Report Number : ICRR0020826

1. Project Data

Project ID	Project Name	
P090501	PK:Land Records Mgmt & Information Syst.	
Country	**Practice Area(Lead)**	**Additional Financing**
Pakistan	Social, Urban, Rural and Resilience Global Practice	P131266,P131266

L/C/TF Number(s)	Closing Date (Original)	Total Project Cost (USD)
IDA-42580,IDA-51510	31-Mar-2012	51,260,000.00
Bank Approval Date	**Closing Date (Actual)**	
25-Jan-2007	31-Dec-2016	

	IBRD/IDA (USD)	Grants (USD)
Original Commitment	45,650,000.00	0.00
Revised Commitment	113,472,412.35	0.00
Actual	111,267,767.72	0.00

Prepared by	Reviewed by	ICR Review Coordinator	Group
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2. Project Objectives and Components

a. Objectives

The objective of the Project was to improve land record service delivery in Punjab. (Financing Agreement, Page 4, Schedule 1).

The Project Appraisal Document (PAD) provides a more detailed statement of the project development objective (PDO) that is still consistent with the Financing Agreement: "To significantly improve the effectiveness of the land records system with respect to transparency, cost effectiveness, and user satisfaction with service delivery, contributing to long lasting tenure security" (PAD Annex 3 page 30).

This Review assesses the project's achievements against the PDO statement in the Financing Agreement,

taking into account the performance indicators specified in the PAD's PDO, namely, transparency, cost effectiveness, user satisfaction and tenure security.

b. Were the project objectives/key associated outcome targets revised during implementation?

No

c. Will a split evaluation be undertaken?

No

d. Components

There were four components under the project:

Component 1: Business Process Improvement and Institutional Capacity Enhancement

(Appraisal: US$1.498 million, AF US$0, Total appraised: US$1.498 million, Actual: US$0.6 million)

This component was to introduce business process changes and to strengthen the capacity of the involved entities responsible for land records management and service delivery. There were two sub-components:

Sub-component 1.1: Institutional Capacity Enhancement. This was to finance training of staff with a focus on the project rationale and better land records service delivery and an assessment of the BOR.

Sub-component 1.2: Business Process Improvement: This was to finance work on changes in business processes, legislative amendments to establish digital land records legally, and the exploration of the use of Public Private Partnerships (PPPs) with regard to land record management and service delivery.

Component 2: Development and Deployment of the Land Records Management and Information System (LRMIS)

(Appraisal: US$32.568 million, AF: US$57.2 million, Total appraised: US$89.77 million, Actual: US$83.5 million).

This component was to roll out the automated LRMIS in 18 districts (extended to 36 through the AF), was to be done through seven sub-components:

Sub-component 2.1: Software development and testing. This sub-component will tested the software operation, data entry procedures and costs, and connectivity options to a central data center.

Sub-component 2.2: Software deployment and further enhancement. This sub-component financed the costs of licensing, installation, training of staff, and software maintenance.

Sub-component 2.3: Data entry and validation. A comprehensive data cleansing and data entry process Was to be carried out in all participating under this sub-component.

Sub-component 2.4: Data centers and connectivity. The Data Centers sub-component financed the establishment of the planned data centers at kanungo and tehsil levels (different administrative levels), while the Network and Connectivity sub-component finance the costs of linking the system together.

Sub-Component 2.5: Establishment of service centers (Land Record Center, or ARCs) for the delivery of land record services. This subcomponent financed the renovation of premises, ICT and other office equipment, furniture, and other investment costs of the Service Centers to be established at the kanungo level.

Sub-Component 2.6: Web development. This financed the costs associated with web site operation and web site content development. Web access was provided by the Provincial Data Center.

Sub-component 2.7: Pilot for spatial data. Under this sub-component, existing maps maintained at the local

level by the patwari were scanned and digitized and integrated with the LRMIS software on a pilot basis. In the process, the database will be used to investigate the issues involved in moving to a parcel-based land records system.

Component 3: Service Delivery and Information Campaigns

(Appraisal: US$8.547 million, AF: US$12.8 million, Total appraised: US$21.35 million, Actual: US$16.5 million)

This was to finance the operation of the LRMIS and outreach to stakeholders and the general population. There were two Sub-Components:

Sub-component 3.1: Service delivery. This was to finance the ARC operation costs for the first 18 months.

