official and held a complete monopoly over the record, its access and up-dation. And through this monopolized control of access and record-updating, the patwari not only manipulated the record but also got extra rich on the cost of people. Keeping this in mind, at the turn of century, the Govt. of the Punjab took up an ambitious project of land computerization in Punjab with the aid coming from the World Bank. Via this project all the rural land record pertaining to 36 Districts of the Punjab stood computerized and the key functions of record-keeping, record-up-dation and provision were automated, and their jurisdictions were transferred from the institution of Patwar to Arazi Record Centers at each Tehsil level. Accordingly, we have further premised this study on the assumption that automation of the record leads to citizen-empowerment and guarantees access and control of vital land information to the land holders and gives them land security and tenure satisfaction. Therefore, our core assumptions after the automation of land records are:1) Computerization of land records have engineered a greater and facilitated access of land holders and land managers to vital land-data;2) Computerization has ensured Real-Time up-dation of the land record therefore chances of manipulation of the record have decreased;3) Because of de-monopolization of access

and up-dation of the land related record in real-time, the incidence of corruption has also decreased.

Objective of the study

- To study the impact of computerization of land record on access to land-information.
- To Study the impact of computerization of land record on incidence of corruption.
- To study the impact of computerization of land record incidence of manipulation of land record.

Research Questions

- Has computerization of land record has widened the access of general public to their record?
- Has Computerization of land record reduced the incidence of corruption & manipulation of record?

Literature Review

Some Govts endeavor to provide the core land related services to its citizen including securing and provision of land related information, it has been noted that any land administration system must provide the integrated land services to all its citizens (Agunbiade & Kolawole, 2016). Ian P. Williamson (2000) presents a deep analysis of land administration system. This analysis is rooted in the countries featuring modern land markets coming out of traditional settings. it has also been observed that land administration/ management varies from country to country depending on the normative, legal and administrative grounds. These variations are discussed in the context of seven essential principles which help to design and develop an idea of land administration within the counties. The study concluded two significant factors in connection with land reform policy; at first is documentation and acceptance and the forthcoming visualization of country's land administration system. Enemark et.al (2005) emphasize the progress and change of land administration system over the time. However, this emphasis necessitates a proficient land management model capable of examining domestic and international needs. While focusing on increased demand of better governance R.K Sapru

and Yudhishthira Sparu (2014) analyzed the growing demands of governance in India in contrast to the other World. This stark contrast in terms of adequate governance delivery is qualified by various elements; such as increase population, poverty, cultural diversity and illiteracy etc. Such scenarios establish the need of E-Governance system to improve the efficacy and proficiency of governance. The successful development of governance system based on information technology encompasses various factors including human and financial resources, leadership intent, managerial construction and citizen understandings. Development and application of such E-Governance system requires transparency and accountability. It has been noted that although the computerization of land record ensures a greater access to land holders to their land-record but the research cautions that stakeholders must also know that how the "private" data of individual citizen is used and most importantly by whom. In the same article it has been held that computerization of land record has primary and secondary objectives: primary objectives bring more efficient & effective data storage, more rapid information retrieval and ease in updating data; the secondary objective is ensuring easy access and hazard free provision of record to public. The author predicts that in coming years the administration would be "technology intensive" and the land administration will be wholly computerized; but before that time the stakeholders must develop the understanding of how technology will be best utilized to support sustainable development. This will further require that how "sustainable development" is identified and how it is measured (Dale, 1999). One Research in our neighboring country pointed out that although Government of India had spent a huge amount on computerization of land record, but this computerization is plagued by incorrect & outdated entries. He further held that ownership & other related record must be put on web, so people can have absolute control of their own record and it would "free" farmers of the control of bureaucrats (Saxena,2005). Researchers in many developing countries brought out that secured land tenures create necessary incentives for investment in land, which results in sustainable economic growth (Deinninqer,2003). Uninterrupted & equal public access to information have been established as key-components of people's empowerment. This access ensures establishment of a society which is secured and progressive. It has been further held that the key components of any human security framework are asset-security & legal infrastructure to support this security. However, the legal remedial paraphernalia can only be evoked if the citizen have complete information about their assets, the tenure of their assets and have information that how they can invoke legal process once their legal rights are infringed (World Investment Report,2017). Pakistan, like many other countries

