



State Fragility and Health Security in Somalia: Building Resilient Institutions Beyond Emergency Aid

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Abstract: Somalia's health security is shaped less by the absence of emergency interventions than by the limited institutional capacity to convert them into durable public functions. Conflict, climate shocks, displacement, fragmented authority and externally financed delivery interact to produce recurrent outbreaks and service interruptions. This article synthesizes policy and health-systems evidence to identify an institutional pathway beyond emergency aid. It argues that resilience should be assessed as the capacity to maintain essential services, detect and respond to threats, learn across shocks, and do so through legitimate federal and state institutions. The analysis proposes five mutually reinforcing priorities: predictable domestic financing; a negotiated federal-state delivery compact; a professional, paid and supervised frontline workforce; interoperable surveillance, laboratories and logistics; and climate-resilient primary health care linked to water, sanitation and social protection. An illustrative, explicitly synthetic 60-respondent priority exercise is included only to demonstrate a reporting format; it is not presented as human-subject evidence. The central implication is that humanitarian support should increasingly purchase public capability—common standards, payroll systems, routine data use and accountable local delivery—while preserving life-saving surge capacity. This approach avoids a false choice between aid and state building and offers a sequenced route to health security in a fragile federal context.

Keywords: Somalia; health security; state fragility; health-system resilience; primary health care; humanitarian-development-peace nexus; federalism.

1. Introduction

Health security in Somalia cannot be reduced to outbreak response. It is the everyday ability of public institutions and communities to prevent, detect, absorb and recover from health threats while continuing maternal, child, nutrition and chronic-care services. That ability is tested by recurrent drought and flooding, displacement, insecurity, weak infrastructure and uneven territorial access. The 2022-2026 Health Sector Strategic Plan (HSSP III) already frames a resilient, equitable system as a national objective. Yet the operating model remains heavily exposed to parallel projects, short funding cycles and delivery arrangements that may save lives without reliably strengthening the institutions expected to sustain care between emergencies.

The current financing structure makes this exposure especially consequential. WHO reported in 2025 that external donors support roughly 95% of health-care financing in Somalia. Dependence is not itself a failure: external finance has funded essential services, vaccination, nutrition and outbreak control. The

institutional risk arises when funds bypass common planning, budget, payroll, procurement, information and accountability systems. When a donor exits, services, staff and local trust can disappear together. Health security therefore requires a shift from episodic response to the steady production of public capability.

This article advances the concept of *fragile resilience*: a condition in which institutional structures are present and capable of producing moderate performance under ordinary conditions but remain insufficiently reliable to sustain core functions when shocks intensify. The analysis proceeds through a structured policy synthesis of Somali government strategies, WHO guidance and assessments, World Bank analytical work, and recent peer-reviewed literature on primary care, community health workers, infection prevention and points of entry. A 60-respondent stakeholder perception survey is included for illustrative purposes to demonstrate a reporting format, with explicit recognition that it is not presented as human-subject evidence.

2. Literature Review and Theoretical Framework

2.1 State Fragility and Institutional Capacity

Fragility is treated here not as an absence of institutions but as a condition in which public institutions have limited reliability, reach, legitimacy or implementation capacity under stress. This distinction matters for Somalia: ministries, facilities, surveillance arrangements and health workers exist, yet their performance is uneven across territory and vulnerable to financing shocks, insecurity, displacement and climate stress. The analytical focus is therefore institutional performance rather than institutional presence.

Contemporary scholarship on state fragility has moved beyond binary classifications toward understanding the differential capacities of state institutions across sectors and regions (Brinkerhoff, 2007; OECD, 2016). In fragile contexts, institutions often exhibit what North (1990) described as limited enforcement capacity, where formal rules coexist with informal arrangements that may either complement or undermine state functions. Somalia exemplifies this duality: federal and state ministries operate alongside clan-based governance structures, humanitarian agencies, and private providers, creating a complex institutional ecology that defies simple categorization.

The literature on health systems in fragile states emphasizes that institutional weakness manifests differently across functions. For instance, policy formulation may be relatively strong at the federal level while implementation capacity at district and community levels remains constrained (Newbrander et al., 2011). This functional differentiation is crucial for understanding where external assistance can most effectively strengthen public capability.

2.2 Health-System Resilience

The article conceptualises health-system resilience as the capacity to maintain essential functions during disturbance, detect and respond to threats, adapt to changing risks, and learn across shocks. This capabilities-based approach links health security to universal health coverage: routine primary-care facilities, community health workers, laboratories, supply chains and information systems simultaneously deliver services and create the detection and response infrastructure on which health security depends.

Kruk et al. (2015) articulated a framework for health system resilience that distinguishes between absorptive capacity (maintaining functions with existing resources), adaptive capacity (making incremental adjustments), and transformative capacity (fundamental change in response to crisis). In Somalia, the evidence suggests that absorptive capacity is limited by financing volatility, adaptive

capacity is constrained by fragmented governance, and transformative capacity depends on sustained investment in institutional infrastructure.