Sub-component 3.2: Stakeholder consultation, public awareness and information. This was to finance education and information campaigns designed to raise awareness of beneficiaries on LRMIS and make land record related processes more transparent.

Component 4: Project Management, Monitoring and Evaluation

(Appraisal: US$5.271 million, AF: US$0, Total appraised: US$5.271 million, Actual: US$5.9 million)

This was to finance the Project Management Unit (PMU) and M&E activities. There were four sub-components:

Sub-component 4.1: Project Management Unit: This was to finance the establishment of the PMU.

Sub-component 4.2: Punjab Information Technology Board (PITB), which was to manage the implementation, delivery and employment of the software. (This sub-component was removed under the AF and responsibilities shifted to the PMU).

Sub-component 4.3: District Project Monitoring Groups. This was to finance a monitoring group of three people in each district. During project implementation, a private consultancy firm was hired to conduct M&E services instead of the establishment of District Project Monitoring Groups.

Sub-component 4.4: Project Evaluation and Impact Assessment was to finance user surveys.

e. Comments on Project Cost, Financing, Borrower Contribution, and Dates

Project cost

The project's estimated cost at appraisal was US$51.261 million (including estimated costs for Physical contingencies US$0.385 million and Price contingencies US$ 2.782 million in addition to the components costs). Another US$70 million was appraised under the Additional Financing, which was to expand the scope of the project from 18 to 36 districts and to cover for previously underestimated costs for software development and data entry (verification and registration). Since the AF was mostly to expand the scope of the project (more funds to do more of the same), a split rating will not be undertaken of this project.

Financing

The project was financed through two IDA credits (Specific Investment Loans (SILs), of US$44.85 million and US$70 million, i.e. US$ 114.85 million in total. The Borrower was to contribute US$6.415 million under the original project and US$ 5.6 million under the Additional Financing, i.e. US$12.015 million. There were no co-financiers.

Borrower contribution

The borrower's total appraised contribution was US$12.015 million in total, and the Actual Borrower

contribution was US$8,2 million.

Dates
The project was appraised on February 06, 2006, approved on January 25, 2007 and made effective only a month later, on March 28, 2007. In addition to the Additional Financing (approved on September 11, 2012), the project underwent 4 restructurings on the following dates: March 2, 2012, April 28, 2014, September 11, 2015 and on June 30, 2016. The Mid-Term Review was carried out on September 9, 2013. The original closing date was March 31, 2012 while the actual closing date was December 31, 2016, i.e., 4 years and nine months (57 months) extension in total. A detailed overview of the restructurings is presented in Table H of the ICR factsheets (unnumbered pages).

3. Relevance of Objectives & Design

a. Relevance of Objectives

At the time of this project's preparation, the issue of opacity and insecurity of land records in Pakistan and its repercussions had been extensively analyzed and documented in numerous studies by the Bank and other donors. The PDO was in line with a set of higher level objectives in the Bank's Country Assistance Strategies (CAS) for FY03-06 and FY06-09, which were closely aligned with Pakistan's Poverty Reduction Strategy (PRS) aimed at: (i) supporting high and broad-based economic growth focusing on the rural economy; (ii) improving governance and consolidating devolution; (iii) investing in human capital while focusing on the effective delivery of basic social services; and (iv) bringing the poor and vulnerable into the development mainstream by reducing inequalities. The CAS for FY03-06 emphasized rural growth, improving government effectiveness, strengthening institutional accountability and transparency, and reducing corruption, and the CAS for FY06-09 emphasized a comprehensive rural strategy for growth and poverty reduction.
At project closure, the PDO continued to be relevant to both National and Provincial authorities. It is well aligned with Pakistan's Vision 2025 in that it contributes to four of the eight pillars: (i) empowering women; (ii) inclusive growth; (iii) modernization of the public sector; and (iv) food security. Vision 2025 specifically highlights land governance as a key factor for an enabling environment for the private sector. The PDO was also well aligned with the economic growth and agricultural productivity aspects of the Provincial Punjab Growth Strategy for 2018. The strategy proposes a modern land record system to improve land markets and increase investments in commercial and residential construction.
The PDO was also well aligned with three of the pillars of the Bank's Country Partnership Strategy (CPS) FY15-19, which highlights the importance of: (i) private sector development facilitated through a strengthened business environment based on accessible land records; and (ii) the acceleration of improvements in public service; and (iii) reaching out to the under-served, neglected and poor. The importance of land governance, and therefore of land record management and related service delivery, remained a high priority, albeit with a shift of emphasis from rural to urban areas.

