Journal : **Journal of Management and Innovation Entrepreneurship (JMIE),**
Publisher : **Yayasan Nuraini Ibrahim Mandiri**
ISSN : **e-ISSN 3026-6505**
Volume / Issue / Year/ Page : **4/ 1/ 2026: October / 333-344**

EVALUATING PUBLIC SERVICE QUALITY IN DISASTER MANAGEMENT: A SERVQUAL-BASED QUALITATIVE STUDY OF BPBD MUSI RAWAS REGENCY

Jumadil Tigar Husni[1]*, Sardiyo [2], Kusumanto[3]
[1,2]Master of Management Program, Bina Insan University, Indonesia
[3] Sriwijaya Polytechnic, Indonesia
[1]jumadil@univbinainsan.ac.id,[2]sardio@univbinainsan.ac.id
[3]manto6611@yahoo.co.id
* Coresponding Author

Article Information

Submission	:	31-08-2026
Review	:	07-09-2026
Revised	:	30-09-2026
Accepted	:	17-10-2026
Published	:	26-10-2026

Keywords
Service Quality, Disaster Management, Public Sector Accountability, SERVQUAL Dimensions, Musi Rawas Regency

Abstract

This study evaluates the quality of public disaster management services delivered by the Regional Disaster Management Agency of Musi Rawas Regency, a district facing recurring floods, landslides, and forest and land fires despite its recent shift from a high- to a moderate-risk category on the Disaster Risk Index. Although the agency officially reported performance achievement above 100% in the 2024 fiscal year, field conditions reveal persistent gaps in equipment, personnel, and logistical readiness, raising the question of how administrative performance can be reconciled with community experience. Using a descriptive qualitative, embedded single-case study design, data were collected through in-depth interviews with 16 purposively selected informants representing BPBD leadership, the Rapid Response Team (TRC), sub-district heads, and affected community members, supplemented by observation and documentation, with source and technique triangulation applied to ensure data validity. Data were analyzed using Miles and Huberman's interactive model. Findings show that while tangible resources, personnel numbers, and equipment remain below ideal standards, the agency demonstrates strong reliability, responsiveness, assurance, and especially empathy in the field, partly offsetting these physical limitations. These findings carry practical policy implications for prioritizing budget allocation toward equipment procurement and decentralized, route-based response planning across Musi Rawas Regency's sub-districts

How To Cite: Husni, J. T., Sardiyo, & Kusumanto. (2026). Evaluating public service quality in disaster management: A SERVQUAL-based qualitative study of BPBD Musi Rawas Regency. *Journal of Management and Innovation Entrepreneurship (JMIE)*, 4(1), 333–344. https://doi.org/10.70248/jmie.v4i1.4644

DOI : https://doi.org/10.70248/jmie.v4i1.4644.
This is an open access article under https://creativecommons.org/licenses/by/4.0/
Copyright© 2026 by Author. Published by Yayasan Nuraini Ibrahim Mandiri

INTRODUCTION

Indonesia is widely recognized as one of the most disaster-prone countries in the world (Priester, 2016). Its geographic location along the Pacific Ring of Fire and at the convergence of three major tectonic plates, combined with a tropical climate, exposes the country to frequent and severe natural hazards such as floods, landslides, and forest fires. According to data from the National Disaster Management Authority (BNPB), more than 5.400 disaster events were recorded across the country in 2023, most of which were hydrometeorological in nature (Rosyida et al., 2023). In legal and conceptual terms, a disaster is an event that threatens and disrupts human life, caused by natural, non-natural, or human factors, and results in loss of life, environmental damage, loss of property, and psychological impact (Law Number 24 of 2007 concerning Disaster

Management); more broadly, a disaster is understood as something that causes hardship, loss, or suffering, an accident, a danger, or a disturbance (Indonesia, 2007).

