



Policy-practice disconnect in climate disaster response: The case of the Zimbabwe Republic police during Cyclone Idai

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ABSTRACT

Background: Climate-induced disasters are testing the institutional limits of law enforcement agencies in sub-Saharan Africa, yet police forces remain peripheral to formal disaster risk governance. Cyclone Idai (March 2019) devastated the Chimanimani District of Zimbabwe, exposing critical gaps in the translation of national climate and disaster policies into ground-level action. This study examines the operational experience of the Zimbabwe Republic Police (ZRP) during the cyclone response, probing the disconnect between formal policy mandates and actual field performance. **Methods:** A qualitative case study design was used, grounded in semi-structured open-ended questionnaires administered to 15 purposively selected informants, including ZRP officers, government stakeholders, community leaders, and non-governmental organizations. Thematic analysis following Braun and Clarke's six-stage framework was applied, with triangulation against key national policy and legal documents, including the National Disaster Risk Management Policy and the Civil Protection Act. **Findings:** All 15 participants (100%) reported that infrastructure collapse, destroyed roads, and bridges were an overriding constraint on police mobility, while 73% cited a total communication network failure. ZRP officers performed broad humanitarian roles, including search and rescue (86.6%), retrieval of the deceased (46.6%), and security of relief supplies (53.3%), operated with severe resource deficits and without climate-specific training. Communities praised the personal dedication of officers while directing frustration squarely at institutional and governance failures. Policy frameworks existed in name but had not been operationalized into routine training, equipment procurement, or coordinated pre-disaster planning. **Conclusion:** A deep policy-practice disconnect defines Zimbabwe's disaster response architecture. Effective climate resilience requires the ZRP to be repositioned from reactive responders to proactive participants in national disaster governance, supported by decentralized authority, dedicated funding, and mandatory disaster training. The study proposes a Disaster Adaptive Response (DAR) model to guide this transition. **Novelty/Originality of this article:** This is the first empirical study to center police institutional capacity within Zimbabwe's climate disaster governance, advancing the DAR model as an anticipatory framework for law enforcement-led disaster response in low-resource contexts.

KEYWORDS: civil protection act; Cyclone Idai; disaster risk reduction; policy-practice gap; Zimbabwe Republic police.

1. Introduction

Climate change is amplifying the frequency and intensity of hydro-meteorological

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disasters across sub-Saharan Africa, placing extraordinary pressure on governance institutions that were designed for routine conditions rather than climate-driven crises (IPCC, 2022; Kelman, 2020). Zimbabwe sits at the intersection of these pressures: structurally exposed to cyclones, floods, and droughts, yet constrained by limited fiscal space, aging infrastructure, and fragmented institutional coordination (Bongo et al., 2026; Munsaka et al., 2021). When Cyclone Idai made landfall in March 2019, it did not merely test the country's emergency systems; it laid bare the accumulation of governance decisions, or the absence of them, over many years.

The cyclone caused more than 400 mm of rainfall within hours in the Chimanimani District, triggering cascading flash floods and landslides that obliterated roads, severed communication lines, and displaced over 270,000 people across Zimbabwe (UNICEF, 2019). At least 634 fatalities were confirmed, with 257 people still missing as of April 2019, and economic losses were estimated at over USD 622 million (Chitongo et al., 2024). These figures place Cyclone Idai among the most damaging hydro-meteorological events in recorded history. Recent assessments show that Southern Africa remains among the region's most vulnerable to cyclone-related compound hazards due to infrastructure deficits and climate variability (Kumar et al., 2024).

Within the multi-agency response that followed, the Zimbabwe Republic Police (ZRP) held a constitutionally mandated role under the Civil Protection Act [Chapter 10:06], covering security, evacuation support, search and rescue, and inter-agency coordination. Yet empirical examination of how the ZRP performed this mandate during the cyclone has remained conspicuously absent from the scholarly literature. Studies have documented community vulnerability (Chanza et al., 2020), humanitarian response failures (Munsaka et al., 2021), and cyclone meteorology (Dube et al., 2021), but the institutional mechanics of police disaster response have not been examined in depth.

This absence matters for both theoretical and practical reasons. Theoretically, law enforcement agencies occupy a distinctive position in disaster governance; they are simultaneously first responders, security guarantors, and local institutional anchors, yet disaster risk reduction scholarship has largely focused on civil protection agencies, NGOs, and the military (Bradley-Smith et al., 2024; Laufs & Waseem, 2020; McLean et al., 2023). Practically, without understanding what the ZRP encountered and why its response was constrained, evidence-based reforms cannot be designed.

Internationally, comparable contexts illustrate what proactive police integration can achieve. Japan's Prefectural Police System maintains joint training protocols with the Fire and Disaster Management Agency and the Japan Self-Defense Forces, enabling pre-positioned coordination in advance of extreme weather events (Miyashita & Sumi, 2023). (Miyashita & Sumi, 2023). The Australian Federal Police participate in multi-agency disaster preparedness exercises that include designated incident command roles (Bradley-Smith et al., 2024). In the United States, local law enforcement agencies are integrated within FEMA's Incident Command System, providing standardized protocols even when command hierarchies are complex (Alshayhan et al., 2024). Zimbabwe's arrangements differ not only in resource endowment but in the degree to which police roles are operationalized within disaster planning cycles.

It is worth widening the comparative frame beyond high-income countries, because the most analytically instructive comparisons for Zimbabwe are closer to home. Benchmarking the ZRP against Japan's prefectural police system or the US Federal Emergency Management Agency risks obscuring what a regional governance pattern, rather than a specifically Zimbabwean failure. A systematic study of how Sendai Framework governance priorities have been translated into institutional practice across Kenya, Nigeria, Egypt, Namibia, and the Democratic Republic of Congo found that the gap between the framework's aspirations and operational realities was not simply a matter of resources. It was a matter of institutional fit: the Sendai architecture assumes stable legal systems, functioning inter-ministerial coordination, and meaningful subnational authority, assumptions that do not hold in many African governance contexts. Real power over resource allocation remained centralized or externally driven across all five countries, and stakeholder participation was

often more symbolic than substantive (Okunola, 2025). Zimbabwe sits within this regional pattern rather than standing apart from it.

The global mid-term review of the Sendai Framework, conducted in 2023, reached a broadly similar diagnosis at a wider scale. Eight years into the framework's implementation period, the review found that deep structural obstacles persisted across signatory states, particularly regarding local governance capacity, inter-ministerial integration, and the financing of preparedness rather than response activities (International Science Council, 2023). The review identified a fundamental tension that runs through the African experience with force: the countries exposed to increasing disaster risk are often the ones with the least institutional and fiscal capacity to close the preparedness gap. There is nothing inevitable about this tension; it is the product of governance choices, funding decisions, and institutional designs, but it cannot be dissolved by policy declaration alone. Zimbabwe's experience is, in this sense, a vivid illustration of a broadly documented problem, which is precisely what makes the Chimanimani case analytically valuable beyond its immediate national context.

Against this background, the present study addresses four intersecting questions: (1) How did cyclone-induced hydro-meteorological hazards influence the ZRP's operational response under the Multi-Agency Response Model? (2) What were community and stakeholder perceptions of the ZRP response? (3) To what extent did the ZRP integrate disaster risk reduction (DRR) and climate change adaptation into its response? (4) How effective is Zimbabwe's climate and disaster mitigation policy framework, and what improvements are needed? Answering these questions requires a methodological approach that can simultaneously capture institutional complexity, lived experience, and policy context.