Rating

Substantial

b. Relevance of Design

Relevance of Design is rated Substantial as the activities and components of this project (business process improvement and institutional capacity enhancement; development and deployment of the LRMIS; and service delivery and information campaign) were necessary and sufficient to achieve the project's objective to improve land record service delivery in Punjab. Furthermore, the results framework was relevant and adequate with a clear statement of objectives that was directly linked to intermediate and final outcomes. The causal chain between funding and outcomes was clear and convincing. Exogenous factors and unintended effects were not identified at the design phase of this project.

Rating
Substantial

4. Achievement of Objectives (Efficacy)

Objective 1

Objective
Objective: to improve land record service delivery in Punjab.

Rationale
Outputs:
• *Improved and legally valid process in place.* Baseline: Changes to the law and process were needed. Target: necessary changes to take place. Achieved: Over 20 sections changed in the Punjab Land Revenue Act (1967) and the Punjab Land Revenue Rules (1968) to stop Patwaris issuing manual land records, to simplify procedures of issuance and transaction of land records and to establish a digital land record process. The official Punjab Land Record Manual was changed accordingly. **Target achieved.**
• *Business model in place at the district level.* Baseline: No business models. Target: Business models in place. Achieved: Business plans, including revenue streams, operating costs, and cost recovery models as well as operational procedure guidelines for ARCs in place in each Tehsil (below district level). **Target exceeded.**
• *LRMIS software functioning effectively.* Baseline: No LRMIS software in place. Target: LRMIS software functioning effectively. Achieved: LRMIS software functioning effectively in 144 Land Record Centers (ARCs) for fard issuance and transactions. Additionally, a new and improved centralized software version was developed and operational in two ARCs by February 2017 and is expected to function effectively in all ARCs by October 2017. This new centralized software was developed because the decentralized software posed challenges to upgrade the software simultaneously in all ARCs and provide adequate professional support due to the frequent changes and fixes in the software. **Target achieved.**
• *Number of districts included in the project:* Baseline: 0. Original target: 18. Revised target: 36. Achieved: 36. Each district has on average four ARCs (overall 144 operational ARCs), each covering on average some

350,000 landholders and some 236,000 parcels. Data from all 25,258 revenue estates (mauzas) were scanned and 91.5% of all revenue estates were operational at the time of project closure. **Target achieved.**
• *Percentage of land owners aware of the new records system after service centers open, including women.* Baseline: 0% (ARCs did not exist). Target: 80%, including 80% women. Achieved: 57%, including 45.6% women. These figures reflect the percentage of ARC clients who claim to have had knowledge of the ARC centers prior to visiting one. No survey was undertaken amongst land-owners who had not been to ARC centers. Thus, these figures do not reflect the percentage of all land owners who are aware of the ARC centers, which most likely would be even lower. **Target not achieved.**
• *Key project issues arising during implementation are identified and addressed.* Baseline: not in place. Target: procedures in place to capture and address key project issues arising during implementation. Achieved: M&E system were in place and key issues were addressed through the project's M&E Unit. Client feedback mechanisms, Steering Committee and a Project Special Steering Committee were all in place. **Target Achieved.**
Stakeholder feedback captured and incorporated into project implementation. Baseline: No. Target: Yes. Achieved: ARC client feedback system in place (through SMS, toll free line and feedback forms) in addition to feedback from internal and other stakeholders obtained through workshops. Client feedback influenced project implementation. **Target Achieved**.

Outcomes:

- *Reduced time needed for issuance of records of rights of land ownership (fards):* Baseline: 2 weeks. Target: 30 minutes. Achieved: 15 minutes as the average time spent at the counter of a Land Record Center (ARC), based on the End of Project Survey. **Target exceeded**
- *Average number of days to complete recording of purchase/sale of property in land administration system.* Baseline: 51 days. Target: 14 days. Achieved: 1 day. The average time to complete a transaction at an ARC counter is one day (165 minutes). The data is based on the End of Project Survey conducted with 2,304 ARC clients. **Target exceeded**
- *Percentage of clients satisfied with land records services at ARCs.* Baseline: ARCs did not exist, and there was widespread dissatisfaction with services provided by the patwaris (traditional land record service providers). Target: 95% of clients are satisfied with ARC services. Achieved: 97.85% satisfied clients, based on average feedback from 37,236 ARC clients from 2011-16. **Target exceeded.**
- *Automated service centers (ARCs) are operating effectively.* Baseline: No ARCs existed. Target: Automated service centers to be operating effectively. Achieved: 144 ARCs operating effectively. On average, 163,233 land records were issued and 51,341 transactions conducted per month on average in 2016. **Target achieved**
- *Stakeholder feedback captured and incorporated into project implementation.* Baseline: No. Target: Yes. Achieved: ARC client feedback system in place (through SMS, toll free line and feedback forms) in addition to feedback from internal and other stakeholders obtained through workshops. Client feedback influenced project implementation. **Target Achieved**.

