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How Local Governments Implement Land-Use Plans: Performance Assessment and Good-Practice Responses in Masbate Province, Philippines

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***Abstract*—** This study assessed CLUP-conforming zoning implementation in Masbate Province, Philippines, and mapped the challenges and good-practice responses that shaped local land-use governance. A descriptive–evaluative mixed-methods design surveyed LGU officials, community leaders, and residents using a 4-point Likert questionnaire and complemented the findings with semi-structured interviews. Overall results indicated "Agree" ratings across relevance, effectiveness, impact, sustainability, efficiency, community participation, and public accountability, with relevance and impact rated highest and community participation rated lowest; residents consistently rated performance lower than implementers. Challenge patterns clustered around limited staffing and technical expertise, inconsistent coordination, constrained financing for monitoring and enforcement, weak data systems and technology adoption, low public awareness, and difficulties integrating environmental safeguards. Documented responses included CLUP and zoning training, a functional Provincial Land Use Committee, earmarked funds for CLUP activities, GIS-based decision mapping, information and education campaigns, and policy anchoring through the Environment Code. The study provided actionable lessons for improving implementation performance beyond compliance.

***Keywords*—** Comprehensive Land Use Plan (CLUP), Zoning Ordinance Implementation, Local Land-Use Governance, Community Participation, Policy Capacity and Good Practices.

I. INTRODUCTION

Land is a finite resource and competing demands for settlement expansion, infrastructure, agriculture, and environmental protection make land-use decisions inherently political and administrative. For local governments, land-use plans are not only technical instruments but also governance tools that shape the distribution of opportunities and risks in communities. Development plans and land-use policies guide development control and provide the basis for regulating private and public actions in space, but their value depends on how effectively they are implemented at the local level (Thomas, 2001). In practice, implementation is often uneven because local governments operate under decentralised arrangements where decision space, institutional capacity, and accountability systems vary widely across jurisdictions (Liwanag & Wyss, 2019).

A persistent concern in the land-use planning literature is that "implementation" is frequently treated as synonymous with plan adoption, legal conformity, or the presence of a regulatory instrument. However, a plan or ordinance can be implemented in a formal, compliance-oriented sense while still failing to "work" in practice. This tension is captured in the performance–conformance divide: conformance asks whether actions align with plans and legal standards, whereas performance asks whether implementation produces the intended outcomes and governance benefits experienced by stakeholders (Feitelson et al., 2017). Reviews of implementation evaluation similarly note that reliance on conformance measures alone can obscure on-the-ground realities and recommend multidimensional assessment approaches that reflect practical effects, administrative processes, and stakeholder experience (Liu, 2016).

This distinction is particularly important for CLUP-conforming zoning, where regulatory legitimacy and effectiveness depend not only on alignment with planning and statutory requirements, but also on how clearly rules are communicated, how consistently they are enforced, and how transparent and inclusive implementation is at the community level. As such, assessing zoning ordinance implementation must go beyond verifying conformity to evaluating how the policy performs across core governance criteria—including participation and accountability—alongside conventional indicators such as relevance, effectiveness, impact, sustainability, and efficiency.

The performance–conformance distinction also directs attention to why implementation quality varies across local settings. In decentralized systems, gaps in performance are rarely explained by plan content alone; they more often reflect differences in local governance capacity—the practical ability of institutions to translate formal mandates into consistent administrative action. In the Philippine context, decentralization creates uneven "decision space" across local governments, where discretion exists but the capacity and accountability arrangements needed to exercise that discretion effectively are not uniform (Liwanag & Wyss, 2019). This helps explain why formally compliant zoning ordinances may still produce uneven outcomes in enforcement consistency, monitoring, stakeholder engagement, and responsiveness: the same policy instrument can perform differently depending on local institutional strength, resource availability, and the maturity of coordination systems.

Public administration research further highlights that implementation quality is shaped by the competence and influence of public managers and the networks through which they mobilize coordination and compliance. Kikuchi (2023) shows that senior public managers and planning-oriented networks matter for local government performance in the Philippines, suggesting that variations in leadership, coordination capacity, and policy orientation can translate into measurable differences in implementation outcomes. This is consistent with evidence from small municipalities where planning for sustainability is strongly affected by institutional characteristics, growth pressures, and local interest-group dynamics—factors that influence how plans are interpreted, prioritized, and enforced in practice (Levesque et al., 2016). Comparative decentralization studies likewise caution that devolving responsibilities without commensurate investments in capacity and accountability can widen performance gaps, particularly where systems are strained or institutional environments are fragile (Brennan & Abímbọ́lá, 2023).