Musi Rawas Regency, located in South Sumatra Province, is one of the regions particularly vulnerable to such events. This vulnerability mirrors a broader pattern across Indonesia's decentralized disaster governance system, in which local agencies are expected to manage complex, systemic disaster risks despite persistent capacity gaps at the sub-national level (Triyanti et al., 2023). Comparable capacity constraints are reported in other Asian settings: an analysis of national audit findings in South Korea identified recurring vulnerabilities in local governments' disaster risk management, including disaster management funds, prevention facilities, forecasting and warning systems, and resident evacuation (Cho & Choi, 2024). Seasonal floods, landslides in hilly areas, and recurring peatland fires are among the key challenges that threaten the safety and welfare of the population. These events not only cause physical and material losses but also disrupt public services and daily community activities. In this context, the Regional Disaster Management Agency (BPBD) plays a critical role as the leading institution responsible for disaster risk reduction and emergency response at the local level. These recurring hazards directly implicate BPBD as the primary institution mandated to safeguard public welfare, making the quality of its services in this setting a matter of urgent public interest and empirical inquiry. Indonesian studies likewise point to coordination as a persistent challenge: in the Ciliwung River basin, transboundary challenges and power sharing across administrative jurisdictions were found to shape flood risk management (Rahayu et al., 2024), and a SWOT-based analysis has examined knowledge management strategy for managing disasters and the COVID-19 pandemic in Indonesia (Oktari et al., 2023).

Disaster management is an essential component of public service delivery that requires timely, accurate, and well-coordinated responses. However, numerous challenges still hinder its effective implementation, including limited human resources, inadequate logistics, weak inter-agency coordination, and low levels of community engagement (Prizzia, 2008). Kapucu & Garayev (2011) emphasized that the success of disaster response efforts is largely dependent on the quality of governance, institutional responsiveness, and public trust in disaster management agencies; in the context of local government disaster agencies, these dimensions provide a structured lens for evaluating not only the physical readiness of an agency but also its behavioral and relational capacity to serve communities under emergency conditions (Kapucu & Garayev, 2011). Similarly, Raju & Becker (2013) highlight the importance of service quality in disaster management systems, particularly in terms of preparedness, rapid response, post-disaster recovery, and public education, and effective service delivery in these areas is critical to reducing risks and minimizing the impact of disasters on affected populations (Hossain et al., 2017). Survey evidence from Sweden similarly shows that trust in crisis management varies across institutions and across layers of government (Bengtsson & Brommesson, 2022).

Quality itself can be understood as the expected level of performance and the control of variability in achieving that performance in order to meet consumer needs; providing good service quality requires fostering close relationships, and quality is therefore a key success factor for an organization or company (Alfajar et al., 2019). Service, meanwhile, is an action or activity offered by one party to another that is essentially intangible and does not result in ownership (Schönsleben, 2019). Service

quality, in this context, refers to customer perceptions of the excellence of the service provided (Sureshchandar et al., 2002). SERVQUAL theory states that service quality has five main dimensions that can influence customer satisfaction: tangibles, reliability, responsiveness, assurance, and empathy (Sugiarto & Octaviana, 2021). The function of public service is to ensure that public needs are met in accordance with applicable laws and regulations governing public services (Abdi & Ali, 2024); the purpose of public service is solely for the benefit of its recipients, and if the service is good, the public will be satisfied with it, since public satisfaction is a benchmark for whether public services are good or bad (Widiastuti, 2025). Evidence from disaster settings supports this link: a survey of 860 respondents after Typhoon Rai in the Philippines showed that public trust develops when quality information and fairness are present in service delivery, with government image mediating the relationships among service quality, perceived justice, and public trust (Cullano et al., 2025). The five assessment principles that must be considered in the implementation of public services, based on SERVQUAL theory of customer satisfaction, are as follows (Hardiyansyah, 2018):

Despite this recognized link between institutional quality and disaster outcomes, empirical evaluations of service quality frameworks such as SERVQUAL remain scarce in the context of local-level disaster emergency response, particularly within Indonesia's regional disaster management agencies (BPBD). While SERVQUAL has been widely applied to evaluate service quality in commercial and general public-sector settings (Sugiarto & Octaviana, 2021), its application to disaster emergency contexts, where service delivery must occur under time pressure, resource scarcity, and life-threatening conditions, has received comparatively limited scholarly attention. This study addresses that gap by applying the five SERVQUAL dimensions to evaluate disaster management services at BPBD Musi Rawas Regency, offering novel empirical insight into how tangible resource constraints interact with relational service dimensions, namely reliability, responsiveness, assurance, and empathy, in a resource-limited local disaster agency, a combination not yet systematically examined in prior SERVQUAL-in-crisis-management literature. Where SERVQUAL has been extended to emergency and crisis service settings, findings similarly indicate that responsiveness and service-process quality remain decisive predictors of user satisfaction even under conditions of acute time pressure and resource constraint (Xie & Ma, 2023). Recent studies that examine government performance in crisis response through service-quality or satisfaction lenses have relied on large-sample surveys (Adamy & Rani, 2022; Cullano et al., 2025), which leaves the experiential and relational side of frontline service in a resource-limited local agency comparatively unexplored.