Outcomes:
• *Reduced time needed for issuance of records of rights of land ownership (fards):* Baseline: 2 weeks.

Target: 30 minutes. Achieved: 15 minutes as the average time spent at the counter of a Land Record Center (ARC), based on the End of Project Survey. **Target exceeded.**
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• *Automated service centers (ARCs) are operating effectively.* Baseline: No ARCs existed. Target: Automated service centers to be operating effectively. Achieved: 144 ARCs operating effectively. On average, 163,233 land records were issued and 51,341 transactions conducted per month on average in 2016. **Target achieved.**

The data for the measured outputs and outcomes of this project clearly show that the objective "to improve land records service delivery in Punjab" was **significantly achieved**.
The PDO indicator on "long lasting tenure security" was measured only by a client survey asking about beneficiaries' expectations, and no hard data exists to measure achievement of this higher level objective. However, in the 2016 End of Project Survey, some 60% of respondents expect the new system to improve; 59% think that the new system will reduce land disputes; 55% think that the new system will increase tenure security of vulnerable groups and 81% think that women's tenure security will improve. Although this is not hard data, these beneficiaries perceptions may be seen as indications of increased tenure security.

Rating
Substantial

5. Efficiency

The project was estimated to yield large positive net benefits and economic rates of return.
According to the ICR (page 10, para 3.3.1), a cost-benefit analysis following the methodology of the AF was conducted after project closure for the full project to assess its economic viability over a long-term time horizon at the applicable social discount rate. Net Present Value (NPV) and Economic Internal Rate of Return (EIRR) were calculated by quantifying the primary economic benefits and comparing it with the capital and incremental operation and maintenance costs attributable to the project (at economic prices) to determine the net economic flows. In addition, a sensitivity analysis was carried out to determine the impact of significant changes in project costs and benefits. Among the expected project benefits are increase in land values, reduced transaction costs and revenue generation. Increased fees might be necessary to cover the operating costs of the system.
The project was estimated to have a positive NPV of PKR16.25 billion (equivalent of US$155 million at the exchange rate of the time of the ICR (June 2017), an EIRR of 66% and a benefit-to-cost ratio of 2.1. As pointed

out in the ICR, while the economic appraisal in the AF Project Paper was based on slightly different assumptions, the ICR appraisal compares favorably with the results in the AF appraisal, which were: NPV of PKR 13.8 billion (US$146 million at AF (2012) exchange rate) and an EIRR of 59%. The benefit-to-cost ratio (in present value terms) was estimated to be higher at the AF stage, at 3.79 due to the substantially lower estimated costs over the projects' lifetime (especially recurrent operating costs) and a shorter time horizon. The results of the sensitivity analysis show that in the worst-case scenario with 20% reduction in benefits and 20% increase in costs, the NPV would be PKR 6.93 billion (US$66 million), and an EIRR of 46% and a benefit-to-cost ratio of 46%.
Project management costs were US$5.9 million, which is considered adequate given both the long implementation period and the fact that all M&E costs were covered under this budget line.
There were implementation and procurement problems that caused delays, which in turn required closing date extensions that totaled 4 years. Prior to 2011, implementation faced delays that caused a low disbursement rate. The delays were related to the complexity of developing a custom software locally and the change in the technical evaluation process by the Government of Punjab (GoPb). Initially, the Borrower had limited internal capacity to supervise and evaluate the LRMIS software. Management gaps in the PMU also contributed to implementation delays. However, once the software development delays were resolved and part of the management changed, the construction of ARCs and the roll out of the LRMIS software started, resulting in increased disbursements in 2011 and 2012.
On balance, given that outputs and outcomes were mostly achieved or exceeded, and the highly positive results on measures of the project's economic worth, efficiency is rated substantial.

