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Institutionalizing a Municipal Incident Command System Readiness and Accountability Framework for Disaster Governance in Sipocot, Camarines Sur

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ABSTRACT

This policy-advocacy study examined how a Municipal Incident Command System (ICS) Readiness and Accountability Framework could be institutionalized for disaster governance in Sipocot, Camarines Sur. Using qualitative documentary policy analysis, the paper reviewed Philippine disaster-risk-reduction laws, national ICS and crisis-management issuances, disaster-governance research, and publicly accessible municipal and provincial records; it did not recruit survey respondents or test an intervention. The available evidence establishes recurring hazard exposure, including flooding reported in ten barangays during Tropical Cyclone Kristine, and completion of Basic ICS Training by municipal personnel in October 2025. However, the public record did not permit verification of an integrated, continuously tested municipal system linking command authority, emergency operations center (EOC) support, personnel qualifications, resource and communications readiness, inclusion and privacy protections, exercise performance, corrective actions, financing, and annual accountability. This is an evidence limitation, not proof that such arrangements are absent. Three policy alternatives were assessed: continuation of existing instruments, administrative strengthening, and a municipal ordinance with implementing rules. The focal proposal begins with a controlled 90-day legal and operational baseline, followed, if validated gaps warrant it, by a phased 18-month implementation and recurring annual readiness cycle. The proposed framework preserves national doctrine and agency jurisdiction while providing a basis for verifiable, inclusive and sustained municipal readiness.

Keywords: *incident command system; disaster governance; municipal readiness; emergency operations center; policy accountability; Sipocot*

INTRODUCTION

Disasters strain the ability of local governments to coordinate decisions, mobilize resources, communicate risk, and act across agencies. In the Philippines, Republic Act No. 10121 (2010) established local disaster risk reduction and management (DRRM) responsibilities, while National Disaster Risk Reduction and Management Council (NDRRMC) Memorandum Circular No. 4 (2012) provided guidance for the Incident Command System as an on-scene response mechanism. Executive Order No. 82 (2012) complements this architecture for human-induced crises. The policy problem is consequently not the absence of a national ICS mandate, but the challenge of sustaining the organizational conditions needed to implement it during real incidents.

Sipocot, Camarines Sur, comprises 46 barangays and had 65,286 residents in the 2024 census (Philippine Statistics Authority [PSA], 2025). Local hazard documentation includes flooding in ten barangays during Tropical Cyclone Kristine in October 2024 (NDRRMC, 2024), while the Municipal DRRM Office reported Basic ICS

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Training for municipal personnel on October 27–29, 2025 (MDRRMO Sipocot, 2025). Provincial efforts to strengthen DRRM planning provide a further setting for capacity development (Provincial Government of Camarines Sur, 2026). These public records establish a hazard-exposed context with documented training, but do not measure the overall readiness of local command and support systems.

The identified research gap concerns the connection among local ordinances and directives, emergency operations center (EOC) arrangements, ICS activation and transfer-of-command procedures, qualified personnel, interoperable resources, communications, mutual assistance, safeguarding, exercises, corrective actions, financing, and accountability. International evidence supports the importance of coordination, communication, and learning mechanisms in emergency management (Abbas & Miller, 2025; Sydnes et al., 2025; Wiedemann et al., 2024). Yet these considerations cannot be treated as confirmed deficiencies in Sipocot without reviewing the municipality's internal documents and capabilities.

Accordingly, the present documentary study examined the applicable legal and policy framework, identified domains requiring controlled local verification, compared available institutional responses, and developed a Municipal ICS Readiness and Accountability Framework. The purpose was to support lawful and evidence-based policy deliberation rather than to replace existing national command doctrine, conduct a field assessment, or claim measured improvements in response performance.

Literature Review

Disaster Governance, Coordination, and the ICS–EOC Interface

Disaster governance requires clarity about authority, coordination, and information exchange across public organizations. NDRRMC Memorandum Circular No. 4 (2012) establishes ICS as a scalable on-scene structure, while Republic Act No. 10121 (2010) defines local DRRM institutions. The EOC performs a complementary coordination and support role rather than acting as an alternative incident commander. NDRRMC Memorandum Circular No. 43 (2016a) and the NDRRMC–National Security Council contingency-planning guidance (2016) connects incident management with response clusters, interoperability, and planned escalation.

