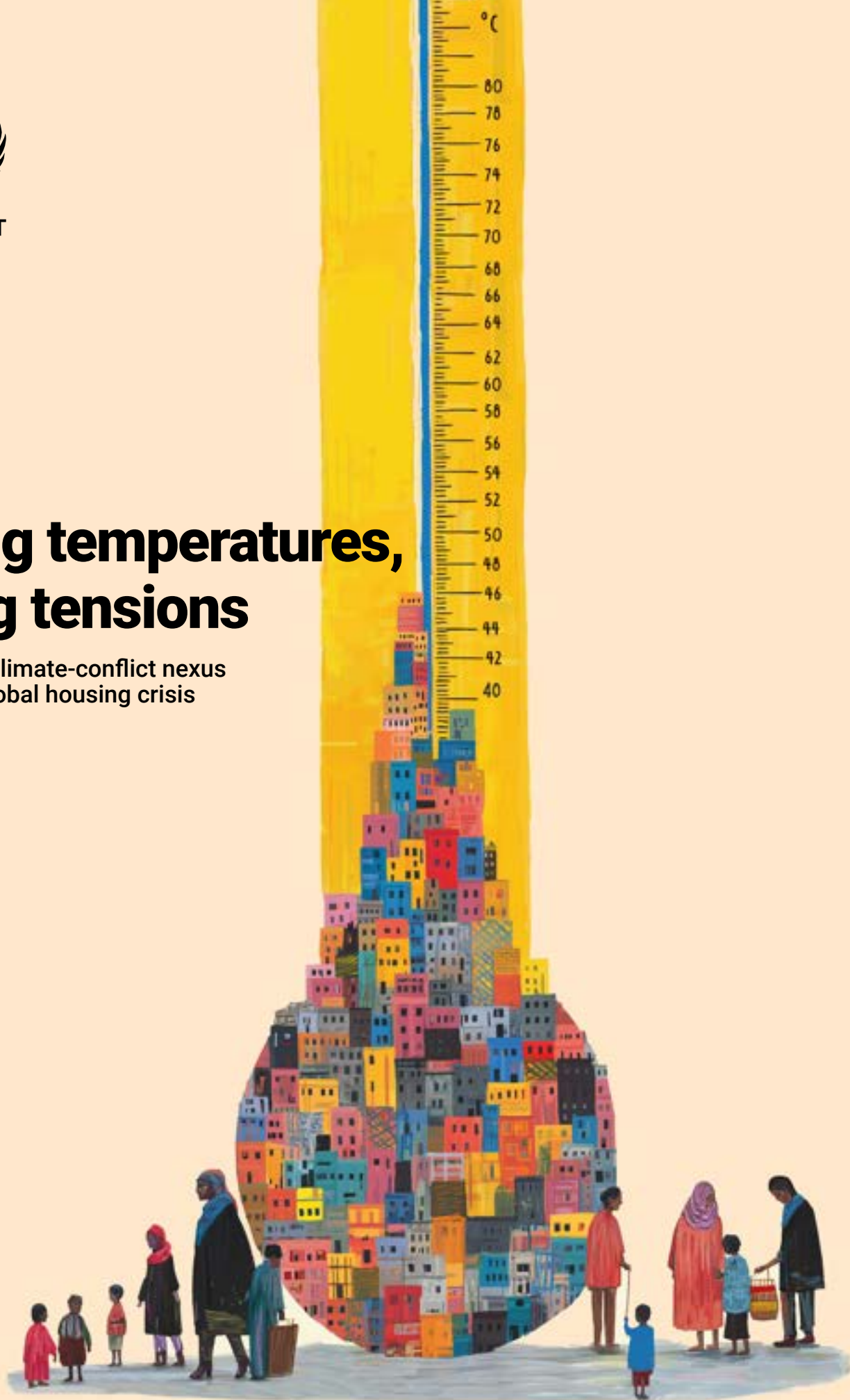


Rising temperatures, rising tensions

The urban climate-conflict nexus
amid the global housing crisis





UN-HABITAT

Rising temperatures, rising tensions: The urban climate-conflict nexus amid the global housing crisis

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This publication responds directly to knowledge gaps and action priorities identified in the Global Research and Action Agenda on Cities and Climate Change Science (GRAA), specifically addressing the area of 'Conflict and crisis response'. The GRAA represents the culmination of extensive and intensive discussion and prioritization among researchers, practitioners, governments, communities and businesses, signposting key research and action areas to help deliver on the Paris Agreement in and through cities.