The governance challenge facing low-income countries is not simply one of political will. It is one of institutional architecture, whether the rules, routines, and resources that govern everyday policing are structured in ways that allow rapid, competent adaptation when extreme events occur. Zimbabwe's disaster governance system has repeatedly defaulted to reactive rather than anticipatory responses, a pattern that persists despite successive policy reforms, and that the Chimanimani case makes empirically concrete (Mavhura, 2020; Munsaka et al., 2021). The Chimanimani case offers a rare empirical window into this tension, documenting in granular detail the point at which incremental adjustment runs out and institutional transformation becomes unavoidable.

There is also a broader knowledge gap worth naming. Disaster risk reduction scholarship has expanded substantially over the past two decades, but its primary institutional subjects have been civil protection agencies, national emergency management authorities, and humanitarian organizations. Law enforcement has remained, with notable exceptions, a peripheral actor in this literature, acknowledged as a first responder in practice but rarely examined as an institutional subject (Laufs & Waseem, 2020; McLean et al., 2023). This is a genuine blind spot: in many low-income countries, police officers are among the most geographically distributed state actors, often present in rural communities where no other government service reaches. Their capacity, or incapacity, is therefore not a secondary concern for disaster governance; it is frequently the proximate determinant of whether survival support reaches affected populations in the critical hours after an event. This study is intended, in part, as a contribution toward correcting that scholarly imbalance.

The study's core argument is that the ZRP's constrained performance during Cyclone Idai reflects a systemic policy-practice disconnect rather than individual failure. Zimbabwe possesses a formally sophisticated set of climate and disaster governance instruments, including the Government of Zimbabwe Ministry of Environment, Water and Climate (2015), the National Disaster Risk Management Policy (2013), and alignment with the Sendai Framework for Disaster Risk Reduction 2015–2030. Yet these frameworks have not been translated into operational preparedness at the station level, pre-disaster planning, or climate-specific training within the police service. This article documents this disconnect empirically and proposes the Disaster Adaptive Response (DAR) model as a forward-looking institutional remedy. In doing so, the study pursues three specific objectives: first,

to document empirically how hydro-meteorological hazards, resource constraints, and communication failures shaped ZRP operational performance during Cyclone Idai; second, to evaluate the extent to which Zimbabwe's existing climate and disaster governance instruments were operationalized within routine police practice; and third, to translate these findings into the Disaster Adaptive Response (DAR) model as a transferable institutional remedy. Because Southeast Asian states face a structurally similar combination of cyclone and flood exposure, decentralized emergency response, and frontline involvement of police and paramilitary agencies, the Zimbabwean case is also read here as a comparative reference point for ASEAN disaster governance.

This study is grounded in three complementary theoretical lenses. The disaster risk perspective articulated in the UNDRR Global Assessment Report (2022) explains why a hydro-meteorological hazard becomes a disaster: governance failures, vulnerability, exposure, and accumulated risk conditions transform a physical hazard into an institutional crisis. Institutional resilience theory extends this by asking what capacities allow an organization to absorb shocks and continue functioning; Birkmann et al. (2022), in a global review of the Sendai Framework's implementation, show that resilience gains have been concentrated where governance systems combine local decision authority, dedicated financing, and functioning inter-agency coordination, precisely the elements this study finds largely absent within the ZRP. Adaptive governance theory supplies the third lens, directing attention to how institutions learn and reorganize before and after crises rather than simply absorbing them. Anticipatory disaster risk governance (UNDRR, 2022), which underpins the Disaster Adaptive Response (DAR) model proposed in Section 4.5, is treated here as an applied form of adaptive governance that links risk information to pre-disaster institutional action. Read together, these three lenses distinguish structural causation (PAR) from institutional capacity (resilience) and institutional learning (adaptive governance), and this tripartite structure organizes the analysis that follows.

Law enforcement's role in disaster response has historically been treated as incidental to core policing rather than as a distinct object of study. Recent scholarship has begun to correct this. Matczak (2025) frames police as emergency management actors whose disaster involvement extended across a full disaster-management cycle, from pre-event planning and drafting of contingency plans to search and rescue and post-disaster order maintenance, describing this as "disaster plural policing (Matczak, 2025)." Empirical case studies illustrate both the potential and the fragility of this role. (Blaustein et al., 2023) found that police in East Gippsland, Australia, functioned as resilient emergency-management actors during the 2019–2020 Black Summer bushfires largely because of pre-existing community-oriented policing relationships and prior institutional reform, while police responses elsewhere have been undermined when disaster duties were not treated as an organizational priority. Comparable lessons emerge from Japan's prefectural police, which maintain joint training protocols with fire and defense agencies (Miyashita & Sumi, 2023), Australia's federal disaster-preparedness exercises with designated incident-command roles (Bradley-Smith et al., 2024), and the integration of United States local law enforcement into FEMA's Incident Command System (Alshayhan et al., 2024). Across these cases, the decisive variable is not resource wealth alone but whether police are structurally embedded, through training, standing protocols, and joint exercises, within the wider disaster governance architecture before a crisis occurs.

Because this journal centers ASEAN disaster governance, this review widens to examine how Southeast Asian institutions have approached the same structural challenge the ZRP faced: converting formal disaster policy into operational capacity for front-line responders. The ASEAN Agreement on Disaster Management and Emergency Response (AADMER) and the ASEAN Committee on Disaster Management provide a regional framework broadly analogous to the Sendai-aligned instruments Zimbabwe has adopted domestically. Syaban and Bisri (2022) examined the local-level adoption of AADMER in Indonesia and found that institutional vulnerability, gaps in local government capacity, incomplete domestication of the agreement into local regulation, and uneven roles for non-governmental actors best explained why regional commitments did not automatically

translate into local operational readiness, a finding that closely parallels this study's account of the ZRP. Trias et al. (2019) mapped disaster risk governance networks across Asia and the Pacific and showed that the density and quality of inter-agency ties, not the mere existence of coordinating bodies, determined whether early warning and response information reached front-line actors. At the operational level, Andreastuti et al. (2023) documented how Indonesia's volcano crisis response depends on risk communication chains linking scientific agencies to first responders and communities, underscoring that even technically sophisticated warning systems fail without a functioning institutional bridge to the agencies, including police, tasked with acting on them. The parallel to Chimanimani is direct: Zimbabwe, like Indonesia, has adopted an internationally aligned disaster governance framework, but the institutional bridge connecting that framework to station-level police practice remains the weakest link in both settings.

