

**DELIVERING LAND ADMINISTRATION SERVICES AT SCALE,
PUNJAB PROVINCE OF PAKISTAN**

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Abstract

Land records system in Punjab province of Pakistan was inherited from the British era and was maintained in the manual/paper form. Recognizing the importance of security of records and compilation of a consolidated database of record of rights Government of Punjab, Pakistan with the financial assistance of World Bank has completed a major governance project titled “Land Records Management and Information Systems”. The services with regards to issuance of computerized Fards (copy of record of right), computerized attestation of mutations, e-passbook for agriculture loan and instant updation of record at website are being rendered through Arazi Record Centers established in all 143 tehsils of the Province. System has been linked with the financial institutions, allied Government departments, courts & agencies. Automation of land records has accomplished its basic objectives by bridging most of the gaps that have been created between the service delivery and the expectations of public due to technological advancements. Introduction of digitized system ensured the better safe gardening of the interest and protection of the rights of the socially disadvantaged groups particularly women & deprived class. Increase in tenure security and positive impact on land markets & property prices are expected in times to come.

Key Words:

Register Haqdar-e-Zameen, Arazi Record Center, Patwari system, Monitoring mechanism

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Background:

The land administration system in the Indo-Pak sub-continent is very old. The Arthashastra is said to be the first Indian work to mention village officers known as Gopa who were responsible for preparation of various registers for the village fields, transfers, and due taxes at a very rudimentary level. An attempt to reform the system was first made by Sher Shah Soori (1534-1545) whereby land was categorized, measured and a schedule of crop rates fixed. The system was reformed during the Mughal King Akbar's reign (1556-1605). Todar Mal, an adviser to Akbar, initiated the regularization of land record management for the first time and devised elaborate methods for agricultural tax assessment on rational basis. The subsequent colonial rule by the British then implemented the system on scientific lines whereby large scale cadastral surveys were conducted to demarcate the boundaries and extent of each individual landholding. Soil fertility was also classified to formulate and rationalize the levy and collection of land revenue from landholders of each and every village.

Land is at the heart of agriculture and the rural economy in Pakistan, particularly in Punjab Province, land ownership and administration issues are of key importance. Inequalities of land distribution, tenure insecurity and difficulties associated with the land administration and registration system are closely interrelated and continue to impose significant constraints on both rural and urban populations, particularly the poor.

Land transactions are relatively high cost (containing a high proportion of informal costs), and disputes about authenticity of land rights are caused, among others, by the inefficient and dispersed land records system. As a result, land markets are thin and land prices are in excess of the discounted value of potential agricultural earnings from land. The low mobility of land contributes to perpetuating the highly unequal distribution of land and, thus, livelihood opportunities. Improving land administration and consequently the functioning of land markets in Pakistan is therefore a priority concern, linked to the broader area of governance and administration at both the central and local levels.

Punjab has a total area of 205,345 square kilometers (Source: Punjab Development Statistics 2011), and is the most populated province of Pakistan with 94.4 million inhabitants (55.2% of Pakistan's total population). Nearly 70% of the population resides in rural areas. Agriculture plays an important role in the Province's economy. However, the overall dispersed and duplicative nature of its land records makes land rights uncertain, negatively impacts economic development, and threatens the vulnerable and the poor whose rights remain virtually unprotected.

Issues in the Papers Based System:

Problematic features of the current land revenue system, recognized by the Government, are the following:

- Obsolete and opaque procedures
- Irresponsive and inaccessible revenue machinery
- Exacerbated disputes over rights and delays in courts

- Increased tenure insecurity
- Multiple institutions and dispersed responsibilities
- Weak institutional capacity to address and solve problems
- Lack of public awareness of their land rights and related procedures

In Punjab, high transaction costs and difficulties associated with the land records system continue to impose significant harm on land owners and prospective land owners, (particularly the poor, who have small holdings and less access to information or resources), making them vulnerable to the predatory behavior of middlemen, and lowering the liquidity of family assets composed in whole or in part of land. As land is also a form of capital, current obstacles for documenting and enforcing land rights have the effect of lowering income from those assets through means such as rent, cultivation, sale, or access to other factors (e.g. credit). Well-defined land rights are key for productive development and factor market functioning. In addition, clear land rights have far-reaching implications for social cohesion and governance, acting as an important catalyst in stabilizing communities, empowering individuals and reducing social exclusion.

Pakistan has a land administration system inherited from the British, involving rules and regulations regarding sale, purchase and use of land resources mainly linked to the collection of land tax. The present land legislation – which is constituted mainly of the Land Revenue Act (1967) and the Registration Act (1908) – does not profess to provide for a State certificate of title to land under the aegis of a public authority. The records of rights and other documents based on the land records, by virtue of provisions in land laws, are presumed to be accurate. However, these entries only provide presumptive status of rights under land laws. Many court rulings have also maintained that entries in the land records are contestable, that the revenue records are not documents of title, and that it is permissible to challenge the entries for determining the title to land.

The ambiguity of agrarian law regarding records of land rights is particularly harmful to the poor, who cannot afford protracted land disputes. Numerous legal disputes are caused by contract enforcement of land rental contracts, e.g. over illegal possession of land, eviction of tenants, and recovery of rent. Cases of land disputes are either heard in the Revenue Courts or Civil Courts. In general, smallholders and tenants tend to prefer to use the Revenue Courts, because they are cheaper, more accessible, and less time-consuming.

