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Research Article

Governing Land-Status Uncertainty in Local Development Planning: An Institutional Analysis and Development Theory-to-Practice Review

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Abstract Land-status uncertainty can obstruct local development planning when incomplete or contested records, unclear claimant recognition, and overlapping authority prevent proposals from moving through planning, authorization, budgeting, and implementation. This article examines that public-administration problem using the verified planning concern in Sembakung Atulai Subdistrict, Nunukan Regency, Indonesia, as a bounded phenomenon. It asks how the Institutional Analysis and Development (IAD) framework explains the relevant actors, rules, information conditions, and decision mechanisms; what applications and criticisms reveal about the framework's conditions and boundaries; and how the synthesis can inform context-sensitive administrative options. A theory-focused narrative literature review used five documented search runs in Scopus restricted to English-language articles and reviews in journals at final publication stage. From 568 exported records, 130 duplicates were removed and 438 unique records were screened; 40 verified full-text journal articles formed the corpus. The synthesis shows that land-status uncertainty is best understood as a configuration of linked action situations in which information becomes consequential only when rules-in-use and competent authority connect evidence to reviewable decisions. It also shows that baseline IAD requires explicit attention to institutional plurality, power, linked arenas, administrative capacity, and feedback. The article translates these findings into five connected domains: land-status information and verification; claimant recognition and dispute routing; cross-level coordination and decision integration; rule operationalization and administrative capacity; and power-aware accountability and adaptive review. The contribution is conceptual-translational; the framework is a procedural diagnostic and neither determines legal land status nor establishes causal effectiveness.

Keywords: Institutional Analysis Development; Land Governance; Land-Status Uncertainty; Local Development Planning; Public Administration.

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1. Introduction

Land-status uncertainty becomes a public-administration problem when unresolved claims, incomplete records, or overlapping authority prevent a development proposal from moving through planning, budgeting, authorization, and implementation. The uncertainty is not only an informational deficit. It is produced and sustained through institutional arrangements that determine who may speak, which records count, which organization is competent to decide, how disagreement is routed, and what happens when no conclusive decision is reached. In such settings, technically plausible projects can remain administratively indeterminate because the planning system lacks an agreed pathway for converting contested or incomplete land information into reviewable public decisions.

The practical relevance of this problem is visible in Sembakung Atulai Subdistrict, Nunukan Regency, Indonesia. An official government account of a local development-planning forum identified unresolved land status as a concern associated with the non-implementation of some proposed programs and recorded proposed administrative responses involving data collection, coordination, mediation, survey, and mapping (Government of Nunukan Regency, 2025). This source verifies a planning and coordination event; it does not establish the legal status of any parcel, concession, or forest area. The present review therefore treats Sembakung Atulai as a bounded public-administration phenomenon: local development

choices are conditioned by uncertainty about land status and by the institutional process through which that uncertainty is addressed.

This distinction matters because land governance commonly joins statutory rules, customary practices, administrative routines, political relationships, and uneven organizational capacity. Studies from Uganda, Ghana, Burundi, Tanzania, Senegal, Nigeria, India, Ethiopia, and China show that decentralization or formal reform does not automatically create a single, authoritative decision arena. Instead, claimants may encounter institutional proliferation, competing forums, practical norms, and incomplete integration between customary and public systems (Van Leeuwen, 2014, 2017; Kobusingye et al., 2016; Biitir et al., 2017; Tchatchoua-Djomo, 2018; Nuhu, 2019; Ho et al., 2021; Adam et al., 2021; Adekola et al., 2023; Emiru et al., 2023; Lavigne Delville et al., 2023). These findings direct attention away from a narrow question—whether a rule exists—toward a broader institutional question: how do actors, rules-in-use, information, authority, interaction, evaluation, and feedback combine to shape a planning outcome?

The Institutional Analysis and Development (IAD) framework is well suited to that question. IAD organizes inquiry around an action arena in which participants occupy positions, select actions under information and control conditions, interact under rules-in-use, and generate outcomes evaluated against explicit criteria. Applications have demonstrated its utility across ecosystem management, forest recreation, conservation policy mixes, soil and water conservation, military intelligence, land readjustment, urban development boundaries, pollution co-production, and social forestry (Imperial, 1999; Wilkes-Allemann et al., 2015; Barton et al., 2017; Nigussie et al., 2018; Bang, 2018; Çağdaş & Linke, 2021; Luo et al., 2021; Sarr et al., 2021; Widiyanto et al., 2025). The framework also supports analysis of nested or networked action situations, which is essential where land verification, dispute handling, spatial planning, budgeting, permitting, and implementation are connected but institutionally separated (Kimmich & Tomas, 2019).

Yet an unqualified use of IAD may understate power, institutional plurality, informal practice, and the difficulty of operationalizing rules. A politicized IAD approach makes actor interests, unequal control, and historical-political context more explicit (Clement, 2010; Whaley & Weatherhead, 2014, 2015). Power-focused extensions show that formally collaborative processes can still restrict agendas, privilege industry or administrative actors, and distribute benefits and burdens unevenly (Brisbois et al., 2019). Methodological work also warns that institutional statements do not fully capture how people communicate and enact rules, while institutional grammar research emphasizes the need for transparent and replicable coding choices (Watkins & Westphal, 2016; Dunlop et al., 2019). These criticisms do not displace IAD; they specify conditions under which its diagnostic use becomes more credible.