Guided by this governance-capacity perspective, Objective 2 of the study examines CLUP implementation not only as a technical planning exercise but as an administrative system facing constraints across capacity, coordination, resources, and information infrastructures. By identifying challenges and documenting good-practice responses across administrative capacity, inter-agency coordination, resource allocation, and data and monitoring systems, the study responds to a core governance question: how local governments—operating with varying decision space and managerial capacity—adapt their institutions and routines to make land-use plans function effectively on the ground (Liwanag & Wyss, 2019; Kikuchi, 2023).

Community participation and public accountability should be understood as legitimacy infrastructure for land-use governance rather than procedural requirements that can be satisfied through periodic consultations. Participation shapes whether communities perceive zoning decisions as fair, understandable, and responsive—conditions that influence compliance and reduce resistance during enforcement and dispute resolution. Research on public participation emphasizes that meaningful engagement depends on the quality of interaction, the clarity of information provided, and whether citizen input is visibly integrated into decisions; tokenistic or extractive participation can weaken trust and undermine implementation (Hügel & Davies, 2020). In land-use policy specifically, participatory processes help align regulations with local realities and improve the acceptability of land-use rules, particularly where livelihoods and property interests are directly affected (Ariti et al., 2018). Collaborative planning studies similarly show that sustained, multi-stakeholder engagement can improve implementation outcomes by building shared problem definitions and negotiating trade-offs, but only when participation is structured as genuine co-production rather than symbolic inclusion (Bozdağ & İNAM, 2021).

The Masbate findings reflect this governance logic. While the overall assessments fall under "Agree," residents consistently rate community participation and public accountability lower than implementers—an important signal that legitimacy is not evenly experienced across stakeholder groups.

This divergence aligns with evidence that municipal officials often perceive policymaking processes as more inclusive and effective than citizens experience them, particularly when engagement mechanisms privilege formal meetings, technical language, or institutional channels that are less accessible to ordinary residents (Lemon et al., 2015; Parks et al., 2023). In Philippine policy implementation contexts, community

participation is repeatedly identified as a critical determinant of whether local environmental and regulatory initiatives translate into effective outcomes, because citizens' acceptance and cooperation affect both day-to-day compliance and the credibility of local enforcement (Camarillo & Bellotindos, 2021). Thus, the resident–implementer gap observed in this study can be interpreted as an implementation risk: even with formal CLUP conformity and administrative arrangements, weak perceived inclusion and accountability may limit public trust, reduce voluntary compliance, and intensify contestation.

This also strengthens the case for viewing stakeholder engagement as part of an institutional ecosystem that extends beyond government actors. In participatory environmental processes, NGOs frequently contribute by widening representation, translating technical information, and sustaining citizen involvement—roles that can improve both process legitimacy and implementation quality when properly integrated into governance structures (Greenspan et al., 2021). When engagement is designed as co-production—where citizens and organized stakeholders help define problems, shape priorities, and monitor outcomes—participation and accountability become reinforcing mechanisms that support implementation performance, rather than isolated activities conducted to satisfy procedural requirements (Hügel & Davies, 2020; Bozdağ & İNAM, 2021). In this regard, the study's inclusion of participation and accountability as core performance dimensions is consistent with the literature: land-use plan implementation "works" not simply when ordinances exist and are enforced, but when governance processes generate legitimacy, shared understanding, and credible responsiveness that sustain compliance over time (Ariti et al., 2018; Camarillo & Bellotindos, 2021).

Risk, resilience, and environmental integration have become a practical test of whether land-use plans "work" in contemporary governance. Increasingly, CLUPs and zoning ordinances are judged not only by their ability to organize growth and regulate land markets, but by how effectively they reduce disaster risk, protect environmental assets, and manage climate-related pressures through enforceable spatial decisions. In the Philippine policy context, the Department of Human Settlements and Urban Development frames the CLUP as a proactive instrument for mitigating disaster risks—an orientation that positions land-use planning as a risk governance tool rather than a purely developmental blueprint (Del Rosario, 2020). This is reinforced by national evidence showing that disaster risks and resilience challenges remain persistent and uneven, creating a continuing need for capacity building at both national and local levels to translate risk information into actionable local planning and implementation routines (Alcayna et al., 2016).