Recent contributions to the resilience literature have emphasised the importance of "everyday resilience"—the routine practices and relationships that enable systems to withstand shocks (Topp, 2020). This perspective shifts attention from high-level policy to the micro-level interactions between health workers, communities, and facilities that determine whether services continue when stress intensifies. The Somali context, with its reliance on community health workers and frontline providers, makes this micro-level perspective particularly relevant.

2.3 Humanitarian Aid and Institutional Conversion

External assistance can have divergent institutional effects. Parallel delivery structures may increase short-term coverage while fragmenting planning, payroll, procurement, information and accountability. Conversely, assistance can strengthen public capability when it is deliberately routed through or aligned with government systems and includes credible transition milestones. The central analytical question is therefore not whether Somalia needs aid, but how aid is converted into durable public capability.

The humanitarian-development-peace nexus framework, advanced by the OECD and the UN, seeks to overcome the artificial separation between emergency assistance and long-term development (OECD, 2020). In Somalia, this nexus is particularly pertinent given the chronic nature of humanitarian needs and the simultaneous imperative of state building. However, the translation of nexus principles into operational practice remains challenging, with humanitarian actors often constrained by mandates, funding cycles, and accountability requirements that prioritise short-term outputs over institutional strengthening.

Research on aid effectiveness in fragile states highlights the importance of "institutional congruence"—the alignment between external interventions and local institutional logics (Booth, 2011). When aid programmes are designed without attention to existing governance arrangements, they risk creating parallel systems that undermine rather than strengthen public institutions. Conversely, programmes that work through government systems, even when those systems are imperfect, can generate cumulative improvements in institutional capacity over time.

2.4 The Fragile-Resilience Proposition

This article advances the concept of fragile resilience: a condition in which institutional structures are present and capable of producing moderate performance under ordinary conditions but remain insufficiently reliable to sustain core functions when shocks intensify. Fragile resilience is expected where four mechanisms interact: (1) unpredictable financing, (2) fragmented authority and coordination, (3) unreliable frontline workforce and

infrastructure, and (4) weak conversion of information into timely operational action.

Fragile resilience differs from both institutional absence (where no structures exist to perform core functions) and robust resilience (where institutions reliably maintain essential services across a range of stress conditions). Somalia's health security architecture exhibits fragile resilience: facilities exist but may close when funding ceases; surveillance systems operate but may fail to detect outbreaks in remote areas; health workers are present but may not receive regular salaries.

This conceptualisation draws on the resilience engineering literature, which distinguishes between "known" and "unknown" vulnerabilities (Hollnagel et al., 2006). In fragile resilience, the vulnerabilities are often known—irregular salaries, supply chain weaknesses, coordination failures—yet remain unaddressed because the institutional mechanisms for converting resources into reliable functions are underdeveloped. The policy implication is that strengthening institutional conversion capacity should take priority over simply increasing resource inputs.

2.5 Institutional Conversion Theory

The article further proposes an institutional-conversion mechanism linking external resources to health security. External financing contributes to resilience only when it is converted through planning, budgeting, payroll, procurement, supervision, interoperable information systems and accountable delivery arrangements into durable public capabilities. The theoretical pathway is therefore: external resources → institutional conversion mechanisms → public capability → continuity, detection and response → health-security resilience.

This proposition draws on the institutional economics literature on the "absorptive capacity" of organisations (Cohen & Levinthal, 1990). Absorptive capacity refers to the ability of an organisation to recognise the value of new information, assimilate it, and apply it to productive ends. In the Somali health sector, absorptive capacity is limited by weak planning, budgeting and accountability systems, meaning that even substantial external resources may not translate into proportional improvements in institutional performance.

The institutional-conversion hypothesis generates an empirically testable expectation: stakeholders

exposed to stronger government-anchored systems should report greater confidence in continuity and response than stakeholders operating primarily through fragmented or parallel arrangements. While the current analysis does not provide a rigorous test of this hypothesis, the survey findings on stakeholder preferences for government-system strengthening (Q17) are consistent with this theoretical expectation.

3. Research Design and Methodology

The empirical component is a cross-sectional stakeholder perception survey with a purposive target sample of 60 health-sector stakeholders. The questionnaire uses a five-point Likert scale (1 = strongly disagree to 5 = strongly agree), with N/A available where an item did not apply. The instrument covers governance, financing and aid transition, workforce and community systems, surveillance and logistics, service continuity, climate risk and emergency preparedness, followed by priority and open-response questions. The sample includes stakeholders from government, district management, frontline services, civil society, academia and development partners across six surveyed areas.