have a land administration system which is not updated and can be considered a deteriorated. This administrative system is based on paper land record and mapping which uses obsolete language and standardization, and the data custody, both physical & operational, lies with different layers of administrative set-up (Ali, Tuladhar & Zevenbergen, 2010). Van Der Molan (2006) held that it is fundamentally important to strengthen the legal frame-work for appropriate land management and land ownership for facilitating uninterrupted access to land-related record; for creating accessible and efficient land-marketing; and establishing appropriate legal forums for providing expedited remedial cover against infringement in land-tenures. It has been indicated that that there is a pressure on Governments to reinvent themselves and make key governance structures automated (Stelzfus, 2005). It has been held that mere computerization of existing governance processes leads to nothing if the existing structures & processes are not reformed with a view to achieving better governance outcomes. It has been further held that e-government is a wasteful endeavor, if automation consumes resources but do not optimize operations and even if the resource utilization lead to operation optimization, the objectives of good governance will not be achieved if these operations do not add into empowered citizenship of the citizens (UN, 2003). Van der Molen (2008) has pointed out that new approaches are needed for storing data, so its access & retrieval is effective & efficient.

Kennedy et al. (2010) elaborate the employment of e-Government enterprises within public settings via Business Process Change (BPC). There arise several issues while implementing such enterprises when it is about contributing to theoretical and administrative part of e-government produced BPC. It is noted that public sector associations or groups are clinched by a shift or transformation from customary or paper-based government to e-government. This shift or transformation is vital to enjoy all the benefits while using information technology as a catalyst for process of change. Massive urbanization and growth of population have accelerated the need of technology intensive land record management for better land and urban management (Hamid, Chauhdry, Mahmood, & Farid, 2016).The technologies can have revolutionary impact upon land record keeping, it’s up-dation and maintenance (Magnier & Barban, 2018) ; GPS technologies can not only provide a fast track mechanism for updating land records but also locating and storing data regarding various land parcels. This technology can be further utilized to detect and remove gaps between data and factual position on the ground. This system can be beneficial for the Govt in maintain transparent records, fair tax assessment, helping to avoid in land data management in efficient and effective ways

and an enabling tool for securing land titles of the citizens (Bhatti et al., 2013). The lack of documentation of land and ensuing scarcity of land resources can have multiple complications and further economic and living disadvantages for already disadvantaged community of the people, therefore a pro-poor record documentation is fundamental for an inclusive world (Verstappen & Zevenbergen, 2012). It has been noted that the future Govts will be technology intensive and therefore it is needed that not only new technological structures and their impact on human lifestyles is mapped up but due consideration must also be given to the culture, values, policies and institutional structures and processes to enable these technologies to have positive correlations with human lifestyles and aspirations (Dawes, 2009). The openness of information is a fundamental tool in new governance structures (Yu, Shengcui, Bin, & Qiuyan, 2014).

Background of Study

Computerization of The Land Record in Punjab

Context of the Project

The Province of the Punjab, with a total area of 205,345 sq. km. is the largest population wise province of the Pakistan. Some 70 percent of the population lived in rural area which was directly or indirectly depended on Agriculture for their livelihood. But the dispersed and duplicative nature of its land records made land-rights uncertain and virtually unprotected. Cumbersome registration processes and uncertainty of the land records contributed to the low mobility of land hence the poor people remained uncertain of their rights related to land and prospective investor in the land remained hesitant to invest capital in the land market. The Board of Revenue with its hierarchies at District and Tehsil level is the custodian of the land related record. However, the BOR's land record keeping and up-dation was intricate due to these multiple hierarchies: District, Tehsil, Kanungoi Circle and Patwar Circle. The lowest administrative level was the Patwar Circle, of which the Patwaris were responsible for many social, political and administrative functions including maintaining land records, and acting as the custodians of records pertaining to public and private lands. The patwaris were the sole authority in issuance of land titled documents (fard). A key and objective concern about the patwris was high transection cost for requiring land related services and hence opportunities for corruption. This system favored big land holders at the expense of small land holders. The project sought to replace this system with a modern, transparent and accessible digital land record management system. As a first step of the Government's strategy to

establish a title-based land registration system in the long term, the project focused on reforming the century old manual land record management system in rural areas of Punjab Province. This includes not only a technological change but also a tremendous cultural change for the general population as well as the Patwaris.