From an implementation perspective, this means that environmental considerations should not be treated as a separate sectoral concern but as a core dimension of land-use governance performance. Risk-based approaches in urban land-use planning emphasize the necessity of embedding hazard and exposure considerations into zoning rules, development permissions, and monitoring systems, with implementation mechanisms that allow local governments to adjust decisions as risks evolve (Greiving et al., 2023). Similarly, evidence from water and climate research highlights that land-use planning influences water resources and climate vulnerability, underscoring why environmental safeguards must be integrated into planning and zoning decisions rather than appended after-the-fact (Kalfas et al., 2024). This integration challenge is also fundamentally political: land-use planning must reconcile competing public interests—development goals, environmental protection, livelihood needs, and risk reduction—often under conditions of limited information and contested priorities (Svensson et al., 2020). As such, environmental integration is not merely a technical requirement; it is a governance process that requires institutional coordination, credible enforcement, and sustained stakeholder support.

In this study, the inclusion of environmental consideration among the implementation domains highlights that CLUP implementation quality can be assessed through the extent to which environmental safeguards and resilience objectives are operationalized—through consistent regulation, monitoring, and inter-agency coordination—rather than remaining aspirational statements in planning documents. In settings like the Philippines, where protected areas and biodiversity conservation effectiveness remain a concern, land-use planning implementation also intersects with the broader challenge of ensuring that environmental protection

commitments are matched by management capacity and enforcement outcomes (Mallari et al., 2015). Overall, the literature suggests that a CLUP's implementation success is increasingly measured by whether it can guide development while simultaneously reducing risk and safeguarding ecological systems—an expectation that raises the importance of local capacity, data systems, and coordination mechanisms for environmental governance (Del Rosario, 2020; Greiving et al., 2023; Kalfas et al., 2024).

The good practices documented in this study can be interpreted as policy capacity responses—practical governance mechanisms that enable CLUP-conforming zoning to function despite constraints in resources, coordination, and systems. Rather than treating good practices as isolated successes, a best-practices assessment lens emphasizes that implementation improves when local governments institutionalize repeatable routines and enabling structures (e.g., capability development, coordination forums, information tools, and monitoring arrangements) that translate plans into consistent administrative action (Calbick et al., 2003). In this sense, the Masbate experience reflects how implementation quality is actively "made" through managerial and organizational choices, where capacity is strengthened not only through formal compliance but through learning-oriented interventions and operational improvements that support day-to-day decision-making.

Importantly, these practices are also transferable lessons when framed systematically as a portfolio of governance instruments matched to observed implementation challenges. A policy landscape analysis approach supports mapping the local implementation environment—identifying what capacities, instruments, and coordination mechanisms are available and where gaps remain—so that good practices can be presented as replicable options rather than context-bound anecdotes (Borazon et al., 2025). In the Philippine setting, evidence shows that technical assistance programs can be instrumental in improving local planning outcomes when they build practical implementation capability and routines, supported by universities and specialized programs that extend the local "support ecosystem" for CLUP work (Mesa & Maneja, 2024; TAP-HSP UPLB, 2021; UPLB, 2021). Finally, the training-oriented component of these practices can be strengthened by applying knowledge mapping methods that diagnose capability gaps and translate them into targeted training priorities—an approach that helps institutionalize learning and supports scalability across LGUs (Alamban et al., 2024).

This study is situated within a growing governance and public administration concern that the effectiveness of land-use plans depends less on their formal adoption than on the policy capacity of local governments to implement them through workable institutions, coordination arrangements, information systems, and learning mechanisms. In the Philippine context—where CLUP preparation and zoning enforcement are shaped by uneven local capacities and reliance on inter-organizational support—implementation outcomes are increasingly influenced by the availability of technical assistance and capability-building ecosystems (Mesa & Maneja, 2024; TAP-HSP UPLB, 2021; UPLB, 2021). Anchored in best-practices assessment perspectives that treat implementation quality as a product of repeatable administrative routines and enabling tools (Calbick et al., 2003), the study examines Masbate Province to show how challenges and "good practices" can be mapped as a portfolio of capacity responses, consistent with policy landscape analysis approaches (Borazon et al., 2025), and strengthened through knowledge mapping that links implementation demands to targeted training priorities (Alamban et al., 2024). Thus, this study was initiated.

