



Reframing Resilience:

An Agenda for a More Equitable Future





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DISCUSSION PAPER

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This paper, authored by a team of contributors from the London School of Economics and Political Science (LSE) — Komala Anupindi, Arush Lal, and George Wharton — and Pandemic Action Network (PAN) — Luisa Mucci and Eloise Todd — is intended to contribute to the debate around solidarity levies mechanisms to fund climate and development and expand the conversation to a broader resilience agenda.

This paper was developed from August-October 2025 by the team. Over the course of this period, more than 40 stakeholders from Africa, Asia, Europe, and the U.S. were consulted on the draft through three consultation meetings and bilateral meetings. These contributions were vital in helping shape this work, and external stakeholders will continue to be at the heart of our work on resilience as the team from PAN and LSE work to build on the foundations laid in this paper. With huge thanks to all those who contributed and for the work they do on climate, health, conflict, finance, gender, and food systems across civil society, programme delivery, academia, and international organisations.

Executive Summary

Introduction

In an era of overlapping crises — climate change, pandemics and health emergencies, and conflict — this paper reframes a resilience agenda that is fit-for-purpose by prioritising systems performance and human security, strengthening core systems, and embedding equity as a foundational principle.

We suggest that resilience should be reframed as the ability of people and institutions to respond to shocks while sustaining dignity, agency, and essential functions, and to build forward toward stronger, more inclusive, and sustainable systems.

To guide priorities, we offer the 3A+ framework, which, building on existing models, integrates Anticipate, Absorb, and Adapt functions, with Advance Equity as a cross-cutting enabler of resilience.

This agenda offers:

- A broadened, integrated definition of resilience that moves beyond siloed climate, health, or single-issue based approaches.
- A concise 3A+ framework to align governance, financing, and operations across intersecting risks.
- A set of cross-sectoral investment options to guide immediate action and longer-term system strengthening.

Designed as a living document, this paper is intended to support ministries, multilateral platforms, and community-led coalitions in choosing what to fund now to protect lives and livelihoods — while building the systems that will carry societies through to 2050.

Call to Action

To operationalise this agenda, we call on governments, multilateral development banks, financing institutions, civil society partners, and multilateral organisations to:

- **Co-develop and pilot** the 3A+ framework in national and regional contexts, embedding it into adaptation plans, health strategies, and conflict-sensitive development programming.
- **Advance and embed equity** as the cornerstone of legitimacy, sustainability, and systemic strength, with inclusive governance mechanisms, and metrics that reflect structural exposure and lived experience.
- **Mobilise domestic resources** to fund cross-sectoral investments, including through anticipatory budgeting and fiscal reforms, with solidarity levies and global mechanisms reinforcing — not replacing — national efforts to strengthen foundational systems: health, social protection, and infrastructure.

- **Strengthen multilateralism** by aligning global financing instruments, technical cooperation, and governance reforms to support nationally-led resilience strategies and cross-border public goods.
- **Use COP30 and other political windows** to break silos and align climate, health, and conflict agendas under a unified resilience vision, grounded in national leadership and global solidarity.

Context & Resilience Frameworks

Multilateral and national systems are facing many complex and interconnected challenges. Climate change, pandemics, conflict, and economic instability are colliding, producing cascading failures that disproportionately affect displaced people, informal workers, and marginalised communities. At the same time, leaders face stark choices on how to invest already limited resources and how to steward those resources.

COP30 presents a strategic opportunity to advance this agenda as climate negotiations increasingly recognise that adaptation must address acute health emergencies, essential service continuity, and conflict prevention.

Resilience frameworks have largely focused on isolated emergencies or single sectors, addressing climate, health, or conflict challenges through separate institutional structures. However, this siloed approach proves insufficient when crises intersect and compound one another, for example:

- **Climate-health nexus:** Floods trigger disease outbreaks; heatwaves strain health systems; air pollution weakens respiratory resilience.
- **Climate-conflict nexus:** Resource scarcity drives displacement and tensions; droughts intensify farmer-herder conflicts.
- **Health-conflict nexus:** Collapsed health systems fuel disease spread; politicised health responses undermine trust.

Where all three of these crises intersect, traditional humanitarian responses are inadequate and underlying vulnerabilities (gender inequalities, food insecurities, fragmented governance, and inadequate social protections) compound these risks.

This discussion paper argues that resilience must be reframed from a narrow technical objective into an operational, political, and security imperative that sustains dignity, agency, and essential functions for the most vulnerable. **We suggest that resilience should be reframed as building forward toward stronger, people-centred systems.**

3A+ Framework for Resilience Investments

To support decision makers, the paper proposes the 3A+ framework, a practical tool for guiding investment and governance decisions:

- **Anticipate:** Detect and act early through integrated surveillance, validated forecasts, and pre-agreed decision rules.
- **Absorb:** Maintain essential functions under stress via shock-responsive social protection, strategic reserves, and decentralised infrastructure.

- **Adapt:** Reconfigure systems through modular logistics, mobile service delivery, and local production capacity.
- **Advance Equity** (foundational): Ensure interventions reach marginalised populations through representative governance, legal reform, and inclusive planning.

These components are mutually reinforcing and shift the goal from bouncing back to building forward better, with equity as a foundation.

Funding the Resilience Agenda

While most global discussions on resilience financing focus on international funding and donor flows, foundational resilience also depends on how countries mobilise their own resources. Resilience must begin with domestic leadership as national governments hold the most immediate levers, through budget allocations, inclusive planning, and locally governed delivery systems. Domestic solidarity levies and other similar innovative financing mechanisms, should reinforce — not replace — these efforts, enabling cross-border cooperation and pooled risk-sharing. In addition, to help ensure that resilience investments are legitimate, durable, and community-owned, policymakers should also:

- **Embed equity** as a foundational condition for all resilience investments, ensuring interventions reflect lived realities and redistribute resources toward those most exposed.
- **Adopt a whole-of-government, whole-of-society approach** that links climate, health, and conflict agendas through integrated planning and inclusive governance.
- **Guarantee community representation** in both planning and execution, to ensure legitimacy, delivery, and sustained impact.

From Framework to Action

COP30 and similar future meetings are a strategic opportunity to endorse this approach. Stakeholders there should look at building resilience through the 3A+ framing, commit to pilot finance modalities that reach conflict-affected settings, support health systems that integrate climate adaptation, and design development strategies that embed equity from the outset.

