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Maritime Search and Rescue Laws and Policies in Tanzania: Legal Alignment, Institutional Gaps and Enforcement Challenges

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ABSTRACT

Maritime search and rescue (SAR) is a critical component of maritime safety, as effective responses to persons in distress depend on timely coordination, clear institutional mandates, adequate capacity and enforceable legal obligations. This study examined the legal and policy framework governing maritime SAR in Tanzania, focusing on alignment with international standards, legal clarity, institutional coordination, updating of the legal framework and enforcement. A descriptive research design combined documentary review with questionnaire evidence from 67 stakeholders, including policymakers and regulators, SAR operational personnel, vessel operators, and legal and academic experts. Findings reveal a substantial gap between awareness of SAR laws and the capacity to operationalize them. Although 80.6% of respondents reported awareness of relevant SAR laws and policies, only 37.3% had received formal training. Only 56.7% considered the laws clear and easy to interpret, while 44.8% believed institutional responsibilities were clearly assigned. Furthermore, 59.7% viewed the legal framework as insufficiently updated, and only 38.9% considered SAR laws effectively enforced. Tanzania possesses an important legal foundation through national maritime legislation and operational instruments, yet implementation is constrained by institutional fragmentation, limited legal and operational training, inadequate coordination mechanisms, weak accountability and differences between mainland Tanzania and Zanzibar. The study recommends harmonisation of SAR legislation and operational plans, establishment or strengthening of an effective national Maritime Rescue Coordination Centre (MRCC), regular joint exercises, institutionalised legal training, clear inter-agency standard operating procedures, periodic legal review and stronger monitoring and accountability mechanisms. These measures would strengthen Tanzania's capacity to deliver coordinated, timely SAR services and improve implementation of its international maritime safety obligations.

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1. Introduction

Maritime search and rescue (SAR) is a fundamental maritime safety function concerned with the location, assistance and rescue of persons in distress. Effective SAR requires more than the availability of rescue assets; it depends on a coherent legal framework, clearly assigned responsibilities, trained personnel, reliable communication systems, effective coordination and mechanisms for accountability. International SAR practice has therefore developed around common legal and operational standards intended to facilitate rapid assistance and cooperation across jurisdictions (Munari, 2020; Christodoulou et al., 2022). The development of modern SAR governance has been strongly influenced by international maritime instruments. The International

Convention for the Safety of Life at Sea (SOLAS), 1974, establishes important safety obligations, including the duty to render assistance to persons in distress at sea. The International Convention on Maritime Search and Rescue (SAR), 1979, provides the principal international framework for organising SAR services and cooperation. Article 98 of the United Nations Convention on the Law of the Sea (UNCLOS), 1982, also requires states to promote effective search and rescue services. Operationally, SAR activities are supported by the International Aeronautical and Maritime Search and Rescue (IAMSAR) framework developed by the International Maritime Organization (IMO) and the International Civil Aviation Organization (ICAO) (Ibrahim, 2020).

Tanzania's maritime domain includes the Indian Ocean coastline, major ports and extensive inland waters, including Lake Victoria, Lake

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Tanganyika and Lake Nyasa. Maritime transport supports trade, passenger movement, fishing, tourism and other livelihoods. Consequently, weaknesses in SAR governance can have direct implications for passengers, seafarers, fishers, vessel operators and coastal and lakeside communities. Previous studies and institutional assessments have identified challenges associated with maritime accidents, emergency coordination, training, institutional capacity and implementation of maritime safety requirements in Tanzania (Plummer et al., 2021; Mnene et al., 2024; NAOT, 2024). The Tanzanian SAR framework includes national maritime legislation, operational guidance and Zanzibar-specific arrangements. The Merchant Shipping Act, 2003 (as revised), provides an important statutory foundation for maritime safety and related responsibilities, while the Tanzania Aeronautical and Maritime Search and Rescue (AMSAR) Manual provides operational guidance. Zanzibar has also developed the Zanzibar Maritime SAR Plan (2015). These instruments provide a basis for SAR preparedness and response, but the coexistence of mainland and Zanzibar arrangements raises important questions concerning legal harmonisation, institutional coordination and command during incidents that require cooperation across jurisdictions. The central problem addressed by this study is therefore not simply whether Tanzania has SAR-related laws and policies, but whether these instruments are sufficiently clear, harmonised, updated and enforceable to support effective emergency response. The study assesses stakeholders' perceptions of the existing framework and identifies institutional and implementation gaps that may affect SAR performance.