Loebach et al. (2024) examined EOC structures and their organizational responsibilities, and Sydnes et al. (2025) highlighted the challenges of coordination during emergencies. Hawkins et al. (2023) argued for incident-management systems capable of adapting to complex public-health responses. Together, these sources support a municipal responsibility matrix, clear activation and command-transfer procedures, and operational reporting arrangements that respect statutory jurisdiction rather than placing field command automatically in a particular political office.

Executive Order No. 82 (2012) also emphasizes preparation, performance, and post-action assessment for human-induced crises. It offers relevant institutional-learning principles, although its specific scope must not be conflated with all-hazards ICS. The source capstone therefore treats local legislation as a means of organizing municipal duties and accountability, not as a vehicle for creating competing response-command doctrine.

Competency, Operational Resources, and Preparedness Exercises

Training attendance demonstrates participation, but does not by itself establish competence to serve in every incident-management position. The Federal Emergency Management Agency (2021) describes the importance of matching incident organization and preparedness to complexity. For municipal implementation, a competency-based primary and alternate roster should be supported by relevant course records, exercises, supervised experience, cross-training, succession planning, and periodic renewal of qualifications.

Simulation and tabletop exercises can reveal operational constraints without an actual disaster. Gundran et al. (2023) investigated simulation-training needs among Philippine response agencies, while Sena et al. (2021) described an emergency preparedness tabletop exercise. Brown et al. (2022) demonstrated incident-command simulation as an interprofessional learning strategy. This evidence supports progressive orientations, tabletop tests, functional exercises, and proportionate field exercises, followed by documented assessment.

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Operational resilience also depends on the condition and mobilization of equipment, communications, logistics, and mutual-aid arrangements. Miller et al. (2025) emphasized adaptive approaches to complex emergency management. For Sipocot, the relevant question is whether these requirements are evidenced by current, tested records—not simply whether resources or training programs are mentioned in plans.

Inclusive Protection, Information Governance, and Public Accountability

Inclusive incident management requires attention to people who may face distinctive evacuation, communication, and service-access barriers, including persons with disabilities, older residents, children, and displaced households. Moyal-Smith et al. (2024) described the need to embed equity within incident-management responsibilities and assessment procedures. The Sendai Framework likewise emphasizes strengthened risk governance and preparedness to support effective response (United Nations Office for Disaster Risk Reduction [UNDRR], 2015).

Sensitive rosters, contact files, vulnerability information, and incident reports require controlled collection, access, storage, disclosure, and retention consistent with Republic Act No. 10173 (2012). At the same time, public accountability can be supported through non-sensitive information on plan implementation, exercises, corrective-action progress, and eligible expenditures. DILG Memorandum Circular No. 2025-105 (2025) underscores readiness monitoring, while Memorandum Circular No. 2026-014 (2026) supports integrated, evidence-based local DRRM and climate-adaptation capacity development.

These literature strands imply that readiness is both technical and institutional: it must be lawful, practiced, inclusive, measurable, and revisited. The original conceptual framework integrates these concerns through a repeating sequence of validation, qualification, resource enablement, protection, exercise, financing, accountability, and adaptation around a governance core. The framework expresses a proposed operating logic, not a statistically validated causal model.

The governance core distinguishes MDRRMC oversight, MDRRMO/EOC support, on-scene ICS, and other lawful agency jurisdictions; the surrounding stages represent a proposed recurring readiness cycle.