In recent years, Musi Rawas Regency has shown improvement in its Disaster Risk Index (IRB). Although the region was previously categorized as high-risk for five consecutive years, it moved to a moderate-risk category in 2024. This progress is encouraging, yet operational challenges remain, especially concerning the readiness and capacity of local institutions.

From a resource perspective, several structural gaps constrain BPBD Musi Rawas's operational readiness. Personnel numbers remain below the ideal standard for the agency's coverage area, which affects the speed and effectiveness of emergency response. Critical equipment, including personal protective gear, communication devices such as handheld radios, and field logistics items such as tents, portable lighting, and first-aid supplies, is available only in limited quantities and, in some cases, poor

condition. These shortages are most acute in post-disaster conditions, when electricity and shelter access are disrupted and mobile communication coverage is weak. Equipment and resources are also among the weakest elements in local preparedness assessments elsewhere: an evaluation of local government disaster preparedness in a Chinese rainstorm case identified the lack of disaster management equipment and resources, training, exercises, and public safety education as weak points (Zhai & Lee, 2023). Rather than an incidental operational detail, this resource gap constitutes the empirical core of the tangibles dimension examined in this study's SERVQUAL framework.

Although official reports show that the Head of the BPBD in Musi Rawas achieved performance targets exceeding 100% in the 2024 fiscal year, field conditions reveal a different picture. Community members affected by disasters such as floods, forest fires, tornadoes, and landslides have expressed dissatisfaction and frustration with the quality and timeliness of the services delivered by the Rapid Response Team (TRC). This divergence between administrative performance indicators and grassroots service experience underscores the need for a qualitative, service-quality-based evaluation, one capable of capturing dimensions of service that quantitative performance metrics alone do not reveal. This divergence echoes recent evidence from local government service delivery research showing that citizen lived perceptions of service quality frequently diverge sharply from officially reported accountability and performance indicators, underscoring the value of citizen-centered, qualitative evaluation alongside administrative metrics (Manaf et al., 2023). A survey of community satisfaction in Aceh, Indonesia, for example, found residents dissatisfied with the local government's performance at every stage of its pandemic response (Adamy & Rani, 2022), which underlines the value of asking service recipients directly.

In light of these issues, the researcher was motivated to conduct a study titled "Evaluating Public Service Quality in Disaster Management: A SERVQUAL-Based Qualitative Study of the Regional Disaster Management Agency (BPBD) in Musi Rawas Regency." This study aims to evaluate the quality of disaster management services provided by BPBD across the five SERVQUAL dimensions. Data were collected through in-depth interviews with 16 purposively selected informants, comprising BPBD leadership and Rapid Response Team (TRC) personnel, sub-district heads, and members of disaster-affected communities, conducted between May and June 2025.

METHODOLOGY

This study uses a descriptive qualitative approach designed to explore and interpret social phenomena as they are experienced and understood by informants, without measuring variables statistically. This study focuses on describing and interpreting data drawn from words, images, and documents rather than numerical measurement. This research report contains excerpts from data drawn from various sources, including field notes, photographs, personal documents, notes or memos, and other official documents. Therefore, this research is designed as an embedded single-case study, in which the Regional Disaster Management Agency (BPBD) of Musi Rawas Regency constitutes the main case, with the five SERVQUAL dimensions serving as embedded units of analysis examined through the perspectives of multiple informant groups.