II. METHODOLOGY

The study employed a descriptive–evaluative research design using a mixed-methods approach to (a) assess the implementation of CLUP-conforming zoning ordinances in Masbate Province across the criteria of relevance, effectiveness, impact, sustainability, efficiency, community participation, and public accountability, and (b) identify implementation challenges and document good-practice responses. Data were gathered from three stakeholder groups—LGU officials, community leaders, and residents—using purposive sampling to capture both implementer and community perspectives. Quantitative data were collected through structured questionnaires using a 4-point Likert scale and challenge checklists covering administrative capacity, stakeholder engagement, policy framework, resources, coordination, data systems, public awareness, conflict resolution, technology, and environmental considerations. Qualitative data were obtained through semi-structured interviews to elicit concrete experiences and practices in implementation. Survey responses were analyzed using descriptive

statistics (weighted means and frequency/percentage distributions), while interview responses were organized and thematically summarized to triangulate and contextualize the quantitative findings. Ethical safeguards were observed through voluntary participation, informed consent, and confidentiality of respondents' identities.

III. RESULTS AND DISCUSSION

Implementation of LGU zoning ordinances in Masbate Province, emphasizing conformity with the CLUP and relevant national laws/legislations in terms of relevance, effectiveness, impact, sustainability, efficiency, community participation, and public accountability

Table 1 shows that respondents generally agree that the implementation of LGU zoning ordinances in Masbate Province is being carried out across all seven performance dimensions, with overall weighted means ranging from 2.76 to 3.16.

Table 1. *Implementation of LGU zoning ordinances in Masbate Province*

Performance Dimension	1 (WM)	2 (WM)	3 (WM)	Overall WM	Overall Description
Relevance	3.35	3.08	3.07	3.16	Agree
Effectiveness	2.98	2.92	2.63	2.84	Agree
Impact	3.15	3.08	3.07	3.10	Agree
Sustainability	2.96	3.08	2.73	2.92	Agree
Efficiency	2.88	2.80	2.73	2.80	Agree
Community Participation	2.91	2.84	2.53	2.76	Agree
Public Accountability	2.96	3.04	2.80	2.93	Agree

Legend:

1. LGU Officials
2. Community Leaders
3. Residents

Relevance obtained the highest overall rating (WM = 3.16), suggesting that zoning ordinances are perceived as aligned with community needs and planning/legal expectations. This is followed closely by Impact (WM = 3.10) and Public Accountability (WM = 2.93), indicating that respondents recognize observable effects of zoning and believe there are accountability-related mechanisms in place. Sustainability also remains positive (WM = 2.92), implying that respondents see some potential for continued implementation over time, although it is not among the strongest areas.

However, the table also highlights dimensions where implementation is comparatively weaker. Community Participation has the lowest overall rating (WM = 2.76), followed by Efficiency (WM = 2.80) and Effectiveness (WM = 2.84). These results suggest that while zoning ordinances are viewed as relevant and somewhat impactful, the processes that make them work smoothly—such as clear communication, consistent enforcement, timely service delivery, and meaningful citizen involvement—may be less robust.

Across all dimensions, a consistent stakeholder pattern emerges: LGU officials rate implementation highest, community leaders provide moderately high ratings, and residents give the lowest ratings, indicating a perception gap between implementers and the public. This gap is most pronounced in governance-facing areas such as community participation (LGU: 2.91; community leaders: 2.84; residents: 2.53) and is also evident in effectiveness (LGU: 2.98; residents: 2.63). Overall, the table suggests that implementation is regarded as generally acceptable, but strengthening citizen participation, improving day-to-day effectiveness, and enhancing administrative efficiency are key areas for improving how zoning ordinances are experienced at the community level.

Key challenges in CLUP implementation in Masbate Province and document the good practices adopted to address them across administrative capacity, stakeholder engagement, policy framework, resource allocation, inter-agency coordination, data and information systems, public awareness and education, conflict resolution mechanisms, technological integration, and environmental consideration

Administrative Capacity. Under Administrative Capacity, the results indicate that CLUP implementation in Masbate Province is strongly constrained by human-

resource and institutional limitations. The most frequently cited issue is limited staff and technical expertise (f=27, 71.05%), showing that many LGUs lack enough personnel with the specialized competencies needed for zoning administration, monitoring, and technical planning. This is compounded by inadequate administrative support from higher authorities (f=26, 68.42%), suggesting that local implementers face gaps in supervision, technical backstopping, or enabling support from upper governance levels—conditions that can slow implementation and weaken compliance consistency. Organizational stability also emerges as a challenge, with frequent staff turnover (f=22, 57.89%) and a lack of efficient organizational structure (f=23, 60.53%), both of which can disrupt continuity, dilute institutional memory, and create uneven application of zoning rules over time.