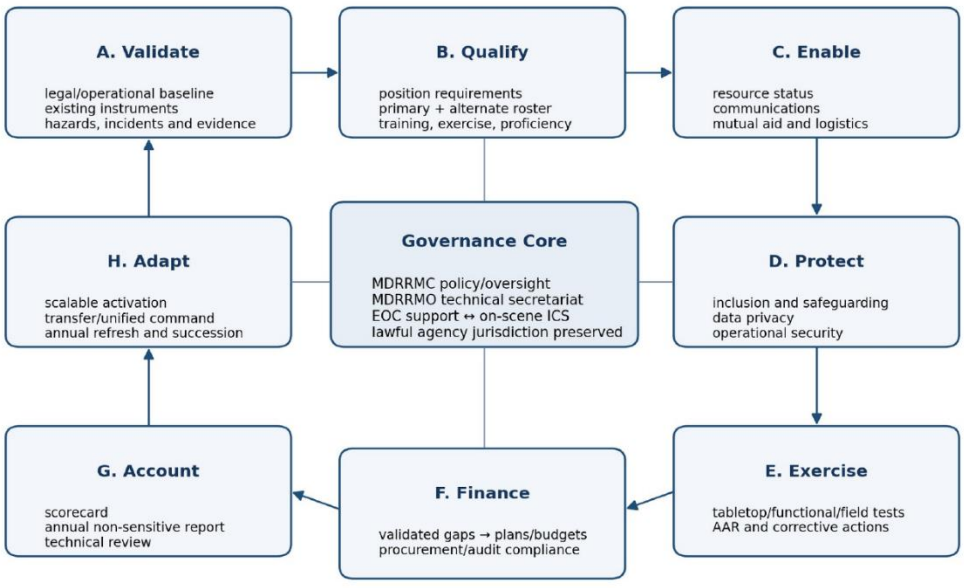


Figure 1. *Municipal ICS Readiness and Accountability Framework*

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METHODS

Research Design

The study employed qualitative documentary policy analysis. Laws, executive and administrative issuances, published disaster reports, research literature, and publicly available local records were examined to determine the governing policy architecture and develop institutionally feasible options. The design was analytical and normative rather than an experimental test, survey, or completed on-site capability audit.

Research Locale

The unit of policy application was the Municipality of Sipocot, Camarines Sur, Philippines. Municipal hazard exposure, governance arrangements, and documented capacity-development activities provided context for a framework applicable to municipal offices and their coordination with barangays, provincial and national agencies, response organizations, and community partners.

Participants and Sampling Technique

No human respondents were recruited for the documentary analysis. Materials were selected purposively for legal authority, policy relevance, recency, institutional applicability, and connection to Sipocot. The source expressly excluded verification of restricted internal municipal plans, personnel rosters, agreements, incident files, and exercise records; these were designated for a subsequent controlled baseline review, not treated as absent.

Research Instrument

The analytical instrument was a policy-evidence review matrix organized around statutory mandate, EOC–ICS interfaces, command activation, personnel qualification, resources and communications, mutual aid, inclusion, data protection, exercises, after-action review, corrective actions, financing, and annual accountability. This matrix was used conceptually to connect documentary sources with proposed governance provisions and verification questions.

Data Gathering Procedure

The author reviewed available national laws and policy issuances, published research on disaster governance, Philippine disaster situation reports, public local and provincial capacity-development information, and existing policy guidance. The material was organized by institutional function, compared against governance alternatives, and synthesized into a proposed ordinance-and-implementation design. The available record does not show direct access to protected municipal administrative documents.

Data Analysis

Documents were analyzed by legal and institutional mapping, qualitative thematic synthesis, and comparison of policy alternatives. Evidence was separated into (a) documented public facts, (b) nationally established requirements, (c) unknown local operational conditions requiring validation, and (d) proposed design responses. Alternatives were compared by transition burden, flexibility, continuity, implementation risk, and suitability after baseline assessment. No statistical hypothesis tests, survey frequencies, or measured intervention effects were generated.

Ethical Consideration

The analysis used publicly accessible documentary sources and did not involve direct collection of identifiable personal data. The proposed policy would require privacy protection and operational security for controlled rosters, incident information, and vulnerable-person referrals in accordance with Republic Act No. 10173 (2012). Because no human-subject fieldwork was documented, no ethics-board approval number is claimed. Documents that may be restricted were not represented as having been inspected.

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RESULTS AND DISCUSSION

Documented Municipal Context and the Limits of Available Evidence

The documentary record identifies a municipality with 46 barangays and 65,286 residents (PSA, 2025), exposure to recurrent natural hazards, and recorded flooding in ten barangays during Tropical Cyclone Kristine (NDRRMC, 2024). MDRRMO Sipocot (2025) documented completion of Basic ICS Training in October 2025, and the Provincial Government of Camarines Sur (2026) reported continuing local DRRM planning-capacity initiatives. These constitute verified context and activity, not measured proof of an integrated readiness system.

The records available to the capstone did not establish whether all local ordinances, office orders, incident-command protocols, rosters, resource inventories, communications tests, mutual-aid agreements, safeguarding mechanisms, exercises, budget instruments, and corrective-action files connect into a single current readiness process. This documentary limitation must be distinguished from evidence of failure. The first policy result is therefore a proposed controlled 90-day inventory, legal harmonization exercise, and gap register before declaring that a local function is missing.