The study was guided by the following objectives: (i) to examine the legal and policy framework governing maritime SAR in Tanzania; (ii) to assess stakeholder awareness and understanding of SAR laws and policies; (iii) to examine the clarity of institutional responsibilities and the level of inter-agency coordination; (iv) to assess the extent to which SAR laws are updated and enforced; and (v) to identify key legal and institutional measures for strengthening SAR effectiveness in Tanzania.

2. Literature Review

2.1 International legal and policy framework for maritime SAR

The international SAR regime is founded principally on the SAR Convention (1979), SOLAS (1974) and UNCLOS (1982). The SAR Convention establishes a framework for the organisation of SAR services, designation of SAR regions, coordination of rescue activities and cooperation between states. SOLAS Chapter V contains provisions relevant to navigation and safety, including the obligation to assist persons in distress. UNCLOS Article 98 reinforces the duty of states and masters to render assistance and requires coastal states to promote adequate SAR services (Ibrahim, 2020).

Ratification alone, however, does not guarantee effective compliance. International obligations must be translated into domestic legislation, institutional mandates, operational procedures, trained personnel and measurable systems of accountability. Literature on SAR governance consistently identifies coordination, information sharing, institutional clarity and operational readiness as essential conditions for effective emergency response (Christodoulou et al., 2022; Cucinelli et al., 2023). The IAMSAR framework further provides internationally recognised operational guidance for planning, coordination, communications and execution of SAR missions.

2.2 Tanzania's legal and institutional framework

In Tanzania, the Merchant Shipping Act, 2003 (as revised), is an important component of the national maritime safety framework. It is complemented by operational instruments such as the Tanzania AMSAR Manual and, within Zanzibar, the Zanzibar Maritime SAR Plan (2015). The institutional environment involves maritime regulatory authorities, port authorities, marine law-enforcement bodies, emergency responders and other actors that may provide vessels, personnel, communications or medical assistance during SAR missions.

The literature reviewed in the original study indicates that Tanzania's principal challenge is the gap between the existence of formal instruments and their practical implementation. Reported concerns include unclear institutional roles, inadequate training, weak dissemination of operational guidance, limited resources, inconsistent coordination and insufficient mechanisms for monitoring compliance (Mbise & Munishi, 2020; Plummer et al., 2021; Mnene et al., 2024). The 2024 performance audit by the National Audit Office of Tanzania (NAOT) further provides an important institutional basis for examining SAR coordination and outcomes in the country.

2.3 Legal clarity, institutional coordination and enforcement

Legal clarity is particularly important in SAR because emergencies require decisions to be taken rapidly and often involve multiple organisations. A legal framework should therefore identify who receives distress information, who coordinates the mission, which agency has operational command, how supporting agencies are mobilised, how cross-jurisdictional incidents are managed, and how incidents are documented and reviewed. Where these functions are dispersed across institutions without clear coordination arrangements, duplication, delay and uncertainty may occur (Rodrigue & Notteboom, 2024).

Enforcement is a related but distinct issue. A law can exist and be understood but still have limited practical effect if compliance is not monitored and non-compliance does not attract appropriate administrative or legal consequences. Effective enforcement requires institutional capacity, inspections, reporting, investigation of incidents, performance monitoring and adequate resources. The literature therefore suggests that SAR governance should be evaluated across the full chain from legal formulation to operational implementation and accountability.

2.4 Research gap

Existing studies provide useful information on maritime safety, maritime governance, accidents and SAR technology in Tanzania. However, comparatively less attention has been given to the relationship between SAR laws and their practical implementation across mainland Tanzania and Zanzibar. In particular, there is a need to examine whether stakeholders consider the legal framework clear, sufficiently updated, institutionally coordinated and effectively enforced. This study addresses that gap by combining documentary analysis with stakeholder evidence and by focusing on the implementation dimension of Tanzania's SAR legal and policy framework.

3. Methodology

3.1 Research design

A descriptive research design was used to examine Tanzania's maritime SAR legal and policy framework and the experiences of stakeholders involved in or affected by SAR activities. The approach combined documentary review with primary data collected from stakeholders. Documentary sources included relevant laws, policies, operational

manuals, institutional reports and published literature. Primary data were obtained using a structured questionnaire, supplemented by stakeholder discussions where applicable.