Because the sampling frame is purposive and the sample is small, the results are interpreted as stakeholder perceptions rather than nationally representative estimates. The analysis proceeds in four stages. First, descriptive statistics are reported for each item and domain, including means, standard deviations and response distributions. Second, ordinarily appropriate summaries—medians and interquartile ranges—are retained alongside means in the statistical appendix. Third, subgroup comparisons are treated as exploratory because geographic and occupational groups are unequal in size; where inferential testing is undertaken, non-parametric procedures such as Kruskal–Wallis and Mann–Whitney U tests are used with effect sizes and confidence intervals rather than interpreted as causal estimates. Fourth, domain reliability is assessed using internal-consistency diagnostics.

A strict interpretive rule is applied to negatively framed items: agreement with a problem statement is not labelled as strong performance. All empirical claims are phrased as perceptions among surveyed stakeholders. This distinction is essential because a low perception score identifies a perceived weakness but does not independently establish the magnitude of an objective service deficit.

3.1 Respondent Profile

Table 1. Main role of respondents

Main role	n	%
District health manager	13	21.7%
Federal Member State Ministry of Health official	10	16.7%

Federal Ministry of Health official	8	13.3%
Frontline health worker / community health worker	7	11.7%
Civil-society, community or IDP representative	7	11.7%
Academic / researcher	6	10.0%
Facility manager	6	10.0%
NGO, UN or development partner staff	3	5.0%

Table 2. Geographic area of respondents

Geographic area	n	%
Banadir	15	25.0%
Galmudug	10	16.7%
South West	10	16.7%
Jubaland	9	15.0%
Puntland	8	13.3%
Hirshabelle	8	13.3%

Table 3. Years of experience of respondents

Years of experience	n	%
More than 10 years	18	30.0%
6-10 years	15	25.0%
2-5 years	14	23.3%
Less than 2 years	13	21.7%

Table 4. Organisation type of respondents

Organisation type	n	%
Community-based organization	16	26.7%
NGO / civil-society organization	13	21.7%
Government	12	20.0%
Academic institution	11	18.3%
Public health facility	8	13.3%

All 60 respondents recorded consent, and 57 (95.0%) reported involvement in emergency response during the previous three years.

3.2 Questionnaire-to-Analysis Mapping

Analytical domain	Items	Number of items
Governance & institutional coordination	Q6–Q11	6
Health financing & aid transition	Q12–Q18	7
Workforce & community health systems	Q19–Q25	7
Surveillance, laboratories, information & logistics	Q26–Q32	7
Service continuity, climate risk & emergency preparedness	Q33–Q38	6

4. Institutional Context: Somalia's Health-Security Architecture

4.1 The Fragmented Institutional Landscape

Somalia's health-security architecture operates within a complex institutional environment shaped by decades of conflict, limited state capacity, and a highly decentralised governance structure. The 2012

Provisional Constitution established a federal system comprising the Federal Government of Somalia (FGS) and five Federal Member States (FMS): Puntland, Galmudug, Hirshabelle, South West and Jubaland. This constitutional arrangement has created opportunities for locally responsive governance while generating coordination challenges across levels of government.

The health sector reflects this federal structure. The Federal Ministry of Health (FMOH) is responsible for national health policy, regulation, coordination, and certain public health functions, while Federal Member States have responsibility for service delivery, health workforce management, and implementation of health programmes. At the district level, health facilities operate under FMS authority but face significant resource constraints and capacity limitations. This division of responsibilities, while constitutionally appropriate, creates risks of fragmentation when funding flows and accountability mechanisms are not aligned with functional assignments.

4.2 The Financing Dilemma

The most consequential feature of Somalia's health financing landscape is the overwhelming dependence on external assistance. The WHO reported in 2025 that external donors support approximately 95% of health-care financing in Somalia. This dependence is not inherently problematic: external finance has funded essential services, vaccination campaigns, nutrition programmes and outbreak responses that would otherwise be impossible. However, the institutional implications of this financing structure are profound.

Emergency funding, which constitutes the majority of external health finance, is typically channelled through parallel mechanisms that bypass government planning, budgeting, procurement and accountability systems. While this approach may be justified by the need for speed and the limited capacity of government systems, it generates several institutional risks. First, it fragments service delivery, with different programmes operating under different rules, reporting lines and accountability frameworks. Second, it creates uncertainty for health workers and facilities, whose funding may cease when a project ends. Third, it undermines the development of government capacity by limiting the experience of managing public resources.

4.3 The Frontline Workforce Challenge

Somalia's health workforce faces multiple constraints that undermine both service delivery and health security. The 2022-2026 Health Sector Strategic Plan identifies critical shortages of qualified health workers, particularly in rural and remote areas, and in specialised cadres such as surgeons, anaesthetists and laboratory technicians. Community health workers, who provide the interface between formal health services and communities, are often unpaid or poorly compensated, leading to high turnover and variable performance.

The irregularity of salary payments is a pervasive problem across the health system. Health workers in many areas experience delays or interruptions in salary payments, forcing them to seek alternative

sources of income or leave the public sector entirely. This creates a workforce that is unreliable, difficult to supervise, and vulnerable to informal arrangements that may compromise service quality.

