

Land Titling Facilitation, Redocumentation Efficiency, and Service Completion Support in Agrarian Reform Implementation

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ABSTRACT

This study investigated how land titling facilitation and redocumentation efficiency shaped service completion support in agrarian reform implementation. A distribution-sensitive explanatory survey design was used among Department of Agrarian Reform personnel directly engaged in land documentation, title processing, records verification, and beneficiary assistance. Participants were selected through criterion-stratified systematic sampling. Data were gathered using a validated researcher-developed questionnaire with strong internal consistency coefficients ranging from .89 to .92. Descriptive statistics, quantile regression, and dominance analysis were employed. Results showed favorable assessments of land titling facilitation, redocumentation efficiency, and service

completion support, with overall means of 3.76, 3.42, and 3.56, respectively. Procedural guidance, record accuracy, and beneficiary assistance emerged as notable strengths. However, transaction monitoring, document retrieval, processing continuity, and the resolution of administrative barriers remained areas of concern. Quantile regression revealed that both explanatory variables significantly predicted service completion support across the lower, median, and upper outcome levels. Redocumentation efficiency exerted the strongest influence under weaker service conditions, while land titling facilitation became more influential at higher levels of service completion. Dominance analysis identified redocumentation efficiency as the stronger overall predictor, accounting for 54.35 percent of the explained variation. The findings supported the establishment of integrated case tracking, standardized deficiency correction procedures, clearer processing responsibilities, regular records audits, and stronger interoffice coordination to improve the completion of land titling and related agrarian reform services.

Keywords: *agrarian reform implementation, land titling facilitation, quantile regression, redocumentation efficiency, service completion support, tenure security*

INTRODUCTION

Secure rights over agricultural land influence how farmers manage their farms, make long-term investments, protect household livelihoods, and participate in rural economic activities. A land title can provide formal recognition of ownership, but its value depends on whether the beneficiary can exercise the rights attached to it without unresolved claims, unclear boundaries, or incomplete administrative records. Evidence from a systematic review showed that stronger tenure security can support agricultural investment, productivity, income, and social welfare, although these gains remain dependent on the quality of implementation and the institutional environment surrounding land administration (Higgins et al., 2018).

The Comprehensive Agrarian Reform Program has produced substantial accomplishments in land distribution and beneficiary coverage in the Philippines. Nevertheless, the transfer of agricultural land has involved more than the physical allocation of property to qualified farmers. Land acquisition, beneficiary identification, valuation, survey, documentation, registration, and title distribution require coordination among several government institutions. Weak land information systems, unresolved ownership questions, documentation deficiencies, and lengthy administrative procedures have affected the completion of some land distribution activities. These conditions indicate that the success of agrarian reform should be assessed not only through the area of land distributed but also through the completion, accuracy, and sustainability of the services provided to beneficiaries (Ballesteros et al., 2018).

One continuing concern involves agricultural lands awarded through Collective Certificates of Land Ownership Award. Collective titles recognized groups of agrarian reform beneficiaries as landowners, but they did not always clearly identify the particular parcel assigned to each farmer. This arrangement could restrict independent farm decisions, create uncertainty over boundaries, and discourage long-term investments when beneficiaries were not engaged in collective farming. Parcelization was introduced to divide qualified collective landholdings and generate individual titles that more clearly establish the ownership rights of each beneficiary. Research conducted by the Philippine Institute for Development Studies emphasized that parcelization could improve farm decision-making and agricultural performance, provided that it was accompanied by reliable cadastral records, efficient documentation, and an effective agrarian justice system (Galang, 2020).

Land titling facilitation is therefore a critical administrative function in agrarian reform implementation. It covers the assistance provided in validating beneficiaries, confirming landholding information, conducting surveys, preparing documentary requirements, resolving discrepancies, coordinating with partner agencies, registering titles, and releasing completed ownership documents. The Support to Parcelization of Lands for Individual Titling Project was established to strengthen the property rights and tenure security of agrarian reform beneficiaries whose lands remained under collective titles. Its design recognized that titling requires technical capability, institutional coordination, accurate records, safeguards, monitoring, and sustained communication with affected beneficiaries (World Bank, 2020).

Within this process, redocumentation serves as a bridge between previously issued collective titles and the generation of accurate individual ownership documents. It may involve rebuilding incomplete land folders, updating beneficiary information, confirming the status of original documents, reconciling inconsistencies, and preparing records for survey approval and registration. Errors or missing requirements at any stage can return a claim to an earlier processing point and extend the period before a beneficiary receives a registrable title. The revised parcelization guidelines of the Department of Agrarian Reform placed importance on field validation, document preparation, lot allocation, survey activities, title generation, registration, and distribution as connected stages rather than isolated transactions (Department of Agrarian Reform, 2021).

Redocumentation efficiency refers not merely to the speed of processing but also to the ability of responsible personnel to produce complete, consistent, accurate, and legally acceptable records. A document processed quickly but returned because of an incorrect entry, missing attachment, conflicting technical description, or insufficient annotation does not contribute to genuine service completion. Registration rules for parcelized titles require close coordination among the Department of Agrarian Reform, the Land Registration Authority, and the Registry of Deeds. Such requirements illustrate how the quality of documentation affects whether a prepared title proceeds to registration or remains pending for correction and further verification (Department of Agrarian Reform & Land Registration Authority, 2022).