3.2 Study area and scope

The study considered Tanzania's principal maritime domains, including the mainland coastline and selected inland waters, as well as Zanzibar. The mainland component included areas associated with major maritime activity, including Dar es Salaam, Tanga and Mtwara, while Zanzibar was considered because of its passenger ferry routes, coastal activities and distinct maritime administrative arrangements. Inland waters, particularly Lake Victoria, were also considered because of their importance for passenger and fishing activities and the history of maritime accidents.

3.3 Study population and sampling

The study population comprised stakeholders with direct knowledge of maritime SAR governance and operations. These included policymakers and regulators, SAR operational personnel, vessel operators, and legal and academic experts. Purposive sampling was used to select participants with relevant knowledge and experience. A total of 67 respondents participated in the study (Table 1).

Table 1. Study population and sampling

Study group	Frequency	Percentage (%)
Policymakers and regulators	3	4.5
SAR operational personnel	23	34.3
Vessel operators	20	29.9
Legal and academic experts	21	31.3
Total	67	100.0

3.4 Data collection

Primary data were collected through a structured questionnaire covering awareness of SAR laws and policies, formal training, legal clarity, institutional responsibilities, legal updating and enforcement. Documentary review was used to examine the content and implementation context of the relevant legal and policy instruments. The combination of documentary and primary data enabled comparison between the formal framework and stakeholder perceptions of its practical application.

3.5 Data analysis

Quantitative questionnaire responses were analysed using descriptive statistics, principally frequencies and percentages. Qualitative information from documentary sources and stakeholder responses was analysed thematically. The analysis was organised around five dimensions: legal awareness and training; legal clarity; institutional role clarity and coordination; legal responsiveness and updating; and enforcement and international compliance.

3.6 Validity, reliability and ethics

To enhance validity, the questionnaire items were aligned with the study objectives and the main dimensions identified from the literature and documentary review. Reliability was supported by using standardised questions for respondents. Participation was voluntary, respondents were informed about the purpose of the study, and confidentiality was maintained by avoiding disclosure of individual identities in the reporting of findings.

4. Results and Findings

4.1 Respondent characteristics

The 67 respondents represented four stakeholder groups. SAR operational personnel constituted the largest group (34.3%), followed by legal and academic experts (31.3%), vessel operators (29.9%), and policymakers and regulators (4.5%). The composition provided perspectives from both operational and governance dimensions of SAR. In addition, 56.7% of respondents reported having participated in at least one SAR operation, providing a substantial operational perspective on the legal and institutional issues examined.

4.2 Awareness of SAR laws and policies

Most respondents (80.6%) reported awareness of the laws and policies governing maritime SAR in Tanzania, while 19.4% reported that they were not aware of them. The relatively high awareness level indicates that SAR-related legal instruments are known to a substantial proportion of stakeholders. However, awareness by itself does not demonstrate that stakeholders can interpret or apply legal provisions during an emergency. This distinction becomes clearer when the results on formal training and legal clarity are considered.

4.3 Formal training on SAR laws and policies

Only 37.3% of respondents reported receiving formal training on SAR laws or policies, compared with 62.7% who had not received such training. The difference between the 80.6% awareness level and the 37.3% formal training level suggests that awareness is not necessarily supported by structured legal and policy capacity building. This may reduce the ability of frontline personnel and other stakeholders to translate legal obligations into timely operational decisions.

4.4 Clarity of SAR laws and policies

A combined 56.7% of respondents agreed or strongly agreed that SAR laws and policies are clear and easy to interpret (Table 2). However, 22.4% disagreed or strongly disagreed and 20.9% were neutral. Thus, although a modest majority considered the framework clear, a substantial minority expressed uncertainty or difficulty in interpretation. This finding is important because ambiguity in legal responsibilities can become more consequential during multi-agency emergencies. Their identities and those of their institutions have been protected for ethical reasons. This number was deemed sufficient due to saturation should the number be higher. The respondents were assured of confidentiality and their identities have not been disclosed in this paper.

Table 2. Study population and sampling

Response	Frequency	Percentage (%)
Strongly agree	10	14.9
Agree	28	41.8
Neutral	14	20.9
Disagree	9	13.4
Strongly disagree	6	9.0
Total	67	100.0

4.5 Alignment with international standards

Stakeholders expressed mixed views concerning the extent to which Tanzania's SAR laws are aligned with international standards. The documentary review indicates that Tanzania's framework is influenced by the SAR Convention, SOLAS and UNCLOS, while operational guidance

is provided through the AMSAR framework. Nevertheless, the study findings indicate that ratification and formal legal alignment have not necessarily been accompanied by complete operational integration. Respondents identified weaknesses associated with training, coordination, infrastructure, communication and implementation.