Existing studies provide rich applications but remain dispersed across land governance, natural resources, public administration, and planning. They rarely translate the framework into a coherent administrative sequence for governing land-status uncertainty before and during local development planning. The gap is conceptual-translational: public managers need a traceable way to connect IAD constructs and empirical cautions to concrete diagnostic records, referral pathways, coordination interfaces, implementation-readiness checks, and accountability reviews. Addressing that gap requires a synthesis that preserves the original analytical structure of IAD while making later adaptations and contextual additions visible.

Accordingly, this review asks three questions. First, how does IAD conceptualize the rules, actors, information conditions, and decision mechanisms that structure land-status uncertainty in local development planning? Second, what do full-text applications and criticisms reveal about the conditions, adaptations, limitations, and boundaries of IAD-based analysis? Third, how can that synthesis be translated into context-sensitive institutional design options connecting land verification, coordination, and accountable planning? The article contributes a five-domain theory-to-practice framework. Its contribution is conceptual and translational rather than a new theory, legal land-status determination, or empirical test of effectiveness.

2. Methods

Review Design and Scope

The study used a theory-focused narrative literature review with a theory-to-practice orientation. The unit of analysis was a peer-reviewed journal article that provided readable full text and made a substantive contribution to at least one of four roles: IAD origin or development, criticism or adaptation, land or natural-resource application, and public-

administration or planning relevance. A fifth search stream captured local land-governance translation studies that did not necessarily use IAD but could clarify implementation conditions. The review was bounded to English-language articles and reviews published in journals at final publication stage. No year, subject-area, or country restriction was applied.

Evidence eligibility was deliberately stricter than discovery eligibility. Scopus metadata and abstracts supported record identification and title–abstract screening, but only readable full texts supported theoretical claims, application findings, criticisms, boundaries, and framework construction. Backward citation checking was additionally used to verify two seminal accounts of the baseline IAD framework (Ostrom, 2011; McGinnis, 2011). These framing sources were used for conceptual orientation and terminology, were not coded as application evidence, and were not added to the 40-article analytical corpus or its denominator. The verified local phenomenon source was used only to establish the planning problem and not as evidence of parcel-level legal status.

Search Strategy and Execution

Five documented search runs were executed in Scopus on 17 August 2026 using TITLE-ABS-KEY fields. Filters were embedded in every query: document type Article or Review; source type Journal; language English; publication stage Final; all years; and no subject-area or country filter. The five streams returned 222, 86, 94, 54, and 112 records, respectively. The complete query strings were retained in the search repository and are reproduced below to make the search auditable.

S1—Theory foundation: TITLE-ABS-KEY (("institutional analysis and development framework" OR "IAD framework") AND (Ostrom OR "action arena" OR "action situation" OR "rules-in-use" OR "institutional grammar" OR "rule configuration*")) AND (LIMIT-TO (DOCTYPE, "ar") OR LIMIT-TO (DOCTYPE, "re")) AND LIMIT-TO (SRCTYPE, "j") AND LIMIT-TO (LANGUAGE, "English") AND LIMIT-TO (PUBSTAGE, "final")

S2—Criticism/development: TITLE-ABS-KEY (("institutional analysis and development framework" OR "IAD framework") AND (critic* OR limitation* OR weakness* OR shortcoming* OR "boundary condition*" OR "conceptual problem*" OR "measurement problem*" OR "theoretical development*" OR "conceptual development*" OR "framework extension*" OR "framework adaptation*")) AND (LIMIT-TO (DOCTYPE, "ar") OR LIMIT-TO (DOCTYPE, "re")) AND LIMIT-TO (SRCTYPE, "j") AND LIMIT-TO (LANGUAGE, "English") AND LIMIT-TO (PUBSTAGE, "final")

S3—Land/forest application: TITLE-ABS-KEY (("institutional analysis and development" OR "IAD framework") AND ("land governance" OR "land-use governance" OR "land use governance" OR "forest governance" OR "natural resource governance" OR "common-pool resource*" OR tenure OR property-right* OR "property right*")) AND (LIMIT-TO (DOCTYPE, "ar") OR LIMIT-TO (DOCTYPE, "re")) AND LIMIT-TO (SRCTYPE, "j") AND LIMIT-TO (LANGUAGE, "English") AND LIMIT-TO (PUBSTAGE, "final")

S4—Public administration/planning: TITLE-ABS-KEY (("institutional analysis and development" OR "IAD framework" OR "action situation") AND ("public administration" OR "public management" OR "local government" OR "subnational government" OR "multilevel governance" OR "multi-level governance" OR "spatial planning" OR "development planning" OR "policy coordination")) AND (LIMIT-TO (DOCTYPE, "ar") OR LIMIT-TO (DOCTYPE, "re")) AND LIMIT-TO (SRCTYPE, "j") AND LIMIT-TO (LANGUAGE, "English") AND LIMIT-TO (PUBSTAGE, "final")