Policy and Institutional Alignment

Republic Act No. 10121 (2010) and Republic Act No. 7160 (1991) provide the broader statutory foundation for municipal DRRM functions and lawful local legislation. NDRRMC Memorandum Circular No. 4 (2012), NDRRMC guidance on interoperability and team mobilization (2016a, 2016b), and contingency-planning guidance (NDRRMC & National Security Council, 2016) specify how municipal arrangements should support national incident-management practice. Executive Order No. 82 (2012) contributes the complementary crisis-management framework for human-induced events.

Recent DILG guidance links governance arrangements with financing and capability monitoring. DILG Memorandum Circular No. 2020-043 (2020) addresses Local DRRM Fund utilization; Circular No. 2025-105 (2025) provides a readiness monitoring structure; and Circular No. 2026-014 (2026) strengthens integrated capacity development. Public financial and readiness reporting must remain consistent with eligibility, procurement, accounting, audit, and personal-data protections (Republic Act No. 10173, 2012). No municipal ordinance could validly override national ICS jurisdiction, make an ineligible expenditure lawful, or assign incident command solely by political rank.

Comparison of Policy Alternatives

The capstone considered three governance paths, all conditional on local validation. Continuing existing instruments may be sufficient where current arrangements are documented and functioning. Administrative strengthening through an executive order, MDRRMC resolution, updated activation procedures, controlled SOPs, or roster policy provides a flexible interim response. A municipal ordinance supported by implementing rules and changeable SOPs is the focal proposal when confirmed gaps require durable cross-office obligations, continuity, budget alignment, and repeated accountability.

Table 1. *Comparison of municipal ICS readiness policy alternatives*

Criterion	Status quo	Administrative strengthening	Ordinance with IRR
Transition burden	Lowest; retain current instruments	Moderate; amend executive/administrative controls	Highest; legislative and consultative process
Adaptability	Depends on the quality of current instruments	High; administrative controls can be updated	High only if technical rules remain in IRR/SOPs
Continuity	Depends on existing practice	Depends on leadership and document controls	Potentially stronger recurring cross-office duties
Principal risk	Unverified fragmentation persists	Controls may weaken with turnover	Overregulation or unfunded duties

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Appropriate condition	Baseline confirms adequate existing mechanisms	Rapid or interim gap correction	Validated need for durable accountability

The Proposed Municipal ICS Readiness and Accountability Framework

The original conceptual design places four distinct functions within a governance core: MDRRMC policy oversight, MDRRMO technical coordination, EOC support, and lawful on-scene incident command. Its eight recurring components are to validate existing instruments and incident evidence; qualify primary and alternate personnel; enable resources, logistics and communications; protect people, records and operations; exercise response arrangements; finance lawful priorities; account through a readiness scorecard and non-sensitive reporting; and adapt procedures after review. The conceptual figure preceding Methods reproduces the proposed sequence without treating it as a new ICS command chart.

A locally approved responsibility and activation matrix would clarify what happens when an incident escalates, who may lawfully assume or transfer command, and how the EOC requests and tracks external resources. Position-specific qualification and supervised exercises would supplement attendance certificates. Resource inventories would record condition and mobilization times; communications plans would include primary, alternate, contingency and emergency channels. Inclusive protection, privacy, and public-information procedures would be tested before deployment, rather than adopted merely as general policy aspirations.

After exercises or significant incident activations, an after-action review would generate a corrective-action register showing owners, deadlines, priorities, support needs, and closure evidence. These practices are supported by findings on simulation learning, interorganizational coordination, and adaptation (Brown et al., 2022; Gundran et al., 2023; Miller et al., 2025). The framework is a documented policy proposal. The capstone did not implement it or demonstrate before-and-after response outcomes.

Eighteen-Month Implementation Roadmap

The design proposes a phased eighteen-month rollout followed by an annual readiness cycle. Its first three months are reserved for controlled legal and operational validation. Drafting or revising legal instruments follows the gap register; training, resource checks, communications tests and exercises then supply evidence of capability. Implementation culminates in an annual review, work-plan update, and public reporting that excludes sensitive operational data.