Components of the Project

The project "Punjab Land Records Management and Information Systems Project" had 4 components: 1) Business Process Improvement and Institutional Capacity Enhancement; 2) Development and Deployment of the LRMIS;3) Service Delivery and Information Campaigns; 4) Project Management, Monitoring and Evaluation.

Project Completion

The project has been completed in June 2016, with the result that the erstwhile land record maintenance jurisdiction has been taken away from BOR and it has been given to Arazi Record Center. At each Tehsil an Arazi Record Center has been established. All the manual record has been digitized and put on a Web, where anyone can see his or her own land record.

However, for gaining an attested copy of land documents or for transferring land, the citizen has to go to ARCs located in their respective Tehsil where a fard is given in 30 minutes while a mutation is completed in 45 minutes.

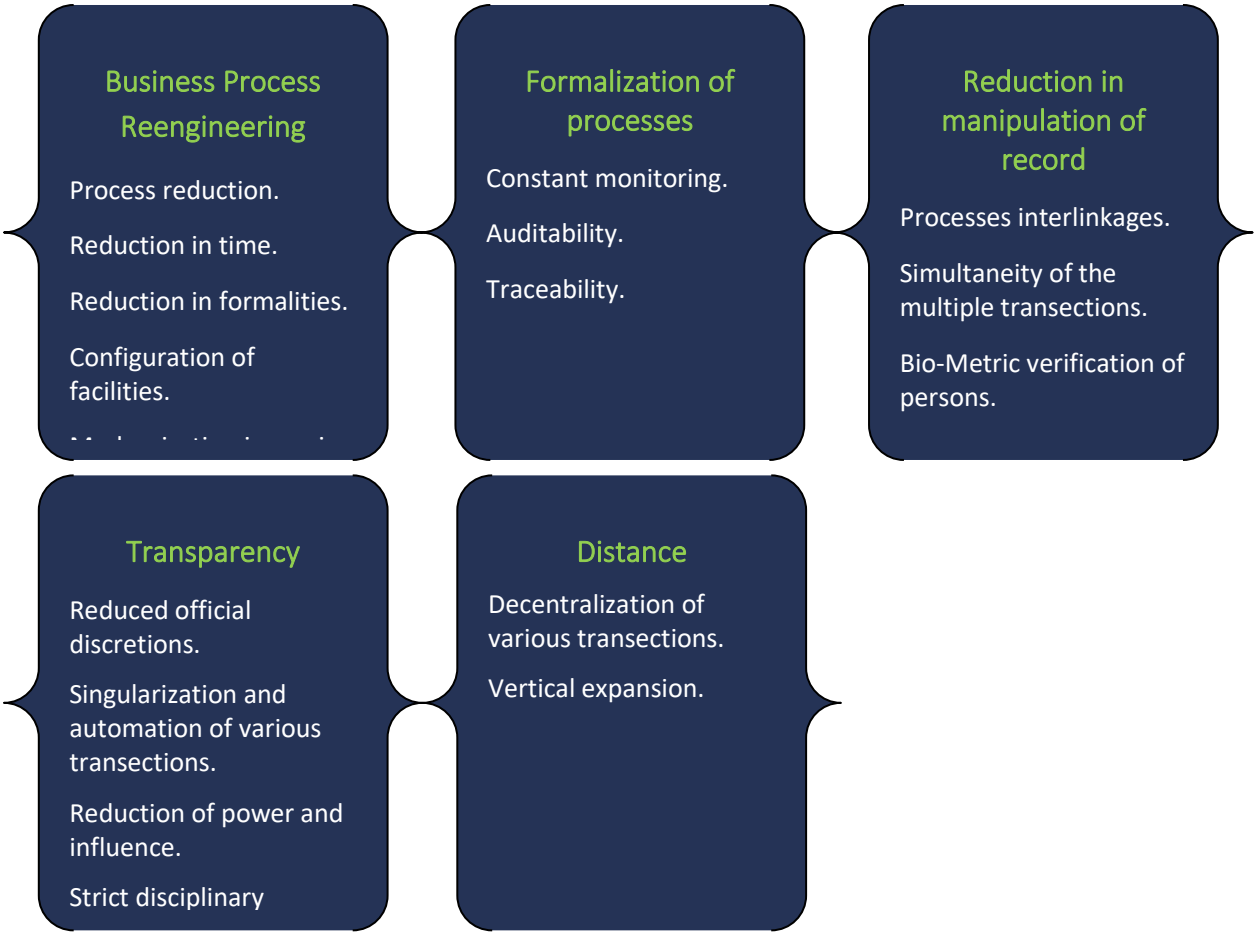
Research Methodology

In depth interviews were conducted with Key Stakeholders at Sub-divisional level including officers/officials of Arazi Record Centers of District Sargodha including Assistant Director Land Record (who is responsible for transferring of land-title) & service center officials (who are responsible for provision of land record and its up-dation. Interviews were also conducted of sub-Divisional Collector/Assistant Commissioners who oversee Revenue Administration at Tehsil level and play a keep role in Land Revenue Assessment, collection, land-management & Land dispute-resolution. The questions which steered the interviews were recruited from multiple angles including manual land administration system as restrictive force in access and transparent service provision mechanism, the over-bureaucratization of land administration system disenfranchising economically disadvantaged sections of the society, the role of e-governance in restructuring and reorienting key governance process in land administration.

Due to limitation of time we have chosen our participant from service provider spectrum but we also propose that this study shall remain incomplete unless we allow for a wider participation of end users to understand the complex linkages of technologies as an empowering tool and also as tool which can disturb the functionalities of organizations.

Result & Analysis

Themes and Codes



As described in methodology, I have conducted in-depth interviews with various officers and officials dispensing business under new land administration model. Various themes emerged out of these interviews regarding research questions which are narrated in greater details below.

Computerization of Land Record and Access

Reduction of transection-time

Our core assumption of this study was that computerization of the land record leads to enhanced access to various land related operations and services. The collector of the sub-division Sargodha has to say following about this.

"Well:the entire focus of the project and it was being financed & implemented with the help of world bank, you know active financial support coming from that institutions, was to, you know, reduce the time of issuance of fard and attestation of mutation – so according to new dispensation – It is expected that a fard will be issued in 30 minutes & a mutation will be attested in 45 minutes – so the new system has added, what would you say, quantifiable indicators / measures and you can easily measure these. So, I will say, from a time yard – risks, the new system has done a great favor – so I think it is pretty much citizen – centric."