To translate strategy into action, this paper offers practical examples that link each pillar of the 3A+ framework — Anticipate, Absorb, Adapt, and Advance Equity — to concrete policy levers, delivery actors, and real-world cases. The Table overleaf provides a snapshot of how resilience investments can be operationalised across intersecting threats, offering decision-makers a reference point for immediate action and longer-term system strengthening.

Solidarity levies and other innovative financing platforms offer a critical opportunity to rethink how resilience is resourced. To be effective, they must secure steady fiscal space for prevention and preparedness, ring-fence funds for community-managed envelopes, and embed equity through transparent governance, vulnerability-based allocation, and accountability mechanisms.

TABLE Towards a roadmap to implement the 3A+ framework

Policy levers across nexuses	Delivery level/actors	Examples
A+ Component: ANTICIPATE		
• Early warning systems • Anticipatory budgeting • Risk mapping • Surveillance integration • Pre-positioned resources	Governments Public health institutes Local risk monitors	Unitaid Air Ticket Levy
A+ Component: ABSORB		
• Shock-responsive social protection • Emergency health reserves • Continuity protocols • Humanitarian coordination	Finance ministries NGOs Health systems Local service providers	WHO Emergency Kits Americares mobile clinics Solidarity Fund (South Africa)
A+ Component: ADAPT		
• Flexible infrastructure • Institutional reform • Integrated planning across climate-health-conflict	Planning ministries Multilateral funds Regional cooperation platforms	Zambian cooperative health hubs
A+ Component: ADVANCE EQUITY		
• Vulnerability-based targeting • Participatory planning • Inclusive governance and accountability mechanisms	Civil society networks Local governments	LiveWell Initiative Fiji ECAL

This paper is a living document as we work to apply the framework to health, climate, conflict, and beyond. We invite interested partners and governments to share their thoughts so we can build a resilience agenda that reflects lived realities, redistributes resources, and strengthens systems under strain.

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DISCUSSION PAPER

Reframing Resilience: An Agenda for a More Equitable Future

Summary and context

In an era of overlapping crises (climate change, pandemics and health emergencies, and conflict), this discussion paper frames a renewed resilience agenda that is fit-for-purpose by putting equity, systems performance, and human security at the heart of policymaking. It is intended to inform convenings across ministries, multilateral platforms, and community-led coalitions by offering:

- A broadened, integrated conceptualisation of a resilience agenda that moves beyond siloed climate or health approaches.
- A concise framework (3A+) to align governance, financing, and operations.
- Illustrative investment examples that demonstrate how the framework can guide decision-making in practice.

We suggest that resilience should be reframed as the ability of people and institutions to prepare for and respond to shocks while sustaining dignity, agency, and essential functions, and to build forward toward stronger, more inclusive, and sustainable systems. To guide priorities, we propose the 3A+ framework: anticipate risks (early warning and prevention before shocks), absorb shocks (maintaining essential functions during crises), adapt institutions (adjusting systems as conditions change), with advance equity as the moral imperative and foundational principle, ensuring investments reach marginalised populations and dismantle structural barriers, rather than assuming benefits will trickle down.

Built on this framework, this paper presents illustrative investment examples organised into two categories. First, foundational systems (governance, financing, social protection, infrastructure) that enable resilience across all threats. Second, investments targeting specific intersections where risks compound: climate-health (e.g., integrated surveillance, resilient infrastructure), climate-conflict (e.g., joint resource management, land tenure security), health-conflict (cross-border health corridors), and triple-threat scenarios (e.g., unified monitoring, multi-purpose hubs). Each example demonstrates how the 3A+ framework works in practice, addressing multiple components for both acute shocks and chronic stresses.

Designed as a living document, this agenda will be iterated with partners to stay responsive to evolving risks, evidence, and political windows, helping decision-makers choose what to fund now to protect lives and livelihoods while building the systems that will carry societies through 2050.

This paper primarily addresses climate and health finance decision-makers preparing for COP30 in Belém, national governments designing integrated resilience strategies, and multilateral institutions deploying innovative financing mechanisms. The COP30 context is particularly significant: climate negotiations increasingly recognise that adaptation investments must address acute health emergencies, continuous access to essential health services, and conflict prevention. Stakeholders at COP30 are uniquely positioned to advance this integrated agenda through climate finance mechanisms, national adaptation plans that incorporate health and peace considerations, and new solidarity levy instruments that can fund cross-sectoral resilience investments. These initial recommendations are timely for COP30 conversations but can continue to be developed as a basis for other health, climate, and conflict agreements, offering a framework for whole-of-society resilience building.

Call to action

A broader resilience agenda grounded in the 3A+ framework is both necessary and actionable, but its success depends on collaborative development. We invite policymakers, community leaders, and civil society representatives to work with us in refining, contextualising, and operationalising the framework to ensure it delivers real-world impact across diverse settings.

To build a resilience agenda that is politically attuned, equity-driven, and investment-ready, we call on decision-makers to:

- **Co-develop and pilot the 3A+ framework** in national and regional contexts, embedding it into adaptation plans, health strategies, and conflict-sensitive development programming.
- **Advance and embed equity** as the cornerstone of legitimacy, sustainability, and systemic strength with inclusive governance mechanisms and metrics that reflect structural exposure and lived experience.
- **Mobilise domestic resources** to fund cross-sectoral investments, including through anticipatory budgeting and fiscal reforms, with solidarity levies and global mechanisms reinforcing — not replacing — national efforts to strengthen foundational systems: health, social protection, and infrastructure.
- **Strengthen multilateralism** by aligning global financing instruments, technical cooperation, and governance reforms to support nationally-led resilience strategies and cross-border public goods.
- **Use COP30 and other political windows** to break silos and align climate, health, and conflict agendas under a unified resilience vision, grounded in national leadership and global solidarity.

Section 1. Introduction

Today's risks are systemic and collectively felt. Climate change, health crises, and conflicts are colliding in ways that overwhelm societies and systems not built to withstand such volatility. By 2023, one in twelve hospitals worldwide faced the possibility of partial or total shutdown from extreme weather, while cholera deaths rose by more than 70% in a single year, fuelled by the intersection of humanitarian crises and environmental disasters (XDI, 2023; Geddes, 2024). These cascading shocks expose fragilities that are neither isolated nor temporary. Instead, they are interlinked, accelerating and exacerbating inequities that already undermine human security and sustainable development.