About UN-Habitat

UN-Habitat is the United Nations programme working towards a better urban future. Its mission is to promote socially and environmentally sustainable human settlements and the achievement of adequate shelter for all. The third domain of change of UN-Habitat's Strategic Plan is "Strengthened Climate Action and Improved Urban Environment" under which the programme helps stakeholders develop and implement policies, norms, guidelines, standards, regulatory frameworks and operating procedures for strengthened climate change mitigation and enhanced air quality, sustainable production and consumption and circularity, urban nature-based solutions and improved urban and community-level climate change adaptation and resilience.

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About the Global Covenant of Mayors for Climate & Energy (GCoM)

GCoM is the largest global alliance for city climate leadership, uniting a global coalition of over 13,500 cities and local governments and 100+ supporting partners. The cities and partners of GCoM share a long-term vision of supporting voluntary action to combat climate change and towards a resilient and low-emission society. GCoM serves cities and local governments by mobilizing and supporting ambitious, measurable, planned climate and energy action in their communities by working with city/regional networks, national governments, and other partners to achieve our vision. Led today by UN Special Envoy on Climate Ambition and Solutions Michael R. Bloomberg and European Commission Executive Vice-President Teresa Ribera, the coalition comprises cities across 6 continents and 147 countries, representing over 1 billion people or more than 13 percent of the global population.

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Foreword

Since its inception, UN-Habitat has raised its voice on the urgent, interconnected challenges facing cities, guided by the Habitat Agenda, the United Nations Millennium Declaration, the Sustainable Development Goals and the New Urban Agenda. Today, the complexity of urban crises is more evident than ever – and the demand for integrated, transformative solutions are more pressing. Persistent poverty, deepening socio-economic inequalities, accelerating climate crisis, environmental degradation, mounting conflict and displacement are rarely isolated crises. They are interwoven pressures shaping the future of the urban age into which most countries have now transitioned.

UN-Habitat's Strategic Plan 2026-2029 is our response to this moment of truth. Grounded in the core objective of ensuring adequate housing and urban basic services for all, the Plan charts a path toward sustainable, safe, and resilient urban development. Its impact areas represent critical priorities for achieving this vision. Increasingly, the world recognizes how climate change and conflict intersect – captured in our Strategic Plan through 'environment and climate action' and 'preparedness, response, recovery, and reconstruction'. The worsening climate crisis, when interacting with socio-economic and political factors, can act as a risk multiplier for conflict and insecurity. At the same time, fragile and conflict-affected settings urgently need stronger, context-sensitive climate action.

Although the connections between climate change and conflict are increasingly acknowledged, engagement with the simultaneous and intertwined processes of urbanization and urban development remains limited. Bridging this gap is essential if the climate-security agenda is to succeed and if cities are to secure a peaceful, resilient future. Housing inadequacy, the persistence of informal settlements, and entrenched urban inequalities continue to fuel climate vulnerability and urban conflict, across the Global South and North alike. On the other hand, well-planned, inclusive cities where everyone enjoys access to adequate housing and basic services hold a key to resilience and stability in a rapidly changing world.

This publication – developed with the generous support of the Global Covenant of Mayors for Climate and Energy and responding to the Global Research and Action Agenda on Cities and Climate Change Science – takes stock of emerging research and practice on the urban climate-conflict nexus. UN-Habitat remains committed to continuing to disentangle and address these complex linkages shaping our urban future. Through this publication, we extend a warm invitation to dialogue and collaboration to advance knowledge and action for an at once climate and conflict resilient urban future for all.