Table 2. *Proposed eighteen-month implementation roadmap*

Phase	Period	Main activities	Required output
1. Baseline and harmonization	Months 1–3	Inventory local legal instruments, SOPs, rosters, resources, agreements, exercises and records	Validated baseline; gap-and-overlap register
2. Policy and technical design	Months 3–6	Review ordinance/IRR or executive measures; finalize responsibility, roster and privacy rules	Reviewed legal and technical policy package
3. Capability and testing	Months 6–12	Position-specific learning, resource and communications checks; progressive exercises	Competency evidence; test records; corrective-action register
4. Institutionalization	Months 12–18	Annual readiness review; lawful budget linkage; non-sensitive reporting	Readiness report and updated annual work plan

Monitoring, Accountability, and Feasibility Safeguards

Monitoring in the source capstone goes beyond counts of training participants or exercises delivered. It would examine current governance instruments, tested EOC–ICS interfaces, competency-evidenced primary and alternate positions, availability and mobilization of priority resources, communications continuity, corrective actions closed with evidence, and lawful spending. A non-sensitive annual readiness report can support oversight

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without disclosing personnel contact lists, operational security information, or vulnerable-person records (Republic Act No. 10173, 2012).

Table 3. *Monitoring and accountability domains*

Domain	Illustrative indicator	Evidence source	Review purpose
Authority and EOC–ICS interface	Approved roles and tested activation/transfer protocols	Policy registers; exercise/activation logs	Correct conflicts and duplication
Personnel readiness	Priority positions with qualified primary and alternate staff	Protected roster; qualification and exercise evidence	Guide succession and training
Resources and communications	Operable priority assets and tested fallback channels	Inventories; maintenance and test records	Prioritize resilience improvements
Organizational learning	Actions closed by date; recurrence of issues	After-action reviews and closure tracker	Verify continuous improvement
Integrity and reporting	Eligible expenses, privacy safeguards, annual public report	Plans, fiscal files, privacy controls	Enable accountable oversight

The design faces foreseeable risks: conflict with existing instruments, command assignments that disregard jurisdiction and competence, training without demonstrated proficiency, insufficient or ineligible funding, communication failures, untested mutual aid, limited accessibility, and disclosure of protected records. Legal and technical review, phased adoption, protected annexes, consultation with competent agencies, annual exercises, and documented correction are therefore integral conditions of feasibility (Loebach et al., 2024; Moyal-Smith et al., 2024; Sena et al., 2021).

CONCLUSION

The documentary analysis concludes that municipal ICS readiness is most appropriately addressed through validation, institutional harmonization, and a continuing accountability process, rather than through creation of a competing incident-command doctrine. Sipocot has a documented context of hazard exposure, prior flooding, and recent Basic ICS Training; however, publicly accessible records reviewed in the source are not sufficient to determine whether all internal command, personnel, resource, communications, exercise, protection, financial, and reporting mechanisms are fully connected. Non-availability of public documentation must not be construed as proof of local non-compliance.

The proposed Municipal ICS Readiness and Accountability Framework contributes a structured policy decision process: review what exists, confirm only genuine gaps, select the least duplicative lawful instrument, build tested capability, monitor corrective action, and renew readiness annually. Its ordinance-and-IRR model offers one potential means of institutional continuity, but its appropriateness depends on controlled municipal validation, competent-agency consultation, lawful financing, and implementation evidence. Because the research did not evaluate an operational intervention, improvements in actual disaster outcomes remain prospective, not established findings.

Recommendation

The Mayor and MDRRMC of Sipocot should consider authorizing a controlled 90-day documentary and operational baseline covering existing ordinances, executive instruments, response plans, EOC–ICS interfaces, rosters, exercises, mutual-aid arrangements, resource files, communications, data protection, and financial controls. The MDRRMO should consolidate validated strengths, gaps, overlaps, and unknowns into a traceable register rather than assuming missing public evidence denotes absent local procedures.

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Where immediate needs are confirmed, the municipality may strengthen controlled administrative instruments and test command-activation, reporting, roster, and communications procedures while a legal review is undertaken. Any proposed ordinance should address continuing governance and accountability obligations, leaving technical incident-command details to amendable implementing rules, standard operating procedures, and national guidance. Consultation should include competent provincial and national DRRM authorities, BFP, PNP, sectoral offices, barangays, civil society, and appropriate data-protection and financial officials.

If an ordinance is subsequently adopted, the proposed eighteen-month roadmap should be calibrated to locally validated capacities and lawful appropriations. A progressive exercise program should generate after-action reviews and verified corrective-action closure, while annual non-sensitive readiness reports should link evidence of actual capability to the next planning and budgeting cycle. Future applied research could examine the framework after implementation using document audits, observed exercises, operational indicators, and stakeholder perspectives; these data were not available to the present capstone.

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