Fiscal and geopolitical constraints compound these risks. Multilateralism is under unprecedented strain as skepticism mounts and trust erodes. Debt burdens and declining official development assistance (ODA) constrain governments' ability to invest in resilience at a moment when the needs are perhaps most urgent. Geopolitical fragmentation has further fuelled mistrust, while also hampering cooperation and leaving critical global public goods underfunded. As narrowly focused investments and siloed responses prove increasingly inadequate, communities bear the consequences, experiencing displacement, hunger, illness, and exclusion as multiple shocks hit simultaneously. While multilateralism faces strain, domestic budgets remain the most immediate lever for resilience. Governments must prioritise anticipatory investments in health, infrastructure, and social protection, even amid debt and austerity. Solidarity levies and global mechanisms can catalyse cross-sectoral investments, but they must be designed to complement and reinforce domestic resources and nationally-led strategies. As described by the [Global Solidarity Levies Taskforce](#), these levies offer predictable, stable, debt-free finance for international solidarity while enabling countries to raise domestic resources for resilience.

In today's era of polycrisis, resilience must move beyond technocratic approaches toward a global, people-centred view. Traditional frameworks focused on bouncing back fail to address interconnected threats where climate disasters trigger displacement, conflicts disrupt health systems, and pandemics deepen inequalities. Systems that fail women, displaced people, and marginalised communities will ultimately fail to deliver resilience for broader communities in the long term.

Addressing these interconnected challenges requires systemic reform of the global finance architecture. Current financing mechanisms remain trapped in sectoral silos, prioritise short-term returns over long-term resilience, and systematically underfund investments that protect against catastrophic events. This reflects deeper problems: conventional cost-benefit analyses struggle to value rare but severe risks, system interdependencies, and counterfactual benefits (Weitzman, 2009; Martin & Pindyck, 2021). Institutional structures including budget cycles, efficiency metrics, and procurement systems compound these limitations. Realigning financial flows toward resilience requires new evaluation frameworks and governance reforms that recognise investments with contingent, cross-sectoral benefits.

Innovative financing mechanisms represent one necessary component of reform. The growing push toward solidarity levies on high-emission sectors — including maritime shipping, aviation, fossil fuels, and financial transactions — can mobilise new resources while ensuring high-emission industries contribute their fair share to the global fight against climate change (Global Solidarity Levies Task Force, 2024). However, mobilising

resources alone is insufficient; success requires clear priorities for cross-cutting investments that deliver multiple benefits across sectors, strengthening systems rather than creating parallel structures, and reaching the most vulnerable populations who bear the greatest burden of compound crises.

This discussion paper explores how such levies can support the provision of global public goods, catalysing a resilience agenda that prioritises equitable resource distribution and shock-resistant systems. Our analysis offers decision-makers a refreshed conceptual framework that moves beyond crisis response to emphasise building forward better on more equitable foundations. We discuss the intersections between three existential threats — climate change, conflict, and health crises — identifying key cross-sectoral investment areas that can safeguard lives and livelihoods while reinforcing human security and development. In doing so, we aim to provide a roadmap for how innovative financing can be channeled toward maximum impact in an era of overlapping emergencies.

Section 2. Reframing a resilience agenda

2.1 Traditional approaches and their limitations

Resilience scholarship has converged on understanding resilience as a dynamic, system-level capability shaped by feedback, learning, and adaptive governance. A prominent capacity-based typology identifies three core functions: absorptive capacity (maintaining core functions during shocks), adaptive capacity (reconfiguring resources in response to changing conditions), and transformative capacity (implementing deeper structural reforms when incremental change proves insufficient) (Blanchet et al., 2017; Barasa et al., 2017; Kruk et al., 2015). Some frameworks add preventive capacity: investments that reduce the likelihood or severity of shocks before they occur (Thomas, 2022). Scholars have also proposed the concept of “everyday resilience,” encouraging a focus on the human “software” of such systems, and emphasising leadership, organisation, skills, and knowledge (Gilson et al., 2017).

While apt for thinking about sociotechnical systems, these capacities tell us little about what resilience means for the people who bear the brunt of accumulating and overlapping crises. Technical approaches often neglect power asymmetries and structural inequities, sometimes reinforcing rather than challenging existing inequalities (MacKinnon & Derickson, 2013). Structural inequities fundamentally determine resilience outcomes: early warning systems cannot help those who cannot afford to evacuate, hospital surge capacity cannot compensate for populations excluded from primary healthcare, and emergency food distribution cannot address chronic poverty that leaves millions perpetually vulnerable.

Resilience thinking has evolved from bouncing back after crises to building forward better: developing systems with enhanced strength, inclusivity, and sustainability. Resilience emerges through processes of positive adaptation to external challenges rather than a static, predefined outcome. This dynamic quality means we cannot simply measure infrastructure or count stockpiles to assess resilience. Instead, we must examine whether systems serve their purpose when stressed and whether all people — not just the privileged — can navigate crises while maintaining dignity and agency. Systems that only serve those already equipped to access them undermine rather than strengthen the resilience of communities and nations.

2.2 Technical capacity and structural equity within social-ecological systems

Scholarship on social-ecological systems recognises that human and natural systems are inseparable (Holling, 1973; Folke, 2006; Walker et al., 2004). Within these interconnected systems, resilience depends on two reinforcing pathways that must be strengthened simultaneously:

First, technical investments build system capacity through engineering and institutional solutions. Health systems, supply chains, and infrastructure networks can develop capacities such as surveillance, redundancy, and modular design that enable them to detect threats, maintain alternative pathways, and reconfigure during crises. These technical capacities ultimately serve to protect people and communities from harm, and communities must have agency in shaping how they are designed and deployed.

Second, structural equity both shapes people's underlying resilience and determines who can access and benefit from protective systems. Research on social vulnerability demonstrates that the same shock produces vastly different outcomes depending on pre-existing inequalities in income security, asset ownership, housing quality, healthcare access, and political power (Cutter, 1996; Cutter et al., 2003, 2008). Building resilience means strengthening people's security, expanding their choices, and ensuring their voice in decisions that affect their lives.

Both pathways depend on healthy ecosystems that provide essential services. Ecosystem degradation drives compound threats while ecosystems themselves face cascading pressures from climate change, health crises, and conflict.

We need a systems-wide approach with equity at its core, building resilience across multiple, compounding crises. This shift may be politically challenging, but it offers a pathway to more legitimate, inclusive, and durable systems.