Within Zimbabwe specifically, a consistent body of scholarship documents a structural gap between disaster policy and institutional practice. Mavhura (2020) argues that Zimbabwe's disaster governance is characterized by fragmented institutional arrangements, weak coordination among stakeholders, and inadequate resource mobilization, all of which undermine effective disaster risk management despite the existence of national policy frameworks. Mavhura (2020) and Mavhura & Mapuva (2022) identify centralization and local financing constraints as recurring barriers to disaster risk reduction investment, while Nyahunda (2024) shows that international climate obligations continue to outpace domestic institutional follow-through. Okunola's (2025) five-country study, Kenya, Nigeria, Egypt, Namibia, and the Democratic Republic of Congo, extends this diagnosis regionally, finding that the Sendai Framework's assumptions of stable legal systems, functioning inter-ministerial coordination, and genuine decentralization do not hold across much of the African governance landscape it examined. What this literature has not yet examined, and what the present study addresses, is the specific institutional experience of police services as first responders within this broader pattern. Disaster risk reduction scholarship has focused primarily on civil protection agencies, national emergency authorities, and humanitarian organizations (Laufs & Waseem, 2020; McLean et al., 2023); law enforcement's institutional capacity for climate-related disaster response, despite police officers frequently being the most geographically distributed state actors in low-resource settings, remains comparatively under-examined. This is the gap the present study addresses empirically through the case of the Zimbabwe Republic Police during Cyclone Idai

2. Methods

2.1 Research design

This study employed a qualitative case study methodology, which is well-suited for examining complex institutional phenomena whose context is constitutive of meaning (Creswell, 2024; Yin, 2018.). The Chimanimani District case was selected for three reasons: it was the most severely affected area during Cyclone Idai; it represents a geographically isolated, resource-scarce governance setting typical of Zimbabwe's rural districts; and existing literature documenting community and humanitarian dimensions provides a secondary data foundation against which interview data could be triangulated.

A qualitative approach was appropriate because the core research interest was understanding how institutional actors experienced, interpreted, and navigated the disaster-response questions that cannot be answered by numerical data alone (Roulston & Halpin, 2022). The case study design enabled analytical depth by focusing on a single high-impact event and tracing causal relationships among hydro-meteorological hazards, institutional capacities, and governance outcomes. The corresponding risk is confirmatory bias, interpreting participants' accounts through the lens of conclusions already forming, rather than remaining genuinely open to evidence that complicates the picture. To manage this, the analytical process deliberately searched for responses that challenged or nuanced

emerging themes at each coding stage, and divergences between participant groups or between interview data and documentary evidence are reported as such in the findings rather than resolved through interpretation.

The decision to use written open-ended questionnaires rather than recorded face-to-face interviews reflected the institutional sensitivities that arise when serving police officers are asked to discuss the limitations of their organization. Written questionnaire responses are somewhat less spontaneous than spoken interview data, but the extended open-response format generated sufficient depth and specificity for rigorous thematic analysis (Roulston & Halpin, 2022).

2.2 Study setting and time frame

Chimanimani District is in Manicaland Province, approximately 240 km southeast of Harare, bordering Mozambique. The district covers approximately 3,450 km² of mountainous terrain, with the Rusitu and Haroni river systems draining through it. The area's geography, steep slopes, high rainfall, and single-road connectivity mean that infrastructure disruption has disproportionate consequences for emergency access. Four wards were central to this study: Ngangu (Ward 15), Gwindingwi (Ward 16), Ngorima A (Ward 21), and Nyahonde (Ward 12), each of which experienced direct cyclone impact. The study covered the immediate response period of March to June 2019, with data collection conducted between November 2025 and May 2026. This temporal gap allowed participants sufficient reflective distance from the crisis while preserving the institutional knowledge of individuals directly involved.

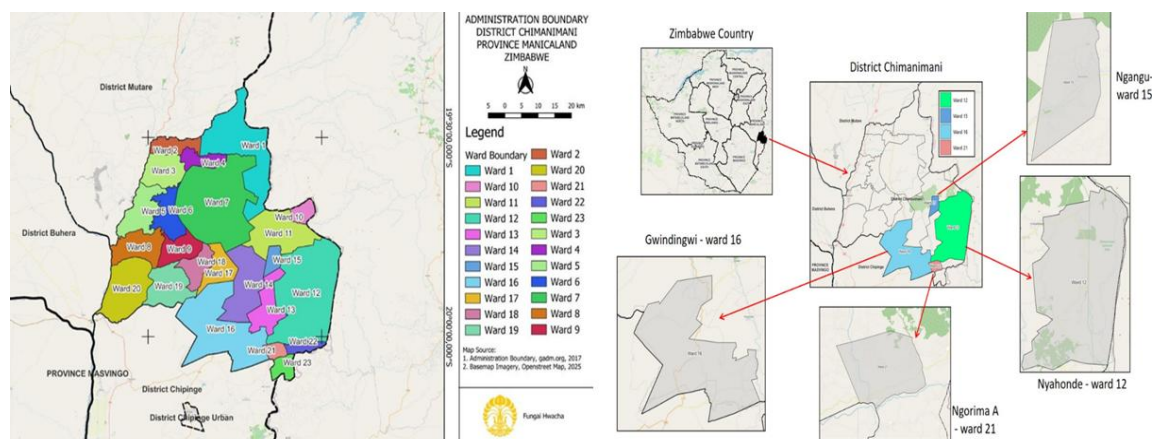


Fig. 1. Research location

2.3 Participants and sampling

Fifteen key informants were recruited through purposive sampling based on direct involvement in the Cyclone Idai response or substantive knowledge of disaster management policy and practice (see Table 1). Purposive sampling was adopted because the research goal was informational depth rather than statistical representativeness (Hennink & Kaiser, 2022; Levitt et al., 2018). Recruitment continued until thematic saturation was reached, the point at which additional interviews generated no new conceptual categories (Hennink & Kaiser, 2022). Participants ranged in age from 31 to 60 years, with 80% holding tertiary qualifications. Half of all participants had more than 20 years of professional experience. The largest geographic cluster of participants (57.1%) was based in Ngangu Ward, the most severely impacted area, ensuring that data reflected direct proximity to the disaster rather than secondary accounts.

Table 1. Participant composition by stakeholder group

Stakeholder group	n	%	Sampling rationale
ZRP officers (search and rescue, traffic, community policing, and command)	5	33%	First-hand operational experience
Government officials (CPU, District Administrator, EMA, local council)	4	27%	Policy implementation and inter-agency coordination
Community leaders (village headmen and ward representatives)	4	27%	Local governance and community experience
Humanitarian NGO representatives	2	13%	Inter-agency coordination and resource perspectives
Total	15	100%	

2.4 Data collection

Primary data were gathered using semi-structured open-ended questionnaires administered in person. This format provided thematic consistency while allowing participants to expand beyond predetermined categories, an important capacity in a study investigating lived institutional experience (Rubin & Rubin, 2011). Questions were organized around four thematic clusters corresponding to the research questions: hydro-meteorological impacts on police operations; perceptions of the ZRP response; integration of DRR and climate adaptation; and assessment of Zimbabwe's disaster and climate policy framework. Secondary data sources included Government of Zimbabwe Ministry of Environment, Water and Climate (2015), the Civil Protection Act [Chapter 10:06] (1989), the National Disaster Risk Management Policy (2013), the Government of Zimbabwe Cyclone Idai impact assessment report (2019), UNDRR (2019) global assessment data, and peer-reviewed literature published between 2019 and 2025. These sources were used for both contextualization and triangulation of primary findings.

2.5 Data analysis

Thematic analysis was conducted following Braun & Clarke (2021) six-stage framework: familiarization, initial coding, theme development, review, naming, and final write-up. All responses to open-ended questions were read iteratively, and inductive codes were generated from participants' narratives. Codes were subsequently clustered into higher-order themes. Triangulation was achieved by comparing emergent themes with documentary evidence and published literature, enhancing analytical credibility (Braun & Clarke, 2021). Frequency analysis was applied to quantify thematic saturation across participants, enabling the identification of themes present across multiple roles, geographic contexts, and experience levels. This multi-perspective approach strengthens the reliability of the findings by demonstrating that key patterns were not idiosyncratic to individuals or positions.