S5—Local land-governance translation: TITLE-ABS-KEY (("land governance" OR "forest-land governance" OR "land-use governance" OR "land use governance" OR "land tenure governance" OR "forest tenure governance" OR "land administration") AND ("local government" OR "subnational government" OR municipal* OR municipality OR district* OR subdistrict* OR decentral*) AND (coordination OR institution* OR "policy integration" OR "development planning" OR "spatial planning")) AND (LIMIT-TO (DOCTYPE, "ar") OR LIMIT-TO (DOCTYPE, "re")) AND LIMIT-TO (SRCTYPE, "j") AND LIMIT-TO (LANGUAGE, "English") AND LIMIT-TO (PUBSTAGE, "final")

Screening and Full-Text Eligibility

The five exports contained 568 records. Deduplication by Scopus EID, DOI, and normalized bibliographic identity removed 130 duplicates, leaving 438 unique records for title–abstract screening. Of these, 394 were excluded because they lacked substantive relevance to IAD theory, criticism, land/resource governance, public administration/planning, or local land-governance translation. Full text was sought for 44 records; four were unavailable or mismatched, and 40 readable full-text journal articles were assessed and included. No article assessed at full text was subsequently excluded.

Screening decisions were recorded at record level with reasons. Evidence roles were not mutually exclusive: 18 articles contributed to theory anatomy or development, six to criticism or adaptation, 11 to land/resource application, six to public-administration or planning relevance, and 15 to local land-governance translation. Counts therefore describe evidence functions, not separate samples.

Extraction and Theory Synthesis

Full texts were extracted into linked repositories covering theory identity, constructs, relations, mechanisms, assumptions and boundaries, empirical applications, criticisms, and public-administration relevance. The theory synthesis distinguished the baseline IAD architecture from later adaptations. Construct records captured action arena, action situation, participants, positions, actions, information, control, costs and benefits, outcomes, exogenous conditions, rules-in-use, interactions, evaluative criteria, feedback, levels of choice, and rule configuration. Mechanism records specified how rules and attributes condition positions, information, authority, incentives, interaction patterns, outcomes, evaluation, and feedback.

Applications were compared by setting, action situation, unit of analysis, operationalization, findings, adaptation, implementation problem, and transferability. Criticisms were coded only when the full text articulated a specific limitation or adaptation, such as insufficient treatment of power, history, informal practice, linked arenas, measurement, temporal dynamics, or organizational capacity. Contradictions were retained as boundary information rather than averaged into a single generalized claim.

Domain Derivation and Analytical Audit

Practice domains were derived through a traceability chain: verified phenomenon element → original IAD construct or mechanism → convergent full-text findings → interpretive transformation → practice option → boundary or caution. Candidate domains were compared for conceptual distinctiveness, mechanism coherence, empirical convergence, diagnostic utility, and avoidable overlap. This process retained five domains. Information verification was separated from claimant recognition because evidentiary quality differs from standing and authority. Coordination was retained as one cross-level domain because vertical and horizontal dependencies converged around common handoffs. Monitoring was incorporated into rule operationalization, while power-aware accountability remained separate because distribution, exclusion, and reason-giving are analytically different from administrative capacity.

The synthesis was audited against three safeguards. First, every practice option had to remain traceable to original theory and full-text evidence. Second, additions derived from politicized or contextual adaptations had to be labelled as such rather than attributed to baseline IAD. Third, wording was calibrated to the design: the framework proposes diagnostic and procedural options but does not validate them, determine land rights, or demonstrate causal effectiveness.

3. Theoretical Foundations And Development

Core IAD Architecture

IAD is a diagnostic framework for explaining how institutional arrangements structure recurrent action. Foundational accounts by Ostrom (2011) and McGinnis (2011) locate its analytical center in the action arena, comprising participants and an action situation. Participants occupy positions, possess different information and control, select available actions, face anticipated costs and benefits, and interact under rules-in-use. These interactions generate outcomes that may be evaluated through criteria such as efficiency, equity, accountability, sustainability, or procedural fairness. Feedback from outcomes can alter participants, rules, strategies, and exogenous conditions. Imperial (1999) showed the value of this structure for ecosystem-based management, while Cole (2017) clarified that laws and social norms enter the framework through rules-in-use rather than as interchangeable background variables.

For land-status uncertainty, the action situation is not simply a meeting or a cadastral task. It is the structured set of opportunities and constraints through which a planning proposal is classified, evidenced, contested, referred, authorized, deferred, or rejected. Positions may include claimant, recorder, verifier, mediator, planner, licensor, budget authority, implementing agency, and reviewer. Boundary rules affect who may occupy these positions; position rules differentiate their roles; choice rules define authorized actions; information rules regulate access to records and reasons; aggregation rules determine how

collective decisions are made; payoff rules distribute costs and incentives; and scope rules specify permissible outcomes. The empirical value of IAD lies in tracing how these rule configurations operate together rather than treating each administrative defect in isolation.

Physical and material conditions, community attributes, and rules-in-use shape the arena. In land governance, material conditions include terrain, accessibility, mapping infrastructure, document availability, and the divisibility or visibility of land uses. Community attributes include shared understandings, inequality, trust, tenure histories, and customary authority. Rules-in-use include formal law but also practical norms and routines actually followed. Studies of customary commons, land allocation, and village land-use planning demonstrate that institutional performance depends on the fit among these conditions rather than formal rules alone (van Gils et al., 2014; Kuusaana & Eledi, 2015; Nyamhanga et al., 2025).