Role of Board of Revenue:

The institutional set-up of the land recording system (especially in urban areas) of Punjab Province is also very opaque, involving many different agencies. The main ones are the Board of Revenue (BOR), the Excise and Taxation Department (ETD), and the development authorities, of which the main one is the Lahore Development Authority (LDA). However, there is no single agency maintaining updated

land records for all of Punjab, and the coordination in record keeping functions being carried out by the various agencies is limited. Within this complicated institutional structure, the BOR is the most important agency for land administration.

Nevertheless, it is important to note that the BOR essentially is a body geared to collect land revenue for the Government. Over the years, the revenue collection role has become secondary to the BOR's role of being the custodian of the records of rights to land, but, inconsistently, the business processes of the organization are still directed to its traditional role.

The BOR's land record maintenance takes place through an intricate system, which involves several levels of administration; the District, Tehsil, Kanungo circle, and Patwar circle. At the lowest administrative level of the records system – the Patwar Circle – are Patwaris. They are not only responsible for land record issues, but also for many social, political, and administrative tasks, including keeping weather records, collecting crop harvest information, reporting of village crimes, and updating registers of voters. In Punjab, about 6,934 Patwaris maintain land records pertaining to 55 million land owners. The Patwaris keep their records in a cloth bag called a Basta. They are the custodians of records pertaining to private as well as government lands. The transfer of land is initiated at the level of the Patwari, but effected by his superiors at the Kanungo and Tehsil levels. The custodian of the land records at District level is the District Collector. District Collector is assisted by Additional District Collectors, Sub-divisional Collectors and Assistant Collectors of Grade-I & II.

The Board of Revenue is the successor of the Office of the Financial Commissioner. It was originally constituted under the provisions of West Pakistan Board of Revenue Act, 1957, which on dissolution of One Unit in 1970, became the Board of Revenue, Punjab.

Functions of Board of Revenue:

- It is the controlling authority in all matters connected with the administration of land, land taxation, land revenue, preparation, updating and maintenance of records;
- It is the highest Revenue Court and custodian of the rights in land of all the right- holders;
- It exercises general superintendence and control over the Revenue Officers and Revenue Courts in the province and has suo-moto jurisdiction.

Land Records Management & Information System Project:

Government of the Punjab started computerization of Land Records with overall objectives to improve service delivery and to enhance the perceived level of tenure security. The Project was initiated in 2007 and was planned for completion by June 2016. A Project Management Unit was been set up under the administrative control of the Board of Revenue, Government of the Punjab to manage the project, coordinate the project related activities and to interact with executing agencies. The project is headed by Senior Member BOR (SMBR). The day to day activities are managed by the Project Director through a team of professionals who have been contractually employed in this temporary arrangement.

The Project vision is to establish efficient, accountable, equitable and secure Land Records Management & Information Systems. Ultimate vision of the Govt. of the Punjab is to gradually move towards a Land Titling System. The approach followed in the design Project encompasses four main actions:

1. Setting the foundations with the objective of generating and strengthening the capacity of the responsible entities to effectively manage and administer the modernized land records system.
2. Developing and deploying an automated land records system (LRMIS) and performing all other pre-service delivery tasks.
3. Provision of services to the population – with the objective of managing, operating, making accessible land-related information – and incorporating feedback from stakeholders in further elaboration of the system.
4. Monitoring the quality and efficiency of the services provided.

The higher level objective of the Project is to improve the land records service delivery in the Province of Punjab, contributing to long-lasting tenure security. The outcomes, expected to result from the Project, are:

1. Increased access to land records at lower transaction cost for the beneficiaries, through a client-responsive service.
2. Increased level of tenure security of land-right holders.
3. Increased transparency in transactions of Land.

Computerization Process:

All the activities given in the below project diagram are timed (Bidding process: 211 days, Scanning: 15 days, Data entry: 25 days, Verification process: 30 days, Entry of Mutations: 30 days, Operationalization: 7 days), inter-linked and inter-dependent and require a sequential execution. Certain activities are precursors of others and require to be executed prior to those:

Following activities need to be performed prior to start of Scanning Operations:

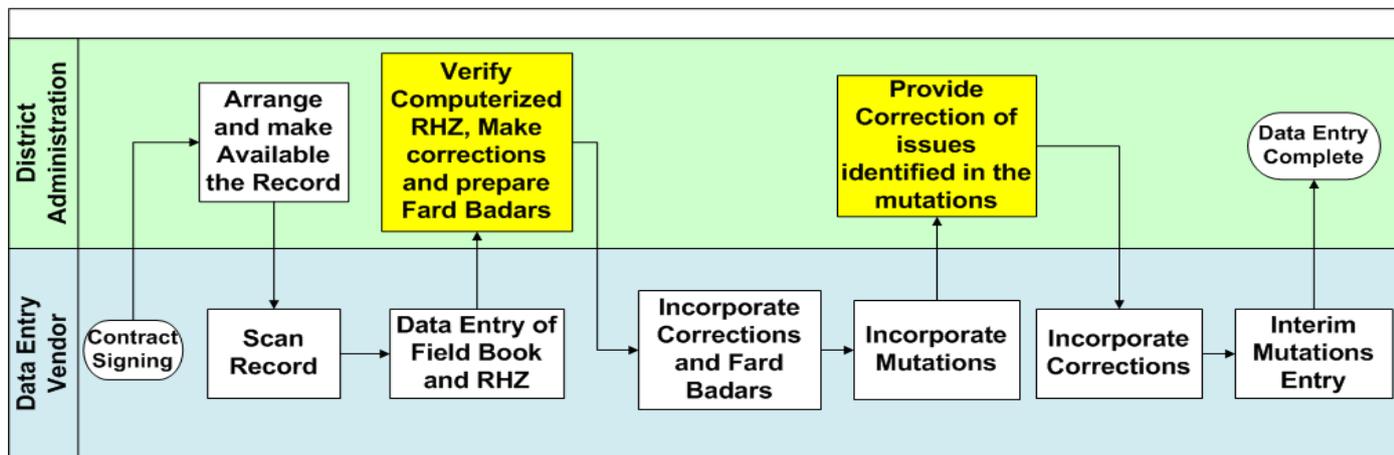
- i. Cleansing of Record
- ii. Manual Quality Assurance of Record for their conformance with the instructions of BOR
- iii. Reconstruction of Missing Record
- iv. Development of Data entry site by the vendor