2.6 Reflexivity and trustworthiness

Several concrete steps were taken to strengthen the credibility, dependability, and confirmability of the analysis, following the qualitative reporting standards of Levitt et al. (2018). Written questionnaire responses averaged approximately 45–60 minutes to complete, with several ZRP and government participants returning extended written narratives well beyond the minimum prompts. Coding was conducted iteratively: an initial codebook was developed from the first five responses, then applied and refined across the remaining ten, with codes and emerging themes cross-checked against the raw questionnaire text by the lead researcher on two separate passes at least two weeks apart to check for consistency in code application. Where thematic interpretation was not immediately obvious, illustrative segments were re-read against the full response rather

than in isolation, and disagreements in interpretation were resolved by returning to participants' exact wording rather than to prior coding decisions. Dependability was supported by maintaining a decision trail documenting how codes were merged, split, or renamed across the six analytic stages. Researcher positionality is also relevant to interpretation: the lead researcher's professional and academic connection to Zimbabwe's disaster management field provided contextual familiarity that aided rapport and interpretation but also required active vigilance against over-identification with participants' institutional perspective; this was managed by deliberately seeking and foregrounding disconfirming or critical accounts at each coding stage, as noted in Section 3.1, and by triangulating interview themes against independent documentary sources (government reports, policy texts) rather than relying on participant testimony alone.

3. Results and Discussion

3.1 Hydro-meteorological hazards and ZRP operational constraints

The physical scale of Cyclone Idai's impact on Chimanimani District created an immediate and total disruption to the ZRP's operational environment. Rainfall exceeded 400 mm within hours, triggering flash floods and landslides that destroyed at least 20 key road and bridge links, including the Nyamatanda, Charter, Nhedziwa, and Kopa bridges, and rendered Skyline Road impassable (Hungwe et al., 2024). All 15 participants (100%) identified road and bridge destruction as the primary constraint on police response, making it the single most universally endorsed finding in the study.

A ZRP officer in the 41–50 age group described the situation in terms echoed by multiple interviewees: communication was reduced to whatever partial cellular signal remained, and movement to the most affected areas was simply impossible when the bridges connecting ZRP stations to those communities no longer existed. A community leader confirmed that mudslides and rockfalls blocked vehicle access entirely in some wards, with officers reduced to proceeding on foot when bridges had gone. Similar findings have been reported across climate-related disaster studies where transportation and communication networks fail simultaneously, severely constraining emergency response effectiveness (Akalanka et al., 2024).

Beyond mobility, 73% of participants (11/15) reported a simultaneous collapse of communication networks. Cell towers, police radios, landlines, and electricity all failed. This co-occurring loss of mobility and communication constitutes what Kelman (2020) terms a "capacity shock" when the scale of an event exceeds the entire available institutional resource base rather than merely stretching it. Similar infrastructure-triggered response failures have been documented in the broader Southern African disaster context (Gazley & Cash, 2024) consistent with IPCC (2022) warnings about compound risk in climate-vulnerable regions.

Table 2. Most frequently reported operational barriers during Cyclone Idai (N = 15)

Operational barrier	Frequency (n)	Saturation (%)	Illustrative narrative
Road and bridge destruction; total mobility loss	15/15	100%	Officers described walking hours through floodwaters when vehicles could not cross.
Complete collapse of communication networks	11/15	73%	Cell towers, radios, and landlines all failed simultaneously.
Critical equipment and resource shortages (vehicles, fuel, PPE, boats)	9/15	60%	Officers conducted body retrievals in floodwaters without protective gear.
Absence of aerial support (helicopters)	4/15	27%	Mountainous terrain made unreachable areas inaccessible without air assets.

Resource deficits compounded the mobility crisis. Nine participants (60%) highlighted critical shortages of vehicles, fuel, personal protective equipment, boats, generators, and medical supplies. Four participants specifically noted the absence of helicopter support, which proved particularly costly given Chimanimani's mountainous terrain: several communities in the Ngorima and Gwindingwi wards became entirely inaccessible during the first 72 hours of the emergency. NGO representatives noted that their organizations sometimes had to provide transport to ZRP officers to reach populations in need, an inversion of conventional response logic that reveals the depth of ZRP resource gaps.

These findings align with the Pressure and Release (PAR) model of disaster causation (Wisner et al., 2024), which conceptualizes disasters as the product of the interaction between hazards and pre-existing social and institutional vulnerability. The hazard itself, extreme rainfall and associated floods and landslides, was beyond institutional control. But the degree to which that hazard translated into operational paralysis was shaped by decades of infrastructure underinvestment, equipment procurement failures, and the absence of disaster-specific resource pre-positioning. This structural causation distinguishes the ZRP's difficulties from simple institutional incompetence.

The spatial character of the response failure deserves more attention than post-disaster accounts typically give it. Most analyses focus on what agencies did or failed to do; fewer examine the geographic conditions within which those agencies had to operate. Chimanimani District's topography is not an incidental detail. The steep mountain terrain, deep river gorges, and single-road connectivity mean that when key bridges fail, the district does not become difficult to reach; it becomes effectively partitioned into isolated fragments accessible only on foot or by air. This is a documented characteristic of the district, not an unexpected condition that could not have been anticipated (Hungwe et al., 2024). The fact that ZRP stations in a district whose geography makes road-based emergency access unreliable during extreme rainfall events had no pre-positioned boats, rope rescue equipment, or helicopter deployment protocols in place represents a specific and preventable planning failure. Pre-disaster vulnerability assessments exist to identify precisely this kind of structural exposure; in Chimanimani, they appear not to have translated into contingency planning at station level.

The timing of that planning failure also matters. The critical window for disaster survival, generally the first 72 hours, during which the probability of finding trapped individuals alive and preventing secondary deaths from exposure, waterborne disease, and structural collapse is highest, was the same period during which the ZRP's mobility and communication were most completely paralyzed (Chanza et al., 2020). By the time surface access was partially restored, the moment at which institutional capacity would have made the greatest difference had largely passed. Pre-positioning even modest assets at the district level would not have eliminated the ZRP's operational constraints, but it would have opened a narrow window of action during the hours that mattered most.

3.2 Integration of DRR and climate adaptation: A structural gap

Despite Zimbabwe possessing several formal instruments for disaster risk reduction and climate adaptation, including the Sendai Framework-aligned National Disaster Risk Management Policy (2013) and the Government of Zimbabwe Ministry of Environment, Water and Climate (2015), the study found minimal evidence that these frameworks had been operationalized within the ZRP before Cyclone Idai struck. Participant assessments of ZRP preparedness were uniformly critical. While 10 of 15 respondents acknowledged that some early warning structures technically existed at the national level, all described ZRP activation protocols as non-functional: weather alerts generated by the Meteorological Services Department did not automatically trigger ZRP pre-positioning, community evacuation support, or resource mobilization. Recent advances in Zimbabwe also demonstrate the potential of technology-enhanced disaster preparedness. A deep learning-based flood prediction model developed using multi-source environmental data showed significant potential for improving flood forecasting accuracy and strengthening early

warning systems, highlighting opportunities for integrating predictive analytics into disaster risk governance and emergency response planning (Norman & Hwacha, 2026).