Section 3. Compound threats and their intersections

Building resilience through technical capacity and structural equity requires confronting the specific threats that stress both systems and people. Three threats stand out as existential: climate change, health crises, and conflict fundamentally threaten human security and the viability of critical systems that sustain societies.

These threats have traditionally been addressed through separate funding streams, institutional mandates, and planning processes. However, they are not independent nor do they occur in a vacuum. These threats drive and amplify one another, exploiting and deepening existing inequities. Such compound dynamics consistently exacerbate cross-cutting vulnerabilities including food insecurity, gender inequality, and systemic discrimination against marginalised communities. Understanding how threats intersect is therefore essential to designing investments that address root causes rather than symptoms.

Climate change manifests through both acute shocks and chronic stressors. Acute events include floods that trigger waterborne disease outbreaks, cyclones that sever supply lines to conflict zones, and heatwaves that amplify urban unrest. Meanwhile, slow-onset changes steadily erode resilience: rising temperatures expand disease vectors, shifting rainfall patterns undermine food security, and sea-level rise drives permanent displacement. The impacts are deeply inequitable, with heat-related mortality estimated to be 45 times higher in urban heat islands where low-income populations concentrate, while only 10% of disaster losses in low-income countries are insured, compared to 40% in high-income countries (Urban Heat Islands and Heat Mortality, 2023).

Health crises are striking more often and spreading faster in our interconnected world. Outbreaks once confined to specific regions now cross borders rapidly, overwhelming health systems already strained by other crises. Each surge diverts scarce resources and exposes deep inequities in access to lifesaving tools. COVID-19 revealed how pandemics exploit existing vulnerabilities: countries with universal health coverage were better able to maintain essential services than those without, and infection rates were higher in overcrowded housing. Beyond immediate health impacts, pandemics erode trust in institutions. Misinformation, politicisation, and past failures weaken public health authority, hampering vaccination uptake and surveillance. This loss of legitimacy compounds other risks, ensuring future pandemics and health crises will be harder to control.

Conflict and fragility shatter the foundations of resilience by destroying both physical infrastructure and social cohesion. Armed violence displaced 108 million people in 2023, destroying livelihoods and overwhelming host communities (UNHCR, 2024). Attacks on health facilities cripple service delivery precisely when needs are greatest. Beyond the death, injury, trauma, dehumanisation, and destruction they cause, conflicts create persistent vulnerability. They degrade education systems, entrench cycles of violence, and erode governance capacity. Countries dependent on natural resource exports face higher conflict risk, while societies with severe horizontal inequalities between groups are more likely to experience violence (The United Nations Interagency Framework Team for Preventive Action, 2011).

3.1 Critical intersections

Where these challenges intersect, their impacts multiply and cascade:

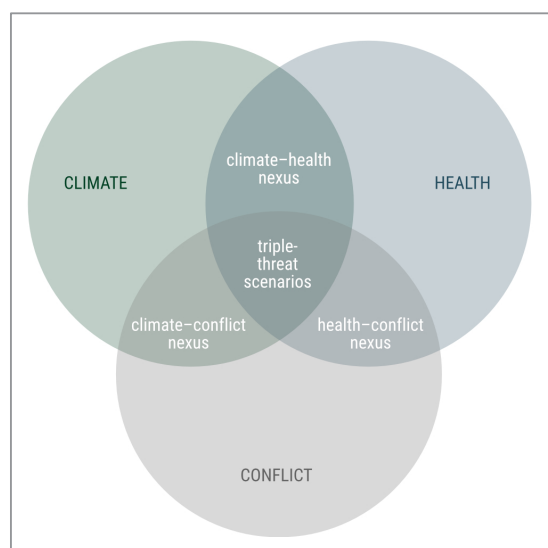
Climate-health crises nexus: Environmental changes directly increase pandemic risk. Deforestation and habitat loss drive zoonotic spillover, which is the source of 75% of emerging infectious diseases (Tajudeen et al., 2022). Climate-driven displacement creates overcrowded conditions ideal for disease transmission. Extreme weather events damage health infrastructure precisely when disease burdens increase. During the 2022 Pakistan floods, damaged water systems triggered cholera outbreaks, while destroyed health facilities could not respond (World Migration Report, UN). Temperature changes expand vector ranges: dengue has increased 30-fold over 50 years as mosquito habitats expand. Meanwhile, air pollution from fossil fuels weakens respiratory systems, increasing vulnerability to airborne pathogens.

Climate-conflict nexus: Resource scarcity intensifies competition and grievances. Drought-driven agricultural collapse contributed to Syria's conflict, and water stress affects two billion people in potential conflict zones. Climate impacts on food production, with yields declining as demand rises. Displacement from rising sea-levels and extreme weather generates tensions in affected communities already facing resource constraints. The Sahel exemplifies this intersection: declining rainfall reduced pastoral resources, intensifying farmer-herder conflicts that armed groups have exploited. Climate change acts as a "threat multiplier," not causing conflict directly but exacerbating existing tensions (United Nations, 2024).

Health crises-conflict nexus: Health crises and violence create mutually-reinforcing vulnerabilities. Conflicts destroy health infrastructure, making disease surveillance and response impossible. Displacement also creates ideal conditions for disease transmission through overcrowding, poor sanitation, and malnutrition. Health workers become targets, depleting response capacity, and the politicisation of health responses in contested areas undermines vaccination campaigns and disease control. In Yemen, collapsed health systems allowed cholera to infect over 2.5 million people (World Health Organization, 2023). Meanwhile, pandemic responses can fuel conflict: lockdowns often led to increased domestic violence, and economic impacts generated further unrest (UN Women, 2020).

Triple intersection: Where all three threats converge, the ensuing results compound. The Horn of Africa faces recurring drought, active conflicts, and disease outbreaks simultaneously. Climate-driven agricultural collapse generates displacement, conflict zones become disease reservoirs, and health systems cannot function. In such contexts, traditional humanitarian response proves inadequate: food aid cannot reach those most in need, vaccination campaigns cannot access conflict zones, and climate adaptation is impossible.