Service completion support becomes especially important when beneficiaries encounter documentary, financial, technical, or procedural barriers that they cannot address without institutional assistance. Effective support may include case monitoring, document retrieval, correction of records, coordination with concerned offices, explanation of requirements, beneficiary follow-up, and assistance until the title or related service is completed. The enactment of the New Agrarian Emancipation Act further emphasized the government's responsibility to remove burdens that prevent agrarian reform beneficiaries from fully benefiting from awarded

lands. By condoning qualified agrarian debts and providing mechanisms for the issuance of certificates of condonation and release of mortgage, the law reinforced the principle that agrarian reform must translate legal entitlements into usable and completed benefits for farmers (Republic of the Philippines, 2023).

The completion of a land title does not automatically settle every difficulty experienced by agrarian reform beneficiaries. Farmers may still face delays in registration, payment concerns, boundary disputes, conflicting claims, restricted access to financing, or uncertainty about the legal status of their holdings. A qualitative study involving agrarian reform beneficiaries in Leyte found that unresolved titling and payment conditions could place farmers in a cycle in which they needed secure titles to obtain credit but also needed stronger farm income to meet land-related obligations. The findings showed that tenure security is shaped by administrative completion, economic capacity, community relations, and the ability of beneficiaries to exercise their rights without continuing uncertainty (Jadina et al., 2025).

Against this background, examining land titling facilitation, redocumentation efficiency, and service completion support offers a practical way of understanding the administrative side of agrarian reform implementation. These areas represent connected responsibilities. Facilitation guides landholding cases through the required procedures, redocumentation ensures that the records supporting each case are accurate and complete, while service completion support helps prevent qualified beneficiaries from remaining in prolonged stages of processing. Weakness in one area can delay the entire chain of service, whereas coordinated performance can improve processing reliability, beneficiary confidence, and the timely delivery of ownership documents.

This study examines how these administrative functions are carried out and how they contribute to the completion of agrarian reform services. It gives attention to the operational work performed behind each processed landholding, corrected document, registered title, and assisted beneficiary. Through this focus, the study may provide evidence for improving workflow management, document quality control, interoffice coordination, case monitoring, and beneficiary assistance within the Department of Agrarian Reform. Its findings may also support the development of practical measures that make land titling services more responsive, accurate, and capable of bringing agrarian reform cases to their proper completion.

Literature Review

Land Titling Facilitation and Tenure Security

Land titling facilitation involves more than helping beneficiaries obtain formal proof of ownership. It includes guiding applicants through verification, surveying, claim validation, document preparation, registration, and title release. Its effectiveness may be judged by whether beneficiaries acquire rights that they understand and can exercise without persistent administrative uncertainty. An evaluation of a land titling program in Nicaragua found that formal titles improved perceived tenure security and increased the perceived value of titled land, showing that properly completed registration can influence how households view and use their property. A separate assessment of Ghana's land administration program explained that formalization does not produce equal benefits for all landholders because the value of a title is also shaped by institutional reliability and the owner's practical ability to sell, transfer, or use the land as collateral. These findings suggest that titling facilitation should combine procedural assistance with clear communication, accurate land information, and continued guidance until ownership rights become legally and practically usable (De la O Campos et al., 2023; Alhola & Gwaindepi, 2024).

Redocumentation Efficiency and Records Integrity

Redocumentation efficiency depends on the ability of responsible offices to retrieve, validate, correct, update, and organize land records without sacrificing accuracy. Paper-based files, inconsistent entries, outdated beneficiary information, and discrepancies between textual records and survey data can cause repeated reviews and prevent cases from proceeding to registration. Digital transformation can reduce these difficulties when it is supported by reliable data standards, redesigned work processes, staff capability, long-term financing, and safeguards for maintaining land information. Technology alone cannot correct records that are incomplete or inaccurate, which means that digitization should be accompanied by systematic data verification and quality

control. Evidence from Rwanda also showed that the sustainability of a land registry rests on the continuous updating of records, accessible services, manageable transaction costs, and institutional arrangements that encourage landholders to register subsequent changes. Efficient redocumentation should therefore be measured through completeness, consistency, processing continuity, and the readiness of each record for the next stage of titling (Ali et al., 2017; Food and Agriculture Organization of the United Nations & International Federation of Surveyors, 2022).

Institutional Coordination in Land Administration

Land administration involves legal, technical, administrative, and social responsibilities that are often distributed among several government offices. Weak coordination can result in conflicting records, repeated documentary requests, delayed survey approvals, unclear accountability, and cases being transferred between offices without definite resolution. Burns et al. argued that land administration reform cannot rely solely on technical systems because its success is also affected by institutional relationships, governance arrangements, policy decisions, and the capacity of implementing agencies to respond to operational barriers. The fit-for-purpose approach likewise supports land administration systems that are flexible, participatory, affordable, and capable of being improved as institutional capacity grows. Applied to agrarian reform implementation, these principles point to the need for shared case information, defined office responsibilities, regular coordination, and procedures that allow documentation issues to be resolved without restarting the entire process. Coordinated administration can help transform separate office transactions into a continuous pathway toward title registration and service completion (Enemark et al., 2016; Burns et al., 2023).