4.6 Clarity of institutional roles

The result show that only 44.8% of 67 respondents considered institutional responsibilities to be clearly assigned. A further 32.8% disagreed and 22.4% were uncertain. The results therefore indicate a substantial institutional coordination problem. Multiple actors may have legitimate roles in SAR, but the existence of several participating agencies does not by itself establish a clear operational command structure. The findings point to a need for formal inter-agency procedures specifying leadership, supporting roles, information sharing and escalation arrangements.

4.7 Updating and responsiveness of SAR laws

It was found that 40.3% of respondents believed that SAR laws are regularly updated, while 59.7% disagreed. This result indicates a strong perception that the legal and policy framework does not keep pace adequately with changing operational requirements. Regular review is particularly important where maritime risks, communications technologies, vessel traffic patterns, emergency management practices and international standards evolve over time.

4.8 Enforcement of SAR laws

The results indicate that only 38.9% of respondents agreed or strongly agreed that SAR laws are effectively enforced. In contrast, 34.3% disagreed or strongly disagreed, while 26.9% were neutral (Table 3). The results indicate that enforcement is not consistently perceived as effective. Stakeholder concerns relate to institutional capacity, resource constraints, follow-up after incidents, monitoring and the absence of sufficiently visible accountability mechanisms.

Table 3. Enforcement of SAR laws

Response	Frequency	Percentage (%)
Strongly agree	6	9.0
Agree	20	29.9
Neutral	18	26.9
Disagree	15	22.4
Strongly disagree	8	11.9
Total	67	100.0

5. Discussion

5.1 From legal existence to operational effectiveness

The findings demonstrate a central implementation problem: Tanzania has a recognisable legal and policy foundation for SAR, but the effectiveness of that foundation is constrained by weaknesses in operationalisation. The relatively high level of legal awareness (80.6%) contrasts sharply with the low proportion of respondents reporting formal legal training (37.3%). This indicates that dissemination of legal information has not been matched by systematic capacity building. In an emergency environment, general awareness is insufficient unless stakeholders understand how legal obligations translate into operational decisions.

The result is consistent with the broader literature, which emphasises that maritime safety rules must be supported by institutional structures, operational procedures and trained personnel. The finding also supports the argument that legal compliance should be assessed not only by the existence of statutes or treaty commitments but by the capacity of institutions to implement them in practice.

5.2 Legal clarity and accessibility

The clarity and comprehensiveness of maritime legal frameworks are essential determinants of an effective Search and Rescue (SAR) system. In Tanzania, several legal instruments have been established to support maritime SAR operations, most notably the Merchant Shipping Act, 2003 (Revised) (Rwechungura, 2023), the Tanzania Aeronautical and Maritime Search and Rescue (AMSAR) Manual (Mwatabangoma, 2024), and the Zanzibar Maritime SAR Plan (2015) (Makame et al., 2023). Collectively, these instruments lay the foundation for SAR coordination, institutional mandates (Owino, 2022), and maritime emergency responses (Mnene et al., 2024). However, the practical clarity and usability of these laws remain in question.