Relations, Mechanisms, and Levels

The framework is relational. Rules and contextual attributes configure positions, available actions, information, control, and incentives; these conditions influence interaction patterns; interaction produces outcomes; evaluative criteria make outcomes contestable; and feedback creates possibilities for institutional change. An information/authority/operative-rules mechanism is especially salient for land-status uncertainty: a record matters only when actors can access it, its provenance is recognized, a competent organization can interpret it, and an operative rule links that interpretation to a planning consequence.

IAD also differentiates operational, collective-choice, and constitutional levels. Operational decisions concern day-to-day verification, referral, service delivery, and enforcement. Collective-choice decisions establish policies and administrative procedures. Constitutional decisions determine who is entitled to make collective-choice rules. Land-status problems often cross these levels. A subdistrict forum can collect concerns but may lack authority to change a higher-level designation; a regency agency can integrate plans but may depend on sectoral concurrence; a village institution may recognize claimants yet lack statutory adjudicative competence. Analysis must therefore identify linked action situations and their dependencies, not assume a single self-contained arena. Kimmich and Tomas (2019) provide a configurational account of action-situation networks, while studies of flood-resilience planning show how discourses, mandates, and resources interact across levels (Vitale et al., 2020, 2023).

Development, Adaptation, and Boundary Conditions

Later developments extend the framework without erasing its core. Institutional grammar research decomposes institutional statements to improve precision and comparability, but coding remains sensitive to language and context (Watkins & Westphal, 2016; Dunlop et al., 2019). Politicized IAD adds explicit attention to history, interests, discourses, and power asymmetries (Clement, 2010; Whaley & Weatherhead, 2014). Power-focused work further asks who controls agendas, information, participation, and distribution (Brisbois et al., 2019). These are best treated as transparent extensions or contextualizations, because baseline IAD permits evaluative and control analysis but does not automatically reveal hidden power.

Boundary conditions follow. IAD is diagnostically strong when the analyst specifies the action situation, rule configuration, units and levels, evidence for rules-in-use, evaluative criteria, and feedback. It is weaker when an organization is equated with an arena, formal law is presumed operative, participation is presumed equitable, or a static snapshot is used for a changing conflict. Roggero et al. (2018) found that institutional analysis in climate adaptation often needed clearer specification of institutional variables, and Brisbois et al. (2019) showed that power can be obscured in collaborative settings. The framework therefore requires empirical discipline and should be combined with power-sensitive and temporal interpretation where the phenomenon warrants it.

Applications, Criticisms, And Boundaries

Applications Across Land Governance and Planning

Land-governance applications reveal recurring institutional plurality. Van Leeuwen (2014, 2017) showed that customary tenure reform and decentralization can involve renegotiation rather than straightforward transfer of authority. Kobusingye et al. (2016) documented how institutional proliferation complicates the forum in which land disputes are reported. Biitir et al. (2017) found that integrating decentralized land administration with traditional institutions requires more than parallel structures, while Tchatchoua-Djomo (2018) connected reform outcomes to institutional pluralism in Burundi. These studies support separating information verification from claimant recognition and dispute routing.

Urbanizing and peri-urban settings add competition and distributional pressure. Kuusaana and Eledi (2015) linked customary allocation and urbanization to land-use planning and food-system implications. Nuhu (2019) emphasized actor interaction and power relations in Tanzanian peri-urban governance. Fuseini (2021) showed how chieftaincy and modern institutions intersect in spatial planning, and Adam et al. (2021) analyzed political competition within decentralized land administration in Ghana. Adekola et al. (2023) adapted IAD to customary land institutions in Nigeria. Together, these studies caution against treating a registry, consultation, or decentralization statute as a complete governance arrangement.

Administrative capacity is another recurring mechanism. Ho et al. (2021) identified institutional challenges in scaling fit-for-purpose land administration through decentralization. Emiru et al. (2023) examined capacity constraints in urban land delivery and administration for housing. Lavigne Delville et al. (2023) described institutional incompleteness, politicization, semi-formality, and bricolage in Senegalese communes. Nyamhanga et al. (2025) linked village land-use planning compliance to governance conditions. These findings show why operational readiness—staff, data, finance, standards, facilitation, monitoring, enforcement, and interagency dependencies—must be diagnosed alongside rule design.

Planning applications confirm that linked arenas and local political interests matter. Çağdaş and Linke (2021) used institutional analysis to examine land readjustment; Luo et al. (2021) analyzed an urban development boundary policy; and Wachter and Wytrzens (2022) compared agricultural interests in local spatial planning. Janssen (2024) showed that people-centered planning practices depend on institutional conditions rather than participation labels alone. Flood-resilience studies in Milan and Naples likewise reveal multi-level constraints and discursive-institutional differences (Vitale et al., 2020, 2023). These applications justify a coordination domain that records authority, concurrence, information handoffs, and escalation across connected decisions.

Natural-resource applications broaden transferability while preserving boundaries. Wilkes-Allemann et al. (2015) demonstrated stakeholder and institutional analysis in urban forest recreation. Nigussie et al. (2018) linked soil and water conservation activities to institutional conditions. Barton et al. (2017) applied IAD to conservation policy mixes. Su et al. (2023) examined farmland titling, adjustment, and collective action in irrigation commons, while van Montfoort and Lulofs (2025) analyzed governance of sponge landscapes. Widiyanto et al. (2025) applied IAD to Indonesia's social forestry institutional transformation. These studies support mechanism-level transfer—rules, information, incentives, interaction, and feedback—rather than direct transplantation of policy instruments.