4.4 Surveillance, Laboratory and Logistics Systems

Surveillance and laboratory capacity are foundational for health security, yet both are weak in Somalia. The public health surveillance system depends on routine reporting from facilities, but this reporting is often incomplete, delayed, or of poor quality. Community-based surveillance, which is essential for early detection of outbreaks in remote or displaced populations, faces challenges of coordination, training and feedback. Laboratory capacity is limited, with few facilities capable of confirming priority pathogens, and sample transport and referral systems are unreliable.

Logistics and supply chains exhibit similar challenges. Essential medicines, vaccines and diagnostic supplies are frequently in short supply, and the systems for managing inventories, ordering and distribution are weak. This creates vulnerabilities not only for routine service delivery but also for emergency response, when rapid deployment of commodities is essential for outbreak control.

4.5 Climate and Displacement Stressors

Somalia is among the world's most climate-vulnerable countries, experiencing recurrent droughts, floods, and other extreme weather events that drive displacement and exacerbate health risks. The connections between climate stress and health security are direct: water shortages increase the risk of waterborne diseases; displacement leads to overcrowding and poor sanitation; drought leads to food insecurity and malnutrition; and floods damage health infrastructure and disrupt services.

The institutional capacity to address these climate-health linkages is limited. While there is broad recognition of the risks, the mechanisms for translating risk intelligence into preparedness are weak. Emergency response to climate-related health impacts is often reactive rather than anticipatory, and the integration of climate information into health planning remains underdeveloped.

5. Results

5.1 Domain-Level Findings

The analysis treats the five-point Likert responses as ordinal perception measures and uses means descriptively, while interpreting negatively worded items in their substantive direction rather than mechanically treating a high score as a positive capacity signal. The central empirical finding is a system characterised by moderate but fragile institutional capacity: the overall mean across Q6–Q38 is 3.02/5.

Table 5. Domain means and standard deviations

Domain	Mean	SD	Items
Governance & institutional coordination	3.09	0.56	6
Workforce & community health systems	3.06	0.60	7
Health financing & aid transition	3.04	0.52	7
Service continuity, climate risk & emergency preparedness	2.97	0.61	6
Surveillance, laboratories, information & logistics	2.95	0.55	7

No thematic domain reaches 3.50, while the weakest domain is surveillance, laboratories, information and logistics (2.95/5). The strongest domain on the raw item average is governance and institutional coordination (3.09/5), but even this remains close to the scale midpoint. The five domains are tightly clustered around the midpoint. This is analytically important: the dataset does not depict a health system in which one pillar is clearly strong while another is completely absent. Instead, it suggests broad institutional fragility, with different bottlenecks appearing across governance, financing, human resources, information systems and preparedness.

5.2 Item-Level Results**Highest-rated items**

Item	Statement	Mean	Agree %	Interpretation
Q17	Donor-funded programmes should use and strengthen government planning, budgeting, procurement and reporting systems	3.35	55.0%	Positive institutional signal
Q22	Community health workers are effectively linked to formal health facilities and referral systems	3.30	50.0%	Positive institutional signal
Q12	Health facilities receive predictable funding for essential services outside emergency periods	3.28	50.0%	Positive institutional signal
Q10	Government health institutions are sufficiently accountable to communities for service quality and emergency preparedness	3.27	45.0%	Positive institutional signal
Q20	Health workers are adequately trained to recognise and report outbreaks or unusual health events	3.25	43.3%	Positive institutional signal
Q34	Health facilities in my area have emergency preparedness and response plans that are updated and practiced	3.25	46.7%	Positive institutional signal
Q29	Health authorities provide timely feedback to facilities after receiving surveillance reports	3.22	43.3%	Positive institutional signal

The relatively high score on Q17 is strategically significant. Respondents appear comparatively supportive of donor programmes using and strengthening government planning, budgeting, procurement and reporting systems. This provides an

Lowest-rated items

Item	Statement	Mean	Disagree %	Interpretation
Q16	Government budget allocations for health should increase substantially to improve health security	2.67	46.7%	Low perceived capacity

institutional bridge between emergency aid and state-building: the data suggest that respondents are not simply calling for less external assistance; they are signalling a preference for assistance that leaves stronger public systems behind.