Beneficiary Participation and Service Completion Support

Service completion support addresses the assistance required by beneficiaries whose cases remain unfinished because of documentary deficiencies, unclear procedures, conflicting claims, communication gaps, or limited ability to follow up with several offices. Beneficiary participation is important because landholders possess local knowledge concerning occupation, boundaries, family relationships, and land use that may not be fully reflected in official files. Ho et al. found that technological tools can support land formalization, but they do not automatically create inclusion when affected communities are not meaningfully involved in validation and decision-making. Doss and Meinzen-Dick further explained that tenure security is multidimensional and shaped by the people, institutions, resources, opportunities, and threats surrounding the exercise of land rights. Service completion support should thus include clear explanations of requirements, opportunities for beneficiaries to verify information, accessible mechanisms for correcting errors, systematic case monitoring, and assistance that continues until the expected service has been delivered. Such support places the beneficiary at the center of the process while preserving the legal and technical standards required in agrarian reform implementation (Doss & Meinzen-Dick, 2020; Ho et al., 2023).

METHODS

Research Design

The study employed a dual-logic predictive-explanatory cross-sectional design. This design was selected because it allowed the study to examine both the predictive contribution and the necessary conditions associated with service completion support in agrarian reform implementation. Land titling facilitation and redocumentation efficiency were treated as explanatory constructs, while service completion support was specified as the criterion construct. Data were gathered at a single period from personnel who had direct involvement in land documentation and title processing activities. Unlike a conventional descriptive-correlational approach, the design combined sufficiency analysis and necessity analysis. Sufficiency analysis determined whether stronger land titling facilitation and redocumentation efficiency predicted improved service completion support. Necessity analysis identified whether a minimum level of either explanatory construct had to be present before a high level of service

completion support could be achieved. This design provided a more complete assessment of how administrative processes contributed to the completion of agrarian reform services.

Research Locale

The study was conducted in selected Department of Agrarian Reform offices and operational units in the Province of Isabela. San Fermin, Cauayan City served as the principal administrative setting because redocumentation completion activities, beneficiary record verification, case monitoring, and coordination with concerned offices were undertaken within this area. Other participating units were selected based on their involvement in land acquisition and distribution, parcelization, title documentation, registration coordination, and beneficiary assistance. The locale was considered appropriate because the participating offices handled landholding cases that required continuous processing from documentary validation to the completion and release of the required agrarian reform service.

Participants and Sampling Technique

The participants were personnel who had direct responsibilities related to land titling facilitation, redocumentation, records validation, survey coordination, preparation of land distribution documents, registration follow-up, case monitoring, and beneficiary assistance. Personnel were included when they had performed relevant functions for a sufficient period to provide informed assessments of the procedures being examined. Employees whose duties were not connected with land documentation, title processing, or service completion were excluded. Individuals who joined the pilot test were also excluded from the main data gathering.

A criterion-stratified random sampling technique was applied. Criterion sampling was first used to identify personnel whose actual work assignments were directly aligned with the variables of the study. The eligible participants were then grouped according to their functional assignments, such as documentation, technical coordination, records management, legal processing, and beneficiary service support. Random selection was conducted within each functional group to reduce the possibility that one area of operation would be disproportionately represented. This procedure ensured that the gathered responses reflected the different stages of agrarian reform service delivery without relying solely on participants from a single unit.

Research Instrument

Data were collected through a researcher-developed questionnaire grounded in the operational procedures associated with agrarian reform land titling and redocumentation. The instrument consisted of three substantive sections. The first section measured land titling facilitation through indicators related to procedural guidance, interoffice coordination, beneficiary communication, document tracking, and assistance during registration. The second section assessed redocumentation efficiency through record completeness, documentary accuracy, correction of discrepancies, processing continuity, and readiness of documents for subsequent action. The third section measured service completion support through case follow-up, response to documentary deficiencies, beneficiary assistance, resolution of processing barriers, and sustained support until the requested service had been completed. Responses were recorded using a five-point agreement scale, with 1 representing strongly disagree and 5 representing strongly agree.

The preliminary instrument underwent content and technical validation by a panel composed of specialists in agrarian reform implementation, land administration, public service management, and quantitative research. The validators assessed the relevance, clarity, specificity, legal appropriateness, and alignment of each statement with its assigned construct. Items containing overlapping ideas, vague expressions, or procedures beyond the participants' responsibilities were revised or removed. The item-level content validity indices ranged from .83 to 1.00, while the scale-level content validity index using the average method was .95. The scale-level indices were .95 for land titling facilitation, .94 for redocumentation efficiency, and .95 for service completion support. These results indicated strong agreement among the validators and confirmed that the retained statements adequately represented the administrative functions covered by the study.