Recent technological developments in Zimbabwe demonstrate that improved disaster preparedness is achievable through the integration of geospatial and artificial intelligence tools. For example, Gahadza & Mugova (2026) used Sentinel-1 Synthetic Aperture Radar (SAR) imagery and a U-Net deep learning model to successfully detect flood events in data-limited environments, illustrating how advanced monitoring systems can strengthen early warning capabilities and support proactive disaster response. However, such innovations remain largely disconnected from operational decision-making within institutions such as the Zimbabwe Republic Police. Nine participants stated that DRR strategies existed within the ZRP only as policy documentation, not as operational training, equipment decisions, or station-level planning. This implementation gap mirrors broader findings across developing countries, where climate adaptation policies often fail to translate into institutional preparedness and local action (Birchall & Bonnett, 2021; Nalau et al., 2024; Nalau & Verrall, 2021; Seddiky et al., 2020).

Officers' own testimony pointed to this absence of institutional preparation. One ZRP officer summarized a view that is widely shared across the cohort: disaster response skills are accumulated through direct exposure to crises rather than through formal training. Another officer described treating each type of emergency—flood, fire, and traffic accident—using identical generic protocols with no climate-specific differentiation, even though the Government of Zimbabwe Ministry of Environment, Water and Climate (2015) nominally recognizes police roles in climate-related emergencies. The multi-agency coordination that did occur was reactive rather than anticipatory. Participants from across stakeholder groups described initial confusion about command authority. One local government stakeholder recalled that during the first 72 hours, directives shifted between the Civil Protection Unit, the Zimbabwe National Army, and the Provincial Administrator in rapid succession, leading officers to fall back on independent judgment because waiting for authoritative instructions was costing lives. This is consistent with findings by Munsaka et al. (2021) on the collapse of pre-planned coordination during Cyclone Idai and with Mavhura's (2020) broader documentation of Zimbabwe's centralized and reactive disaster governance culture (Coppola, 2024).

Table 2.1 in the Civil Protection Act [Chapter 10:06] outlines specific inter-agency collaborative functions for the ZRP within Zimbabwe's national disaster response architecture: casualty verification with the Department of Civil Protection, logistics security with the Zimbabwe National Army, victim identification support with the Ministry of Health, and humanitarian supply route protection alongside NGOs and the Red Cross. The study finds that while these functions were eventually performed, largely through improvisation, they were not activated through the pre-planned mechanisms the Act envisions. The coordination that materialized was driven by crisis pragmatism rather than institutional preparedness, a pattern consistent with what Coppola (2021) identifies as the foundational weakness of response-oriented, as opposed to preparedness-oriented, disaster governance systems.

This disconnects mirrors broader patterns documented in the disaster governance literature. Wamsler & Johannessen (2020) show that national climate adaptation strategies in developing countries routinely fail to produce local institutional change because the translation mechanisms, training mandates, budget allocations, and operational procedures are either absent or unenforced. Seddiky et al. (2020) similarly document how international DRR frameworks, including the Sendai Framework, remain rhetorical commitments rather than operational realities in resource-constrained institutional contexts. Zimbabwe's experience represents a specific case of this general pattern rather than an anomalous failure. (Seddiky et al., 2020; Wamsler & Johannessen, 2020).

It is also worth noting what the absence of climate-specific training means in human terms, not only for operational outcomes but for the officers required to respond. Several participants in this study described having to improvise methods for recovering bodies from flood debris without any prior instruction in safe body handling or psychological

preparation for mass casualty events. This improvisation was driven by necessity and personal conscience, not institutional guidance. Occupational health research on emergency responders increasingly recognizes that the absence of preparation for traumatic tasks has measurable consequences for officer wellbeing and long-term retention (McCanlies et al., 2018). A preparedness framework that asks officers to perform functions for which they have received no training is not only operationally risky; it transfers the cost of institutional failure onto individual officers in ways that compound over time.

A further dimension deserving attention is the differential experience of disaster response across gender lines. The Cyclone Idai response, like many large-scale disaster operations, was carried out predominantly by male officers, reflecting broader patterns in Zimbabwe's police service. Yet the communities most affected by the cyclone included significant proportions of women-headed households, elderly residents, and people with disabilities, groups with distinct evacuation needs and communication preferences (Luft, 2016). The mismatch between the demographic composition of the responding force and the specific needs of affected populations is not merely an equity concern; it has direct operational consequences for the effectiveness of needs assessment, evacuation compliance, and information dissemination.

Future disaster preparedness frameworks within the ZRP should incorporate gender-responsive protocols and, where feasible, ensure that response teams include officers with relevant language and community familiarity. What makes the DRR integration gap particularly difficult to accept is that the post-Cyclone Idai period offered a clear and documented opportunity to address it. The Government of Zimbabwe commissioned a detailed impact assessment in 2019 that identified specific preparedness deficits with considerable precision, including the absence of disaster-specific training in ZRP curricula and the lack of pre-positioned equipment in cyclone-prone districts (Government of Zimbabwe, 2019). Those recommendations existed in writing. That officers interviewed for this study, during data collection conducted between November 2025 and May 2026, were still describing learning disaster response entirely through direct crisis exposure rather than any formal preparation suggests that the post-disaster institutional learning cycle, the conversion of review findings into changed practice, did not function as it should have.

There are cautious signs of improvement, though they remain fragile. IOM-supported training delivered in Mutare in March 2024 brought together 41 participants from across Mashonaland East Province's nine districts, including police personnel, for structured work on disaster risk management planning, climate change adaptation, and early warning systems (IOM, 2024). Macheka (2024) has similarly documented growing recognition within Zimbabwe's institutional landscape of the need to mainstream disaster preparedness capacity across multiple sectors and agencies. These developments matter. But episodic, externally funded training workshops, however well-intentioned, do not constitute the systemic integration that the Sendai Framework envisions. Sustainable institutional preparedness requires that DRR competencies be woven into standard ZRP recruit training and in-service development cycles, rather than delivered through workshops funded by international migration agencies years after the crisis that made the gap visible (Macheka, 2024).

A more structurally promising parallel comes from Zimbabwe's own experience with anticipatory action. Since 2019, the Department of Civil Protection has worked with FAO, WFP, the Zimbabwe Red Cross Society, and other partners to move from externally driven pilot projects toward genuine government ownership of anticipatory action within the national disaster risk management architecture. By 2023, the National Community of Practice on Anticipatory Action had been formally recognized within national contingency planning; by late 2024, anticipatory action sub-committees had been established within civil protection structures at national, provincial, and district levels (Bongo et al., 2026). That journey, from humanitarian pilot to government-embedded structure, took five years of sustained engagement across multiple institutions and funding streams. The lesson it holds for ZRP integration into anticipatory governance is both encouraging and sobering: the institutional change is possible in Zimbabwe's governance context, but it requires

patient, multi-year commitment rather than single policy directives, and it requires the ZRP to be included in the architecture being built rather than remaining peripheral to it.

3.3 Community and stakeholder perceptions

Despite the operational constraints documented above, community perceptions of ZRP personnel were predominantly positive. Participants consistently commended the personal dedication, courage, and physical sacrifice of individual officers. Table 3 details the specific roles that ZRP officers were seen to have performed during the crisis.