Data for this study were obtained from two main sources. Primary data consist of

information obtained directly from informants through interviews and field observation. Secondary data consist of BPBD's disaster management facility and equipment records, employee education and certification data, and official regulatory documents, including Law Number 24 of 2007 and the 2023 Disaster Risk Index (IRB) reports. The 16 informants were selected using a purposive sampling technique, based on the criterion that each informant possessed direct knowledge of, involvement in, or experience with BPBD Musi Rawas's disaster management services. Purposive sampling selects information-rich participants deliberately according to the purpose of the study, and recent guidance recommends documenting the whole sampling journey, from defining the selection criteria to deciding when to stop (Ahmad & Wilkins, 2024). The sample of 16 informants can be considered in relation to the principle of saturation, which depends on both the purposeful selection of informants and the coherence of what different informants report (Bouncken et al., 2025); empirical work on virtual interview studies suggests that near saturation can be reached after roughly 15 to 23 interviews, particularly when a structured interview guide and deductive coding are used (Squire et al., 2024). The informants comprised BPBD leadership and administrative staff, members of the Rapid Response Team (TRC), sub-district (kecamatan) heads in disaster-affected areas, and members of communities affected by floods, landslides, or forest and land fires. This composition was intended to capture perspectives from both the service-provider and service-recipient sides of the agency's operations. To ensure the validity of the data, this study applied source triangulation, by comparing information across the four informant groups described above, and technique triangulation, by cross-checking interview findings against direct observation and documentation. Triangulation of this kind combines different data sources and methods to strengthen the credibility of qualitative findings (Kawar et al., 2024).

Data collection techniques are the most strategic step in the research. This study used semi-structured, in-depth interviews with the 16 informants described above, guided by an interview protocol aligned with the five SERVQUAL dimensions. Table 1 presents the interview protocol used in this study.

Table 1. Interview Protocol Based on SERVQUAL Dimensions

Dimension	Question Indicator	Target Informant Group
Tangibles	Availability and condition of disaster management facilities, equipment, and personnel	BPBD leadership; TRC members
Reliability	Consistency and dependability of disaster response procedures	BPBD leadership; TRC members
Responsiveness	Speed and accuracy of the agency's response to disaster reports	Sub-district heads; affected community members
Assurance	Competence, training, and trustworthiness of the TRC team	TRC members; affected community members
Empathy	Attentiveness and compassion shown toward disaster victims	Affected community members; sub-district heads

The data analysis technique employed in this study is qualitative data analysis, which was carried out both during the fieldwork and after all data had been collected. The analysis followed Miles and Huberman's (1994) interactive model, where data collection and analysis occurred simultaneously through the following stages:

Data Collection: Data were gathered through interviews, documentation, and direct observation conducted at the Regional Disaster Management Agency (BPBD) of Musi

Rawas Regency. This process involved systematically searching for, recording, and compiling relevant information.

Data Reduction: The collected data were compiled in detailed written form. Through this stage, the information was summarized and refined by selecting essential points and focusing on significant aspects. Data were organized and categorized based on relevant concepts, themes, and classifications to provide a clearer understanding of the observations and to assist the researcher in identifying any additional data required to complement the existing findings.

Data Presentation: The organized data were then displayed in a structured format, such as a matrix, aligned with the core issues of the study. This presentation method helped reveal patterns and relationships among data, thereby facilitating deeper analysis.

Conclusion Drawing and Verification: This final stage involved drawing preliminary conclusions based on the reduced and presented data. These conclusions were reviewed and validated by revisiting the data to ensure consistency, relevance, and accuracy of interpretation in the context of the research objectives.

RESULTS AND DISCUSSION

The Regional Disaster Management Agency (BPBD) of Musi Rawas Regency holds a central role in executing disaster management activities within the region, spanning policy formulation, prevention and mitigation, preparedness, emergency response, and post-disaster rehabilitation and reconstruction, in coordination with relevant government and non-government stakeholders. Findings from the 16 informants are presented below according to each SERVQUAL dimension.

Data were collected between May and June 2025 through in-depth interviews with the 16 informants described above, covering BPBD leadership, TRC personnel, sub-district heads, and disaster-affected community members. Tangible assets at BPBD Musi Rawas relate to the agency's physical infrastructure, equipment, and personnel available for disaster management.