Criticisms, Tensions, and Transfer Boundaries

Four tensions recur. First, formal rules and rules-in-use may diverge. Cole (2017), Lavigne Delville et al. (2023), and Nyamhanga et al. (2025) show why compliance cannot be inferred from legal text. Second, apparent collaboration may conceal unequal agenda control or selective participation (Clement, 2010; Whaley & Weatherhead, 2015; Brisbois et al., 2019). Third, a bounded arena may omit decisive external situations, such as budgeting, licensing, customary recognition, or higher-level planning (Kimmich & Tomas, 2019; Vitale et al., 2023). Fourth, operationalization can become overly schematic if coded statements substitute for how actors actually communicate and exercise discretion (Watkins & Westphal, 2016).

Transferability is therefore conditional. Evidence from one land system can illuminate mechanisms—forum competition, information fragmentation, capacity gaps, or power asymmetry—but cannot establish the legal meaning of Indonesian land categories. Likewise, a successful institutional arrangement in one context is not evidence that the same arrangement will be effective elsewhere. The appropriate transfer is analytical: identify equivalent positions, rules, dependencies, and evaluative criteria, then test them against competent legal and organizational evidence in the receiving context.

Theory-To-Practice Translation Framework

The synthesis yields five connected domains. They are presented as a sequence because each creates inputs for the next, but the sequence is iterative rather than strictly linear. Verification produces an auditable account of what is known and unresolved; claimant recognition determines whose claims and authority must be considered; coordination connects the competent arenas; rule operationalization tests whether decisions can be implemented; and

accountability evaluates process and distribution while feeding corrections back into earlier stages.

The framework does not decide substantive land rights. It organizes the administrative work required to move from uncertainty to a reasoned planning treatment—proceed, proceed conditionally, redesign, refer, defer, or reject—within applicable authority. Each domain contains a diagnostic record, not a promise of effectiveness.

Table 1. IAD Theory-to-Practice Translation Matrix for Land-Status Uncertainty

Governance issue	Theory construct or mechanism	Application evidence	Practice implication	Boundary or caution
Unresolved or fragmented land-status information blocks planning decisions.	Information rules; rules-in-use; action–outcome linkage.	Fragmented records and unclear authority recur across Uganda, Ghana, Ethiopia, Senegal, the Netherlands, and Tanzania.	Maintain a staged verification register recording source provenance, verifier, status category, unresolved issues, and update history.	The register is an administrative evidence trail, not a legal adjudication or proof of ownership.
Multiple claimants and institutions compete for recognition and forum access.	Participants, positions, boundary/choice/aggregation rules, control.	Institutional plurality, forum competition, customary–statutory overlap, and unequal recognition recur across land cases.	Create a claimant-and-authority map and tiered referral protocol covering standing, documentary basis, competent forum, escalation, appeal, and interim planning treatment.	Participation or registration does not establish legal entitlement; due process and differentiated claims remain necessary.
Local proposals depend on decisions across village, subdistrict, regency, and higher-level arenas.	Linked action situations; levels of choice; rule configuration.	Mandate fragmentation, closed decisions, weak handoffs, and policy/funding dependence recur in planning and land administration.	Map linked decisions and specify lead authority, required concurrence, information handoffs, deadlines, escalation, and recorded reasons.	Coordination must not blur statutory authority or create a parallel licensing or adjudication body.
Formal plans and rules do not become operative administrative practice.	Rules-in-use, interaction, outcomes, feedback.	Capacity, finance, facilitation, standards, monitoring, enforcement, and practical norms shape implementation.	Use an implementation-readiness assessment tied to each decision and responsible organization.	A checklist cannot create resources or authority and should not become an unsupported performance ranking.
Unequal agenda, information, participation, and enforcement shape outcomes.	Control, evaluative criteria, distribution, feedback; politicized IAD extension.	Power asymmetry, selective participation, clientelism, low trust, and closed decisions limit correction.	Keep a decision-accountability record of participants/exclusions, evidence, authority, reasons, effects, objections, appeal, review date, and corrective action.	Disclosure and participation alone are insufficient; protect sensitive personal, customary, and commercial information.

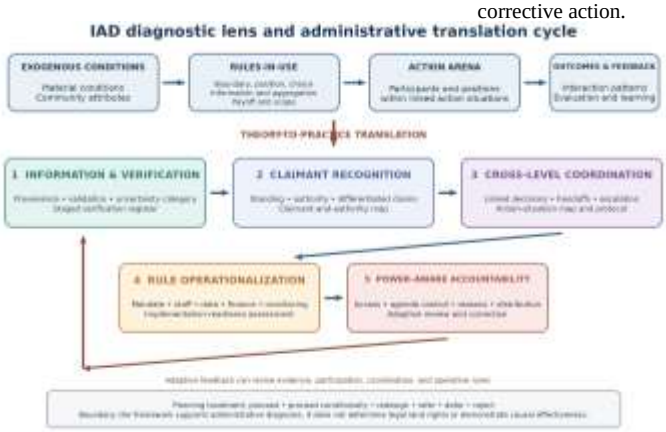

Figure 1. Institutional Analysis and Development Theory-to-Practice Translation Framework for Land-Status Uncertainty.