A pilot test was conducted among comparable personnel from a Department of Agrarian Reform office that was not included in the main data collection. The pilot participants evaluated the questionnaire's clarity, readability, completion time, and practical relevance. Their responses were also used to determine the internal consistency of the three scales. Cronbach's alpha was .89 for land titling facilitation, .92 for redocumentation efficiency, and .91 for service completion support. The complete instrument obtained an overall Cronbach's alpha coefficient of .94. These coefficients demonstrated good to excellent internal consistency and indicated that the statements within each section consistently measured their intended construct. Items that showed weak corrected item-total correlations, reduced scale reliability, or caused difficulty during the pilot administration were refined before the questionnaire was administered to the main participants.

Data Gathering

The researcher first secured approval from the appropriate Department of Agrarian Reform officials and the concerned office authorities. A formal request described the purpose of the study, the qualifications required of participants, the expected data gathering procedures, and the safeguards established for confidential information. Coordination was undertaken with designated office representatives only for the identification of qualified participants and the scheduling of questionnaire distribution.

Before the questionnaire was administered, the participants received an informed consent form that explained the study, the voluntary nature of participation, the expected completion procedure, the possible inconvenience involved, and the measures used to protect their responses. The researcher clarified that participation or nonparticipation would not affect employment status, performance assessment, assignment, promotion, or access to office services.

The questionnaire was distributed through printed copies or a controlled electronic form, depending on the accessibility and work arrangement of the participating offices. The participants answered the instrument individually and were not required to complete it in the presence of a supervisor. No office head or immediate superior was given access to individual responses. The researcher remained available to explain general instructions but did not interpret particular statements in a manner that could influence the participants' answers.

Completed questionnaires were reviewed for completeness without requiring participants to explain or defend their responses. The responses were assigned numerical codes and entered into a statistical database. A second review of the encoded data was undertaken to detect missing entries, reversed values, duplicate records, and inconsistencies between the original questionnaire and the electronic dataset. The cleaned dataset was then prepared for statistical analysis.

Data Analysis

The data were analyzed through descriptive statistics, reliability assessment, quantile regression, and dominance analysis. Before the substantive analyses were performed, the dataset was screened for missing responses, implausible values, careless answering patterns, excessive uniformity, and influential observations. The distribution of composite scores was examined through histograms, boxplots, skewness, kurtosis, and robust measures of central tendency.

The mean and standard deviation were used to summarize the general assessment of each variable. The median and interquartile range were also reported because these measures were less affected by unusually high or low responses. Bootstrapped confidence intervals were generated to provide more stable estimates of the descriptive results. The following ranges were used to interpret the weighted means: 4.21 to 5.00 as strongly agree, 3.41 to 4.20 as agree, 2.61 to 3.40 as moderately agree, 1.81 to 2.60 as disagree, and 1.00 to 1.80 as strongly disagree.

Quantile regression served as the primary inferential treatment. It was selected because ordinary least squares regression estimated only the expected change in the average value of service completion support. Quantile regression allowed the effects of land titling facilitation and redocumentation efficiency to be examined at different portions of the outcome distribution. Separate models were estimated at the 25th, 50th, and 75th percentiles of service completion support.

The 25th-percentile model represented conditions in which service completion support was relatively limited. The median model represented the typical level of service completion support, while the 75th-percentile model represented comparatively stronger service completion conditions. This procedure determined whether facilitation and redocumentation had uniform effects or whether their contributions became stronger or weaker at different performance levels. The analysis was considered appropriate because offices experiencing persistent processing difficulties might require different forms of support from offices whose cases were already approaching completion.

Regression coefficients, standard errors, confidence intervals, probability values, and pseudo coefficients of determination were reported for each quantile model. Standard errors were estimated through bootstrap resampling to reduce dependence on normality assumptions. Statistical significance was evaluated at the .05 level. The equality of coefficients across quantiles was also tested to determine whether the strength of a predictor differed significantly between lower and higher levels of service completion support.

Dominance analysis was subsequently applied to compare the relative contribution of land titling facilitation and redocumentation efficiency. This procedure examined the additional explanatory value contributed by each predictor across all possible model combinations. It was used instead of relying solely on standardized regression coefficients, which could be affected by the correlation between the explanatory variables. General dominance weights were computed and converted into percentages to identify the proportion of the explained outcome associated with each predictor.

The combination of quantile regression and dominance analysis allowed the study to answer two related questions. Quantile regression identified where the explanatory variables exerted stronger or weaker effects across the distribution of service completion support. Dominance analysis determined which explanatory variable made the greater overall contribution to the outcome. This analytical strategy provided a more detailed interpretation than a conventional correlation or single mean-based regression model.

Ethical Consideration

The study observed the principles of voluntary participation, informed consent, confidentiality, privacy, fairness, and responsible handling of research data. Participants were informed that they could refuse participation, leave particular statements unanswered, or withdraw before their responses had been consolidated without experiencing any penalty. The researcher avoided using authority, workplace relationships, or administrative channels to pressure personnel into joining the study.

The instrument was designed to obtain assessments of administrative practices rather than confidential information about individual agrarian reform cases. No copies of land titles, certificates of land ownership award, survey plans, beneficiary folders, legal pleadings, memoranda containing restricted information, or registration documents were collected. Participants were instructed not to mention identifiable beneficiaries, landowners, properties, pending disputes, or case references in any portion of the questionnaire.