BPBD leadership and TRC members reported that the agency possesses personal protective equipment (safety helmets, headlamps, safety goggles, smoke masks, leather gloves, firefighting boots and suits), field logistics (tents, sleeping gear, first-aid kits, lighting equipment, hand tools), water pumps, and communication and transportation facilities, all organized and stored in a dedicated warehouse. However, informants also identified specific shortages: only two water tankers against an ideal of four, and an insufficient number of water pump engines relative to the extent of flood-prone areas the agency must cover. Shortages of this kind are not unique to Musi Rawas: qualitative evidence from disaster managers in Iran shows that improper distribution of facilities can leave demand for relief unsatisfied during the response phase (Bathaei & Khankeh, 2023).

Reliability concerns the consistency and dependability of BPBD's response procedures, including the TRC team's knowledge, conduct, and technical capability in disaster management.

Informants described a structured notification-to-deployment procedure: disaster reports from sub-district or village heads reach BPBD leadership, who then mobilize the TRC team to the disaster site with the necessary equipment. This procedure is supported by four TRC teams of seven to eight members each, which

informants considered adequate for standard mobilization but potentially strained when disasters occur simultaneously across the regency's fourteen sub-districts. Research on emergency management resources identifies fast response capability and resource allocation capability as the most impactful factors in operational capability (Zhang & Lee, 2024), which is consistent with the strain informants described when several incidents coincide.

Sub-district heads and community informants further highlighted travel time as a persistent constraint: from BPBD's office in Tugumulyo sub-district, travel to the affected area ranges from one hour (Tuah Negeri) to two-and-a-half hours (Muara Lakitan), with intermediate travel times reported for BTS Ulu (2 hours), Megang Sakti (1.5 hours), Muara Kelingi (2 hours), Selangit (1.5 hours), STL Ulu Terawas (1.5 hours), and Sukakarya (1.5 hours), compounded by uncertain road conditions. Studies of emergency management capability in rural China likewise identify rural road density as one of the most significant driving factors of capability (Wang & Vansant, 2025). While awaiting the TRC team's arrival, sub-district and village governments reported coordinating informally to provide early assistance to affected communities.

Responsiveness concerns BPBD's ability to assist affected communities quickly and accurately once a disaster is reported.

Informants reported that upon receiving disaster reports from sub-district or village officials, BPBD immediately mobilizes the TRC team and equipment to the affected site. This responsiveness is reinforced by cross-agency coordination involving the Regent's office, the Social Service Agency (Dinsos), the Public Order Agency (Satpol PP), sub-district and village officials, and the wider community, and by TRC personnel who are considered well-trained and skilled in evacuation and disaster assistance. Institutional coordination among agencies is a recurring theme in disaster management in the Asia-Pacific region (Aggarwal & Carlson, 2021).

As one BPBD informant summarized, upon receiving reports of a flood or forest and land fire from a sub-district or village, the agency immediately coordinates with the TRC team to prepare equipment and proceed to the disaster site. Assurance reflects the public's confidence that BPBD Musi Rawas is capable of delivering competent, courteous, and fully committed service.

This assurance is anchored in formal competency credentials. Informants confirmed that the TRC team holds training certificates issued by BPBD Musi Rawas, the South Sumatra Provincial BPBD, the National Disaster Management Agency (BNPB), and Basarnas. Public confidence in responders also depends on communication: in a study of full-scale emergency exercises, participation created opportunities for learning, but community faith in emergency services could be diminished if the purpose of the exercise was not clearly communicated (Humann et al., 2021).

However, informants also acknowledged that this competence coexists with a persistent personnel shortfall. BPBD plans ongoing training and recruitment for the TRC team; the current complement of four teams, each with seven to eight personnel, is still considered insufficient when disasters occur simultaneously, with the community, the Indonesian National Armed Forces (TNI), and the Indonesian National Police (Polri) providing supplementary on-site assistance that informants nonetheless regarded as inadequate to fully close the gap. Empathy refers to a firm yet caring attitude toward disaster victims, exercised within the bounds of standard operating procedures.

Informants consistently described empathy as a collective effort: the TRC team,

together with the wider BPBD organization, is expected to provide equitable assistance at disaster sites, ranging from evacuation and moving residents' belongings to coordinating emergency assistance, so as to prevent casualties. Informants further noted that while the training TRC members currently receive is considered adequate, dedicated training funds or technical guidance, with accommodation and transportation covered by the BPBD budget, would further strengthen the team's capabilities. The prominence of empathy among frontline staff is consistent with research on compassion in public service work, which distinguishes empathic concern from compassionate motivation and shows that the two relate differently to frontline workers' burnout (Ropes & de Boer, 2021), and with evidence that frontline public employees' social mindfulness is associated with service-oriented organizational citizenship behavior through public service motivation (Qin et al., 2024).