At the same time, the findings imply that capacity gaps are being addressed through targeted interventions. The reported good practice—a province-wide CLUP and Zoning Implementation & Monitoring Training-Workshop conducted by DHSUD Region, organized around functional divisions (e.g., planning/monitoring and evaluation, land resources)—directly responds to the most prominent constraints by strengthening technical competencies, standardizing implementation approaches, and clarifying role specialization across participating LGUs. In effect, the training initiative functions as a capacity-building mechanism that can mitigate skills shortages and partially offset turnover by institutionalizing shared tools, procedures, and implementation knowledge across the province.

Stakeholder Engagement. Under Stakeholder Engagement, the data indicate that CLUP implementation is weakened by gaps in inclusion, collaboration, and transparency—conditions that can reduce legitimacy and make compliance more difficult. The most prominent issue is the insufficient involvement of marginalized groups in consultations (f=25, 65.79%), suggesting that engagement processes may not be reaching or effectively representing groups most affected by land-use decisions. This is reinforced by the reported lack of community participation in decision-making (f=23, 60.53%) and weak collaboration between government and stakeholders (f=23, 60.53%), pointing to participation that may be limited to information-sharing rather than meaningful co-production. These engagement deficits likely contribute to public resistance to CLUP policies (f=22, 57.89%) and perceptions of limited transparency in the planning process (f=22, 57.89%), both of which can trigger contestation, slow implementation, and undermine trust in zoning decisions.

The documented good practice directly responds to these concerns through institutional redesign: the Provincial Land Use Committee (PLUC) was reconstituted to include NGOs and representatives from several national government agencies (NGAs). This action strengthens stakeholder engagement by widening representation, creating a formal venue for multi-sector dialogue, and improving coordination between provincial actors and external partners. By incorporating NGOs, the PLUC can better bridge community perspectives—including marginalized voices—into land-use deliberations, while NGA participation can enhance technical credibility and policy alignment. Overall, the reconstituted PLUC functions as a governance platform intended to improve transparency, reduce resistance through inclusive deliberation, and strengthen collaborative implementation of CLUP-related policies.

Policy Framework. Under the Policy Framework domain, the findings show that CLUP implementation is constrained by rule clarity, legal coherence, and enforceability. The most frequently cited concern is inconsistent enforcement of zoning regulations (f=27, 71.05%), indicating that even when ordinances exist, uneven application across areas or cases can weaken predictability and credibility. This is closely linked to conflicting policies between local and national frameworks (f=25, 65.79%), which suggests that implementers may face overlapping mandates or inconsistent directives that complicate interpretation and enforcement. Additional challenges—such as insufficient legal support for land-use decisions (f=22, 57.89%), lack of clarity in zoning laws (f=21, 55.26%), and delays in updating the CLUP and zoning ordinances (f=21, 55.26%)—further point to a policy environment where ambiguity and outdated provisions can create enforcement gaps, increase disputes, and reduce the ability of LGUs to respond to emerging development and environmental pressures.

The good practice cited—adoption of the Masbate Provincial Environment Code of 2000 as an overarching local policy for environmental management and

sustainable development—functions as a policy-anchoring mechanism that helps address these framework challenges. By providing a consolidated normative basis for environmental governance, the Environment Code can strengthen legal coherence, clarify guiding principles for land-use decisions, and support more consistent enforcement by aligning local regulatory actions with broader sustainability objectives. In implementation terms, an overarching code can also reduce policy fragmentation by serving as a reference point for harmonizing local rules with national mandates, and it can legitimize zoning decisions by grounding them in an established provincial policy framework—particularly in cases where legal support, clarity, and timely ordinance updates are perceived as insufficient.