Efficiency Rating
Substantial

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal	✓	59.00	0 ☑Not Applicable
ICR Estimate	✓	66.00	0 ☑Not Applicable

* Refers to percent of total project cost for which ERR/FRR was calculated.

6. Outcome

The overall outcome of this project is satisfactory. Both Relevance of Objective and Relevance of Design were substantial. Efficacy was also substantial as data showed that the Project Development Objective had been substantially achieved. Efficiency was also substantial, as the sound methodology applied to calculate NPV and IERR showed that the project achieved high levels of value for money.

a. Outcome Rating
Satisfactory

7. Rationale for Risk to Development Outcome Rating

Technical Risk: The infrastructure is in place (the physical centers) and the software is functioning well and is continuously maintained and improved. Adequate measures are in place to back-up data. Technical risks are **low**.
Financial and Economic Risk: The operation of the ARC centers is adequately funded and the Government is currently looking into possibilities for raising service fees to increase revenue income and secure sustainability for the long term. Adequate measures are in place to prevent bribery and fraud: the approval structure in the centers are monitored in real time; several employees need to be involved in each transaction; and posters with information on the service fees are on the walls in the ARC centers for transparency and accountability. Financial and economic risks are **low**.
Institutional Risk: The PMU's activities have been transferred to the Punjab Land Record Authority (PLRA), which is adequately funded and staffed. ARC staff have raised concern about low salaries. The PLRA has recognized these issues and are considering possible solutions to be able to provide more competitive salaries. Provisions for digital land records as provided by the new ARCs are reflected in key laws. Institutional risks are **moderate**.
Social Risk: The new system is preferred by the vast majority of its users and resistance from Patwaris are low and expected to remain low due to incentives provided to them. Social risks are modest.

a. Risk to Development Outcome Rating
Modest

8. Assessment of Bank Performance

a. Quality-at-Entry
The Bank team designed a project of strategic relevance to the country context, commissioned relevant preparatory studies and incorporated lessons learned from similar projects in the region. Poverty and social development aspects were taken into account, although relevant gender issues could have been better reflected in the design. According to the ICR (page 23 para 5.1.1), stakeholder consultation processes were intensive and inclusive, although they could have included the Patwaris more actively. The implementation and M&E arrangements were sound. The risk assessment was adequate and realistic and appropriate mitigation measures were put in place.
Project objectives and design responded to the real needs of Punjab Province but faced challenges related to schedule, scope and scale, which were caused by an under-estimation of the total number of land

records to be entered into the Information System. This under-estimation of the total number of land records, in addition to the underestimation of entry costs, caused an increase in the required financing. The AF estimated costs more realistically and covered for the additionally required funds as well as funds to cover for a doubling of the geographic are to be covered (expansion from 18 to 36 districts). However, the time required to achieve the PDO remained under-estimated; resulting in four restructurings in addition to the AF.

Quality-at-Entry Rating
Moderately Satisfactory

b. Quality of supervision
20 supervision missions were conducted during the 10 years of the project's operation. The Bank team provided adequate supervision inputs, especially with regard to the ICT TA provided. The TTL at preparation led the project from 2006-2015, providing an unusual and valuable degree of continuity to the project. Initial delays and ongoing issues of project implementation were handled by the Bank team in a candid and proactive manner, according to the ICR (page 23, para 5.1.2). Furthermore, the Bank team showed flexibility in extending the closing date and providing Additional Financing, which enabled the Client to not only complete the project as originally planned but to successfully double the physical area covered to incorporate the whole Province. The Bank also provided crucial technical advice with regard to the development of the decentralized and centralized software versions, which was greatly appreciated by the PMU. The Bank also financed relevant unforeseen initiatives, such as a study tour for the PMU to Lithuania in 2016.
However, environmental safeguards issues were not properly followed up during supervision and were not sufficiently reflected in mission documents, although an environmental safeguards review was conducted at the end of the project. The Bank team also failed to monitor progress on achievements of indicators on a regular basis, and despite several restructurings, these issues were not adequately and satisfactorily addressed during implementation.