Anacláudia Rossbach
United Nations Under-Secretary-General and
Executive Director, UN-Habitat



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Abbreviations and acronyms

AECID	Agencia Española de Cooperación Internacional para el Desarrollo (the Spanish Agency for International Development Cooperation)
BARMM	Bangsamoro Autonomous Region in Muslim Mindanao
BDSF	Bangsamoro Spatial Development Framework
CCFLA	Cities Climate Finance Leadership Alliance
COP	Conference of the Parties (to the UNFCCC)
CPI	Climate Policy Initiative
FAO	Food and Agriculture Organization of the United Nations
GCCM	Global Centre for Climate Mobility
GCF	Green Climate Fund
GCoM	Global Covenant of Mayors
GDP	Gross domestic product
GFRDD	Global Facility for Disaster Reduction and Recovery
HDP	Humanitarian-development-peace
HLP	Housing, land and property
ICRC	International Committee of the Red Cross
IDMC	Internal Displacement Monitoring Centre
IDP	Internally displaced person
IIED	International Institute for Environment and Development
IOM	International Organization for Migration
IEA	International Energy Agency
IFRC	International Federation of Red Cross & Red Crescent Societies
IPCC	Intergovernmental Panel on Climate Change
LDCs	Least developed countries
MtCO2e	Million tonnes of carbon dioxide equivalent

NbS	Nature-based solutions
ODI	Overseas Development Institute
PBF	Secretary General’s Peacebuilding Fund
RDNA	Rapid Damage and Needs Assessment
RISE UP	Resilient Settlements for the Urban Poor programme
SHIELD	Strengthening Institutions and Empowering Localities Against Disasters and Climate Change in the Philippines
Sida	Swedish International Development Cooperation Agency
UCLG	United Cities and Local Governments
UCCRN	Urban Climate Change Research Network
UN	United Nations
UN CSM	United Nations Climate Security Mechanism
UN DESA	United Nations Department of Economic and Social Affairs
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNFPA	United Nations Population Fund
UNGA	United Nations General Assembly
UN-Habitat	United Nations Human Settlements Programme
UNHCR	United Nations High Commissioner for Refugees
UNRWA	United Nations Relief and Works Agency for Palestine
UN OCHA	United Nations Office for the Coordination of Humanitarian Affairs
UN SC	United Nations Security Council
UNU-CPR	United Nations University Centre for Policy Research
US	United States
WCR	World Cities Report
WHO	World Health Organization
WRI	World Risk Index
WRI	World Resources Institute

Definitions

Official definitions of the following concepts are sometimes used by different organizations for specific purposes. The definitions outlined here are generic and intended to help orient the reader.



Climate change Climate change refers to long-term shifts in average temperatures and weather patterns. Since the 1800s and the industrial revolution, human activities have been the main driver of climate change. In particular, the burning of fossil fuels, such as coal, oil and gas, generates greenhouse gas emissions that trap heat within the atmosphere. This, in turn, raises the average surface temperature of Earth, contributing to a range of weather-related changes and secondary impacts. See e.g., NASA, n.d.; UN, n.d.a.

Hazard A hazard is a phenomenon, process or activity that presents danger to humans, ecosystems or assets. Hazards can be natural, anthropogenic or socio-natural in origin. Many hydrometeorological hazards, including cyclones, floods, drought and extreme temperatures, are becoming more frequent or intense as a result of climate change. See e.g., IFRC, 2021; UNDRR, n.d.a.

Exposure Exposure denotes the situation of people, ecosystems, services, infrastructure and other assets of value in hazard-prone areas. Coastal cities may, for example, display high exposure if they host large populations and critical infrastructure where they are prone to sea level rise and storm surges. See e.g., UNDRR, n.d.b.