FIGURE 3.1 Critical intersections



Section 4. Cross-cutting vulnerabilities and system gaps

Beyond the direct intersections of climate, health, and conflict, certain vulnerabilities and systemic weaknesses amplify impacts across all three threats, marking them as foundational systems of resilience:

Gender inequality amplifies every threat. Women and girls face heightened risks during climate disasters, health crises, and conflicts, yet are systematically excluded from decision-making. For example, women are more likely than men to live in extreme poverty, particularly during child-rearing years (UN Women & UNDP, 2020) making them more vulnerable to crises. Yet at COP28 climate negotiations, women represented only 34% of delegates and 19% of heads of delegation (WEDO, 2024), while in 2023 peace processes, women comprised just 5% of negotiators (UN Women, n.d).

Food insecurity drives and results from compound crises. Climate change reduces yields, conflicts destroy agricultural systems, and pandemics disrupt supply chains. In 2023, over 700 million people faced chronic hunger, with malnourished populations more vulnerable to disease, food scarcity intensifying conflicts, and hunger forcing displacement (WHO, 2024).

Systemic discrimination concentrates vulnerability among Indigenous peoples, racial minorities, refugees, and other marginalised groups who face compounding barriers: lack of documentation preventing service access, exclusion from early warnings, discrimination in aid distribution, and limited voice in resilience planning. These populations bear disproportionate impacts while having the least capacity to adapt.

Alongside these vulnerabilities, fundamental weaknesses in how systems are organised prevent effective response when crises compound:

Fragmented governance and financing challenge coordination across sectors. Climate funds often exclude conflict-affected settings, while health financing mechanisms may overlook climate adaptation needs. Separate ministries and agencies tend to address individual threats without coordination with national adaptation plans rarely integrating health considerations, pandemic preparedness strategies not fully accounting for climate projections, and conflict prevention efforts missing environmental drivers. Power asymmetries and corruption further distort allocation toward political interests rather than vulnerable populations. Addressing these requires both top-down reforms and bottom-up accountability.

Inadequate social protection leaves populations exposed when crises compound. Only 47% of the global population has access to at least one social protection benefit, leaving 4 billion people without safety nets when multiple shocks strike simultaneously (ILO, 2021). Where systems exist, they typically respond to single shocks rather than compound crises, with rigid eligibility excluding those who need support most.

Fragile supply chains concentrate production without redundancy. Active pharmaceutical ingredients depend on facilities exposed to climate risks. Food systems rely on just-in-time delivery without buffers. Critical minerals for renewable energy are clustered in conflict-prone regions. This asymmetry favours economies with resources and economic backing while leaving resource-constrained countries unable to access essentials during any combination of threats.

Siloed knowledge systems prevent learning across domains. Climate scientists, epidemiologists, and conflict analysts work separately with incompatible data. Early warning systems operate independently, missing compound risks like drought combined with migration patterns and social tensions that signal conflict, or flooding combined with damaged infrastructure and population density that indicate disease outbreak risk.

These vulnerabilities and system gaps interact and reinforce one another, with effects that operate at multiple scales. At the global level, economic inequalities between countries mean that some nations can invest in backup systems and strategic reserves while others cannot, leaving the least-resourced countries most exposed to compound crises. At national and local levels, fragmented governance means no one advocates for marginalised groups during compound crises; inadequate social protection hits women and discriminated populations hardest and fragile supply chains deepen food insecurity. Addressing these cross-cutting challenges is essential for enacting a reframed resilience agenda fit-for-purpose to address the existential threats of today and tomorrow.

Section 5. The 3A+ framework for resilience investments

Resilience depends on strengthening both technical capacity and structural equity within social-ecological systems. When climate change, health crises, and conflicts intersect and amplify one another, responses that address only one dimension inevitably fail. Yet understanding these principles is insufficient — translating them into practice requires structured guidance that helps decision-makers navigate complex tradeoffs and prioritise investments.

The 3A+ framework provides this guidance. Building on established resilience scholarship, it integrates anticipation (action before shocks), absorption (maintaining functions during crises), and adaptation (adjusting during and after shocks). One distinctive contribution of the framework is to put equity as the most important foundational principle underpinning investment decisions taken through this approach: technical investments must be explicitly designed to reach marginalised populations rather than assuming benefits will trickle down.

As a guide to investments, the framework supports building forward better — proactively strengthening institutional capacity, enhancing service delivery, establishing flexible protocols, and dismantling structural barriers that perpetuate vulnerability during periods of relative stability rather than waiting for crises to force change. Investing before crises strike allows societies to address root causes, include marginalised voices, and create lasting improvements that serve populations better today while protecting them tomorrow.

By providing common framing across ministries, funding streams, and sectors, the 3A+ framework can enable coordination where fragmentation currently undermines resilience efforts. While this paper focuses on the climate-health-conflict nexus, the 3A+ framework provides a generalisable approach applicable to other intersecting challenges. The framework could guide resilience investments across diverse sectors and threat combinations:

- **Food-water-energy nexus:** Anticipating resource scarcity, absorbing supply disruptions through strategic reserves, adapting agricultural practices, and advancing equity through universal access to essential resources
- **Migration-development nexus:** Anticipating displacement patterns, absorbing population movements through scalable services, adapting integration policies, and advancing equity through rights protection

The framework's power lies in its systematic approach to any scenario where multiple threats intersect and structural inequities determine outcomes. By consistently asking “how do we anticipate, absorb, adapt, and advance equity?” across different contexts, decision-makers can identify gaps, coordinate investments, and ensure marginalised populations aren't left behind regardless of the specific challenges being addressed.

5.1 Framework components

Advance equity (*foundational*) poses equity as the guiding principle for investment decisions and addresses the structural conditions that shape resilience. This involves elements such as redistributive policies (e.g., progressive taxation, universal services), inclusive governance (participatory planning, accountability mechanisms), and dismantling discriminatory systems that concentrate vulnerability.

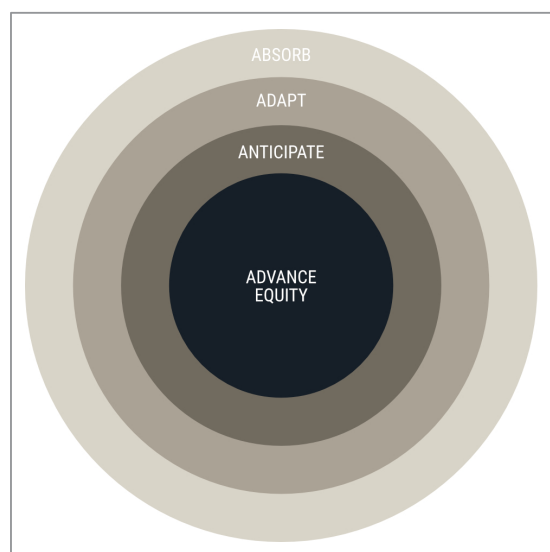
Anticipate corresponds to preventive and early warning capacity. For systems, this involves surveillance infrastructure, monitoring protocols, and contingency planning. For populations, implementation must consider factors like information access (e.g., language, literacy, communication channels), resource availability for preventive action, and participation in risk assessment processes. Effective anticipation requires both technical detection capabilities and ensuring all groups can receive and act on warnings.