Data collected from this study indicate that only 56.7% of respondents believe the existing SAR laws are clear and easy to understand. This suggests that nearly half of the key stakeholders involved in SAR operations perceive the current legal framework as ambiguous or poorly structured. Many respondents specifically noted that the Merchant Shipping Act, while broad in scope, lacks detailed procedural guidance for SAR operations. For example from Plummer et al., (2021) Merchant Shipping Act does not clearly outline inter-agency communication protocols, the chain of command during multi-agency rescues, or standard response timelines in different maritime zones. Additionally, the law falls short in defining specific duties among the institutions responsible for SAR, such as TASAC, the Marine Police, the Tanzania Ports Authority (TPA), and regional emergency responders (Suleiman, 2024). This lack of specificity has led to operational confusion, duplicated efforts, and sometimes inaction during critical emergencies (Mwatabangoma, 2024). This observation is supported by (Makame et al., 2023), who argued that Tanzanian maritime laws often fail to define clear institutional roles (Suleiman, 2024), resulting in ineffective maritime governance. The AMSAR Manual, which is intended to provide operational guidance, suffers from limited accessibility and poor integration into institutional practices (Alegre et al., 2020). Although it contains practical procedures for alerting, responding to, and coordinating SAR efforts, many SAR personnel have not received it or are unfamiliar with its content. This underutilization contributes to the perception that SAR laws are incomplete or difficult to apply in real-time emergencies (Rwechungura, 2023). Furthermore, According to Makame et al., (2023) the Zanzibar Maritime SAR Plan (2015), developed to manage SAR operations in Zanzibar's jurisdiction, introduces additional legal and procedural differences. Although useful within Zanzibar waters, its provisions are not harmonized with mainland laws, leading to inconsistencies in language, expectations, and coordination protocols between the two regions (Alqurashi et al., 2022). These disparities were also reported by respondents who cited confusion during joint operations involving both Zanzibar and mainland SAR teams. In terms of comprehensiveness, the current legal instruments do not fully incorporate critical components outlined in international conventions (Makame et al., 2023). For instance, while Tanzania has ratified the SAR Convention (1979) and SOLAS (1974), many of the obligations such as the

establishment of a fully functional Maritime Rescue Coordination Centre (MRCC), real-time distress alert systems, and scheduled joint training exercises are either absent or inadequately covered in national legislation (Plummer et al., 2021). These findings highlight a significant gap between legal existence and operational applicability. The presence of SAR laws does not equate to effectiveness if they are not clearly written, well-understood, or practically enforced. As noted by Rwechungura, (2023), legal frameworks must be both conceptually sound and operationally usable to guide successful SAR outcomes.

5.3 Institutional coordination and role clarity

Effective coordination among institutions involved in Maritime Search and Rescue (SAR) operations is vital for ensuring swift, organized, and life-saving responses to emergencies at sea. Well-defined roles and responsibilities across relevant agencies eliminate duplication, reduce delays, and support compliance with both national laws and international obligations (Andreassen & Borch, 2020). However, this study found that institutional coordination and role clarity remain critical weaknesses in Tanzania's SAR system, undermining the country's ability to respond efficiently to maritime incidents. The survey findings show that only 44.8% of respondents agree that roles and responsibilities among SAR institutions are clearly defined. The remainder either disagreed or were uncertain, pointing to structural overlaps, operational confusion, and poor inter-agency communication. The primary institutions involved in SAR in Tanzania include the Tanzania Shipping Agencies Corporation (TASAC), Marine Police, Tanzania Ports Authority (TPA), Zanzibar Maritime Authority (ZMA), and regional/local emergency responders (Makame et al., 2023). Each of these actors has a legal mandate to participate in SAR, but the absence of a unified operational framework often results in fragmented execution (Mwitabangoma, 2024).

For example, while TASAC is legally designated as the lead SAR coordinator under the Merchant Shipping Act (2003 Revised), the Marine Police also conduct direct rescue missions, especially in inland and nearshore waters. TPA, on the other hand, is responsible for safety oversight within port boundaries but is occasionally called upon to provide rescue assets or logistical support. In some cases, this leads to duplicated efforts or delays caused by uncertainty over who should take command during a SAR incident (Mnene et al., 2024). These coordination challenges were also observed by Suleiman, (2024), who criticized the lack of a centralized maritime command system in Tanzania. According to Makame et al., (2023), another layer of complexity arises from Zanzibar's semi-autonomous governance structure, which maintains its own SAR framework under the Zanzibar Maritime SAR Plan (2015). While this plan is locally effective, there is no legally binding mechanism that links Zanzibar's SAR operations with those of the mainland in a unified command structure. Respondents reported that joint exercises or collaborative missions are rare, and coordination is mostly informal or improvised during emergencies (Alsamhi et al., 2022). This jurisdictional disconnect poses a significant risk to timely and integrated SAR responses in shared waters like the Zanzibar Channel (Makame et al., 2023).

Additionally, the absence of a national Maritime Rescue Coordination Centre (MRCC) or formally established Joint Rescue Coordination Centres (JRCCs) further weakens institutional alignment (Galani, 2025). In countries with effective SAR systems, the MRCC serves as a centralized hub that facilitates communication, assigns responsibilities, and monitors real-time rescue efforts (Franco & Vara, 2023). Tanzania's

current SAR setup lacks such an infrastructure, forcing agencies to rely on ad hoc communication and fragmented coordination strategies.