Disaster Disasters constitute serious disruptions to the functioning of communities or societies as a result of hazards and their interaction with conditions of exposure and vulnerability. Importantly, disasters are not inevitably the result of hazards: they arise where there is sufficient exposure and susceptibility to harm, owing to social, economic and environmental factors. See e.g., UNDRR n.d.d; IFRC, n.d.

Vulnerability Vulnerability is the condition of being susceptible to negative impact from events and circumstances such as climate change-related hazards – with which it is often associated – but also conflict and displacement. Vulnerability is determined by various physical, social, economic and environmental factors, and is a potential property of individuals and communities as well as assets and systems. Their degree of vulnerability is a central element in how well they are able to mitigate, cope with, resist and recover from shocks and adverse situations. See e.g., UNDRR, n.d.c.

Migration Migration is the movement of people from their usual place of residence to somewhere else, whether across or within international borders (internal or international migration). Migration can be forced or voluntary, and motivated by a wide range of social, economic, political and environmental factors, including the slow- and sudden-onset impacts of climate change. Some definitions take international migrants to be persons who have lived outside their country of origin for at least 12 months. In this publication, ‘migration’ is used more broadly and synonymously with human mobility. It can be temporary, recurrent or permanent. See e.g., IOM, n.d.a.



Urban conflict Conflict, simply, is the presence of (perceivably) incongruent interests occurring from the interpersonal level to the international. Conflicts can remain non-violent disagreements but may lead to violent clashes where effective channels for inclusive dialogue and problem solving are missing. Urban conflict, here, encompasses conflicts that originate in, concentrate in, or significantly affect cities. Conflicts directly related to the shape of urban development and the dynamics of urban life are examples of the former, while broader interstate and civil wars and other armed conflicts that (partly) play out in cities or have major urban repercussions, illustrate the latter. See e.g., Cockayne et al., 2017; O'Dowd, 2015.



Displacement, internally displaced persons, refugees Displacement is the forced movement of people from their usual place of residence to somewhere else, whether across or within international borders. Displacement is often differentiated as conflict and violence-induced or disaster-induced, though the distinction between different displacement drivers can be unclear. Internal displacement occurs within the national borders of the internally displaced persons (IDPs) in question (see e.g., UNHCR, n.d.a). People who flee and cannot return to their countries because of persecution, war or violence are refugees, per the 1951 United Nations Convention Relating to the Status of Refugees (UNHCR, n.d.b). While refugees have special rights to protection under international law, there is no widely accepted international legal framework for people who are internationally displaced as a result of the impacts of climate change. Attempts have been made to change this (see e.g., Climate Refugees, n.d.; Displacement Solutions, n.d.; IOM, n.d.b), but they have not yet resulted in comprehensive international framework reform.

Urban fragility Fragility refers to a systemic condition, usually of states but also of cities (Muggah, 2015), characterized by low levels of institutional or governance capacity which impede the ability to maintain peace and foster economic and social development (World Bank, n.d.a). Different sets of indicators exist to measure fragility, which tends to occur in the context of an aggregation of shocks and stresses, common among which are political instability, militarization, history of armed conflict, peacekeeper presence, limited institutional accountability, limited access to justice, economic exclusion, inequality, instability, low human development, demographic and environmental pressure, weak international linkages, and population flight (Michel, 2018; Schreiber et al., 2016; World Bank, n.d.a). Urban fragility is similarly associated with an accumulation of risks combined with a lack of ability and/or willingness of governing bodies to deliver on the social contract (de Boer et al., 2016; Muggah, 2015).



Urban crisis The term crisis is variously defined by stakeholders in different contexts but broadly involves catastrophic trends or conditions that present a severe threat to people. 'Humanitarian crisis' has been defined as 'an event or series of events that represent a critical threat to the health, safety, security, or well-being of a community or other large group of people usually over a wider area' (UNGA, 2015). This encompasses disasters triggered by climate change-related hazards, as well as the impacts of conflict. Urban crises, here, are crises that originate in, concentrate in or significantly affect cities. Within this, a distinction can be made between cities located within a crisis and cities in crisis. Increasingly, cities are sites where different crises converge.