Domain 1: Land-Status Information and Verification

The first domain treats verification as an institutional information process. Administrators should identify authoritative and supplementary sources, define who can access and validate them, record conflicts among sources, and assign an explicit uncertainty category. The resulting register should link each evidentiary state to a provisional planning treatment and a responsible next action. This design follows evidence that fragmented records and uncertain authority can persist despite formal reform (Van Leeuwen, 2014; Kobusingye et al., 2016; Biitir et al., 2017; Emiru et al., 2023). Its essential safeguard is provenance: no entry

should be converted into a legal conclusion beyond the competence and documents of the responsible authority.

Domain 2: Claimant Recognition and Dispute Routing

The second domain translates participant, position, and boundary rules into a claimant-and-authority map. The map should distinguish claimant standing, supporting documentation, customary or statutory basis, relevant public authority, mediation or adjudication route, appeal, and the interim treatment of a development proposal. The aim is not to collapse plural institutions into one forum but to make pathways and competence auditable. Evidence from Uganda, Burundi, Ghana, Tanzania, and Nigeria shows that institutional proliferation and overlapping authority can intensify uncertainty when actors shop for forums or when recognition is uneven (Kobusingye et al., 2016; Tchatchoua-Djomo, 2018; Nuhu, 2019; Fuseini, 2021; Adekola et al., 2023).

Domain 3: Cross-Level Coordination and Decision Integration

The third domain maps the linked action situations through which a proposal travels. A coordination record should specify the lead organization, required concurrence, data handoffs, sequence, deadline, escalation route, and reasons for each decision. This avoids treating coordination as a meeting without decision architecture. Multi-level planning studies and decentralization research show that local implementation can be constrained by higher-level mandates, funding, policy, or closed decision processes (Amsler, 2016; Kimmich & Tomas, 2019; Ho et al., 2021; Adam et al., 2021; Vitale et al., 2023; Janssen, 2024). The safeguard is jurisdictional clarity: coordination connects competent decisions but does not create authority that law has not conferred.

Domain 4: Rule Operationalization and Administrative Capacity

The fourth domain asks whether an authorized choice can become operative practice. An implementation-readiness assessment should cover mandate clarity, staffing, data, finance, technical standards, facilitation, monitoring, enforcement, interagency dependencies, and feedback. It should attach named gaps and actions to the responsible organization rather than produce a generic score. Evidence from Ghana, Ethiopia, Senegal, Tanzania, pollution co-production, and social forestry shows that formal arrangements often depend on facilitation, resources, trust, and monitoring to function (Kuusaana & Eledi, 2015; Sarr et al., 2021; Emiru et al., 2023; Lavigne Delville et al., 2023; Widiyanto et al., 2025; Nyamhanga et al., 2025).

Domain 5: Power-Aware Accountability and Adaptive Review

The fifth domain adds an explicit record of participants and exclusions, evidence considered, authority exercised, reasons, distributional effects, objections, appeal routes, review dates, and corrective actions. This is a contextualized extension informed by politicized IAD and power-focused criticism. It responds to findings that apparently collaborative or participatory processes may restrict agendas, normalize unequal control, or exclude corrective feedback (Clement, 2010; Whaley & Weatherhead, 2014, 2015; Brisbois et al., 2019; Janssen, 2024). Accountability requires more than disclosure: decision-makers must provide reasons, permit challenge, monitor effects, and revise earlier assumptions when evidence or circumstances change.

Discussion

Theoretical Clarification

The review clarifies that IAD explains land-status uncertainty most productively when the phenomenon is framed as a configuration of linked action situations rather than as a missing-document problem. Information is consequential only in relation to positions, authority, rules-in-use, and planning scope. A verified record without a competent decision route does not resolve uncertainty; a competent forum without recognized claimants or usable evidence cannot produce a legitimate decision; and a formal decision without operational capacity may not affect implementation.

The five domains preserve the baseline architecture while making adaptations visible. Domains one through four mainly contextualize original IAD constructs and mechanisms. Domain five explicitly incorporates politicized and power-aware extensions. This separation prevents later additions from being retroactively attributed to baseline IAD and clarifies why power, distribution, and reason-giving require deliberate operationalization.

Conceptual Synthesis and Alternative Domain Structures

The retained structure balances parsimony and diagnostic distinction. Merging information verification with claimant recognition would create a broad 'status processing' category but conceal the difference between evidence and standing. Splitting coordination into vertical and horizontal forms would increase detail but duplicate the same dependencies and handoffs. Creating a sixth monitoring domain would separate feedback from the organizations and rules whose operation it assesses. Conversely, merging accountability with capacity would imply that administrative competence and legitimate distribution are the same problem. The five-domain structure is therefore a reasoned synthesis, not an empirically validated optimum.

The framework also connects recurrent findings that are often treated separately. Institutional plurality is linked to information provenance and dispute routing; decentralization is linked to cross-level decision dependencies; practical norms are linked to operational capacity; and participation is linked to power-aware evaluation. This integrated chain is the article's main conceptual-translational contribution.