Absorb reflects absorptive capacity: maintaining essential functions during shocks. System-level implementation focuses on surge capacity, strategic reserves, and infrastructure redundancy. Population-level absorption depends on factors including household economic buffers (e.g., savings, insurance), social protection systems (e.g., unemployment benefits, food assistance), and universal access to essential services. Households with assets and formal employment typically recover faster from equivalent shocks than those in informal, precarious conditions.

Adapt operationalises adaptive capacity through different mechanisms at each level. Systems implement adaptation through flexible protocols, cross-training staff, and modular infrastructure that can be reconfigured. Population adaptation requires elements such as secure land tenure that enable investment, labor mobility, and retraining opportunities, and participation in planning processes. Research demonstrates that communities with secure property rights invest more in risk reduction than those facing potential displacement.

This approach aligns with the principles of Global Public Investment (GPI), which emphasise shared responsibility, domestic leadership, and inclusive governance in financing public goods. These paradigm shifts help translate the 3A+ framework into the institutional arrangements, financing mechanisms, and governance structures that enable coordinated action across sectors. Countries could set out their own resilience agenda setting out how much public investment is needed. Funds raised from both domestic and international sources could contribute to this resilience agenda, which connects the local to the global.

FIGURE 5.1 Framework components



This is not only about fairness or inclusion but also helps ensure legitimacy and sustainability. Without an explicit focus on equity, resilience investments risk reproducing the structural inequalities that make populations vulnerable in the first place, undermining the political legitimacy needed for collective action and eroding the social cohesion that enables communities to withstand shocks.

These four elements work in concert. Effective resilience investments must address all components simultaneously: building early warning systems that reach marginalised populations (anticipate + advance equity), maintaining services that serve everyone during shocks (absorb + advance equity), and enabling communities to shape adaptive responses (adapt + advance equity).

Decision-makers can apply this framework through a structured assessment process:

1. Identify intersecting threats relevant to their context (e.g., drought + displacement, pandemic + conflict).
2. Assess current capacity across each component: What anticipation mechanisms exist? What absorption capacity is available? How adaptable are systems? Who is excluded?
3. Identify gaps by asking: Are responses only reactive (anticipation)? Will systems collapse under stress (absorption)? Are systems inflexible when conditions change (adaptation)? Who remains marginalised and most at risk (advance equity)?
4. Prioritise investments that address multiple components simultaneously, as shown in the integration examples in Section 6.
5. Monitor and iterate by tracking whether interventions strengthen all four components and whether benefits reach intended populations.

5.2 Operationalising the response: From Framework to Action

To provide some examples of implementation, Table 5.1 links each 3A+ pillar to concrete policy levers, relevant actors, and concrete examples across climate, health, and conflict. This structure reflects the whole-of-society approach needed for resilience, clarifying how governments, multilateral actors, and civil society can operationalise the framework through coordinated action. The 3A+ framework can guide such hybrid models to strengthen systems and build equity from within. Section 6 of the paper illustrates how the 3A+ framework applies across intersecting threats:

- Governments and public health institutes can lead on **Anticipate** functions by embedding early warning systems, anticipatory budgeting, and surveillance integration into national resilience strategies, drawing on models like the Unitaid Air Ticket Levy.
- Finance ministries, NGOs, and health systems are central to **Absorb** functions, deploying shock-responsive social protection, emergency health reserves, and continuity protocols, as demonstrated by WHO Emergency Kits, AmeriCares mobile clinics, and Solidarity Fund emergency grants.

- Planning ministries, multilateral funds, and regional platforms help **Adapt** systems through flexible infrastructure and integrated planning across climate, health, and conflict, like in Zambia’s cooperative health hubs.
- Civil society networks and local governments are essential to **Advance Equity**, ensuring interventions reflect lived realities through vulnerability-based targeting, participatory planning, and inclusive governance. Initiatives, like Fiji’s ECAL and Nigeria’s LiveWell Initiative, show how equity can be embedded through legal reform and community-led delivery.

TABLE 5.1 Towards a roadmap to implement the 3A+ framework

These roles are intended to guide implementation, but are not prescriptive, functions may be led by different actors depending on context, capacity, and opportunity.

Policy levers across nexuses	Delivery level/actors	Examples
A+ Component: ANTICIPATE		
• Early warning systems • Anticipatory budgeting • Risk mapping • Surveillance integration • Pre-positioned resources	Governments Public health institutes Local risk monitors	Unitaid Air Ticket Levy
A+ Component: ABSORB		
• Shock-responsive social protection • Emergency health reserves • Continuity protocols • Humanitarian coordination	Finance ministries NGOs Health systems Local service providers	WHO Emergency Kits Americares mobile clinics Solidarity Fund (South Africa)
A+ Component: ADAPT		
• Flexible infrastructure • Institutional reform • Integrated planning across climate-health-conflict	Planning ministries Multilateral funds Regional cooperation platforms	Zambian cooperative health hubs
A+ Component: ADVANCE EQUITY		
• Vulnerability-based targeting • Participatory planning • Inclusive governance and accountability mechanisms	Civil society networks Local governments	LiveWell Initiative Fiji ECAL

Section 6. Priority investment areas: Building resilience at the intersections

This section illustrates the 3A+ framework through investment examples organised around threat intersections. The examples fall into two categories. Section 6.1 addresses key investment areas for foundational systems (governance, financing, social protection, and infrastructure) that enable resilience across all threats. Sections 6.2-6.5 target intersection points where climate, health, and conflict compound, requiring integrated rather than siloed responses. Each example demonstrates how the 3A+ framework can work in practice: building capacity to anticipate and prevent crises, maintaining essential functions during shocks, enabling adaptation as conditions change, and advancing equity to ensure benefits reach the most vulnerable.

The 3A+ framework reveals what resilience requires at each threat intersection. The following subsections apply this framework to climate-health, climate-conflict, health-conflict, and triple-threat scenarios, as well as foundational enabling functions.