Resource Allocation. Under Resource Allocation, the findings indicate that financial constraints are a major barrier to sustained CLUP implementation. The most frequently cited concern is insufficient funding for CLUP initiatives (f=24, 63.16%), suggesting that many activities required for effective land-use governance—such as updating technical studies, conducting consultations, producing maps, and supporting enforcement—are difficult to maintain with current budgets. This is reinforced by the reported lack of financial support for monitoring and enforcement (f=23, 60.53%) and inadequate allocation of resources for planning and implementation (f=23, 60.53%), pointing to an implementation environment where ordinances may exist but the operational funding needed to make them work (staff time, field inspections, compliance monitoring, and administrative processing) is limited. Challenges related to fiscal strategy also emerge, including poor budget prioritization for land-use projects (f=22, 57.89%) and limited access to external funding sources (f=21, 55.26%), which together indicate difficulty both in internal prioritization and in mobilizing supplemental resources beyond regular local revenues.

The documented good practice—earmarking a fixed percentage of the Internal Revenue Allotment (IRA) for CLUP-related projects—directly responds to these resource constraints by institutionalizing a predictable funding stream for implementation. By dedicating a portion of IRA to activities such as zoning administration, mapping, and public consultations, LGUs can stabilize core implementation functions and reduce the risk that CLUP priorities are displaced by short-term spending pressures. In practical terms, earmarking improves the feasibility of monitoring and enforcement, supports regular technical updates, and strengthens continuity of implementation over time—making the CLUP less dependent on ad hoc funding and more embedded in routine local budgeting.

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Data and Information Systems. Under Data and Information Systems, the findings indicate that CLUP implementation is constrained by weak data quality, limited technological capability, and poor interoperability across agencies. The most frequently cited challenge is the lack of accurate land-use data (f=24, 63.16%), suggesting that planning and enforcement decisions may be made with incomplete or outdated spatial and socio-economic information. This is reinforced by inadequate systems for data management and sharing (f=23, 60.53%) and the lack of regular data updates for planning purposes (f=23, 60.53%), which point to institutional limitations in maintaining reliable datasets over time and making them accessible for routine implementation work. Technology constraints are also evident, with limited access to technology for mapping and monitoring (f=22, 57.89%) and insufficient data integration across agencies (f=22, 57.89%), indicating that even when data exist, they may not be harmonized or usable for coordinated monitoring, enforcement, and decision-making across implementing offices.

The documented good practice—use of GIS-based decision mapping and related tools introduced during the 2023 CLUP/Zoning Implementation & Monitoring initiatives—directly responds to these constraints by strengthening the technical foundation for evidence-based planning and enforcement. GIS-based decision mapping improves the accuracy and usability of spatial information, supports clearer zoning boundary interpretation, and enables more systematic monitoring of compliance and land-use change. It also creates a shared technical language for inter-agency coordination by making maps and spatial layers easier to integrate across offices. In effect, adopting GIS tools helps convert data from a passive "planning requirement" into an operational asset for routine implementation, while also providing a platform for improving data management, standardizing updates, and strengthening cross-agency information sharing over time.

Public Awareness and Education. Under Public Awareness and Education, the findings show that one of the strongest barriers to CLUP implementation is the limited understanding of land-use rules among citizens and stakeholders. The most frequently cited challenge is limited public awareness of the CLUP and zoning ordinances (f=28, 73.68%), indicating that many community members may not know what the ordinances require, why they exist, or how they affect property use and development decisions. This is reinforced by the lack of educational programs on land-use planning (f=25, 65.79%) and insufficient information dissemination to communities (f=24, 63.16%), suggesting gaps in structured communication efforts and sustained learning opportunities. As a result, implementers also report misunderstanding of zoning regulations among stakeholders (f=23, 60.53%) and a lack of community training on sustainable land management (f=23, 60.53%). Together, these findings imply that implementation challenges are not only administrative but also behavioral: when the public does not understand zoning rules, compliance becomes harder, resistance increases, and enforcement can be perceived as arbitrary or unfair.

The good practice identified—implementation of information, education, and communication (IEC) programs and community organizing on environment and land use by the province and LGUs—directly addresses these awareness deficits by improving rule clarity and strengthening community engagement. IEC initiatives can translate technical zoning provisions into accessible messages, clarify responsibilities and penalties, and explain the public benefits of zoning (e.g., safety, environmental protection, orderly development). Community organizing complements IEC by creating sustained platforms for dialogue, feedback, and local champions who can reinforce understanding at the barangay level. In practical terms, strengthening public awareness and education supports smoother implementation by increasing voluntary compliance, reducing misinformation and conflict, and helping residents see zoning ordinances as legitimate governance tools rather than externally imposed restrictions.