One of the assistant director land record explained,

'*You know we work like NADRA or any bank. With the old system you had to trace the Patwari but under the new system you just have to move in. in Shah Pur there are 25 desks. You move to any one of them, give details and within 30 minutes you will be issued your Fard. The formality of the procedure enhances your access and that's what we are doing'*

One of the service center officials whose business it is to issue land related documents said,

'Well we are not Patwari's. We do not have powers. We just make entries and the computer does the rest and we have to be here from 9 to 4. We cannot make excuses. We do not have field trips like Patwari's. We do not have to attend AC office or courts. So here we are doing our routine job'

Reduction in processes

When I asked how this transection-time was reduced and how it contributed to the access, the assistant commissioner responded:

".....but because there were so many steps – process invoked in the issuance of fard – these processes on the one hand made the simple act of issuance of fard a tedious process and on the other hand gave a lot of discretion in the hands of patwaris to do misuse."

"Yeah, no, problem – so I was talking about, you know – mutation – mutation is ……. An instrument or a person through which land from one person transferred to another person – now in the order system first you need to have a fard for sale – for this you needed to go to patwari, who would have asked for your CNIC & a challan, after the payment of challan / tax / fee for the fard , a fard would be issued to you – then you will have a bargain with the party, take money etc. then you again come back to patwari – and he will enter a mutation in a register called mutation register. And would have given you and other party a time for recording of statements – and would have issued a challan to be paid. So after few days both parties will appear before the tehsildar and have statement would have been recorded – that so you know there were lot of process – now you just have to come – tell your CNIC to SCo – because it is connected with NADRA database – so all the information are there – you are issued a challan for payment of fard – which you pay in the bank situated in the same building and you know then both the parties appear before ADLR sitting in the same building and mutation is attained."

Formality of The Process Increases Responsiveness

When I asked that how this process-reengineering works for an enhanced access, one of the participants, ADLR Shapur, responded:

"……. This is a building and our presence is monitored electronically – my Deputy Director sitting at Lahore can check my status activity at any given point in time – but more so everything that I do is instantly recorded and uploaded – the moment I do an act – it becomes auditable – this formality has improved the ordinary people – the only thing they have to do is to get a token, and then it is our responsibility to give him relief – and it's just not the relief, but instant relief, you know 30 minutes for Fard and 45 minutes for mutation – ."