Global housing crisis The global housing crisis refers to the current critical housing inadequacy facing the world, both the Global South and the Global North. While the crisis may manifest in different ways depending on context, it is characterized by the lack of one or more elements of adequate housing: habitability, affordability, accessibility, tenure security and access to basic services. These deficits often manifest in the form of steeply rising housing costs, forced evictions, displacement and homelessness. Key among their drivers are weak land governance systems and unsustainable land use practices that fail to optimize the social and ecological functions of land.

Urban resilience Resilience is the ability of individuals, communities, cities, institutions and systems to prevent, resist, absorb, adapt, respond and recover positively, efficiently and effectively when faced with a wide range of risks. Urban resilience refers to the ability of cities and human settlements to position themselves accordingly to shocks and stresses, while undergoing transformation into more sustainable systems. Resilience at a city level recognises the urban area as a dynamic and complex system that must continually adapt to various challenges in an integrated and holistic manner. See e.g., UN-Habitat Urban Resilience Hub (n.d.a)

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Introduction

Our world is increasingly volatile, violent and vulnerable.

Climate change is accelerating, with 2024 the hottest year on record (WMO, 2025), and the global cost of disasters on a steady upward trajectory (UNDRR, 2025). Meanwhile, conflict events have nearly doubled in volume over the past five years (ACLED, 2024) and civilian deaths in armed

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2.8 billion people experience some form of housing inadequacy.”

conflict increased by 40 per cent in 2024 (UN OCHA, 2025a). At the end of the same year, 123 million people were forcibly displaced – almost twice the amount of a decade earlier (UNHCR, 2025a). These developments are playing out in parallel to unprecedented urbanization. At the time of the last World Urbanization Prospects study, 55 per cent of the global population lived in urban areas and it was projected that, by 2050, the number would rise to 68 per cent (UN DESA, 2018). Global crises increasingly converge in cities. Here, losses and damages from climate change are mounting and conflicts devastate civilian infrastructure and demand civilian lives, at the same time as a ubiquitous housing crisis is becoming increasingly evident. 2.8 billion people currently experience some form of housing inadequacy – from record-high costs to unsafe dwellings and homelessness – and 1.1 billion live in slums (UN Stats, 2023): a situation with clear links to galloping urban vulnerability and fragility.

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2024 was the hottest year on record.”

Yet, despite the undeniable centrality of cities to the global polycrisis that layers climate change and conflict impacts atop rising inequality and mounting

housing inadequacy, they are remarkably neglected in the growing literature and action on the climate change-conflict nexus.

Plänitz (2019) evidences this neglect, highlighting an overwhelming focus on rural dynamics in a systematic review of academic articles connecting climate change and conflict. Gizelis et al. (2021) complement the finding, calling the forsaking of ‘urban areas in the statistical study of demographic and environmental security’ a ‘considerable and important research gap’. Schreiber et al. (2016), meanwhile, call attention to the lack of engagement with urban fragility and conflict in budding action for urban resilience. These research and action gaps have also been registered in the Global Research and Action Agenda on Cities and Climate Change Science (GRAA): the culmination of continuous exchange among researchers, practitioners, governments, communities and businesses through the Innovate4Cities process, and currently home to over 160 knowledge gaps and 250 action priorities critical for achieving the goals of the Paris Agreement in and through cities. Conflict and Crisis Response was added to the GRAA pillar of Justice and Equity in 2024, reflecting consensus about the need for stronger engagement with compound urban crises and the integration of both climate and conflict considerations into crisis prevention, response and recovery (Innovate4Cities, 2024).