Individual responses were not released to supervisors, administrators, participating offices, or other personnel. Findings were presented only in summarized form. Office-level results were combined when separate reporting could have made individual participants identifiable. Printed questionnaires were stored in a secured cabinet, while electronic data were protected through passwords and restricted access. Only the researcher and authorized academic advisers were permitted to examine the cleaned dataset.

The study complied with the Data Privacy Act of 2012 and the research ethics requirements of the institution under which the research was conducted. Data were retained only for the period required for academic review, verification, and publication. After the retention period had ended, printed records were destroyed securely, and electronic files containing participant responses were permanently deleted. The results were reported truthfully, and no data were altered, removed, or selectively presented to favor a desired conclusion.

RESULTS AND DISCUSSION

Table 1. *Validity and Reliability of the Research Instrument*

Construct	Number of Retained Items	I-CVI Range	S-CVI/Ave	Cronbach's Alpha	McDonald's Omega	Interpretation
Land Titling Facilitation	20	.83 to 1.00	.95	.89	.90	Good reliability
Redocumentation Efficiency	24	.83 to 1.00	.94	.92	.93	Excellent reliability
Service Completion Support	24	.83 to 1.00	.95	.91	.92	Excellent reliability
Entire Instrument	68	.83 to 1.00	.95	.94	.95	Excellent reliability

Table 1 shows that the research instrument demonstrated satisfactory content validity and internal consistency. The item-level content validity index ranged from .83 to 1.00, indicating that the expert validators generally agreed that the retained statements were relevant, clear, and aligned with the constructs being measured. The scale-level content validity indices ranged from .94 to .95, exceeding the commonly accepted minimum standard for a content-valid instrument. These results suggested that the questionnaire adequately represented the operational dimensions of land titling facilitation, redocumentation efficiency, and service completion support.

Cronbach's alpha coefficients ranged from .89 to .92 across the three scales, while McDonald's omega coefficients ranged from .90 to .93. The coefficients indicated that the items within each scale consistently measured the same underlying construct. The slightly higher omega estimates also suggested that the instrument maintained strong reliability even when the individual statements contributed differently to their assigned scales. The overall reliability coefficients of .94 and .95 confirmed that the complete questionnaire was sufficiently stable for the main analysis.

The strong measurement properties were important because administrative processes such as record verification, discrepancy correction, title monitoring, and beneficiary assistance involved related but distinguishable activities. A weakly structured instrument could have combined these functions without accurately determining where service strengths and processing difficulties occurred. Reliable measurement also supported the subsequent use of composite scores in the quantile regression and dominance analyses.

Table 2. *Assessment of Land Titling Facilitation*

Indicator	Mean	Standard Deviation	Median	Interquartile Range	Interpretation	Rank
Procedural guidance	4.02	0.56	4.00	0.75	Agree	1
Interoffice coordination	3.58	0.68	3.60	1.00	Agree	4
Beneficiary communication	3.91	0.59	4.00	0.80	Agree	3
Monitoring of title-related transactions	3.37	0.73	3.40	1.00	Moderately agree	5
Registration assistance	3.94	0.61	4.00	0.80	Agree	2
Overall land titling facilitation	3.76	0.54	3.80	0.70	Agree	

Table 2 indicates that land titling facilitation was generally assessed positively, with an overall mean of 3.76. Procedural guidance obtained the highest mean of 4.02, followed by registration assistance at 3.94 and beneficiary communication at 3.91. These results indicated that personnel were generally able to explain documentary requirements, guide concerned parties through prescribed procedures, and provide assistance during the preparation and registration of title-related documents.

The relatively high assessment of procedural guidance suggested that participants understood the sequence of activities required for land titling and were able to communicate these requirements to beneficiaries and other

concerned parties. Clear procedural assistance was particularly important because parcelization and individual titling required the completion of technical, legal, and administrative steps. The Support to Parcelization of Lands for Individual Titling Project was designed to improve tenure security by converting qualified collective land titles into individual titles, a process that required sustained institutional and beneficiary support rather than title preparation alone (World Bank, 2020).

Monitoring of title-related transactions obtained the lowest mean of 3.37 and was interpreted as moderately agree. This indicated that difficulties remained in consistently tracking documents after they had been transmitted to other offices or moved to another processing stage. Some transactions might have required repeated follow-ups because progress information was not immediately available, responsibilities were distributed among several units, or documentary deficiencies were discovered only after formal review.

Interoffice coordination received a mean of 3.58, which was positive but lower than the ratings for direct beneficiary assistance. The result suggested that personnel performed well in activities under their immediate control but experienced greater difficulty when completion depended on responses, approvals, certifications, or document movement involving other units. This difference identified a practical service gap. Good communication with beneficiaries could not by itself complete a title when technical, legal, survey, and registration actions were not synchronized.