Data entry work involves undertaking of following activities:

- v. Scanning of Record
- vi. Data Entry of Record

- vii. Printing of Base Record
- viii. Detection of Errors and Inconsistencies
- ix. Correction and Verification of Record
- x. Updating the Legacy Record
- xi. Entry of Mutations
- xii. Correction of Mutations, their verification and re-entry
- xiii. Deployment of updated database at the service centre
- xiv. Stoppage of Manual Mutations for a period of 7 days
- xv. Scanning of mutations occurred in the interim period, their entry and verification
- xvi. Start of Services

The figure below provides a graphical representation of process flow being followed for computerization of land records in Punjab:

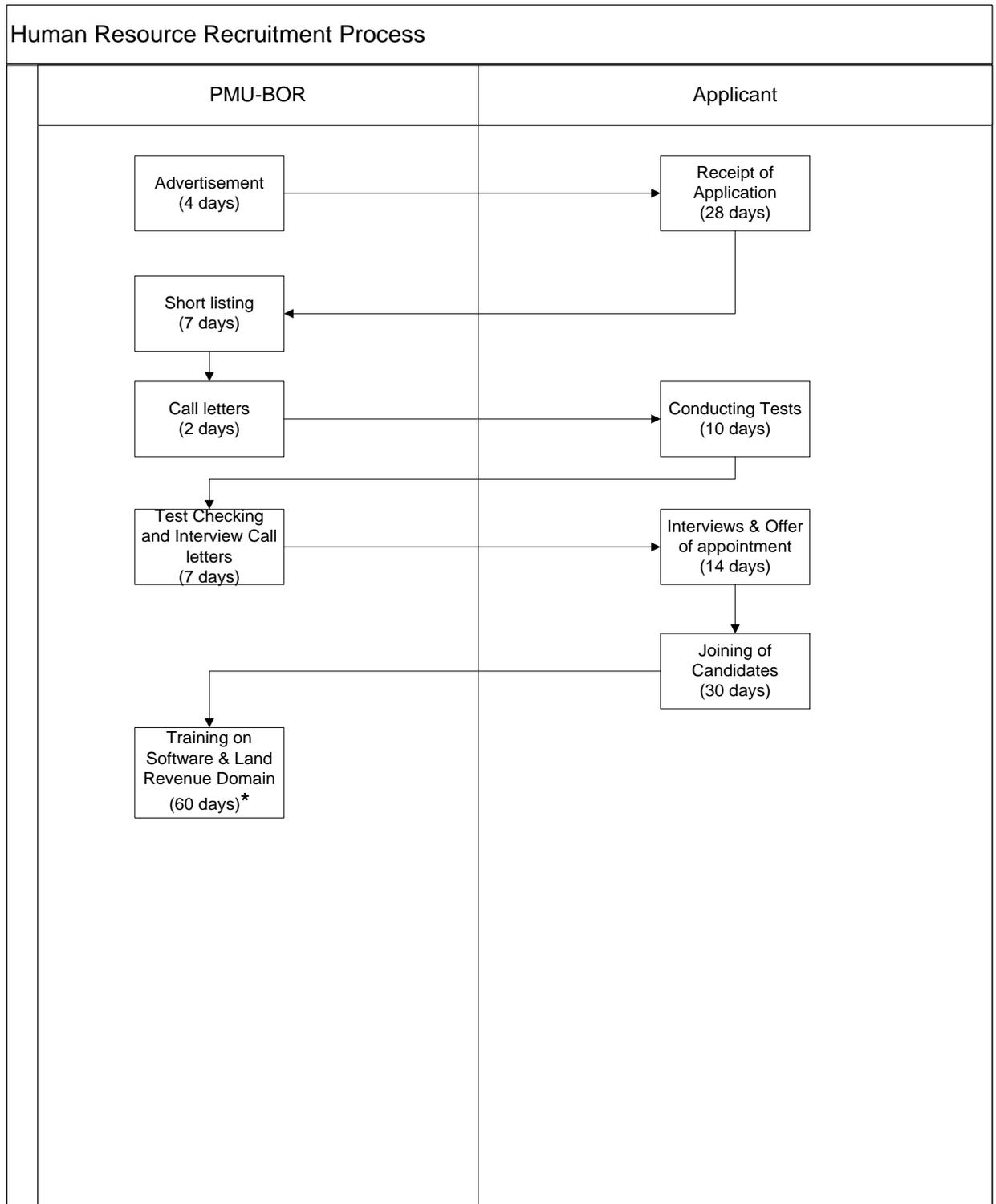


Execution of civil works involves undertaking of following activities:

- xvii. Identification of state land for construction of service centre
- xviii. Survey of site
- xix. Preparation of feasibility
- xx. Transfer of possession of site
- xxi. Preparation of building design and engineering drawings
- xxii. Preparation of bidding document for civil works
- xxiii. Invitation of Bids and their Evaluation
- xxiv. Obtaining formal approval from World Bank
- xxv. Award of contract
- xxvi. Mobilization of contractor
- xxvii. Construction Work
- xxviii. Installation of Electricity Connection

Recruitment of staff for Service Centres requires following activities:

- xxix. Publication of Advertisement
- xxx. Receipt of applications and short listing of candidates
- xxxi. Test and interviews of candidates
- xxxii. Issuance of offer letter, acceptance and joining of staff
- xxxiii. Training
- xxxiv. Deployment at Service Centers

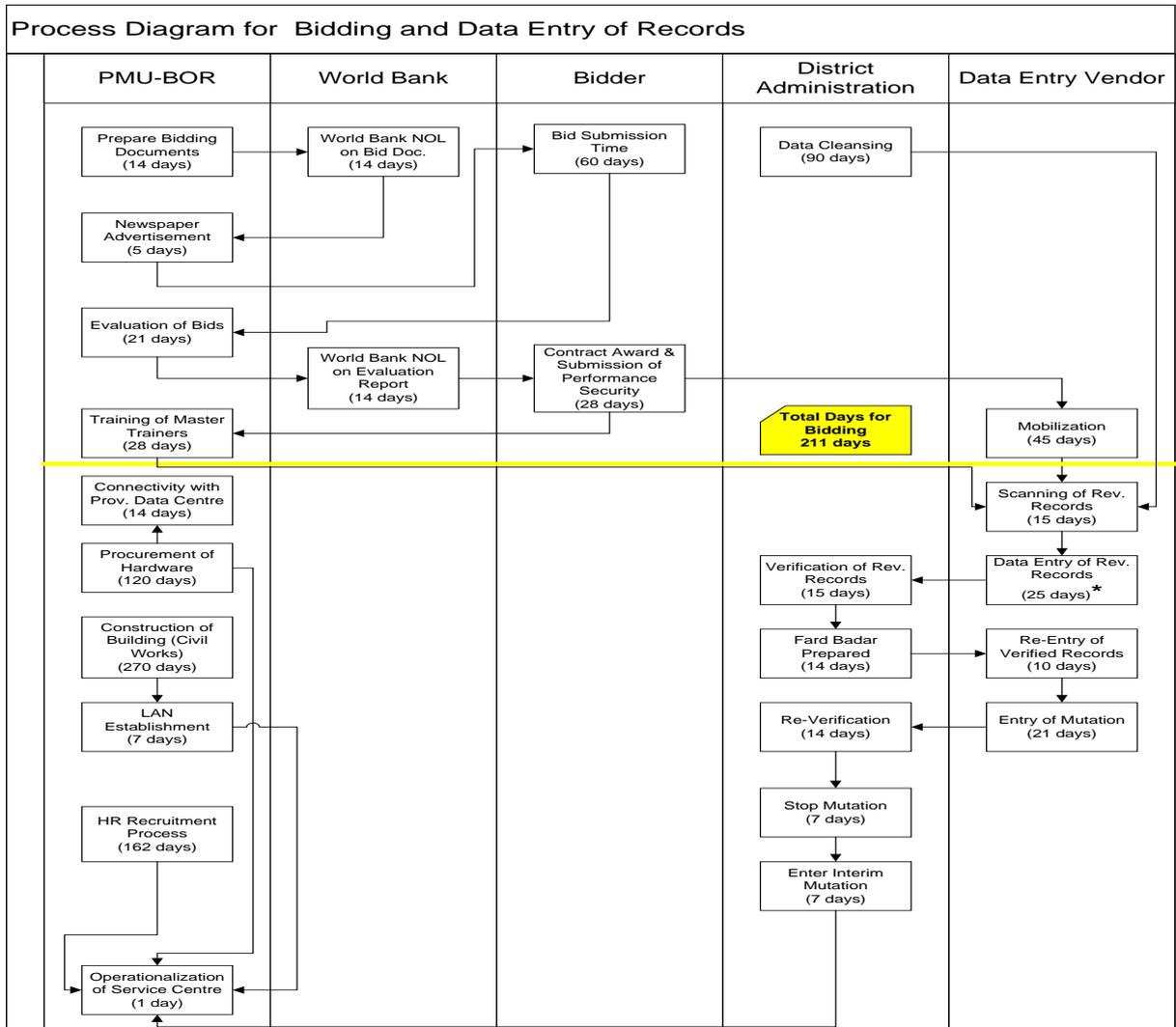


*The trainings for all the selected candidates will be completed within a span of 18 months with 9 batches and each batch will take 2 months for the training

Start of Services at the service centre requires following set of activities to be completed prior:

- xxxv. Completion of data entry
- xxxvi. Completion of civil works

- xxxvii. Procurement of furniture & fixture
- xxxviii. Recruitment of staff
- xxxix. Procurement of Hardware & deployment at Service Centre
- xl. Establishing LAN and WAN



* This is the average of data entry time taken in each tehsil considering 139 tehsil. Data entry time varies from 5 days to 100 days depending on the number of land owners and pages in each Mouza and number of Mouzas in each revenue estate

Project Phases:

The data entry, civil works and recruitment & training of human resource constitute the major components of the project. It is planned to undertake these components in following 4 different phases:

PILOT PHASE	
Lot	Districts (03)
1	Lahore
2	Lodhran
3	Hafizabad

PHASE-I	
Lot	Districts (08)
1	Mandi Bahauddin
	Narowal
	Gujrat
	Sialkot
2	Jhelum
	Chakwal
	Attock
	Rawalpindi