Contextual Interpretation for Local Development Planning

Applied to the verified Sembakung Atulai planning concern, the framework suggests a sequence of administrative questions. What is known, from which source, and with what unresolved conflict? Who has a recognizable claim or official role? Which organizations have competence at each decision point? What concurrence, information handoff, or escalation is required? Are staff, finance, standards, facilitation, and monitoring available? Who is included or excluded, how are reasons recorded, and when is the treatment reviewed? These questions can structure institutional diagnosis without asserting the legal status of any particular land area.

A defensible planning system should also make uncertainty governable. Instead of treating every unresolved status as either a complete stop or an informal workaround, the system can assign transparent interim treatments: proceed where no relevant conflict exists; proceed conditionally with safeguards; redesign to avoid the disputed scope; refer to a competent forum; defer until specified evidence is obtained; or reject with recorded reasons. Such categories require legal and organizational calibration before use, but they illustrate how institutional diagnosis can improve the visibility of administrative choice.

Practical Translation for Public Administrators

For planners, the framework provides a structured pre-implementation diagnostic. For land and sectoral agencies, it clarifies information provenance, competence, and handoffs. For subdistrict and village facilitators, it differentiates participation, recognition, mediation, and legal determination. For oversight bodies, it creates records that can be reviewed for timeliness, reason-giving, distributional effects, and corrective action. The framework is most useful when embedded in existing planning and case-management systems rather than established as a parallel institution.

Implementation should begin with a limited pilot on a small number of planning proposals, accompanied by legal review and process mapping. Evaluation should examine record completeness, referral clarity, decision latency, unresolved dependencies, participation quality, and the use of feedback—not merely the number of projects approved. Comparative case work can then assess whether different rule configurations produce more coherent and legitimate administrative pathways.

5. Conclusion

This review answers the first research question by showing that IAD conceptualizes land-status uncertainty through linked action situations configured by participants, positions, actions, information, control, incentives, rules-in-use, levels of choice, interaction, evaluative criteria, outcomes, and feedback. The key mechanism is relational: evidence becomes administratively consequential only when operative rules and competent authority connect it to a decision.

In answer to the second question, full-text applications and criticisms show that IAD is diagnostically useful across land, natural-resource, planning, and public-administration settings when the action situation, rule configuration, levels, and evidence for rules-in-use are explicit. Its boundaries arise when formal rules are treated as practice, arenas are isolated from linked decisions, power and distribution are implicit, communication is reduced to coded statements, or capacity and temporal change are ignored.

In answer to the third question, the synthesis translates into five connected domains: land-status information and verification; claimant recognition and dispute routing; cross-level coordination and decision integration; rule operationalization and administrative capacity; and

power-aware accountability and adaptive review. Together, they provide a traceable administrative diagnostic for moving from uncertainty to a reasoned planning treatment. The contribution is conceptual-translational. It does not determine legal land status, validate a new theory, or establish the effectiveness of the proposed options.

LIMITATIONS

The 40-article analytical corpus is limited to English-language, final-stage journal articles indexed in Scopus and available as readable full text. Two seminal IAD articles identified through backward citation checking were used only to verify baseline concepts and terminology; they were not treated as application evidence or included in the corpus denominator. Relevant books, non-English studies, legal scholarship, grey literature, and non-indexed local research may therefore be absent. The theory-focused narrative design supports interpretive integration but does not estimate effect sizes or comparative causal impacts. Evidence-role counts overlap and should not be read as independent samples.

The local phenomenon is established through a verified official planning account, not through parcel-level legal records, fieldwork, interviews, or organizational process data. Consequently, the framework has not been tested in Sembakung Atulai and cannot establish the legal accuracy, feasibility, acceptability, or effectiveness of any practice option. Legal review, stakeholder engagement, organizational diagnosis, and empirical pilot evaluation are required before operational adoption.

DATA AVAILABILITY

No primary dataset was generated or analyzed. The search log, screening decisions, and domain-derivation matrix are provided as supplementary materials accompanying this article.

Discussion

The synthesis answers the practical problem by changing the unit of translation rather than the content of the focal theory. The original framework is organized by competence and level; the proposed framework is organized by the recurring administrative functions through which those cells interact in integrated pilgrim services. This move preserves theoretical fidelity while avoiding two unhelpful extremes. A simple three-column translation would be too abstract for institutional practice, whereas nine separate domains would merely reproduce the matrix and invite checklist scoring. Five domains retain the complete taxonomy while making evidence, mobilization, orchestration, authorization, and adaptive fit analytically distinguishable.

The theoretical clarification is that policy capacity should be treated as contingent potential. The literature supports neither a direct linear relationship between capacity inputs and policy outcomes nor the assumption that every cell contributes equally in every setting. Analytical expertise may be blocked by fragmented learning arrangements; operational resources may remain nominal rather than deployable; political support may be broad but insufficiently connected to implementation; and a successful outcome may reflect favorable demand rather than robust capability. The non-deficit sequence operationalizes this clarification by separating demand, capability, enabling relations, deployment, and outcomes.

The conceptual synthesis brings together developments that are often discussed separately. Demand–supply fit from Brenton et al. (2023), governance-mode vulnerabilities from Howlett and Ramesh (2016), temporal erosion from Walter et al. (2020), microfoundations from Fleischer and Wanckel (2024), integration conditions from Saguin and Howlett (2022) and Vince et al. (2024), and configurational findings from Capano et al. (2025) and Sarti (2026) are positioned within one translation architecture. These additions are not presented as new constructs authored by this review. Their synthesis makes explicit how later scholarship constrains use of the original matrix.