The geographic obstacle identified in the reliability findings above, travel times of one to two-and-a-half hours between the BPBD office and outlying sub-districts, aligns with the concept of response time in emergency services, a critical determinant of disaster management effectiveness (Kapucu & Garayev, 2011). Within crisis logistics management theory, such distance-related delays function as a structural constraint on service delivery that cannot be fully offset by personnel competence or goodwill alone. This reinforces the argument that tangible and logistical investment, such as decentralized equipment placement at the sub-district level, is a necessary complement to the agency's demonstrated relational strengths in reliability, responsiveness, assurance, and empathy (Hossain et al., 2017). Evidence on rural emergency management in China similarly points to weak disaster infrastructure and difficulties in information sharing as obstacles to efficient emergency response (Yang et al., 2024).

Taken together, these findings show that BPBD Musi Rawas's service quality is shaped less by any single dimension than by the interaction between its tangible constraints, most acutely the shortage of water tankers and pump engines relative to the regency's flood-prone river basin areas and forest and plantation zones, and its comparatively strong relational performance in reliability, responsiveness, assurance, and empathy (Whybark, 2015). This pattern is consistent with evidence that local government capacity is multidimensional: in Puerto Rico, municipal capacity for public engagement and community involvement was associated with faster post-disaster recovery, while other management capacities were not consistently associated with it (Rosas et al., 2021). Among the specific measures informants proposed for strengthening this capacity, improved spatial planning and zoning for disaster-prone areas (Uddin & Matin, 2021) featured alongside mitigation, preparedness, and community-outreach measures, which are addressed together with the study's practical policy implications in the Recommendations section below.

CONCLUSION

Taken together, the findings of this study indicate that the quality of disaster management services provided by BPBD Musi Rawas Regency is characterized by a persistent gap between tangible operational capacity and relational service quality. The agency's physical resources, including equipment, communication tools, and rapid-response personnel, remain below the level required to serve the district's fourteen sub-districts effectively, and this gap is compounded by significant travel-time obstacles to disaster-affected areas. However, this study also finds that BPBD Musi Rawas

compensates for these tangible limitations through consistently strong performance on the reliability, responsiveness, assurance, and empathy dimensions of SERVQUAL, reflected in its structured response procedures, credentialed personnel, and the collaborative, compassionate engagement demonstrated by its Rapid Response Team toward affected communities.

This finding contributes to the theoretical understanding of public sector crisis management by suggesting that, in resource-constrained local disaster agencies, relational and behavioral service dimensions can partially, but not fully, offset tangible resource deficits. For regional disaster governance, this implies that policy attention should not treat SERVQUAL dimensions as independent targets, but should prioritize closing the tangibles gap, through budget reallocation toward equipment and decentralized logistics, as the dimension most likely to unlock further improvement across the other four dimensions.

LIMITATION

This study has several limitations, including a scope limited only to the Musi Rawas Regency area, making the results not generalizable to other regions. The number of informants was relatively small, which may not fully represent all relevant stakeholders. Because the informants were purposively selected, the findings should be read as analytically transferable rather than statistically generalizable (Ahmad & Wilkins, 2024). Additionally, there were time constraints and limited access to supporting data such as complete documentation of BPBD equipment and budgets. Furthermore, the descriptive qualitative approach used has not quantitatively measured performance, so further research with a more comprehensive approach is recommended.

RECOMMENDATIONS

The researcher recommends that the Musi Rawas Regency Flood Disaster Management Agency (BPBD) pay greater attention to and improve its performance during the pre-disaster, disaster, and post-disaster phases. This is based on information from several informants who stated that the community needs early education, awareness, and preparation to face potential disasters. Likewise, during a disaster, the community needs additional equipment such as rubber boats and fire trucks, which should be available at least at each sub-district office. Furthermore, in the post-disaster phase, the community still requires assistance from BPBD Musi Rawas Regency, for example, after a flood, residents need support for recovery efforts, such as cleaning or spraying mud off the floors of their homes. This aligns with evidence from other flood-prone Indonesian regions that community leaders, when formally engaged alongside government agencies, play a decisive role in translating disaster response resources into effective, locally trusted assistance during and after flood events.