Table 3. Operational roles performed by ZRP during Cyclone Idai (multiple responses possible, N = 15)

Role	Frequency (n)	Percentage (%)
Search and rescue / evacuation of survivors	13	86.6%
Retrieval and burial of the deceased	7	46.6%
Security of relief supplies, warehouses, and camps	8	53.3%
Humanitarian assistance (food, health support, shelter coordination)	5	33.3%
Coordination with other response agencies	3	20.0%
Crowd control and traffic management	3	20.0%
Counselling and information dissemination	3	20.0%

Search and rescue were the most frequently reported function, with 86.6% of participants affirming this as a central ZRP contribution. Officers also took on the emotionally and physically demanding work of recovering and arranging for the burial of victims, a role that extended well beyond standard law enforcement remit and speaks to the adaptive scope that disaster conditions impose on first responders. The management of deceased victims was recognized as particularly important by community leaders, for whom dignified treatment of the dead carries deep social and cultural significance.

Crucially, participants drew a sharp distinction between their evaluation of individual officers and their assessment of the institutional system. Where criticism arose, and it arose frequently, it was directed at the absence of transport, communication equipment, and preparedness structures, not at the officers themselves. This distinction aligns with Cannon (2022) concept of institutional vulnerability, in which systemic failures produce poor disaster outcomes that are then attributed to the individuals constrained to act within them.

One community leader captured this distinction clearly: officers who were visible in the community, who walked into flood zones without boats or ropes, and who worked through the night, were viewed as genuinely trying to help. The anger community members expressed was directed at the state that had sent those officers with inadequate tools. This public capacity to separate individual commitment from institutional provision is both analytically important and practically significant: it means that the institutional legitimacy of the ZRP was preserved through Cyclone Idai even as its operational effectiveness was severely curtailed, providing a foundation on which future preparedness investment can build.

Perry and Lindell (2020) argue that public trust in emergency responders enhances compliance with evacuation orders and communication directives during disasters. The ZRP appears to have retained sufficient community trust to maintain this functional role in future events. However, trust built on personal heroism rather than institutional competence is fragile: it depends on officers consistently performing beyond institutional capacity, is unsustainable, and ethically problematic. The distinction between trust earned through personal sacrifice and trust grounded in institutional competence also has practical implications for how ZRP preparedness reforms should be designed and communicated. The social capital literature suggests that community resilience is enhanced not simply by the presence of responsive institutions but by the felt sense that those institutions are prepared, equipped, and, crucially, accountable (Bongo et al., 2026). Research on community experiences following Cyclone Idai in Chimanimani found that the social ties

formed between officers and community members during the crisis continued to shape cooperative behaviour well beyond the emergency itself (Chanza et al., 2020). These are not just warm feelings. They are a latent institutional resource. If future preparedness investments are made visible within affected communities, through officer participation in community risk mapping, pre-positioning exercises, or early warning information sharing, the goodwill built through personal heroism in 2019 can be consolidated into something more durable than individual goodwill.

Several community participants in this study were explicit about the conditional nature of that goodwill. They respected and were grateful for the officers who had waded into floodwaters without boats or proper equipment. They were equally clear, without much prompting, that if the next major event arrived with the same gaps, the same missing transport, the same communication blackout, the same sense that nothing had been planned or prepared, their patience with the institutional system would not survive it. This is accountability talk, delivered from below rather than above, and it deserves to be treated as the governance mechanism it is.

The role of informal digital communication networks also emerged briefly but usefully across NGO participant accounts. Chari & Ngcamu (2025) document how social media platforms partially substituted for collapsed formal communication channels during the Cyclone Idai response in Chimanimani, enabling coordination that official systems could not deliver. For the ZRP, this suggests a practical, low-cost preparedness augmentation: building community digital communication networks into formal emergency protocols as a redundant information layer for precisely the circumstances- complete infrastructure failure- when redundancy is most valuable. (Chari & Ngcamu, 2025).

3.4 Policy effectiveness and governance gaps

Zimbabwe has assembled a formally coherent set of climate and disaster governance instruments. The National Climate Policy (2016) establishes a framework for climate-resilient development planning. The National Disaster Risk Management Policy (2013) calls for a shift from preparedness to response. The Civil Protection Act [Chapter 10:06] provides the legal architecture for multi-agency coordination. Zimbabwe's commitments under the Sendai Framework further embed these instruments within international DRR norms. On paper, the framework is reasonable.

In practice, the Cyclone Idai response revealed that these frameworks were, as one policy stakeholder participant put it, "beautiful policy, empty practice." Another used the phrase "fire brigade approach" to describe what unfolded: agencies responding after destruction had occurred rather than managing risks before impact. Twelve of 15 participants identified a persistent gap between written policy and operational reality. Familiarity with the relevant frameworks was low among ZRP officers: only two of the five officers could name the principal instruments governing their disaster response mandate.

Three structural drivers of this implementation gap were identified across participant accounts. Firstly, centralization of decision-making authority in Harare slows response in districts like Chimanimani, where local knowledge is essential, and communication infrastructure is fragile (Chikoto & Sadiq, 2012; Mavhura, 2020; Mavhura & Mapuva, 2022). Local commanders who understood ground conditions were waiting for authorization from provincial and national structures while the window for early intervention was closing. Second, insufficient financing for preparedness activities, training, equipment, pre-positioning, and drills means that policy intentions are not converted into operational readiness. The Civil Protection Act assigns responsibilities to the ZRP but does not create corresponding budget lines or procurement obligations. Third, the absence of modern early warning dissemination systems meant that meteorological forecasting did not reach affected communities or trigger institutional pre-deployment. Emerging research demonstrates that technological solutions capable of improving disaster monitoring already exist. Gahadza & Mugova (2026) showed that Sentinel-1 SAR imagery combined with deep learning techniques can effectively identify flood-affected areas in Zimbabwe,

even where ground-based data are limited. The challenge, therefore, lies less in technological availability than in the institutional adoption and operationalization of these tools within disaster governance frameworks.

These findings are consistent with a growing body of comparative evidence. Nyahunda (2024) documents similar policy-practice gaps in Zimbabwe's climate adaptation frameworks, noting that international obligations frequently outpace domestic institutional follow-through. Mutasa and Chikoto (2021) specifically identify disaster governance in Zimbabwe as characterized by a structural implementation gap driven by resource constraints and institutional fragmentation. Chatiza (2019) similarly argues that Zimbabwe's disaster risk governance is weakened by fragmented institutional mandates, weak inter-agency coordination, and inadequate financing, leaving responsibility dispersed across institutions without corresponding implementation capacity (Chatiza, 2019; Nyahunda, 2024).

The comparative regional evidence sharpens this diagnosis. Okunola's (2025) study of five African countries, Kenya, Nigeria, Egypt, Namibia, and the DRC, found that the gap between the Sendai Framework's governance ambitions and local operational realities was not simply a resource problem. It was an institutional fit problem: the framework's model of governance assumes conditions, stable legal systems, functioning inter-ministerial coordination, and real decentralisation- that many African states have not yet achieved. In four of the five countries studied, DRR and climate strategies existed in parallel with the inter-ministerial coordination or dedicated financial instruments needed to mainstream risk management across sectors. Participation mechanisms existed on paper but remained largely symbolic in practice, with real power over agenda-setting and resource allocation staying concentrated at the centre. Zimbabwe's governance architecture for disaster management reflects each of these features. Policies that assign responsibilities without creating accountability mechanisms, without matching budget lines, and without specifying implementation timelines are policies in name only.