The contextual interpretation is that a newly established Hajj and Umrah ministry operates at the intersection of institutional transition, integrated public services, and cross-border governance. Mandate transfer makes deployability and role clarity salient; the diversity of pilgrim services makes evidence and integration salient; regulation and distributional choice make legitimacy and accountability salient; and seasonal, health, emergency, and bilateral variation make adaptive fit salient. Hajj-sector studies confirm the relevance of these problem

families, although they rarely apply the Wu–Ramesh–Howlett policy-capacity framework directly. Accordingly, the framework converts sector evidence into diagnostic questions rather than claims about present organizational weakness.

The practical translation has two audiences. For ministry leadership and public managers, the domains can structure capability reviews, improvement discussions, and evidence requests. For Commission VIII and parliamentary support staff, the same domains offer an oversight architecture that moves beyond expenditure and output review. This translation is consistent with the view that parliamentary capability combines analytical, procedural, relational, and political competences embedded in institutional roles (Munoz-Del-Campo, 2025). Oversight can ask what demand is being addressed, which capability configuration is relevant, whether resources are deployable, how institutional interfaces function, how authorization and accountability are maintained, and what learning follows implementation. This approach respects the distinction between legislative scrutiny and executive management: Parliament can demand explanations and evidence without prescribing day-to-day operating choices.

Transferability is bounded. The domains may be useful in other newly established ministries or integrated public services, especially where authority is distributed and continuity must be maintained during institutional change. Nevertheless, the specific manifestations, critical bottlenecks, and appropriate indicators must be grounded in the legal mandate, policy task, administrative culture, service population, technology, and intergovernmental relationships of each setting. Cross-border services additionally require evidence about foreign law, bilateral arrangements, data access, provider markets, and sovereign authority.

Alternative theories may be necessary when the analytical question changes. Institutional theories may better explain path dependence and the legitimacy of organizational forms; collaborative-governance theories may offer finer-grained accounts of trust building and joint decision rules; principal–agent theory may illuminate delegation and information asymmetry in parliamentary oversight; and public-value theory may clarify competing value criteria. Wu–Ramesh–Howlett policy-capacity framework is most useful for diagnosing competencies, enabling resources, and their configuration. It should not be forced to explain every aspect of institutional change, collaboration, accountability, or religious-service governance.

Empirical inquiry is now required to validate and refine the translation. Future research could operationalize domain-specific indicators without collapsing constructs, compare capability configurations across institutional phases, examine domestic and Saudi interfaces, and test whether particular combinations are associated with learning, implementation reliability, legitimacy, or resilience. Longitudinal and comparative designs would be especially valuable because they can distinguish accumulated capability from temporary crisis mobilization and can assess how demand–capacity fit changes over time.

4. Conclusion

RQ1 is answered by reconstructing policy capacity as a three-by-three matrix of analytical, operational, and political competences across individual, organizational, and systemic levels. The framework operates through technical-soundness, implementation, legitimacy, cross-level enablement, configurational fit, demand–supply alignment, and learning or erosion. Its principal boundaries are multidimensionality, contingency, measurement impurity, normative judgment, temporal change, and distributed control.

RQ2 is answered by showing that public-administration applications use the framework to explain policy work, implementation, crisis response, integration, regional governance, analytical systems, and organizational development. These applications also expose circular outcome measures, missing demand-side mechanisms, context dependence, alternative sufficient configurations, and the inability of individual skill or formal resources to overcome fragmented institutional arrangements.

RQ3 is answered through a five-domain translation for integrated pilgrim services: Evidence, Learning, and Service Intelligence; Mandate-to-Delivery Mobilization; Integrated Domestic and Cross-Border Orchestration; Legitimacy, Accountability, and Stakeholder Authorization; and Adaptive Readiness and Demand–Capacity Fit. The domains support conditional practice options and parliamentary questions while retaining the original framework taxonomy and a non-deficit diagnostic sequence. The contribution is conceptual and translational: it neither proposes a new theory nor establishes current ministry deficits or universal effectiveness.

Limitations

The review is limited by the interpretive judgment inherent in a theory-focused narrative design, the use of Scopus as the sole journal database, English-language and document-type filters, and the availability of full text. Eleven potentially relevant records could not be verified in full and were excluded from the analytical corpus. The corpus contains comparatively thin direct evidence applying Wu–Ramesh–Howlett policy-capacity framework to cross-border public services and no field validation of the five-domain translation within the new ministry. Hajj and Umrah studies were therefore used to establish contextual relevance and transfer conditions, not to diagnose current capacity. The framework's domains, indicators, relationships, and practical utility should be tested through longitudinal, comparative, and mixed-method research before being used as a formal assessment instrument.

Supplementary Material

Supplementary Tables S1–S3 accompany this article. Table S1 reports the six retained documented search runs, exact Scopus queries, filters, result counts, and reconciled selection flow. Table S2 lists the 47 included full-text journal articles and two official contextual sources. Table S3 reports the domain-derivation, practice-output, and boundary matrix.

Data Availability

No primary dataset was generated or analyzed. The documented search runs, reconciled screening flow, included full-text journal corpus, and domain-derivation matrix are provided in Supplementary_Tables_S1-S3.docx accompanying this article.

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