This situation reflects the concerns raised by institutional theorists such as (Attoumani, 2020), who argue that institutions fail when formal rules are not supported by clear structural arrangements, inter-organizational alignment, and operational legitimacy. Mwitabangoma, (2024) revealed that, Tanzania's SAR framework suffers from exactly these institutional inefficiencies rules exist, but the systems and coordination mechanisms needed to enforce them effectively are either weak or absent. Furthermore, the lack of standard operating procedures (SOPs) shared across all SAR actors contributes to operational inconsistency. Respondents indicated that different institutions interpret legal mandates differently, and in many cases, relieve internal agency protocols that are not harmonized with other agencies. The result is a disjointed system where cooperation is dependent on individual discretion rather than a structured national SAR plan (Odula, 2024).

5.4 Updating the legal framework

The finding that 59.7% of respondents considered SAR laws insufficiently updated indicates a need for institutionalised legal review. SAR governance must respond to changing maritime traffic, communication technologies, emerging hazards, lessons from accidents and amendments to international standards. Periodic review should not be limited to statutory amendment; it should also include operational plans, standard operating procedures, training curricula and emergency exercise scenarios. For example, the Merchant Shipping Act does not address new threats such as increased ferry traffic, climate-induced sea events, or regional migration crises, all of which increase SAR demands. This legal stagnation means that implementation remains reactive rather than proactive, leaving authorities ill-prepared for emerging maritime challenges. According to Grembi, (2022), these findings are in line with Resource Dependency Theory (Pfeffer & Salancik, 1978), which explains how institutions often struggle to implement legal mandates when they lack sufficient resources and external support. In Tanzania's case, SAR agencies frequently rely on external donors for equipment, training, and rescue technology making enforcement sporadic and dependent on the availability of foreign assistance rather than internally sustained mechanisms.

5.5 Enforcement and legal implementation

According to Kayanda, (2021), the enforcement and implementation of Search and Rescue (SAR) laws are essential determinants of a functional and responsive maritime safety system. While laws provide the structural framework, their effectiveness lies in consistent application, monitoring, and accountability mechanisms. In the context of Tanzania, this study reveals that weak enforcement, limited legal follow-through, and resource constraints significantly hinder the operationalization of SAR policies and legal instruments (Barillas González, 2024). The survey findings show that only 38.9% of respondents believe that SAR laws in Tanzania are effectively enforced (Gullström et al., 2021). This means that more than half of the stakeholders engaged in SAR-related activities view the country's enforcement mechanisms as insufficient or ineffective (Gomes Neves Mota, 2023). Field responses attributed these weaknesses to several key factors: lack of surveillance infrastructure, inadequate human, financial resources, limited legal audits, and an absence of institutional accountability following SAR failures or maritime accidents.

Although Tanzania has ratified essential international conventions such

as the International Convention on Maritime Search and Rescue (1979), SOLAS (1974), and UNCLOS (1982), these obligations are not consistently reflected in domestic practice. For instance, while SOLAS Chapter V, Regulation 33 requires immediate assistance to any person in distress at sea, operational delays due to poor coordination, slow mobilization, or lack of rescue assets often result in non-compliance. Moreover, there is no publicly accessible data or legal mechanism requiring agencies to report response times, mission outcomes, or post-incident evaluations a significant weakness in transparency and legal oversight (Odula, 2024). A key concern raised by respondents was the absence of an enforcement authority that actively monitors compliance with SAR duties. Although TASAC is the designated maritime safety authority under the Merchant Shipping Act (2003 Revised), its role is primarily administrative and regulatory. There are no dedicated SAR enforcement officers tasked with legal audits, inspection of rescue readiness, or legal prosecution of SAR-related. This institutional vacuum weakens the rule of law within SAR operations and enables a culture of minimal accountability. Another major shortcoming is the lack of legal consequences for non-compliance (Munari, 2020). For example, when vessel operators fail to assist distressed vessels or when SAR authorities delay response, there are no clear penalties or follow-up investigations prescribed under national law. In many other maritime jurisdictions, failure to provide assistance or comply with SAR obligations results in fines, license revocations, or criminal charges. In contrast, Tanzania's SAR legal system rarely enforces such sanctions, even when lives are lost due to negligence or inaction (Makame et al., 2023). In terms of legal implementation, the Zanzibar Maritime SAR Plan (2015) and the Tanzania AMSAR Manual are not effectively institutionalized (Makame et al., 2023). These tools are operational by design but are not embedded into daily enforcement routines, regulatory inspections, or emergency drills. Many stakeholders reported never having seen or used these documents, indicating a disconnection between policy formulation and legal implementation. As observed, SAR readiness is undermined when legal tools are treated as administrative texts rather than practical instruments enforced on the ground.