PHASE-II	
Lot	Districts (13)
1	Jhang
	TT Singh
	Sargodha
2	Muzaffargarh
	Layyah
3	Okara
	Nankana Sahib
	Kasur
4	Multan
5	Gujranwala
	Sheikhupura
6	Bahawalpur
	RahimyarKhan

PHASE-III	
Lot	District (12)
1	Mianwali
	Khushab
	Bhakkar
2	Faisalabad
	Chiniot
3	Khanewal
	Vehari
4	DG Khan
	Rajanpur
5	Pakpattan
	Bahawalnagar
	Sahiwal

Development of Software in Urdu Language:

The software comprising both the service centre and data entry modules has been developed and deployed. It, however, requires improvements and introduction of additional functionalities owing to the diverse and varied nature of land records. The additional features are continuously being added in view of the new experiences in different areas. A new centralized software is being prepared by the project catering all the emergent needs and diversification of the land records. This robust software with a centralized database will be available for the field by June 2017.

Scanning and Data Entry:

The scanning and data entry of the revenue record of all 36 districts has been 100% completed. PMU has preferred the approach of phased addition of estates to the ambit of LRMIS so as to test the accuracy of record, note the connectivity problems, provide for simultaneous operation of manual and computerized systems and give time allowance to the public to adapt to the changed system.

Since the automation is taking place for a system that is already in operations, the project needs to translate data kept on manual registers and loose sheets to digital records saved in the database. To accomplish this five private vendors have been hired who are charged with the responsibility of scanning the manual registers available in District Record Room, Tehsil Record Room and Patwari Basta. The scanned record is subsequently entered in the digital database including any transactions that have taken place in the base record since its creation. The components of record being catered by the digitization process are listed below for reference:

- a. Shajrah-e-Nasab
- b. Register Haqdarar-e-Zamin
- c. Register Gardawari
- d. Register Tagayarat-e-Kasht
- e. Register Intiqaalat
- f. Wajib-UI-Arz
- g. Field Book
- h. Naqsha Haqooq Chahaat

Following components are not included in the digitization processes since their impact on the rights of the individuals is very limited and has not significance as far as delivery of service to general public concerned:

- a. Indexes
- b. Roznamcha Partaal Roznamcha Waqaati
- c. Roznamcha Hidayati
- d. Roznamcha Karguzari
- e. Roznamcha Partaal
- f. Village Book

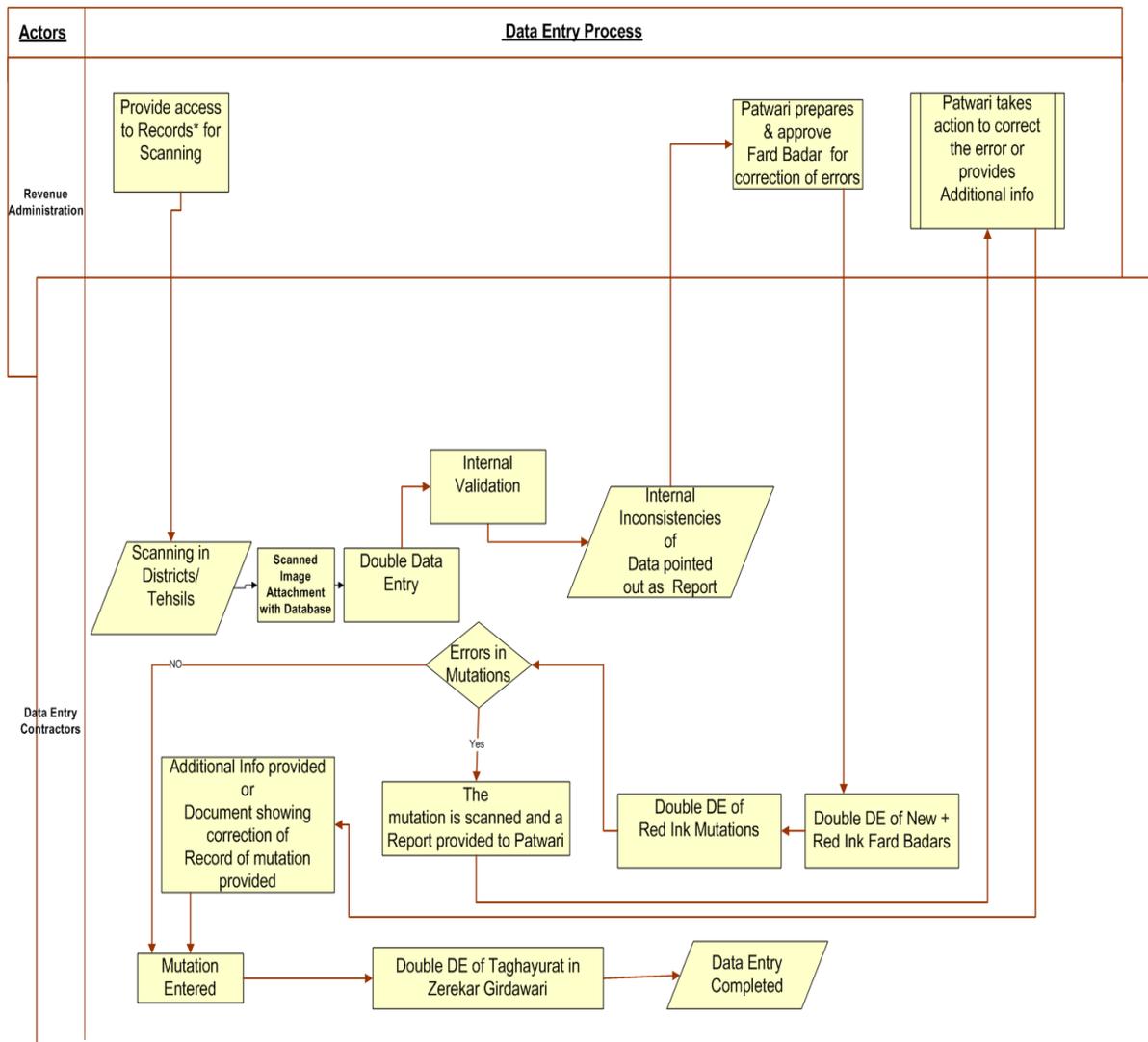
Data Entry Process:

1. District Revenue Administration was asked to ensure that *part sarkar* of all Registers Haqdarar Zameen *Zer e Kar* and Field Books (including supplementary Field Books) is available in the District Record Room and *part sarkar* Mutations, Fard Badar and Musavi are available in the Tehsil Record Room. They were required to direct the

Revenue Officers to ensure that part sarkar of all approved or rejected mutations upto a given date are deposited in the Tehsil Record Room. District Revenue Administration also required to get the Girdawari *Zer e Kar* and Taghayurat Registers for all revenue estates in the district deposited in the respective District Record rooms for the purpose of scanning.

2. Data entry contractor has set up scanning facilities at the Tehsil Revenue Record Rooms and District Revenue Record Rooms. Schedule for this purpose issued to the District Revenue Administrations well in time.
3. Using the scanned images of the record the data entry vendor entered the record contained in the Register Haqdaran Zamin, Mutation, Field Book, Fard Badar, Taghayurat and Girdawari in the digital data base using the software already developed. All the scanned images were attached to the entered data for future referencing.
4. The software has the capacity to enter data on “as-is” basis. The record in the base register (Register Haqdaran Zamin) entered in the data base without any attempt by the data entry contractor, at correction of errors.
5. The software also has the capacity to point out logical errors in the data (names in the Khewat ownership column and Shajra Nasab may not match, Shares may not add up to 1 in a khewat, Meezan Khatuni and Meezan khewat may not match the total area of khasras, area of owners may not match their shares).
6. A list of errors as mentioned above along with the printouts of computerized Register Haqdaran-e-Zameen was provided to the concerned Revenue Officers. Corrections were made through the prescribed process and reports in the form of Fard Badar were provided to the Data Entry Vendor within a given time (not more than fifteen days). Similarly a list of all the mutations that cannot be entered due to any problem in the mutation were also be provided to the Revenue Officers for corrections in accordance with the procedure within a given time (not more than fifteen days).
7. The corrections provided by the Revenue Officers were entered and the scanned images of the Fard Badars & reports/orders were attached to such corrections.
8. After the entry of mutations, printouts of Register Haqdaran-e-Zameen in which these mutations would have been incorporated, were generated. These printouts were sent to the District Administration for verification. Data Entry of the corrections pointed out by Revenue Administration on the printouts was done.
9. The Quality Assurance Consultant was assigned the responsibility of ensuring that

- a. Data entry vendor has put in place and is using appropriate quality assurance systems.
 - b. Any bugs reported by the data entry vendor and any change requirements are properly documented and properly incorporated in the software by the software consultant.
10. The entered record was printed out at the conclusion of the data entry process and fresh Registers Haqdaran Zamin, incorporating all the mutations and Fard Badars was handed over to the Revenue Officers for validation.
11. A Fard of each Khewat was also printed at the conclusion of the data entry process and provided to the right holders so that they can point out any errors for correction through the fard badar process. Requests for such Fard Badars were received at the Service Centres and corrections were made in two ways:
 - a. If it is a data entry error the Service Centre Official compared the record with the scanned image of the original record and forwarded the request directly to the Revenue Officer for approval of correction.
 - b. If it is an error in the record provided by the patwaris the complaint was provided to the Patwari who was responsible for providing his report along with a Fard Badar (or a *Sehat* Mutation) within a given time and submit it at the Service Centre after approval of the Revenue Officer (or collector in case of a *Sehat* Mutation).
12. After the initial period of correction of records as mentioned at points 10 and 11 the Patwaris were prohibited from issuing such fards.



*1. Register Haqdarān Zameen Zerekar (District Copy)

2. Register Dakhil Kharij (part Sarkar of all Red ink Mutations in RHZ Zerekar)

3. Fard Badar register (Part Sarkar of all Red ink Fard Badars in RHZ Zerekar)

4. Field Book & supplementary Field Book (Tatima Shajra)

5. Girdawari Register Zerekar

6. Register Taghayurat (including all the Taghayurat record in Girdawari Zerekar)

IT Infrastructure & Human Resource:

The procurement of necessary IT infrastructure is undertaken by the project to allow the service center run its operations smoothly. The equipment procured includes the processing machines, the application/data hosting server machines, the printing devices and scanners. Data centre for housing the data of the entire Punjab has been established at Arfa Kareem Software Technology Park Lahore owned by Government of the Punjab. Requisite computing equipment like computer systems, servers, thumb devices, cameras, UPS have been procured for 143 service centers. LAN & WAN activities completed in all 143 service centers. The project has also created a new cadre for service delivery and has hired more than 1,200 qualified individuals. These include:

- a. Service Center Officials – Responsible for manning of service delivery counters and perform basic entry/retrieval operations on the database.
- b. Service Center Incharge – Acts as a supervisor to Service Center Officials, is responsible for smooth running of operations and provides technical support.
- c. Assistant Director Land Records – Entrusted with the powers of Assistant Collector Grade I, these officers are responsible for recording of statements of parties involved in a mutation and attestation of the mutations. Any changes that take place in the digital data, has to be formally endorsed by these officer through biometric signatures.