There is also a fiscal dimension that honest policy analysis cannot avoid. The Civil Protection Act assigns responsibilities to the ZRP but does not create corresponding funding obligations. The World Bank's Poverty, Prosperity, and Planet Report (2024) estimates that one in five people globally now faces a significant lifetime risk from an extreme weather event, a figure substantially higher in sub-Saharan Africa. In contexts of acute fiscal constraint, there will never be a comfortable moment to invest in disaster preparedness, because disaster preparedness competes for budget space with immediate service delivery pressures whose political costs are immediate and visible. The practical implication is that reforms need to be sequenced by feasibility and near-term impact. Mandatory DRR modules in existing ZRP training curricula, pre-positioning minimal equipment at the district level, and formalised inter-agency communication protocols are achievable without resolving Zimbabwe's broader fiscal challenges. They represent the floor of what responsible disaster governance requires, and the distance between where the ZRP currently stands and that floor is the most operationally meaningful measure of the disconnect this study documents.

The Cyclone Idai experience in Chimanimani represents, in this sense, a predictable outcome of a system in which policies are aspirational rather than operational. The absence of standardized inter-agency protocols, pre-positioned equipment, and mandatory police disaster training is not incidental to the framework; it reflects the limits of policy adoption in the absence of commensurate implementation infrastructure. Placed alongside comparative evidence, Zimbabwe's experience appears less exceptional and more diagnostic of a pattern that recurs wherever regionally endorsed disaster frameworks meet locally under-resourced institutions. In Indonesia, Syaban and Bisri (2022) found that AADMER's local-level adoption was constrained by very similar mechanisms, incomplete domestication of regional agreements into local regulation, uneven local government capacity, and thin non-governmental partnerships, notwithstanding Indonesia's considerably more developed disaster management architecture and its status as an AADMER depositary state. Trias et al. (2019) reached a parallel conclusion at the network level: across Asia-Pacific disaster governance systems, the strength of inter-agency ties, not

the formal existence of coordinating committees, determined whether early warning translated into field action. Read against the ZRP's experience, this suggests that Zimbabwe's police-specific implementation gap is a local instance of a governance pattern documented well beyond Southern Africa, including within ASEAN member states that, on paper, possess more mature regional disaster instruments than the Sendai-aligned framework Zimbabwe has adopted domestically.

The comparison also clarifies what the DAR model would need to operationalize differently across governance contexts. In a decentralized, resource-constrained system such as Zimbabwe's, the anticipation and preparation phases are the most immediately actionable because they require redesigning existing station-level routines rather than new legislation. In more centralized ASEAN disaster governance systems built around a national coordinating authority, such as Indonesia's National Disaster Management Agency (BNPB) or the Philippines' National Disaster Risk Reduction and Management Council, the coordination and institutional-learning phases would likely be the more binding constraint, since the formal architecture for anticipation already exists but front-line agencies, police included, are not always systematically embedded within it (Matczak, 2025; Syaban & Bisri, 2022). This suggests the DAR model's four phases are transferable as an analytic structure, but the specific reform priority within each phase is governance-context dependent rather than universal.

3.5 The disaster adaptive response (DAR) model

The study's empirical findings point toward a coherent set of institutional reforms that can be organized within what the author terms the Disaster Adaptive Response (DAR) model. This model draws on anticipatory disaster risk governance principles (UNDRR, 2022), the Sendai Framework's emphasis on preparedness and early warning, and the operational lessons from Chimanimani District. (UNDRR, 2022) The DAR model is structured around four sequential phases, as shown in Figure 2 below. In the anticipation phase, climate forecast data are systematically translated into institutional triggers: ZRP stations in cyclone-prone districts would be required to activate pre-deployment protocols when meteorological risk thresholds are crossed. This replaces the current system in which weather warnings are generated but not automatically linked to police actions. The anticipation phase should also incorporate satellite-based flood monitoring and AI-supported forecasting systems.

Recent studies in Zimbabwe have demonstrated the effectiveness of Sentinel-1 SAR imagery and deep learning approaches for rapid flood detection and early warning, providing a practical foundation for anticipatory disaster governance (Gahadza & Mugova, 2026). In the preparation phase, pre-positioned equipment, boats, communication devices, fuel reserves, and protective gear are maintained at the district level and can be accessed without waiting for centralized procurement. Mandatory DRR training modules would be integrated into both recruit training and in-service professional development. In the coordination phase, multi-agency standard operating procedures define roles, communication hierarchies, and resource-sharing arrangements before events occur rather than improvising them under disaster conditions. Regular joint exercises across ZRP, ZNA, CPU, and NGO partners institutionalize these arrangements. In the institutional learning phase, post-disaster reviews systematically capture operational lessons and feed them back into training curricula, equipment specifications, and planning updates.

The DAR model complements rather than replaces Zimbabwe's existing policy framework. It provides the operationalization mechanism that is currently absent: the translation of policy text into station-level procedures, budget commitments, training requirements, and inter-agency protocols. Without such mechanisms, institutional learning from Cyclone Idai will not prevent similar performance gaps in future events. The anticipation phase of the DAR model rests on a premise that the evidence increasingly supports: the bottleneck in effective early warning systems is rarely technological. Improved flood forecasting models, satellite-based monitoring tools, and impact-based

warnings already exist and have been demonstrated to work in Zimbabwe's specific geographic and environmental context (Gahadza & Mugova, 2026). What is consistently missing is the institutional linkage that converts a weather warning signal into an operational pre-deployment decision, the trigger protocols, pre-authorized resource movements, and trained human capacity to act before a disaster is formally declared, rather than hours or days after. This is the core insight that has driven Zimbabwe's own evolving experience with anticipatory action. Building through a national Community of Practice from 2019 onward, the Department of Civil Protection has moved gradually from externally initiated pilots toward genuine government ownership, embedding anticipatory action sub-committees within civil protection structures at national, provincial, and district levels by 2024, and integrating anticipatory action protocols into the 2024–25 national multi-hazard contingency plan (Bongo et al., 2026). The DAR model's anticipation phase proposes extending this architecture to the ZRP: the police should not be a passive resource waiting to be deployed after a formal disaster declaration, but a standing participant in trigger-based pre-deployment planning in cyclone-prone districts.