Quality of Supervision Rating
Moderately Satisfactory

Overall Bank Performance Rating
Moderately Satisfactory

9. Assessment of Borrower Performance

a. Government Performance
The Provincial Government showed dedication and ownership throughout the life of the project, from preparation to closure, which was crucial for the successful implementation of the project. According to the ICR (page 24 para 5.2.1), the project became part of the permanent agenda of the Punjab District Coordination Officer Conference as well as of the Board of Revenue (BOR) Full Board Meeting. The Chief Minister of the Province of Punjab supported the project throughout its lifetime and provided political

support at the highest level in the Province. To acknowledge the new system and digital land records legally, the Provincial Government ensured that essential legal changes were made in all related land laws. The Government also provided co-funding in the amount of US$8.2 million, which was 73 percent of the estimated Borrower contribution. According to the Task Team Leader (at the meeting with IEG on June 29, 2017), the Government's commitment to this project was a key element for its success.

Government Performance Rating
Satisfactory

b. Implementing Agency Performance
The Board of Revenue seconded high ranking officials to the PMU to ensure successful implementation, and made a separate PMU building available to the project staff. The PMU was adequately staffed with highly qualified professionals. The organizational set-up of the PMU was adequate with clear management lines and departments to cover the most important aspects of the project's operations. Monitoring of safeguards was not adequately reflected in the organizational design of the PMU, however, resulting in insufficient monitoring of safeguards during implementation. Consultations with stakeholders and beneficiaries were carried out throughout project execution and an adequate M&E system was set up to monitor achievements against indicators including the monitoring of beneficiaries' views, which were utilized during implementation.
Initial delays in project implementation were partly related to inefficient project management. This was resolved by seconding new staff to the PMU. There were no major issues with regard to procurement, despite initially delayed contracting of data entry and civil works. Otherwise, procurement processing was in line with the World Bank's policies. Complaints about procurement issues were communicated to the Bank and addressed by INT. Financial management procedures were satisfactory and the transition of project responsibilities from the PMU to the PLRA was managed professionally.

Implementing Agency Performance Rating
Moderately Satisfactory

Overall Borrower Performance Rating
Moderately Satisfactory

10. M&E Design, Implementation, & Utilization

a. M&E Design
Overall, the M&E Design was sound and designed to collect, analyze and provide decision-makers with information about the project's progress in achieving the PDO. The PDO was clearly specified and the indicators did reflect the objective to a large extent. Most of the indicators were measurable in terms of numbers, timing and location. For the most part, the proposed data collection methods and analysis were appropriate for the purpose. The M&E design was well-embedded institutionally and had sufficient stakeholder ownership.

It was stated in the Financing Agreement that "Project success will be assessed by client satisfaction with the new system, in terms of access to records and increased level of tenure security, and by measures of improvement in services (reduced time for issuance of fards and completing mutations). Although the Project aims at benefiting the entire community of landowners, a specific target will be the underprivileged and marginal groups that are penalized by the existing land recording system. Specific measures for participation by women and subsistence farmers will therefore be monitored" (FA, page 4, Schedule 1). However, the Results Framework had very few gender-relevant or gender-disaggregated indicators (only one, stating that the project targeted 80% female landowners to be aware of the ARC centers), which was a missed opportunity to demonstrate achievements related to gender issues.

b. M&E Implementation

While the PAD called for a series of "Social Assessments" to be undertaken for baseline, midterm review (MTR), and end-of-project data to be collected, no separate study was done at MTR. A baseline survey of the Board of Revenue services was carried out in 2009 but the collected data was not fully aligned with the indicators in the project's Results Framework and women were not interviewed. A detailed "End-of Project Survey" was carried out in 2016 but comparability with the baseline was limited given the shortcomings of the baseline study.

The PMU's internal M&E system had been designed to work through District Project Monitoring Groups in each project district. However, during implementation, it became clear that this was inefficient, and an internal M&E department within the PMU was established and a consultancy company was hired starting in 2012 for monitoring and quality assurance. The consultancy company implemented the M&E framework by developing an online monitoring portal and establishing a call center. The monitoring team included 57 field consultants who visited the ARCs up to twice a week in addition to making some surprise visits. The consultancy company provided a series of reports and ensured the continuous monitoring of project progress. Since these services were outsourced, no M&E capacity was built within the PMU, resulting in difficulties in reporting on the Results Framework.

Most of the PAD-enumerated indicators were adequately measured. Despite the relatively well designed indicators, some of them were not measured as intended by design, such as the percentage of landowners who were aware of the ARC centers. The survey was done only amongst landowners who had already visited ARC centers, asking them whether they had been aware of the ARC centers prior to the visit. This did not give any indication as to what percentage of *all* land owners (including those who had not already visited an ARC center) were aware of the ARC centers.