The overall result showed that land titling facilitation was functioning but remained uneven across its components. Strong procedural guidance and registration assistance provided a sound operational foundation. However, weaker transaction monitoring could allow cases to remain pending without early identification of the reason for delay. A centralized case-tracking mechanism, defined follow-up schedules, and clearer responsibility for each pending action could strengthen the continuity of facilitation from initial document preparation to final registration.

Table 3. *Assessment of Redocumentation Efficiency*

Indicator	Mean	Standard Deviation	Median	Interquartile Range	Interpretation	Rank
Retrieval of supporting documents	3.26	0.76	3.20	1.00	Moderately agree	5
Accuracy of landholding records	3.72	0.62	3.80	0.80	Agree	1
Correction of documentary discrepancies	3.34	0.71	3.40	1.00	Moderately agree	4
Completeness of documentary requirements	3.49	0.66	3.50	0.90	Agree	3
Continuity of document processing	3.18	0.79	3.20	1.20	Moderately agree	6
Readiness of documents for subsequent action	3.54	0.65	3.60	0.80	Agree	2
Overall redocumentation efficiency	3.42	0.61	3.43	0.90	Agree	

As reflected in Table 3, redocumentation efficiency obtained an overall mean of 3.42, which was located at the lower boundary of the agree category. This was the lowest overall assessment among the three major variables. The result indicated that redocumentation activities were being performed, but several stages remained vulnerable to interruptions, incomplete source records, delayed corrections, and repeated documentary reviews.

Accuracy of landholding records received the highest mean of 3.72. This suggested that when the required records were available, personnel generally exercised care in reviewing names, landholding information, technical descriptions, and supporting documents. Readiness of documents for subsequent action also received a positive assessment, with a mean of 3.54. These findings showed that completed redocumentation outputs were usually suitable for endorsement to the next processing stage.

Continuity of document processing received the lowest mean of 3.18. This suggested that some files did not move steadily from retrieval and validation to correction, completion, and endorsement. Interruptions might have occurred when original records were unavailable, signatures or certifications were pending, discrepancies required legal or technical review, or documents had to be returned to an originating office. The standard deviation of 0.79 also indicated wider differences in participants' experiences, suggesting that processing continuity was stronger in some cases or units than in others.

Document retrieval and correction of discrepancies were also assessed only at the moderately agree level. These results identified important operational barriers because redocumentation could not be completed solely through careful encoding or document preparation. Personnel first had to locate valid source records and reconcile inconsistencies among beneficiary lists, collective titles, approved surveys, landholding records, and current occupancy information.

Galang identified record-keeping quality, cadastral information, and the resolution of administrative and legal concerns as important requirements for the effective parcelization of collective land titles. The study emphasized that parcelization could provide clearer individual rights, but weak records and unresolved cases could slow the process and reduce its intended benefits (Galang, 2020).

The findings suggested that redocumentation efficiency was the principal operational concern of the study. Accuracy was generally maintained once documents were assembled, but the ability to retrieve complete records and sustain uninterrupted processing was less consistent. The problem therefore appeared to involve workflow continuity rather than a general lack of attention to document accuracy. Establishing a consolidated document inventory, deficiency classification system, aging report, and standard correction pathway could reduce repeated handling and prevent files from remaining inactive for extended periods.

Digital record management could also support document retrieval and case monitoring, but technology would have to be accompanied by data cleaning, common standards, staff preparation, and clear rules for updating records. Digital transformation in land administration can strengthen transparency, service quality, and operational efficiency when the transition is properly planned and supported (Food and Agriculture Organization of the United Nations, 2022).

Table 4. *Assessment of Service Completion Support*

Indicator	Mean	Standard Deviation	Median	Interquartile Range	Interpretation	Rank
Follow-up of pending cases	3.62	0.67	3.70	0.90	Agree	3
Response to documentary deficiencies	3.43	0.70	3.40	1.00	Agree	5
Resolution of processing barriers	3.29	0.75	3.30	1.00	Moderately agree	6
Beneficiary guidance and assistance	3.84	0.58	4.00	0.80	Agree	1
Interoffice referral and coordination	3.51	0.69	3.60	0.90	Agree	4
Assistance until service completion	3.66	0.64	3.70	0.80	Agree	2
Overall service completion support	3.56	0.59	3.58	0.80	Agree	

Table 4 shows that service completion support obtained an overall mean of 3.56, interpreted as agree. Beneficiary guidance and assistance received the highest mean of 3.84. Assistance until service completion ranked second, with a mean of 3.66. These results suggested that personnel generally recognized the need to accompany beneficiaries and cases beyond the initial submission of requirements.

The positive rating for beneficiary guidance indicated that participants provided explanations, clarifications, and directions when beneficiaries encountered procedural concerns. This was an important strength because land titling procedures could be difficult for beneficiaries to navigate without direct institutional support. Continued assistance could also reduce incomplete submissions, missed follow-up activities, and misunderstandings concerning the status of landholding documents.

Resolution of processing barriers received the lowest mean of 3.29 and was interpreted as moderately agree. This result showed that personnel could identify and refer problems but might not always possess the authority, records, resources, or interoffice arrangements needed to resolve them promptly. Cases involving conflicting records, unavailable source documents, boundary concerns, overlapping claims, or registration deficiencies could require decisions beyond the immediate office or work unit.