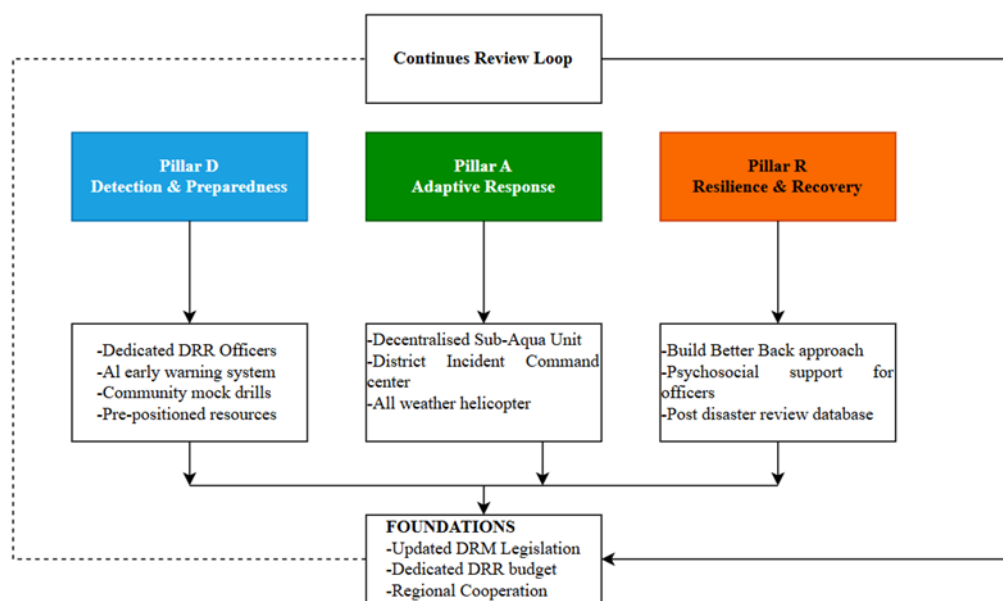


Fig. 2. DAR model

The coordination phase responding directly to the most damaging failure that participants across all stakeholder groups identified during Cyclone Idai: the absence of pre-agreed roles and communication chains across responding agencies. The command confusion documented in section 3.2- directives shifting between the Civil Protection Unit, the Zimbabwe National Army, and the Provincial Administrator within the first 72 hours- was not a product of bad intentions. It was a product of structures that had never been practiced before they were needed. Joint exercises by ZRP, ZNA, CPU, and NGO partners in non-crisis periods, resulting in agreed standard operating procedures and tested communication hierarchies, are not expensive luxuries. They are the minimum institutional investment that pressures crisis coordination, a matter of activating rehearsed arrangements rather than improvising them under maximum pressure. The institutional learning phase addresses a specific frustration that ran through virtually every participant account in this study: the sense that post-disaster reviews produce carefully written recommendations that subsequently disappear into institutional files without changing anything. The Government of Zimbabwe's post-Cyclone Idai assessment identified the ZRP's preparedness deficits with considerable specificity (Government of Zimbabwe, 2019). The persistence of those same deficits in officer accounts gathered more than six years later is, in some ways, the most direct evidence in this study of a non-functioning learning cycle. Building in clear accountability for whether review findings are implemented, by whom, by

when, and with what consequence if not, is what separates an institutional learning phase from an exercise in documentation.

This study set out to examine why the Zimbabwe Republic Police's response to Cyclone Idai in Chimanimani District fell significantly short of the standard anticipated by national disaster and climate governance frameworks. The evidence gathered from 15 purposively selected participants, spanning ZRP officers, government officials, community leaders, and humanitarian workers, converges on a single overriding finding: the ZRP's constrained performance reflected a systemic policy-practice disconnect rather than individual failure. Returned directly to the four research questions guiding this study: cyclone-induced hydro-meteorological hazards, principally the destruction of roads, bridges, and communication infrastructure, paralyzed ZRP mobility and coordination during precisely the 72-hour window when institutional response mattered most; community and stakeholder perceptions distinguished sharply between praise for individual officers and criticism of the institutional system that left them under-equipped; DRR and climate adaptation integration remained minimal, existing as policy documentation rather than station-level training, equipment provision, or activation protocols; and Zimbabwe's climate and disaster policy framework, while formally comprehensive, requires the specific operational mechanisms, mandatory training, pre-positioned resources, decentralized authority, and accountable review cycles, that the Disaster Adaptive Response (DAR) model proposed here is intended to supply.

Hydro-meteorological hazards, particularly the destruction of roads, bridges, and communication infrastructure, created an operational environment of near-total institutional incapacity during the critical first 72 hours. This incapacity was not solely a product of the cyclone's severity; it was amplified by pre-existing infrastructure deficits, equipment shortages, and the absence of pre-positioned disaster resources. ZRP officers responded with conspicuous personal dedication across a remarkably broad range of roles, from search and rescue to victim retrieval to supply security, but did so without climate-specific training, specialist equipment, or functioning coordination mechanisms. Community and stakeholder perceptions clearly distinguish between the commitment of individual officers, widely praised, and the institutional failures that left those officers under-resourced. This distinction is analytically important: it means the ZRP retains social legitimacy as a disaster response institution, but that legitimacy is currently sustained by personal heroism rather than institutional competence, which is not a sustainable foundation.

4. Conclusions

The policy framework governing ZRP disaster response, including the Civil Protection Act, the National Disaster Risk Management Policy, and the National Climate Change Response Strategy, exists at a rhetorical level that has not been converted into operational reality. Mandatory disaster training, pre-positioned equipment, decentralized coordination protocols, and early warning activation triggers remain absent from the ZRP's institutional practice. This gap is not unique to Zimbabwe, but the Chimanimani case makes its consequences concrete and quantifiable. The study proposes the Disaster Adaptive Response (DAR) model as a framework for addressing this gap, moving the ZRP from reactive response toward anticipatory preparedness through four phases: anticipation, preparation, coordination, and institutional learning. Implementation of this model would require mandatory integration of DRR into ZRP training curricula, dedicated district-level equipment reserves, formalized multi-agency protocols, and a decentralization of decision-making authority to provincial and district commanders. These are not novel recommendations in the abstract; their significance lies in their grounding in the specific operational failures exposed by Cyclone Idai.

The findings carry broader relevance for policing and disaster governance in sub-Saharan Africa, where law enforcement agencies frequently operate as *de facto* first responders in climate-induced disasters without the institutional mandate, training, or

resources that role demands. As climate change continues to intensify hydro-meteorological events across the region, the question of how police forces are prepared for that role becomes increasingly urgent. This study contributes an empirical foundation and a practical model for that conversation. Several limitations of this study should be acknowledged. The purposive sample of 15 participants, while appropriate for qualitative depth and sufficient for thematic saturation, cannot support claims of statistical representativeness across Zimbabwe's policing and disaster governance landscape.

The study's temporal focus on a single cyclone event in one district, chosen precisely for analytical depth, also means that the findings should be interpreted as an in-depth case rather than a generalization about all disaster events or all districts. Future research should extend the empirical base through comparative case analysis across multiple disaster types, including drought and urban flooding, and across different provincial and peri-urban settings where the ZRP's operational context and resource environment may differ substantially from Chimanimani. Longitudinal research designs that track whether institutional reforms change practice over time would also significantly advance knowledge in this field. Finally, the DAR model proposed here is an analytical and normative framework rather than an evaluated intervention; its real-world application will need to be tested, refined, and adapted in collaboration with ZRP practitioners, policymakers, and the communities they serve. Comparative research extending this design to ASEAN disaster governance settings, where police and paramilitary agencies perform front-line roles similarly under regionally coordinated frameworks such as AADMER, would help establish whether the policy-practice disconnect documented here in Zimbabwe reflects a broader structural pattern across disaster-prone, decentralizing states rather than a country-specific institutional failure.

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Author Contribution

Conceptualization, F.H. and M.K.; Methodology, F.H.; Validation, F.H., M.K., and W.B.; Formal Analysis, F.H.; Investigation, F.H.; Resources, F.H.; Data Curation, F.H.; Writing – Original Draft Preparation, F.H.; Writing – Review & Editing, W.B.; Visualization, W.B.; Supervision, M.K.; Project Administration, A.A.; and Funding Acquisition, F.H.

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Ethical Review Board Statement

The study was conducted in accordance with the ethical guidelines of Universitas Indonesia. Informed consent was obtained from all participants before data collection. Participant confidentiality was maintained throughout the study.

Informed Consent Statement

Informed consent was obtained from all participants involved in the study.

Data Availability Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request, subject to participant confidentiality constraints.

Conflicts of Interest

The authors declare no conflict of interest.

Declaration of Generative AI Use

During the preparation of this work, the author used AI writing assistance to support structural organization and academic language clarity. After using this tool, the author reviewed and edited the content as needed and takes full responsibility for the content of the publication.

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