Statement on the Use of Artificial Intelligence.

The author acknowledges the use of Deepl and Grammarly AI as a language editing aid during the preparation of this manuscript, used to support grammar checking and sentence clarity. All ideas, analyses, interpretations, and conclusions presented in this study remain entirely the author's responsibility.

Conflicts of interest

The authors declare no conflict of interest.

Author contributions

Conceptualization, Author1; methodology, Author1 and Author2; data collection, Author1; data validation, Author1 and Author2; formal analysis, Author1 and Author2; writing, original draft preparation, Author1 and Author2; writing, review and editing, Author1 and Author2. All authors have read and approved the final version of the manuscript.

ACKNOWLEDGEMENTS

The researcher would like to thank the Musi Rawas Regency Regional Disaster Management Agency (BPBD) for its assistance in data collection and systematic presentation of the research, as well as the communities affected by the floods and forest and land fires who shared information to improve the services provided by the Musi Rawas Regency BPBD.

REFERENCES

Adamy, A., & Rani, H. A. (2022). An evaluation of community satisfaction with the government's COVID-19 pandemic response in Aceh, Indonesia. *International Journal of Disaster Risk Reduction*, *69*, 102723. https://doi.org/10.1016/j.ijdrr.2021.102723

Aggarwal, V., & Carlson, M. (2021). Institutional coordination in disaster management in the Asia Pacific. *Natural Hazards Review*, *22*(3), 02021001. https://doi.org/10.1061/(asce)nh.1527-6996.0000486

Ahmad, M., & Wilkins, S. (2024). Purposive sampling in qualitative research: A framework for the entire journey. *Quality & Quantity*, *59*(2), 1461–1479. https://doi.org/10.1007/s11135-024-02022-5

Bathaei, S. A., & Khankeh, H. R. (2023). Factors associated with relief overdemanding in the disaster response phase: A qualitative content analysis. *Natural Hazards*, *116*(3), 4009–4019. https://doi.org/10.1007/s11069-022-05810-0

Bengtsson, R., & Brommesson, D. (2022). Institutional trust and emergency preparedness: Perceptions of Covid 19 crisis management in Sweden. *Journal of Contingencies and Crisis Management*, *30*(4), 481–491. https://doi.org/10.1111/1468-5973.12391

Bouncken, R. B., Czakon, W., & Schmitt, F. (2025). Purposeful sampling and saturation in qualitative research methodologies: Recommendations and review. *Review of Managerial Science*, *20*(2), 579–615. https://doi.org/10.1007/s11846-025-00881-2

Cho, H., & Choi, N. (2024). Analyzing vulnerabilities of disaster risk management systems of local governments in South Korea: Evidence from National Audit Office reports. *Systems*, *12*(3), 76. https://doi.org/10.3390/systems12030076

Cullano, R. A., Tiu, A. M., Mata, P., Yamagishi, K., Gonzales, G., Maturan, F., Evangelista, S. S., Burdeos, A., & Ocampo, L. (2025). Structural analysis of public trust and the mediating role of government image in typhoon-induced disaster response. *Journal of Public Affairs*, *26*(1), e70103. https://doi.org/10.1002/pa.70103

Humann, M., Collie, C., Bright, K., Thomsen, J., & Crook, P. (2021). Public engagement during full-scale exercises: Dimensions of trust and community resilience.

Journal of Contingencies and Crisis Management, *30*(3), 317–326. https://doi.org/10.1111/1468-5973.12388

Indonesia. (2007). *Undang-Undang Republik Indonesia Nomor 24 Tahun 2007 tentang Penanggulangan Bencana*.

Kapucu, N., & Garayev, V. (2011). Collaborative decision-making in emergency and disaster management. *International Journal of Public Administration*, *34*(6), 366–375. https://doi.org/10.1080/01900692.2011.561477

Kawar, L. N., Dunbar, G. B., Aquino-Maneja, E. M., Flores, S. L., Squier, V. R., & Failla, K. R. (2024). Quantitative, qualitative, mixed methods, and triangulation research simplified. *The Journal of Continuing Education in Nursing*, *55*(7), 338–344. https://doi.org/10.3928/00220124-20240328-03

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Sage Publications.