Since data is scattered all geographically dispersed location it is important that safety of the data is ensured by all means necessary. Furthermore, a duplicate copy of the data is required to be created in case of a disaster that may render the existing devices located at the center, unusable. To overcome this challenge, all Tehsil centers are connected through a private data network to a central repository. The changes in the data are copied to this repository at the end of the day so that system has fall back option in case of a disaster.

Monitoring Mechanism:

The project also monitors the quality of services being rendered by the new system to ensure that highest standards of customer satisfaction are maintained. This is accomplished by use of multiple techniques such as feedback form, surprise visits and customer reach-out calls. In addition to these, a call center has been set up for the customers to lodge their complaints and enquire about services. The number of call center is prominently displayed at all the centers and is accessible around the clock. IP cameras have been installed in the service delivery area of all 143 Arazi Record Centers and monitoring of service delivery is being carried out from the monitoring control room established at the headquarters. An integrated dashboard has

also been deployed to check the system efficiency, staff efficiency and sending automated alerts in case of any deviation from the SOPs. A toll free telephone line has also been deployed at each ARC which is connected with the call center.

Quality Assurance and Monitoring Consultant (third party) has been deployed to ensure smooth operations and close monitoring of activities related to land records computerization and efficiency of service delivery. Response so far is quiet encouraging with customer satisfaction level at approximately **98%** against the anticipated 95%. Call Centre with Universal Access Number (U.A.N. # **042-111-222-277**) has also been established to provide guidance and for prompt redressal of the complaints / feedback of valued customers.

Dissemination and Public Outreach:

LRMIS understand that importance of reaching out to customers and as the operationalization of village records takes place all-out effort is made to make public aware of the changes that have taken place in the system and propagate facilities being extended by the project. This effort is augmented by holding community meetings at village level, distribution of free fards and announcements through local media. The list given below provides a generic view of the services being extended by the project after operationalization of records of a village:

- a. Copies of Record of Rights i.e. Fard
- b. Recording of Mutations
- c. Instant Updating of Records
- d. Issuance of Agriculture Passbook

PMU implemented an extensive information dissemination and stakeholder outreach program through innovative tools, in order to educate potential customers about the purpose, progress, processes, and benefits of the Project including above the line and below the line activities.

- These include campaigns of television commercials, campaigns through print media; press briefing in which journalists participated from local, regional and national newspapers; and below the line activities.
- A number of newspapers published independent articles and special supplement editions on the project with interview of the management.
- Below the line activities executed through non-conventional and innovative tools such as street theatre in district headquarters along with tricycles march with branded tricycles for the publicity of play and dissemination of LRMIS messages; branding of intercity busses and vehicles of Lahore.
- CCTV advertising in long route buses and passenger terminals of leading national transport companies having highest number of busses in their fleet that commute all over Pakistan.

- Street Theater performed
- Misali News letter has been prepared and distributed.
- Workshops held for the revenue functionaries to help the revenue functionaries in understanding the digitized system and how they have to correct the RHZ record.
- TNA workshops for the district Government officers / officials held in Lahore, Multan & Rawalpindi.
- Awareness & dissemination workshops held which played a significant role in awareness of the project among the land owners and as well as the general public.
- Free fard distribution and community meetings are being held continuously in each tehsil of Punjab. So far the response of land owners on the data provided on fards is highly satisfactory as 98% entries found correct.

Legal Amendments:

The necessary legal changes have been made in the laws governing the revenue record in the province; following laws/rules have been amended

- Punjab Land Revenue Act, 1967
- Punjab Land Revenue Rules, 1968
- Land Revenue Manual

Comparison with Manual System

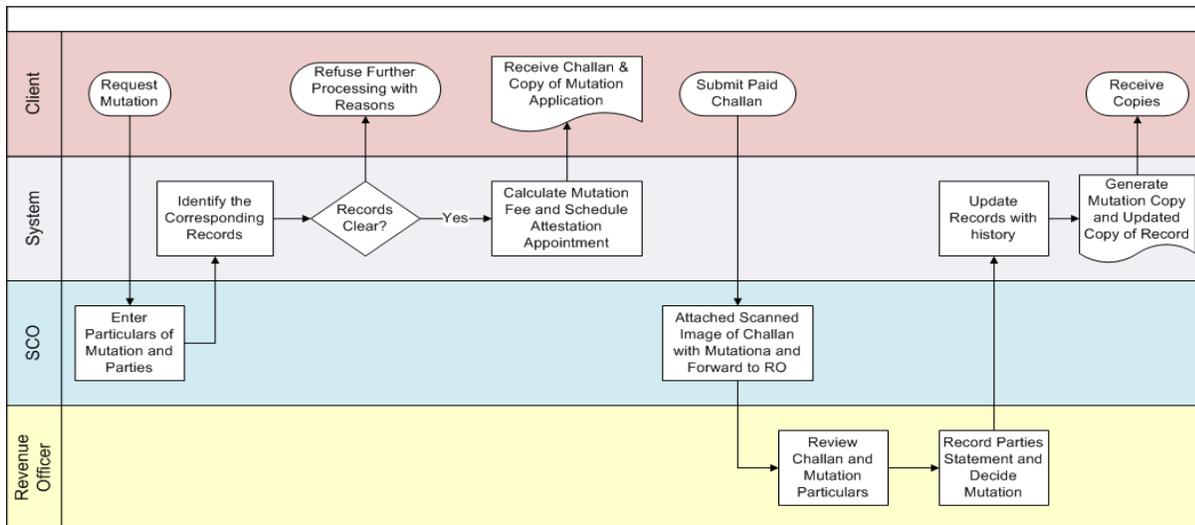
Focusing on the ills of manual system, the digital system has reduced the discretion and human intervention to a minimum. Majority of the steps are executed by the automated system mechanically. Moreover, since all calculations are done by the automated system the time required to execute the relevant processes has been reduced significantly. A comparison of time required to get a copy of record rights (i.e. Fard) and recording of mutation in both manual and automated system is given below:

Activity	Time Taken	
	Manual System	Automated System
Fard Issuance	Not Defined	30 Minutes
Mutation Recording	Not Defined	50 Minutes

The process flow charts given below provide detailed comparison between the two systems:

Issuance of Fard

Manual System



144 Arazi Record Centres have been established in all tehsils of Punjab under this PMU for attestation of mutations and issuance of fard. World Bank has financed the Project roll out in 36 Districts of Punjab till Dec 2016. The PMU interacts directly with BOR, the PITB, the C&W Department, the Steering and Operational Committees and the District Governments for the Project implementation. It is responsible for operational control of project implementation, including management of all aspects of the project implementation plan. The PMU has a financial management unit with responsibility for accounting, disbursements, the operations of the Special Account, and the preparation of the project financial management reports.

The PMU has a procurement and Civil Works unit which is responsible for drafting bidding documents, overseeing the procurement processes and monitoring the execution of Civil Works under the Project. Civil Works form a major component of the project under which service centres are being constructed throughout the province so this procurement and civil works unit has been supplemented with additional resources. The PMU has also established a stakeholder outreach unit, which looks after the dissemination to the internal and the external stakeholders, public awareness and impact assessment through feedback analysis.

The PMU has a Provincial Information & Communication Technology (ICT) Team, which is an integral component of the PMU during the project. There is also a software team for coordinating with the software vendor to resolve issues arise during operation of software at service centres. The HR department of PMU is responsible for recruitment, selection, staffing, training, employee grievances, career planning, employee relationship, employee's performance evaluation, compensation and benefits.

Accurate and complete information of people's right, removing the maximum number of record inconsistencies and other evils which have crept into the land record system over the last many decades. Building up a reliable and complete database is cumbersome and time taking process.

Services of Issuance of Fard & attestation of mutation shall be offered at the service centres in each tehsil. The fard issued and mutation attested will contain the photographs and thumb impressions of the applicants. A sample fard issued and mutation attested is attached which is in sharp contrast to manual fard and mutations.

The computerized land records have been posted at the web, so that round the clock anyone can access the land record at the PMU web portal i.e <http://punjab-zameen.gov.pk>

An efficient and transparent land records system, in line with internationally accepted standards that serves the needs of all levels of government sector, private section and individuals. Scanning of 31 million pages completed. Data entry of 55.7 million land owners / 25,208 mauzas completed. Protection against duty evasion by miscreants, which has caused colossal loss to the Government exchequer in the past.

Equality in service delivery to all beneficiaries discouraging VIP culture. Boosting economic activity by restoring the confidence of people in the authenticity and reliability of land records.

Government of Punjab has taken following initiatives to expedite the process of computerization:

- Progress Review Meeting chaired by the Chief Minister is held once every month.
- Progress Review Meeting by the Chief Secretary, Punjab on fortnightly basis.
- Commissioners have been directed to review the progress of LRMIS on weekly basis and DCOs have to review the progress on daily basis.
- Project Steering Committee headed by Chief Secretary of the Punjab meets regularly to review status of project implementation and issue necessary directions to all concerned for expediting the process.
- LRMIS Project is also a permanent agenda item on the Commissioners Conference held every month under the chairmanship of Chief Secretary, Punjab.
- A special Committee has been constituted on the directions of the Chief Minister under the chairmanship of Minister Revenue and Senior Member Board of Revenue, to expedite the record verification and correction activities.
- A committee of highly respected and well reputed, retired officers has also been formed to provide guidelines and advice on smooth resolution of bottlenecks/issues being faced in the computerization of land records.

The project was supported by the World Bank to meet its funding requirements for development expense as well as operational expense for the first one and a half year of each service center. In addition to financial assistance, World Bank also extended its Technical and Implementation support through biannual visits of its experts. During these visits, the operations of the project were reviewed in detail along with any issues

being faced by the project. The team of the Bank helped project in formulating appropriate strategies and learn from the experiences of other countries to make right choices in its execution. Deviations from project plan were particularly paid attention to during the regular progress review meetings, portfolio meetings and financial audits. The bank has also supported the project in attracting formulating its procurement procedures and providing guidance in preparation of Terms of Reference to hire private vendors.

Conclusions

The automation of land records system in Punjab has come a long way in accomplishing its basic objectives. While it was never intended to replace the existing system completely it has brought in major improvement to the service delivery to general public. More so, it has helped bridge some of the gap that has been created between the service delivery structure and the expectations of the public due to technological advancements. The new system has empowered the people by providing them easy access to land records. Introduction of new measures will help socially disadvantaged groups particularly women to better safe guard their interests and protect their rights. Resultantly, a decrease in litigation will be realized.