Conflict and Resolution Mechanisms. Under Conflict Resolution Mechanisms, the findings indicate that CLUP implementation is significantly constrained by the absence of robust, trusted, and enforceable processes for managing land-use disputes. The most frequently reported concern is inadequate mechanisms for resolving land disputes (f=27, 71.05%), suggesting that disagreements over zoning classifications, boundary interpretations, land-use claims, or development restrictions may persist without clear pathways for resolution. This challenge is intensified by the weak enforcement of conflict resolution outcomes (f=25,

65.79%), implying that even when decisions are made, they may not be consistently carried out or respected—undermining both the credibility of the CLUP and the authority of implementing institutions. Additional constraints include limited involvement of stakeholders in dispute resolution (f=24, 63.16%), insufficient legal support for land dispute settlements (f=23, 60.53%), and the lack of mediation and arbitration processes (f=22, 57.89%). Collectively, these point to conflict management as a governance gap: unresolved disputes can delay zoning actions, weaken enforcement, and heighten community resistance to land-use decisions.

The documented good practice—using PLUC hearings and technical working groups as venues to reconcile conflicting land-use claims—directly responds to these constraints by providing an institutionalized, multi-actor platform for dispute processing. PLUC hearings and TWGs can create structured spaces where evidence is reviewed, technical interpretations are clarified, and affected parties can be heard, helping reduce misunderstandings and improve procedural fairness. Because these bodies can bring together provincial offices, relevant agencies, and stakeholders, they also support more credible decisions and better coordination in implementing outcomes. In effect, this mechanism strengthens CLUP implementation by shifting conflict resolution from informal or ad hoc bargaining toward more formalized deliberation and technical review—improving the likelihood that disputes are settled in ways that are transparent, technically defensible, and implementable.

Technological Integration. Under Technological Integration, the findings show that CLUP implementation is strongly constrained by limited access to, and institutional readiness for, digital planning and monitoring tools. The most frequently cited issue is the limited use of GIS and other technological tools (f=28, 73.68%), indicating that many LGUs still rely on manual or fragmented methods that reduce accuracy and slow decision-making. This is closely linked to the lack of training on new technologies for planning (f=27, 71.05%), suggesting that even where tools exist, technical skills gaps prevent their effective use. Respondents also identify insufficient technological infrastructure for monitoring (f=23, 60.53%), which limits the capacity to track compliance, land-use changes, and ordinance enforcement in a timely manner. Financial and organizational barriers further complicate modernization, including high costs associated with technological upgrades (f=22, 57.89%) and resistance to adopting new technologies (f=21, 55.26%), reflecting both budget constraints and change-management challenges within implementing institutions.

The good practice—adoption of GIS and digital tools for spatial planning, zoning enforcement, and CLUP monitoring—directly targets these barriers by strengthening the operational backbone of implementation. GIS and digital tools improve spatial accuracy, speed up zoning verification and permitting decisions, and enable more systematic monitoring and reporting, which are essential for consistent enforcement. Over time, digital workflows can also reduce dependence on individual staff knowledge by standardizing procedures, thereby helping mitigate the effects of turnover and uneven technical expertise. While adoption does not automatically resolve infrastructure and cost constraints, it represents an important step toward modernizing CLUP implementation by making monitoring more evidence-based, enforcement more consistent, and inter-office coordination easier through shared spatial data and common technical platforms.

Environmental Considerations. Under Environmental Consideration, the findings indicate that CLUP implementation is constrained by both technical and governance gaps in mainstreaming environmental protection into land-use decision-making. The most frequently cited concern is insufficient integration of environmental issues in the CLUP (f=27, 71.05%), suggesting that environmental safeguards may not be consistently translated into zoning classifications, development controls, or permitting decisions. This is reinforced by weak enforcement of environmental regulations (f=24, 63.16%) and limited capacity for environmental monitoring and evaluation (f=23, 60.53%), pointing to constraints in both regulatory follow-through and the institutional ability to track environmental outcomes over time. The data further show that implementation is challenged by value and priority trade-offs, with reported conflicts between development and environmental sustainability goals (f=22, 57.89%), as well as information constraints such as the lack of environmental data for informed planning decisions (f=22, 57.89%). Together, these challenges imply that even when environmental objectives are recognized, they may be difficult to operationalize

without adequate monitoring systems, reliable data, and consistent enforcement routines.