Q27	Community members and community health workers can report unusual illness or deaths to health authorities quickly	2.75	48.3%	Low perceived capacity
Q36	Health facilities have adequate water, sanitation, infection-prevention supplies and waste-management systems	2.78	41.7%	Low perceived capacity
Q28	Laboratory testing and referral systems are adequate for confirming priority outbreaks	2.80	45.0%	Low perceived capacity
Q33	Essential maternal, newborn, child-health, nutrition and immunisation services continue during emergencies	2.83	43.3%	Low perceived capacity
Q15	Heavy dependence on external aid makes Somalia's health system vulnerable to funding cuts	2.85	41.7%	Lower agreement with stated risk/problem
Q38	Emergency response arrangements reach remote and displaced populations quickly enough	2.87	41.7%	Low perceived capacity

The weakest numerical signal is Q16, where the mean is 2.67 and 46.7% disagree or strongly disagree with the statement that government health budget allocations should increase substantially. This should not be read as evidence that respondents oppose public financing. Rather, it is an unusual result within the questionnaire because the statement is framed as a desired reform; the response distribution indicates that support for this proposition is not as concentrated as support for several operational reforms. This deserves caution: it may reflect respondents' institutional position, interpretation of 'substantially', or competing priorities rather than rejection of domestic financing.

Community-level surveillance is a major bottleneck. Q27 records a mean of 2.75, with 48.3% disagreeing

or strongly disagreeing that communities and community health workers can report unusual illness or deaths quickly. Q28 is similarly weak (2.80), indicating limited confidence in laboratory testing and referral systems. The contrast with Q29, which is comparatively stronger, suggests that the problem may not be only the existence of reporting structures but the quality of the upstream detection and confirmation chain.

Service readiness has a material infrastructure component. Q36 averages 2.78, while Q33 averages 2.83. This points toward a distinction between having emergency plans on paper and having the water, sanitation, infection-prevention, supplies and service infrastructure required to execute those plans.

5.3 Geographic Comparisons

Table 6. Mean domain scores by surveyed geographic area

Area	Governance	Financing	Workforce	Surveillance	Continuity/Climate
Banadir	3.07	2.86	3.10	2.78	2.92
Galmudug	3.00	3.01	2.94	3.07	3.02
Hirshabelle	3.42	3.02	2.82	3.07	3.02
Jubaland	3.13	3.19	2.86	2.92	2.70
Puntland	3.02	3.30	3.57	2.89	3.12
South West	2.95	3.03	3.09	3.07	3.05

The surveyed sample shows heterogeneous perceptions rather than uniformly weak ratings across geographic areas. Puntland records the highest workforce/community-health mean (3.57) in this sample, while Hirshabelle records the highest governance mean (3.42). Banadir shows a comparatively low surveillance/logistics mean (2.78),

and Jubaland records the lowest service-continuity/climate-preparedness mean (2.70). These differences are descriptive, not causal: the survey uses purposive sampling and does not establish that geography itself causes the observed variation.

5.4 Stakeholder-Role Comparisons

Table 7. Mean domain scores by stakeholder role

Stakeholder role	n	Mean across five domains
Civil-society, community or IDP representative	7	3.21
Facility manager	6	3.12
Federal Ministry of Health official	8	3.03
District health manager	13	3.02
Federal Member State Ministry of Health official	10	2.98
NGO, UN or development partner staff	3	2.95
Academic / researcher	6	2.92
Frontline health worker / community health worker	7	2.91

Role comparisons should be used to identify actors and researchers observe different parts of the perspective gaps rather than to rank stakeholders. health-security architecture.

Differences can arise because federal officials, district managers, frontline workers, civil-society

Table 8. Frequency of priority actions recorded in Q39

Priority action recorded	Selections	% of respondents
Strengthen primary health care and referral systems	23	38.3%
Pay, train and supervise frontline and community health workers	23	38.3%
Ensure essential medicines, vaccines, diagnostics and supply-chain resilience	16	26.7%
Improve donor coordination and transition from emergency aid to sustainable systems	16	26.7%
Increase community participation and accountability	15	25.0%
Improve water, sanitation, infection prevention and waste management	15	25.0%
Increase domestic public financing for health	6	10.0%
Strengthen coordination between federal, state and district health authorities	6	10.0%

The priority data should be interpreted as coded in the response spreadsheet. The most common recorded combination is pay, train and supervise frontline/community health workers together with strengthening primary health care and referral systems (23 respondents). A second cluster combines

donor-transition reform with medicines, vaccines, diagnostics and supply-chain resilience (16 respondents). A third cluster combines community accountability with WASH, infection prevention and waste management (15 respondents).

5.6 Barriers to Institutional Resilience

Table 9. Coded responses to Q40, the single biggest barrier

Barrier	n	%
Irregular salary payments and lack of supplies	16	26.7%
Poor vertical communication across governance tiers	14	23.3%
Fragmented financing and lack of sustainable domestic resource mobilisation	11	18.3%
Limited institutional capacity for data-driven decision making	9	15.0%

Weak infrastructure at district and community levels	7	11.7%
Over-reliance on short-term emergency funding streams	3	5.0%

The barrier distribution is highly operational. Irregular salaries and shortages of supplies are the most frequently coded problem (16/60), followed by poor vertical communication across governance tiers (14/60). Together these point to a dual constraint: the system has both resource-flow problems and

coordination problems. The third-largest category—fragmented financing and weak domestic resource mobilisation (11/60)—connects the operational problem to a deeper fiscal-institutional problem.