Oktari, R. S., Latuamury, B., Idroes, R., Sofyan, H., & Munadi, K. (2023). Knowledge management strategy for managing disaster and the COVID-19 pandemic in Indonesia: SWOT analysis based on the analytic network process. *International Journal of Disaster Risk Reduction*, *85*, 103503. https://doi.org/10.1016/j.ijdrr.2022.103503

Qin, X., Zhang, S., & Dou, K. (2024). Good thoughts lead to good deeds: How frontline public employee's social mindfulness affects service-oriented organizational citizenship behavior. *Review of Public Personnel Administration*, *46*(2), 393–417. https://doi.org/10.1177/0734371x241289943

Rahayu, H. P., Zulfa, K. I., Nurhasanah, D., Haigh, R., Amaratunga, D., & Wahdiny, I. I. (2024). Unveiling transboundary challenges in river flood risk management: Learning from the Ciliwung River basin. *Natural Hazards and Earth System Sciences*, *24*(6), 2045–2064. https://doi.org/10.5194/nhess-24-2045-2024

Raju, E., & Becker, P. (2013). Multi-organisational coordination for disaster recovery: The story of post-tsunami Tamil Nadu, India. *International Journal of Disaster Risk Reduction*, *4*, 82–91. https://doi.org/10.1016/j.ijdrr.2013.02.004

Ropes, E., & de Boer, N. (2021). Compassion towards clients: A scale and test on frontline workers' burnout. *Journal of European Public Policy*, *28*(5), 723–741. https://doi.org/10.1080/13501763.2021.1912150

Rosas, E., Roberts, P. S., Lauland, A., Gutierrez, I. A., & Nuñez-Neto, B. (2021). Assessing the impact of municipal government capacity on recovery from Hurricane Maria in Puerto Rico. *International Journal of Disaster Risk Reduction*, *61*, 102340. https://doi.org/10.1016/j.ijdrr.2021.102340

Squire, C. M., Giombi, K. C., Rupert, D. J., Amoozegar, J., & Williams, P. (2024). Determining an appropriate sample size for qualitative interviews to achieve true and near code saturation: Secondary analysis of data. *Journal of Medical Internet Research*, *26*, e52998. https://doi.org/10.2196/52998

Sureshchandar, G. S., Rajendran, C., & Anantharaman, R. N. (2002). The relationship between service quality and customer satisfaction – A factor specific approach. *Journal of Services Marketing*, *16*(4), 363–379. https://doi.org/10.1108/08876040210433248

Triyanti, A., Surtiari, G. A. K., Lassa, J., Rafliana, I., Hanifa, N. R., Muhidin, M. I., & Djalante, R. (2023). Governing systemic and cascading disaster risk in Indonesia: Where do we stand and future outlook. *Disaster Prevention and Management: An*

International Journal, *32*(1), 27–48. https://doi.org/10.1108/dpm-07-2022-0156

Uddin, K., & Matin, M. A. (2021). Potential flood hazard zonation and flood shelter suitability mapping for disaster risk mitigation in Bangladesh using geospatial technology. *Progress in Disaster Science*, *11*, 100185. https://doi.org/10.1016/j.pdisas.2021.100185

Wang, J., & Vansant, E. (2025). Assessment and examination of emergency management capabilities in Chinese rural areas from a machine learning perspective. *Sustainability*, *17*(3), 1001. https://doi.org/10.3390/su17031001

Yang, J., Hou, H., & Hu, H. (2024). Exploring the intelligent emergency management mode of rural natural disasters in the era of digital technology. *Sustainability*, *16*(6), 2366. https://doi.org/10.3390/su16062366

Zhai, L., & Lee, J. E. (2023). Analyzing the disaster preparedness capability of local government using AHP: Zhengzhou 7.20 rainstorm disaster. *International Journal of Environmental Research and Public Health*, *20*(2), 952. https://doi.org/10.3390/ijerph20020952

Zhang, K., & Lee, J. E. (2024). Assessing the operational capability of disaster and emergency management resources: Using analytic hierarchy process. *Sustainability*, *16*(10), 3933. https://doi.org/10.3390/su16103933