Data reports generated by the new software were available and provided important insights into the performance of the ARCs, such as the number of entered fards and transfers, and the time required. Client feedback mechanisms, including a call center, also provided important insights from 2012 onwards, but key data on tenure security and awareness of the new system were not captured during project implementation and were only reported on in the "End of Project Survey" (2016).

c. M&E Utilization

Collected M&E data was used during project implementation to initiate appropriate adjustments. Call Center numbers show that 85 percent called for information, 14 percent for complaints and the rest to provide

suggestions. Based on the calls and other client surveys, procedures to change the name on a land record were reduced from four to two, separate counters and waiting areas for women were created, and measures were taken against at least ten staff members who were accused of corruption. The project's monitoring of customer satisfaction also led to the development of a specialized training for ARC staff to enhance the customer experience. Collected data was also used for the end-evaluation. Data that was not properly collected, such as data on land tenure security and public awareness, could have helped the PMU to improve respective activities.

M&E Quality Rating

Substantial

11. Other Issues

a. Safeguards

The project was identified as a Category C project as it was expected to have minimal to no adverse environmental impacts. Under the Additional Financing, the project changed Categories from C to B and triggered OP/BP 4.01 Environmental Safeguards due to the anticipated construction and renovation of ARC buildings. An Environmental Management Plan (EMP) was prepared in May 2012. However, environmental monitoring of 79 newly built ARCs did not go ahead as planned. Despite a refresher workshop conducted by the Bank in 2013, safeguards supervision remained insufficient afterwards and was also not documented in mission documents. 53 ARCs were renovated under the project without the implementation of the mandatory EMP, as there was no budget provision for its implementation. According to the ICR (page 12) the PMU had assumed that rehabilitation and renovation work carried out by respective districts and local governments did not require EMP implementation, and that the environmental impacts of the work were minor.
The Bank team became aware of these shortcomings in 2016 and conducted a post-review of the 79 newly constructed ARCS and concluded that most construction activities had been in line with local laws and had not had any negative environmental impacts. In August 2016, an Environmental Coordinator was assigned to oversee EMP implementation for the planned renovation activities of the PLRA office building and the eight planned additional ARC buildings.
The project was thus not implemented in full compliance with the requirements under OP/BP 4.01, but post-assessments showed no significant adverse environmental impact.

b. Fiduciary Compliance

Financial Management
The Bank conducted 17 bi-annual Financial Management (FM) supervision missions. The main identified FM issues were delays in staffing the FM department and late replies to FM observations raised in project audits. Nine annual audits were conducted by the Office of the Director General Audit Punjab in Lahore and the Auditor General of Pakistan in Islamabad. At the time of project closure, 25 audit observations were still outstanding, but they were all settled by April 2017. The annual audits were in general acceptable to the

Bank and unmodified audits were received that provided reasonable assurance that FM was conducted as outlined in the Financing Agreements.
The Bank provided advice on FM during supervision missions and conducted several training sessions contributing to the PMU's high FM capacity level. At closure, the newly established PLRA was in the process of developing financial management rules as per the revised structure.

Procurement
Procurement activities under the project were satisfactory overall. Procurement performance was rated satisfactory at closing and for most of the project period. Key issues identified through supervision missions were procurement delays associated with software, which caused a chain of delays in other planned procurement events. However, once these delays were resolved, procurement processes were conducted satisfactorily, according to the ICR (page 13, para 2.4.6). A Procurement Committee was established to advertise calls for bids, and to open and evaluate tenders. During project launching and implementation, procurement capacity was adequate, but in the project's last two years, the responsibility was handled by the procurement officer as the PMU's Procurement Specialist position was vacant, for which no suitable candidate was identified despite advertising the vacancy five times.
Several complaints were received regarding procurement, but according to the ICR (page 13, para 2.4.8), they were satisfactorily resolved through the PMU's complaints redress committee. Three complaints included allegations of corruption, all which were forwarded to the Integrity Vice-Presidency, but due to lack of evidence and anonymity of the letters, the INT recommended that no further action be taken.

c. Unintended impacts (Positive or Negative)

The ICR lists the following unintended outcomes that were not foreseen at appraisal (page 21, para 3.5.8)