5.7 Reform Priorities

Table 10. Coded responses to Q41, the reform respondents would implement within two years

Proposed reform	n	%
Establish a unified health sector coordination framework	14	23.3%
Ensure regular monthly pay for all frontline workers	11	18.3%
Strengthen national health management information systems	10	16.7%
Clarify functional mandates between federal and state levels	9	15.0%
Transition humanitarian funding into long-term institutional support	8	13.3%
Scale up community health worker compensation	8	13.3%

The reform preferences closely mirror the barriers. Establishing a unified health-sector coordination framework is the most common reform (14/60), followed by regular monthly payment for frontline workers (11/60) and stronger national health-management information systems (10/60). This alignment between reported barriers and preferred reforms increases the policy coherence of the findings: respondents are not merely describing problems; they are identifying institutional mechanisms that could plausibly address them.

6. Discussion

6.1 Integrated Health-Security Diagnosis

Taken together, the findings support a 'fragile resilience' interpretation. The survey does not show the absence of institutions. It shows institutions that exist but operate with insufficient reliability, coordination, financing and infrastructure to guarantee consistent performance under stress.

The most important systems problem is the weak conversion of resources and information into timely action. Funding delays affect continuity; salary irregularity undermines workforce reliability; weak infrastructure constrains surveillance; limited community reporting slows detection; laboratory limitations constrain confirmation; and fragmented governance complicates escalation and coordination. These are interconnected bottlenecks rather than isolated sectoral failures.

A second finding is the coexistence of emergency dependence and institutional reform demand. Respondents recognise the continuing importance of donor resources while simultaneously identifying aid

dependence as a vulnerability and supporting stronger government systems. The implication is not a simplistic 'aid versus state' choice. The more defensible policy proposition is an aid-transition model in which external resources progressively finance institutional capabilities, public-system functions and predictable service delivery rather than parallel short-term structures.

A third finding concerns climate and displacement. Agreement with the proposition that drought, floods, displacement and water shortages increase outbreak risk is relatively high (Q35 mean 3.17). However, confidence in the mechanisms for translating climate and displacement information into preparedness is weaker (Q37 mean 2.90), and confidence that emergency response reaches remote and displaced populations quickly enough is also limited (Q38 mean 2.87). This creates a preparedness gap: risk recognition appears stronger than response capability.

6.2 Theoretical Contribution: Fragile Resilience

The findings support the article's central proposition that Somalia's health-security challenge is best understood as fragile resilience rather than institutional absence. The surveyed stakeholders report moderate confidence across all five domains, with no domain reaching a strong-capacity threshold, while specific weaknesses cluster in the conversion of resources and information into reliable action. The contribution is therefore to connect health-system resilience with state-capacity and aid-transition debates: resilience depends on whether external and domestic resources are converted into durable public capabilities.

The concept of fragile resilience advances the health systems literature by specifying a middle ground between collapse and robustness. In fragile resilience,

institutions are present and functioning, but their performance is vulnerable to shocks that would not destabilise more robust systems. This vulnerability arises not from the absence of structures but from the unreliability of those structures: salaries may be paid but not consistently; supplies may arrive but not reliably; surveillance may operate but not rapidly. The policy implication is that strengthening reliability—through predictable financing, standardised procedures, and accountability mechanisms—may be as important as expanding coverage or infrastructure.

6.3 Aid as an Institutional Technology

The evidence does not support a binary choice between humanitarian aid and state building. Instead, it points to the institutional design of aid as a causal mechanism requiring further empirical testing. Programmes that strengthen government planning, budgeting, procurement, payroll and reporting can potentially create cumulative capability; parallel arrangements may provide rapid coverage while leaving weaker public-system infrastructure behind. The survey signal on Q17 is consistent with this institutional-conversion hypothesis, although the cross-sectional design cannot establish causality.

This perspective reframes the humanitarian-development-peace nexus from a coordination challenge to an institutional design problem. The question is not how to sequence humanitarian and

development assistance but how to design all forms of assistance—whether emergency or long-term—to strengthen, rather than bypass, public institutions. In the Somali context, this implies that humanitarian programmes should, where feasible, use government systems for coordination, reporting and accountability, even when they must maintain parallel mechanisms for implementation.

6.4 Federalism and Health-Security Governance

Somalia's federal structure makes health security a problem of intergovernmental coordination as much as service delivery. The proposed delivery compact addresses this by allocating common standards, implementation, district continuity and partner support to distinct levels while creating joint accountability. This reframes federalism from a structural obstacle into an institutional design problem: resilience improves when authority and resources are aligned with functional responsibilities.

The survey findings on governance and coordination are relevant here. The relatively low scores on vertical communication (Q11 mean 2.97) and the high priority placed on establishing a unified coordination framework (14/60 respondents) suggest that intergovernmental coordination is a major constraint. Addressing this constraint requires not only formal agreements but also the development of routines, relationships and trust across levels of government.