The difference between beneficiary guidance and barrier resolution was notable. Personnel appeared more capable of explaining procedures and following up cases than of removing the structural causes of delay. This suggested that service completion support relied partly on individual effort, while unresolved administrative problems required broader institutional action. Strong employee commitment could improve communication, but it could not substitute for integrated records, timely technical decisions, and defined escalation procedures.

Land administration reforms often encounter difficulties when technical improvements are introduced without equal attention to governance, institutional relationships, decision-making authority, and implementation conditions. Sustainable reform therefore requires both operational systems and arrangements that enable agencies and units to address barriers that fall outside routine processing (Burns et al., 2023).

The findings showed that service completion support was present but had not reached the same level across all activities. Direct assistance was a strength, while barrier resolution remained the most visible weakness. An escalation mechanism could be established to classify unresolved cases according to documentary, legal, technical, registration, or beneficiary-related concerns. Each category could then be assigned a responsible office, expected action, and review period.

Table 5. *Quantile Regression of Land Titling Facilitation and Redocumentation Efficiency on Service Completion Support*

Service Completion Quantile	Predictor	Coefficient	Bootstrap Standard Error	95% Confidence Interval	p-value	Decision
25th percentile	Land titling facilitation	0.21	0.08	0.05 to 0.37	.010	Significant
	Redocumentation efficiency	0.49	0.09	0.31 to 0.67	<.001	Significant
	Pseudo R ²	0.31				
50th percentile	Land titling facilitation	0.29	0.07	0.15 to 0.43	<.001	Significant
	Redocumentation efficiency	0.44	0.08	0.28 to 0.60	<.001	Significant
	Pseudo R ²	0.38				
75th percentile	Land titling facilitation	0.41	0.09	0.23 to 0.59	<.001	Significant
	Redocumentation efficiency	0.28	0.08	0.12 to 0.44	.001	Significant
	Pseudo R ²	0.34				

Note. Coefficients were estimated using bootstrap standard errors based on 10,000 resamples. Statistical significance was evaluated at $\alpha = .05$.

Table 5 presents the effects of land titling facilitation and redocumentation efficiency at the 25th, 50th, and 75th percentiles of service completion support. Both explanatory variables produced statistically significant positive coefficients at all three quantiles. This indicated that improvements in either land titling facilitation or redocumentation efficiency were associated with stronger service completion support. However, the magnitude of their effects differed across the outcome distribution.

At the 25th percentile, redocumentation efficiency produced the strongest coefficient at 0.49, while land titling facilitation had a coefficient of 0.21. This indicated that under conditions where service completion support was comparatively weak, redocumentation efficiency was the more influential factor. A one-unit improvement in redocumentation efficiency was associated with a 0.49-unit increase in the lower portion of service completion support, after land titling facilitation had been held constant.

This result suggested that cases experiencing weak completion support were primarily constrained by incomplete records, document retrieval problems, unresolved discrepancies, or interrupted processing. Under these conditions, additional procedural guidance alone might have produced limited improvement because the cases could not move forward without complete and usable documentation. Strengthening redocumentation therefore appeared to be the most immediate intervention for offices or case groups operating at the lower service level.

At the median, redocumentation efficiency remained the stronger predictor, with a coefficient of 0.44, compared with 0.29 for land titling facilitation. The pseudo coefficient of determination was also highest at the median model, reaching 0.38. This indicated that the two predictors explained more variation in typical service completion conditions than in either the lower or upper portion of the distribution.

At the 75th percentile, land titling facilitation became the stronger predictor. Its coefficient increased to 0.41, while the coefficient of redocumentation efficiency declined to 0.28. This indicated that once documentary processes had reached a more functional level, stronger service completion depended increasingly on active coordination, beneficiary communication, transaction monitoring, and registration assistance.

The shift in coefficient strength showed why a single ordinary regression estimate would have provided an incomplete interpretation. Redocumentation efficiency was most critical where service completion was weak, while land titling facilitation became more influential where service conditions were already stronger. The results therefore supported a differentiated improvement strategy rather than a single intervention for all offices or cases.

For units with weaker service completion, priority should be given to document recovery, discrepancy correction, and workflow continuity. For units operating at a stronger level, attention should shift toward monitoring, coordination, registration follow-up, and timely beneficiary communication. This interpretation was consistent with the purpose of the SPLIT Project, which combined parcelization activities with capability development, project management, monitoring, and institutional support rather than treating the issuance of titles as a single technical transaction (World Bank, 2020).

Table 6. Tests of Coefficient Equality Across Service Completion Quantiles

Predictor	Quantiles Compared	Difference in Coefficients	Wald Statistic	p-value	Interpretation
Land titling facilitation	25th and 50th	0.08	1.42	.234	No significant difference
Land titling facilitation	50th and 75th	0.12	3.94	.047	Significant difference
Land titling facilitation	25th and 75th	0.20	5.87	.016	Significant difference
Redocumentation efficiency	25th and 50th	-0.05	0.68	.410	No significant difference
Redocumentation efficiency	50th and 75th	-0.16	4.76	.030	Significant difference
Redocumentation efficiency	25th and 75th	-0.21	6.42	.012	Significant difference

Note. A positive difference indicates a stronger coefficient at the higher quantile for land titling facilitation. A negative difference indicates a weaker coefficient at the higher quantile for redocumentation efficiency.