To support contextualisation, the examples provided in each table serve as indicative modalities for operationalising the 3A+ framework. These examples are not exhaustive nor prescriptive, as all phases of the framework are interconnected, and delivery mechanisms can scale across levels, are mutually reinforcing, or can be integrated simultaneously.

6.1 Foundational systems

Cross-cutting investments create the conditions for resilience across all threat intersections by strengthening governance, financing, economic protections, and critical infrastructure systems. These enabling investments must prioritise marginalised groups through mandatory representation, vulnerability-based resource allocation, and universal access to essential service. The global conversation on redistribution and resilience financing continues to focus predominantly on multilateral funding and donor commitments. However, financing foundational resilience also requires domestic innovation and is shaped by how countries mobilise and govern their own resources. Domestic solidarity levies, when designed with equity and anticipatory action in mind, offer a powerful tool for building resilience from within.

Fiji's Environment & Climate Adaptation Levy (ECAL) exemplifies this approach. Introduced as a 5% surcharge on tourism-related services, ECAL channels domestic revenue into the Climate Relocation of Communities Trust Fund, which supports planned relocation and infrastructure upgrades for communities vulnerable to climate impacts. This fund is structured to receive both domestic and international contributions, demonstrating how anticipatory financing can be embedded in national policy and scaled through solidarity mechanisms. Similarly, France's Air Ticket Levy, established in 2006, generates revenue for Unitaïd's global health programmes, showing how a domestically collected levy can serve both national and international resilience goals.

The 3A+ principles introduced in this paper can support the investment of solidarity levies to strengthen foundational systems through domestic financing, as well as complementing international mechanisms, and can build legitimacy by focusing on initiatives with local ownership. Governments are encouraged to explore hybrid financing models that combine domestic surcharges, extractive levies, and pooled contingency funds to operationalise resilience across scales.

TABLE 6.1 Foundational systems

Policy levers across nexuses	Delivery level/actors	Examples
A+ Component: ANTICIPATE		
• Scenario planning with pre-agreed response triggers • Community feedback loops • Automatic disbursement triggers • Supply chain transparency • Diversified production networks	Governance structures embed foresight into policy Financing mechanisms enable rapid response before crises peak Diversified systems prevent cascading failures	<u>African Risk Capacity (ARC)</u>
A+ Component: ABSORB		
• Shock-responsive social protection • Strategic reserves • Distributed renewable energy • Redundant infrastructure	Systems maintain essential functions during compound shocks through strategic reserves, redundancy, and rapid scaling capacity	<u>Sahel Adaptive Protection Programme</u>
A+ Component: ADAPT		
• Adaptive logistics platforms • Real-time resource reallocation • Flexible operational protocols	Systems adjust operations during crises through flexible reconfiguration, resource reallocation, and real-time learning	<u>Ethiopia Emergency Nutrition Reserve</u>
A+ Component: ADVANCE EQUITY		
• Representation quotas • Legal protections • Elimination of user charges • Gender-disaggregated data • Vulnerability-based infrastructure prioritisation	Structural investments directly address inequities that determine whether other resilience investments reach those most vulnerable	<u>Zambian Cooperative Model</u>

6.2 Climate-health

Climate change and health crises intersect through expanding disease vectors, extreme weather destroying health infrastructure during disease outbreaks, and environmental degradation driving zoonotic spillover. Investments must prioritise vulnerability-based resource allocation, community participation in design, and universal access regardless of documentation status.

TABLE 6.2 Climate-health investments options

Policy levers across nexuses	Delivery level/actors	Examples
A+ Component: ANTICIPATE		
• Scenario planning with pre-agreed response triggers • Community feedback loops • Automatic disbursement triggers • Supply chain transparency • Diversified production networks	Governance structures embed foresight into policy Financing mechanisms enable rapid response before crises peak Diversified systems prevent cascading failures	Americares Climate Resilience Toolkit
A+ Component: ABSORB		
• Shock-responsive social protection • Strategic reserves • Distributed renewable energy • Redundant infrastructure	Systems maintain essential functions during compound shocks through strategic reserves, redundancy, and rapid scaling capacity	GCF, UNDP and WHO join forces to ramp up climate health support for developing countries Green Climate Fund
A+ Component: ADAPT		
• Adaptive logistics platforms • Real-time resource reallocation • Flexible operational protocols	Systems adjust operations during crises through flexible reconfiguration, resource reallocation, and real-time learning	BRAC Community Health Workers – Bangladesh
A+ Component: ADVANCE EQUITY		
• Representation quotas • Legal protections • Elimination of user charges • Gender-disaggregated data • Vulnerability-based infrastructure prioritisation	Structural investments directly address inequities that determine whether other resilience investments reach those most vulnerable	Resilience Fund for Women in Global Value Chains

6.3 Climate-conflict resilience

Climate change and conflict intersect through resource scarcity intensifying competition, climate-driven displacement generating tensions, and environmental degradation undermining livelihoods that provide alternatives to violence. Investments must ensure equitable resource access through land tenure security, joint management structures, and participatory planning.

TABLE 6.3 Climate-conflict investment options

Policy levers across nexuses	Delivery level/actors	Examples
A+ Component: ANTICIPATE		
• Satellite monitoring • Contingency planning • Compound risk mapping • Community monitoring • Anticipatory protocols • Tenure security	Integrated approaches identify hotspots where climate and conflict risks compound, with automatic triggers releasing resources before crises peak	<u>UNDP/UNOWAS Sahel Resilience Project</u>
A+ Component: ABSORB		
• Solar-powered water infrastructure with joint management • Climate-secure community hubs providing water, cooling, shelter, and neutral spaces • Strategic food reserves maintaining supply during compound shocks • Protected humanitarian corridors ensuring access despite conflict	Maintaining access to essential resources prevents displacement and reduces competition that fuels violence; infrastructure creates cooperation incentives	<u>Solidarity Fund (South Africa)</u>
A+ Component: ADAPT		
• Emergency livelihood support providing immediate income alternatives • Mobile resource distribution adjusting to displacement patterns • Rapid employment programmes activated during compound shocks	Creating immediate alternatives and adjusting distribution in real-time maintains livelihoods and reduces desperation during crises	<u>LiveWell Initiative (Nigeria)</u>
A+ Component: ADVANCE EQUITY		
• Mandatory marginalised group representation in resource management • Participatory planning for resource allocation • Gender-responsive governance ensuring women's land and water rights • Transparent allocation mechanisms accountable to communities	Equity investments create inclusive governance and ensure marginalised groups – especially women – have voice in decisions that prevent future conflicts	<u>Resilience Fund for Women in Global Value Chains</u>

6.4 Health-conflict resilience

Health crises and conflict intersect through violence destroying health infrastructure, displacement creating conditions for disease transmission, and politicisation of health responses undermining disease control. Investments must ensure health services remain accessible across conflict lines, reach displaced populations regardless of documentation, and maintain neutrality that enables universal access.