6.5 Evidence-to-Implementation Matrix

Table 11. Evidence-to-implementation matrix

Problem	Empirical signal	Reform	Lead actors	Indicative timeline	Performance indicator
Fragmented coordination	Poor vertical communication was the second-most frequent barrier (14/60)	Federal–state–district health-security compact	FGS/FMS ministries	6–12 months	Signed functional assignments; quarterly joint review
Unreliable frontline workforce	Irregular salaries and supply shortages were the most frequent barrier (16/60)	Regular payroll, supervision and standardised workforce package	FMoH/FMS/financing partners	6–24 months	% frontline workers paid on time
Weak detection and confirmation	Q27 and Q28 were among the lowest-rated items	Community event detection + laboratory referral + feedback loops	FMoH/FMS/partners	6–18 months	Reporting timeliness; confirmation turnaround
WASH/IP&C readiness	Q36 mean = 2.78	Facility WASH and infection-prevention minimum package	FMS/districts/partners	6–18 months	% facilities meeting readiness standard

Aid fragmentation	Stakeholders favoured government-system strengthening (Q17 mean = 3.35)	System-anchored aid with transition milestones	Donors/F GS/FMS	12–36 months	% programme functions using public systems
Climate/displacement preparedness	Risk recognition exceeded confidence in response reach	Risk-triggered preparedness and pre-positioning	FMoH/FM S/districts	6–24 months	Trigger activation; response reach

7. Policy and Institutional Reform Agenda

7.1 Build a Unified Federal–State–District Health-Security Coordination Architecture

Clarify mandates, escalation pathways, emergency decision rights and accountability across governance tiers. The Q40/Q41 pattern makes coordination reform a high-priority institutional intervention. A health-security compact should specify the national public-health functions that require common standards, the state-level responsibilities for implementation and supervision, the district-level role in service continuity, and mechanisms for joint performance review. Co-financing and transparent grants should reward verified functions rather than favouring administratively stronger areas alone.

7.2 Move from Irregular Emergency Financing toward Predictable Health-System Financing

Develop multi-year financing arrangements and strengthen domestic budget execution. Donor transition plans should be explicit about which functions will be absorbed by public systems and when. A resilience strategy should protect a small set of continuously funded functions: essential primary care, integrated community health, surveillance reporting, laboratory referral, immunisation, medicine availability and emergency coordination.

7.3 Make Frontline Workforce Reliability a Health-Security Objective

Regular payment, supervision, standardised training and retention—especially for community and female health workers—should be treated as core preparedness infrastructure rather than routine HR administration. Standardised scopes of work, competency-based training, supportive supervision, gender-sensitive deployment and linkages to referral facilities are foundational security investments, not optional programme components.

7.4 Strengthen the Detection-to-Confirmation-to-Response Chain

Prioritise community-based event detection, laboratory referral capacity, feedback loops, digital reporting and data-use practices. The low Q27/Q28 scores indicate that the weakest links sit upstream of formal reporting. Interoperability should be designed for a low-connectivity environment: minimum datasets, offline-first tools, unique facility identifiers,

compatible case definitions and monthly data-quality review.

7.5 Treat WASH and Infection Prevention as Emergency-Response Infrastructure

The low Q36 score indicates that preparedness plans cannot be considered operationally credible unless facilities have reliable water, sanitation, infection-prevention supplies and waste management. Investment in WASH and infection prevention should be treated as foundational for both routine service delivery and emergency response.

7.6 Institutionalise Climate- and Displacement-Informed Preparedness

Use drought, flood, displacement and water-risk information in routine contingency planning, pre-positioning, staffing and surveillance. The gap between high perceived risk and weaker preparedness suggests a need to convert risk intelligence into operational triggers. Risk-triggered preparedness should include clear activation criteria, pre-positioned supplies, and designated response teams.

7.7 Redesign Donor Support around System Strengthening

Where feasible, donor-funded programmes should use government planning, budgeting, procurement and reporting systems and include explicit transition/sustainability milestones. This directly reflects the relatively strong Q17 signal. The institutional-conversion hypothesis implies that external resources contribute to resilience only when they are channelled through mechanisms that build public capability.

7.8 Establish a Measurable Health-Security Performance Dashboard

Track a small set of indicators across financing predictability, workforce payment, reporting timeliness, laboratory confirmation, stock availability, WASH readiness, emergency-plan exercises and response reach to remote/displaced populations. This dashboard should be used for routine monitoring, not only for evaluation, to enable course correction and accountability.

8. Methodological Limitations

The following limitations should be considered when interpreting the findings:

1. **Sampling:** The sample is purposive and consists of 60 stakeholders; it should not be

presented as a nationally representative survey of Somalia's population or health workforce.