Table 6 confirms that the effects of the explanatory variables were not uniform across the service completion distribution. The effect of land titling facilitation did not differ significantly between the 25th and 50th percentiles. However, significant differences were recorded between the 50th and 75th percentiles and between the 25th and 75th percentiles. These results showed that land titling facilitation became increasingly influential as service completion support moved toward a higher level.

The effect of redocumentation efficiency followed the opposite direction. Its coefficient did not differ significantly between the 25th and 50th percentiles, indicating that document-related concerns remained important

throughout the lower and middle portions of service completion. Significant decreases were observed from the 50th to the 75th percentile and from the 25th to the 75th percentile.

The findings indicated that redocumentation efficiency had a remedial function. It was particularly important when service completion was being constrained by missing, inconsistent, or unprocessed documents. Once the basic documentary requirements had become more stable, its marginal effect decreased. Land titling facilitation then assumed greater importance because completed documents still required coordination, monitoring, beneficiary communication, registration action, and follow-through.

This pattern suggested a sequential improvement model. Redocumentation efficiency formed the operational base of service completion, while land titling facilitation moved completed or substantially completed records through the remaining stages. Weak redocumentation prevented facilitation from producing its full effect. Conversely, strong redocumentation without active facilitation could result in technically prepared documents remaining pending for endorsement, registration, or release.

Table 7. Dominance Analysis of Predictors of Service Completion Support

Predictor	R ² When Entered Alone	Additional R ² When Entered Second	General Dominance Weight	Relative Contribution	Dominance Classification
Land titling facilitation	.36	.06	.210	45.65%	Secondary dominant predictor General dominant predictor
Redocumentation efficiency	.40	.10	.250	54.35%	
Combined model			.460	100.00%	

Note. The general dominance weights sum to the total model R² of .460.

Table 7 shows that land titling facilitation and redocumentation efficiency jointly accounted for 46.00 percent of the variation in service completion support. This represented a substantial explanatory contribution, although 54.00 percent of the variation remained associated with other factors not included in the model. Such factors could include staffing availability, workload, legal complexity, survey delays, access to original documents, coordination with external offices, technological capacity, or the nature of individual landholding cases.

Redocumentation efficiency emerged as the general dominant predictor. It accounted for 54.35 percent of the explained variation, while land titling facilitation accounted for 45.65 percent. Redocumentation efficiency also produced the higher explanatory value when entered alone and the greater additional contribution when entered after land titling facilitation.

The dominance result supported the quantile regression findings. Redocumentation efficiency exerted the strongest influence among cases or offices with weaker service completion and remained important at the median. The finding indicated that the quality and continuity of documentary work formed the principal foundation of service completion. Without complete and internally consistent records, personnel could not reliably proceed with title preparation, endorsement, registration, or final release.

Land titling facilitation remained a substantial predictor and should not be treated as secondary in practical importance. Its relative contribution of 45.65 percent showed that effective records alone did not guarantee completed services. Cases still required procedural guidance, coordinated action, transaction monitoring, beneficiary communication, and assistance through registration. Its stronger effect at the 75th percentile further showed that facilitation distinguished units capable of moving from technically completed documentation to consistently completed service delivery.

The results indicated that administrative improvement should not focus exclusively on increasing the speed of processing. Faster processing could produce repeated returns or corrections when records were incomplete. Redocumentation should first ensure that documents were accurate, complete, traceable, and ready

for the next action. Facilitation should then ensure that those documents continued moving until registration, release, or another defined completion point had been reached.

CONCLUSION

Land titling facilitation, redocumentation efficiency, and service completion support were generally practiced at favorable levels, although important operational weaknesses remained in transaction monitoring, document retrieval, discrepancy correction, processing continuity, and the resolution of administrative barriers. Redocumentation efficiency emerged as the stronger overall predictor of service completion support, particularly in offices or cases with lower completion performance, while land titling facilitation became more influential when documentary requirements had already reached a more advanced stage. These findings showed that service completion depended on both the quality of land records and the ability of personnel to sustain coordination, monitoring, beneficiary assistance, and registration follow-up until the intended service had been delivered. It was therefore recommended that the Department of Agrarian Reform establish an integrated case-tracking and document inventory system, adopt uniform procedures for identifying and correcting documentary deficiencies, assign clear responsibility and completion timelines for every processing stage, and strengthen coordination among documentation, technical, legal, registration, and beneficiary support units. Regular case conferences, records quality audits, targeted staff training, and periodic monitoring of aging or inactive cases should also be conducted. Priority assistance should be directed toward cases with missing or conflicting records, while offices with stronger documentary readiness should focus on faster interoffice referral, registration monitoring, and sustained communication with agrarian reform beneficiaries. These measures may improve workflow continuity, reduce repeated document handling, strengthen accountability, and increase the likelihood that land titling and related agrarian reform services will reach proper and timely completion.

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