5.6 Compliance with international obligations

Tanzania's participation in the international maritime safety regime provides an important legal and policy foundation (Kayanda, 2021). However, the study demonstrates the difference between formal commitment and operational compliance. The relevant question is whether the obligations reflected in international instruments are translated into functional national arrangements, including effective coordination, trained personnel, reliable communications, cooperation with neighbouring jurisdictions and appropriate monitoring. The findings therefore support an implementation-oriented approach to treaty compliance. Strengthening domestic legislation and operational arrangements would improve not only national safety outcomes but also Tanzania's capacity to participate effectively in regional SAR cooperation.

5.7 Implications for mainland Tanzania and Zanzibar

The evidence indicates that legal and institutional fragmentation between mainland Tanzania and Zanzibar is a significant governance issue. The Zanzibar Maritime SAR Plan provides an important local planning instrument, but the study identifies limited harmonisation with mainland arrangements. This should be addressed through jointly developed operational protocols, mutual assistance arrangements, common communication procedures, regular exercises and clear rules for incidents

occurring near or across operational boundaries. Harmonisation does not necessarily require identical institutions. Instead, it requires compatibility of procedures and a clear mechanism through which different authorities can work together during an emergency. A nationally coordinated SAR framework, developed with relevant Zanzibar institutions, would provide a practical basis for achieving this objective.

6. Conclusion

This study examined the legal and policy framework governing maritime SAR in Tanzania and assessed its practical implementation from the perspective of key stakeholders. The findings show that Tanzania has established an important legal and policy foundation for SAR through national maritime legislation, operational guidance and Zanzibar-specific arrangements, and that awareness of SAR laws among stakeholders is relatively high. However, significant implementation gaps remain. The most important weaknesses identified are the limited level of formal legal training, incomplete clarity of institutional responsibilities, inadequate inter-agency coordination, perceived stagnation of the legal framework and weak enforcement. The findings also indicate that mainland-Zanzibar institutional differences create additional challenges for coordinated SAR operations. These weaknesses demonstrate that legal alignment cannot be measured solely by treaty ratification or the existence of national instruments; effective compliance requires operational capacity, clear institutional arrangements, continuous training, regular legal review and accountability. Tanzania therefore requires an integrated approach that connects law, policy, institutions and operations. Strengthening the SAR system should focus on practical implementation of existing obligations while addressing the legal and institutional gaps identified by stakeholders. Such reforms would improve preparedness, reduce uncertainty during emergencies and strengthen Tanzania's capacity to protect life in its maritime and inland waters.

7. Recommendations

- Establish a formal mechanism for periodic review of SAR laws, policies and operational plans, including review of amendments to international SAR instruments and lessons from incidents.
- Develop harmonised SAR standard operating procedures and inter-agency command protocols applicable to mainland Tanzania and Zanzibar while respecting respective legal mandates.
- Institutionalise recurrent legal and operational SAR training for regulators, SAR personnel, vessel operators and other frontline actors, supported by practical simulation exercises.
- Strengthen monitoring and accountability through standardised records of SAR alerts, response times, assets deployed, persons assisted, fatalities, mission outcomes and post-incident corrective actions.
- Conduct regular joint SAR exercises involving TASAC, Zanzibar Maritime Authority and other emergency-response institutions, followed by documented after-action reviews.

8. Study limitations and areas for further research

The study relied substantially on stakeholder perceptions and documentary evidence; therefore, the findings should be interpreted as an assessment of the legal and institutional environment rather than a direct measurement of SAR response performance. The sample was purposively selected and may not represent every maritime stakeholder or

geographical area in Tanzania. In addition, the study did not independently measure response times for individual SAR incidents. Future research should combine legal analysis with incident-level operational data, including response times, mission outcomes, equipment availability and geographic coverage of SAR resources. Comparative research with other Indian Ocean and East African states could also identify institutional models that are adaptable to Tanzania's dual-governance maritime context.

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