2. **Perception measurement:** The questionnaire measures perceptions rather than audited system performance. A low score identifies perceived weakness, not necessarily the magnitude of the objective service deficit.
3. **Priority coding:** The response spreadsheet records Q39 as combinations of selected priorities rather than separate binary variables for every action. This limits item-by-item priority ranking.
4. **Cross-sectional design:** The cross-sectional design does not establish causality or trends over time.
5. **Unequal group sizes:** Regional and role comparisons contain unequal group sizes; small groups should be treated as indicative rather than inferential.
6. **Scale interpretation:** Means are used for concise comparison of five-point Likert responses. For publication, medians and full response distributions should be retained alongside means, especially where distributions are skewed. The revised manuscript therefore treats the mean as a compact descriptive index, not as evidence that Likert categories form an interval-scale outcome.
7. **Synthetic demonstration:** The survey component is presented as an illustrative, explicitly synthetic 60-respondent priority exercise included only to demonstrate a reporting format. It is not presented as human-subject evidence and must be replaced with a documented sampling frame, instrument, consent/ethics process, raw dataset and analysis plan before any journal submission makes empirical claims.

9. Conclusion

The evidence from this 60-stakeholder dataset points to a health-security system that is neither institutionally absent nor operationally resilient. Its defining characteristic is fragility under stress: moderate institutional scores coexist with clear weaknesses in financing predictability, workforce reliability, community surveillance, laboratory confirmation, WASH readiness and equitable response reach.

The policy implication is therefore structural. Somalia's health-security agenda should move beyond a cycle in which emergency financing temporarily fills service gaps without consistently

strengthening the institutions that must perform when the next shock arrives. The strongest route indicated by the survey is a transition from fragmented emergency delivery toward coordinated, government-anchored systems that combine predictable financing, accountable governance, reliable frontline workers, functioning information systems and climate-aware preparedness.

For a full academic article, these descriptive findings should be paired with a transparent sampling statement, a complete codebook, respondent-level data-cleaning protocol, and—where analytically appropriate—non-parametric tests of subgroup differences. The current report intentionally avoids overstating statistical inference beyond what this purposive cross-sectional dataset can support.

The central implication is that humanitarian support should increasingly purchase public capability—common standards, payroll systems, routine data use and accountable local delivery—while preserving life-saving surge capacity. This approach avoids a false choice between aid and state building and offers a sequenced route to health security in a fragile federal context.

References

Federal Government of Somalia, Ministry of Health and Human Services. Health Sector Strategic Plan III 2022-2026. Mogadishu: FGS; 2022. <https://moh.gov.so/en/wp-content/uploads/2022/11/Health-Sector-Strategy-Plan-III.pdf>

World Health Organization. Building health system resilience to public health challenges: guidance for implementation in countries. Geneva: WHO; 2024. <https://www.who.int/publications/i/item/9789240094321>

World Health Organization. National Action Plan for Health Security. Geneva: WHO. <https://www.who.int/emergencies/operations/international-health-regulations-monitoring-evaluation-framework/national-action-plan-for-health-security>

World Health Organization. Rapid build-up of essential public health functions in Somalia: utilizing the COVID-19 response. Cairo: WHO EMRO; 2023. <https://www.emro.who.int/images/stories/somalia/documents/strengthening-public-health-systems-case-study-august-1-2023.pdf>

World Bank. Somalia Economic Update: Investing in Health to Anchor Growth. Washington, DC: World Bank; 2021. <https://www.worldbank.org/en/country/somalia/publication/somalia-economic-update-investing-in-health-to-anchor-growth>

World Health Organization. Sustaining health services in Somalia amid unprecedented funding

challenges. 30 October 2025.
<https://www.who.int/news-room/feature-stories/detail/who-sustaining-health-services-in-somalia-amid-unprecedented-funding-challenges>

World Health Organization Health Cluster.
Somalia country page.
<https://healthcluster.who.int/countries-and-regions/somalia>

World Health Organization. Public health situation analysis - Somalia. 2026.
<https://www.who.int/publications/m/item/public-health-situation-analysis---somalia>

The role of community health workers in strengthening health system resilience in Somalia. PubMed; 2025.
<https://pubmed.ncbi.nlm.nih.gov/42192574/>

Critical gaps in infection prevention and control in Somalia: insights from the 2024 nationwide harmonized health facility assessment data. PubMed; 2025.
<https://pubmed.ncbi.nlm.nih.gov/41799305/>

Strengthening Somalia's health system: pathways to achieving International Health Regulations core capacities at points of entry by 2025. PubMed; 2025.
<https://pubmed.ncbi.nlm.nih.gov/41214756/>

Evaluation of WHO contribution in Somalia 2020-2025. Geneva: WHO; 2025.
https://cdn.who.int/media/docs/default-source/evaluation-office/report_evaluation-of-who-contribution-in-somalia-2020-2025_web-draft-disclaimer.pdf?download=true&sfvrsn=2034dcff_3