TABLE 6.4 Health-conflict investment option

Policy levers across nexuses	Delivery level/actors	Examples
A+ Component: ANTICIPATE		
- Integrated health intelligence combining disease surveillance, facility mapping, and security tracking - Community-based surveillance operating across conflict lines - Cross-border information sharing maintaining disease tracking - Decentralised health structures reducing impact of facility attacks	Early warning detects outbreaks before they spread across conflict zones; decentralised structures prevent system collapse when facilities are attacked	Early Warning Alert and Response Network (EWARN) – Syria
A+ Component: ABSORB		
- Neutral health spaces accessible regardless of territorial control - Cross-line cold chain solutions using drones and armoured vehicles - Mobile diagnostic platforms at IDP camps - Community health networks maintaining services when formal systems collapse	Protected spaces, cross-line supply chains, and community networks function when formal systems are attacked or destroyed	Americares Mobile Clinics – Fragile Settings
A+ Component: ADAPT		
- Flexible service delivery protocols functioning across conflict lines - Rapid facility reconfiguration as territorial control shifts - Mobile workforce deployment responding to displacement	Operational flexibility maintains services despite territorial fragmentation, rapidly reconfiguring as control shifts	WHO Emergency Health Kits WHO Mobile Clinics
A+ Component: ADVANCE EQUITY		
- Community-negotiated agreements ensuring health service neutrality - Rights protection for displaced populations regardless of documentation	Health services remain accessible regardless of conflict lines, with explicit protection for displaced and undocumented populations	Health Access for Internally Displaced Persons (IDPs)

6.5 Triple-threat integrated responses

Where climate change, health crises, and conflict converge, impacts become catastrophic. The Horn of Africa exemplifies this: recurring drought drives agricultural collapse and displacement, conflict zones become disease reservoirs, and health systems cannot function. Triple-threat responses require inclusive governance ensuring marginalised groups shape priorities, transparent resource allocation, and protection of rights across displacement and territorial boundaries.

TABLE 6.5 Triple-threat investment options

Policy levers across nexuses	Delivery level/actors	Examples
A+ Component: ANTICIPATE		
- Integrated early action monitoring climate, disease, and conflict simultaneously - Compound risk mapping modelling three-way interactions - Regional cooperation frameworks for future coordination - Cross-border preparedness agreements enabling resource sharing	Unified monitoring enables rapid decision-making with pre-agreed triggers when compound indicators are met	<u>Solidarity Fund (South Africa)</u>
A+ Component: ABSORB		
- Cross-border health security corridors along displacement routes - Multi-purpose community hubs providing health, climate refuge, and dialogue spaces - Distributed manufacturing producing supplies when supply chains fail - Strategic reserves positioned for cross-border access	Multi-purpose infrastructure and cross-border mechanisms maintain essential functions when all three threats converge	<u>Solidarity Fund (South Africa)</u>
A+ Component: ADAPT		
- Flexible coordination platforms enabling rapid cross-sectoral response - Mobile integrated service delivery adjusting to displacement and territorial shifts - Real-time resource reallocation across health, humanitarian, and development actors	Flexible coordination rapidly integrates across sectors and adapts institutional arrangements as the crisis evolves	<u>LiveWell Initiative (Nigeria)</u>
A+ Component: ADVANCE EQUITY		
- Inclusive governance ensuring marginalised groups shape priorities - Cross-border rights protection for displaced populations - Transparent resource allocation accountable to affected communities - Gender-responsive programming with mandatory women's participation	Governance structures centre marginalised voices, protect rights across borders, and address gendered impacts of compound crises	<u>Resilience Fund for Women in Global Value Chains</u>

Section 7. Conclusion

This paper has mapped the growing risks of climate change, health crises, and conflict as interlocking threats that disproportionately impact the least well off, erode systems, and overwhelm response capacity. Building resilience means addressing not only these acute threats but also the chronic vulnerabilities they expose. The choice facing global leaders is between investing now or continuing to pay exponentially more in human suffering and economic losses when compound crises meet unprepared systems and vulnerable populations.

Resilience must span food security, development finance, and gender equity, among other existential threats and enabling functions. Section 3 argued that these intersections demand more than reactive aid or siloed programming. They call for a coherent governance and investment paradigm that reflects the lived realities of those most affected. The 3A+ framework offers immediate entry points for uptake: embedding health and conflict sensitivity into adaptation planning and financing; creating dedicated fiscal channels that support locally led, multi-sectoral resilience strategies; and aligning national planning processes with equity metrics that reflect lived experience and structural exposure. These shifts would help translate the 3A+ framework into delivery architecture, offering governments and partners a coherent pathway to act on compound risk while reinforcing political ambition.

As negotiators prepare for the COP Belém meeting, there is a clear opportunity to reframe resilience as a strategic imperative rather than a thematic add-on. However, this moment must be seen as part of a broader continuum: future COPs, alongside global milestones such as the UN High-Level Meeting on Pandemic Prevention, Preparedness, and Response, offer additional platforms to embed equity-driven, cross-sectoral investments into global financing and governance frameworks. With adaptation finance under increasing strain and indicator frameworks still evolving, there is space to advance more integrated, equity-driven approaches. This requires pooled financing that reaches conflict-affected settings, health systems that integrate climate adaptation, and development strategies that embed equity from the outset.

This paper provides a starting point for deeper dialogue, sharper strategy, and collective action. As the framework pinpoints, the discussion of global resilience must span sectors, actors, and a vast set of priorities to ensure that it is both anticipatory and reactive. What comes next must be shaped by communities, policymakers, and multilateral actors working together to define what resilience truly demands — and how to fund it.

As we work to apply the framework to health, climate conflict and beyond, and we invite interested partners and governments to share their thoughts so we can build a resilience agenda that reflects lived realities, redistributes resources, and strengthens systems under strain.

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