The good practice identified—the Environment Code of 2000, which embeds principles of environmental protection and sustainable use of natural resources into local land-use governance—serves as a policy anchor for strengthening environmental integration in CLUP implementation. By institutionalizing environmental norms within an overarching provincial framework, the Code can provide clearer guidance for zoning decisions, reinforce enforcement legitimacy, and support the alignment of development actions with sustainability goals. In practical terms, an environmental code can help reduce ambiguity when balancing development pressures against environmental safeguards, and it can justify stricter enforcement and monitoring by grounding decisions in established provincial policy. While capacity and data limitations remain key constraints, the Environment Code functions as a structural mechanism that strengthens the policy basis for integrating environmental considerations into land-use planning and zoning implementation.

Overall, the discussions across the ten implementation domains show that CLUP implementation in Masbate Province follows a consistent pattern: core governance functions are present, but their effectiveness depends on whether LGUs have the capacity, resources, coordination mechanisms, and information systems to operationalize them. The most pressing constraints cluster around human-resource and organizational limitations, gaps in stakeholder inclusion and transparency, policy coherence and enforcement consistency, financing for monitoring and implementation, weak inter-agency alignment, and persistent deficits in data, technology, and environmental monitoring—conditions that can collectively weaken legitimacy, slow execution, and reduce compliance. At the same time, the documented good practices demonstrate that these barriers are not insurmountable when local governments institutionalize practical capacity responses, such as province-wide training and functional divisions for implementation, strengthened coordination platforms (e.g., PLUC and technical working groups), earmarked funding for CLUP-related activities, GIS-based decision mapping and digital monitoring tools, IEC and community organizing efforts, and a policy anchor for sustainability through the Environment Code. Taken together, these findings imply that improving CLUP implementation requires not only sustaining plan conformity, but also investing in the administrative and governance infrastructure that makes zoning ordinances work consistently and credibly at the community level.

IV. CONCLUSION

The findings indicate that the implementation of LGU zoning ordinances in Masbate Province is generally perceived as acceptable across all performance dimensions, with overall ratings consistently falling under “Agree.” Relevance and impact obtained the strongest assessments, suggesting that zoning is viewed as aligned with local development needs and capable of producing observable community-level effects. However, the comparatively lower ratings for effectiveness, efficiency, and sustainability imply that translating zoning provisions into consistent day-to-day administrative outcomes remains challenging. Most importantly, the pattern of stakeholder responses shows that residents consistently rate implementation lower than LGU officials and community leaders, signaling a perception gap that is most visible in governance-facing criteria, particularly community participation and public accountability. This indicates that while implementation structures may be in place, the citizen experience of inclusion, transparency, and responsiveness remains a key area requiring strengthening.

The results also demonstrate that CLUP implementation faces multi-dimensional constraints that cut across administrative, institutional, financial, technical, and environmental systems. Challenges were strongest in areas such as limited staff expertise and administrative support, weak inclusion of marginalized groups and stakeholder collaboration, inconsistencies in enforcement and policy coherence, insufficient funding for monitoring and implementation, fragmented inter-agency coordination, inadequate and outdated data systems, low public awareness and education, weak dispute-resolution capacity, limited technological adoption, and difficulties integrating environmental safeguards into land-use decisions.

These barriers reveal that implementation problems are not confined to a single function, but rather reflect interrelated capacity and governance gaps that collectively affect the credibility and effectiveness of zoning ordinances at the community level.

At the same time, the study documents concrete good-practice responses that demonstrate how local governments can address implementation bottlenecks through practical governance mechanisms. Province-wide capability-building initiatives, strengthened coordination platforms (such as functional PLUC processes and technical working groups), earmarked funding for CLUP activities, GIS-based decision mapping and digital monitoring tools, IEC and community organizing, and the Environment Code as a policy anchor for sustainability together represent a portfolio of institutional responses that make implementation more workable, coherent, and defensible. Taken together, the conclusions for Objectives 1 and 2 suggest that sustaining CLUP-conforming zoning requires moving beyond formal compliance toward investments in administrative capacity, participatory legitimacy, inter-agency coordination, evidence-based monitoring, and environmental governance—so that zoning ordinances not only exist and conform to planning requirements, but consistently "work" in practice and are experienced as credible by the communities they regulate.

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