- The provision of agriculture e-loan passbooks in ARCs was enabled. E-loan passbooks contain land-related information and are a prerequisite to obtain a loan from a bank, using land as collateral. Previously, e-loan passbooks were only issued by post offices. The addition of this service in the ARCs has the potential to increase loan disbursements to farmers.
- Punjab Information Technology Board (PITB) is responsible for the e-facilitation centers, which function as one-stop-shops for services, such as obtaining driving licenses, passport issuance and other. In two of the e-facilitation centers a counter for the issuance of fards was established during the project implementation time frame. The current objective of the PLRA is to establish nine fard issuance counters by June 2017. This initiative was not foreseen in the original project design. The creation of the Punjab Land Records Authority (PLRA) is contributing to the sustainability of the project's activities. The Government of Punjab passed a law to legally establish the new PLRA and transferred the project activities to the PLRA, which is adequately-funded and staffed. The key staff from the PMU were transferred to the new PLRA, ensuring that institutional memory is preserved and the PMU's activities continue in a sustainable way.
- The LRMIS has become a model in Pakistan. The Supreme Court has directed all Provinces to complete the digitization of land records by citing LRMIS as a positive example. LRMIS has also become an international model. Based on the interest of other provinces in Pakistan and other

countries, the Bank organized a conference in June 2017 in Thailand to enable representatives from Pakistan (Punjab and Sindh province), Laos, Afghanistan, Sri Lanka, Ghana, Sierra Leone, and the Philippines to learn from the project's experiences.

d. Other

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12. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Satisfactory	Satisfactory	---
Risk to Development Outcome	Negligible	Modest	---
Bank Performance	Moderately Satisfactory	Moderately Satisfactory	---
Borrower Performance	Moderately Satisfactory	Moderately Satisfactory	---
Quality of ICR		Substantial	---

Note
When insufficient information is provided by the Bank for IEG to arrive at a clear rating, IEG will downgrade the relevant ratings as warranted beginning July 1, 2006.
The "Reason for Disagreement/Comments" column could cross-reference other sections of the ICR Review, as appropriate.

13. Lessons

The lessons are taken from the ICR with some modification of language:

- **Political support to major transformational change depends on evidence-based advice provided to the Government (including adequate strategies, achievement of results and constant communication flows).** Several assessments were conducted by the PMU to develop its strategy, including the required social and technical processes for reforming the manual land records management system and establishing a title-based system in the long term. This enabled the PMU to provide evidence-based advice to the Government, resulting in political support.
- **Implementation in a limited geographical area provides important lessons and reduces transaction costs for country-wide replication**. The project's implementation in only one province can function as a model for other projects. The lessons from the pilot project on managerial, technological and social aspects may build the basis for a successful replication of the system in other provinces or regions. The chosen approach allowed the Government to learn lessons in one province and replicate the system with fewer

transaction costs in other provinces.

- **The technical and social complexities inherent in land administration reform require a programmatic approach and design that is scalable**. Land administration reforms require a relatively long planning period including pilots, strong local capacities, a comparatively longer implementation period and significant funding. The estimation and triangulation of the number of land records of a manually maintained system is difficult because reliable data in such situations is often not available and is to be established for the first time by the activities of such projects. When these factors are considered, the objectives for land administration reforms can be achieved sustainably.
- **Centralized software systems adapted to local capacities and needs might be more appropriate than decentralized software systems.** Technical innovation and candid analysis is fundamental to successfully develop a customized software adapted to local capacities and needs. A decentralized software approach may result in several issues, such as time-consuming manual data upload to the central server, fewer quality control options at the central level, unavailability of specialized staff in remote locations and difficulties in implementing standardized policies and security measures. A centralized software system resolves these issues.
- **Successful participation and communication strategies are essential inputs to major cultural and behavioral transformation.** Social Assessments to map out potential opposition to the development of a digital land records management system is crucial. The sources of opposition may be the holders of traditional land record offices, land owners, public servants and civil society in general. A useful mitigating measure may be designing a detailed communication and participation strategy to convey and educate different audiences about the objectives of the project.

14. Assessment Recommended?

No

15. Comments on Quality of ICR

The ICR Is very well written, succinct, clear and contains relevant and sufficient information. The ICR is results-oriented and presents solid evidence and sound analysis of the project's achievements. The lessons presented are clearly based on the evidence and analysis presented. The ICR is internally consistent and in compliance with OPCS guidelines.

a. Quality of ICR Rating

Substantial