Simultaneity and singularization of the processes:

When further probed as how multiple activities can be performed within a span of 30 minutes, the AC Sargodha reported:

" But now because all these transactions are computationally linked with each other, that is the moment the mutation is attested and you the sale matures and parties attest to this transection through biometric, you know at that very time not only the mutation will be entered and attested but correspondingly the record of rights shall also stood amended. Its real time up-dation."

The discussions reveal that time-linked processes, process-reengineering and simultaneity of the transaction and record up-dation have contributed in enhancing the access of general public to their record. Our findings are corroborated by the research that technological interventions in record keeping and up-dation leads to empowerment of the general public towards enhanced access to record (e.g. Bhatti et al., 2013; Van der Molen,2008).

Computerization of Land Record and Manipulation of The Record

Another important assumption was that digitization leads to transparent land record, in this regard various reasons were ascribed by the participants regarding decrease in incidences of manipulation.

Monopoly of the record led to manipulation

When I inquired how automation provided record security, one of the participants responded following:

"The patwari had absolute control of the land record and as it wasn't available to public, so he had space to do whatever with the record. But now everything is electronically recorded. And as the people, poor people have more access to their record and record is being monitored from PMIU and even AC can audit every activity, so it's impossible that anyone would do any bad thing with the record."

Automated auditory checks and enhanced access of authority to the record

The Assistant Commissioner Sargodha reported:

"You whatever an SCO or ADLR is doing, it is all going in a data base. So, they know that whenever there would be a complaint, the whole data and its associated activities will be traced back and you know the liability-fixing becomes ever easy. So, you know this fear of an audit and easy traceability make it abundantly difficult for anyone to transgress his limits."

This is an important thread of our research. It not only gives out that digitization ensures less and less manipulation of the record (e.g. Magnier & Barban, 2018) but there are other very important implications of this discussion. One of the obvious reason for non-manipulation of the record is traceability of the official who does anything with the record. Because every activity is electronically recorded from the

portal of any given official so the backup data related to that activity can be retrieved at any time, allowing the detection of the official who initiated and completed that activity. But as the discussion suggests that it's just not the traceability, but the fear that any illegal activity will not be tolerated, keeps the officers and officials from manipulating the record. This has very important implications for our governance structure: if the system takes exception to the wrongdoing and there are evidences that a wrong act shall meet the penalty, then it can enhance the effectiveness of system in curbing malpractices.

Computerization of Land Record and Corruption

Another important theoretical assumption was that digitization has decreased the practices of corruption. The Assistant Commissioner Sargodha said following,

"Patwari was corrupt because he had absolute powers over the land record. Now it's computer or the software who is that powerful. Because patwari could manipulate with the record and change the very land entitlement therefore he was corrupt. Now, neither the ADLR nor SCO have those powers so how can they be corrupt."

The Assistant commissioner Shah Pur indicated,

"Why people gave money to Patwari? Because they thought that Patwari was the most powerful person and he can do anything with their land record but now the assumptions about ADLR and SCO's are changed. People do not consider them powerful and they know that any serious complaint against anyone of them will have serious consequences therefore they are not fearful of them."

He further added that,

"It is not that there is zero corruption. For instance, an ADLR can remove a status quo order from the system and give benefit to one party or he does not remove the status quo order even when it has been vacated. So, you know where they can do, they do but a strict auditory system stops them from doing these kinds of things."

Our findings are in line with the previous research which dictates that technology can increase the transparency in the system (e.g. Yu, Shengcui, Bin, & Qiuyan, 2014).

Conclusion

The study suggests that computerization enacted through Business Processes Reengineering has increased the access of a common citizen to his land related data. We hold that it is not merely the automation of the land record that has contributed in more citizen-centric land administration but the policies and amendments in the legal operates surrounding this land administration system that has delivered the dividends.

We also hold that these findings are not necessarily conclusive as we could not involve the citizen as participants of our study. But as this research moves further, we contemplate to invoke the viewpoint of the citizen regarding effects of technological interventions in enhancing their land titlr security and ensuring a greater control on their land records.

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