The same need is reflected in the outline of the Intergovernmental Panel on Climate Change (IPCC) Special Report on Climate Change and Cities (SRCities) which is under preparation and set to be delivered in 2027. SRCities represents a critical milestone for climate science, and a unique opportunity to centre cities in climate policy and

“
**123 million people were forcibly
 displaced by the end of 2024 – almost
 twice the amount of a decade earlier.**”

action. Chapter 5 on Solutions by City Types and Regions will synthesize climate solutions-relevant knowledge for cities with different characteristics including, explicitly, those experiencing fragility and conflict (IPCC, 2024). The limitations to peer-reviewed literature on this topic make grey and white literature all the more important for providing SRCities authors with relevant insights. Channelling voices from the ground and synthesizing information held by practitioners and experts working in cities are central tenets of the support provided by the United Nations Human Settlements Programme (UN-Habitat) and the Global Covenant of Mayors for Climate and Energy (GCoM) to knowledge processes such as the SRCities production. The intersection of climate change and urban conflict is also central to UN-Habitat's Strategic Plan 2026-2029, which adopts 'preparedness, response, recovery and reconstruction' and 'environment and climate action' as two impact areas in a triadic framework to address the global housing crisis (UN-Habitat, 2025a).

UN-Habitat has a decades-long track record of normative and operational work to address urban crisis and climate change and has long integrated these two areas. The Urban Recovery Framework stands as a key instrument for more effective recovery in cities impacted by natural and man-made crises (UN-Habitat, 2022), while the agency's guidance on sustainable reconstruction facilitates a greener urban future in conflict-affected regions (UN-Habitat et al., 2023). UN-Habitat is strengthening efforts to tackle displacement in all its forms, informed by the Global Institutional Plan on Solutions to Internal Displacement (UN-Habitat, 2023a), and targeting climate change-related displacement specifically through in-

country projects and tools such as the Designing for Displacement series (UN-Habitat, 2023b). To address urban vulnerability and fragility underlying climate change-related disasters, loss and damage, social tension and conflict, UN-Habitat is supporting resilience building through initiatives such as the Resilient Settlements for the Urban Poor (RISE UP) flagship programme (UN-Habitat, n.d.a), the City Resilience Global Programme (UN-Habitat Urban Resilience Hub, n.d.b), and the Open-ended Intergovernmental Expert Working Group on Adequate Housing for All (UN-Habitat, 2024a). These effort support and align with priorities within the multilateral system, including the Secretary General's Action Agenda on Internal Displacement (UN, n.d.b), the work of the UN Climate Security Mechanism (UN CSM) (n.d.), and the Humanitarian Reset instigated by the Inter-Agency Standing Committee (IASC, 2025).

This publication builds on existing work and insights, going a step further toward connecting cities, climate change and conflict. In doing so, it seeks to address the research gaps highlighted in the peer-reviewed literature as well as the knowledge gaps and action priorities identified in the GRAA, and thereby to offer insights relevant for SRCities. The publication explores the role of cities and urban development – with a particular focus on housing and basic services – as culprits, victims and solutions at the climate-conflict nexus. Chapter 2 explores the complex interlinkages that connect these two phenomena, including the increasing overlap of climate change impacts and urban conflict; the two-way causal links between climate change and urban environmental degradation on the one hand and tension and conflict in cities on the other; and the interrelated factor of climate change- and conflict-related displacement to, from,

through and within cities. Chapter 3 turns to solutions, mapping the research and action needed to address the identified interlinkages. It emphasizes the imperative of integrating cities more fully into evidence building, policymaking and project development toward joined-up climate resilience and peace, and of positioning cities and urban stakeholders as important leaders and partners in this endeavour. Finally, Chapter 4 presents a set of UN-Habitat-led projects that are already integrating climate change and conflict considerations, covering Guinea-Bissau, Jordan, Lebanon, Mozambique, Philippines, Syria and Yemen. These cases illustrate how the nexus is addressed in UN-Habitat's work, and they can serve to inspire and guide future programming.

The findings presented in Chapter 2 underscore to what degree cities merit more attention in discourse on the climate change and conflict nexus. There is a striking overlap of high climate risk scores and experiences of fragility and conflict both at national and urban level. Complex emergencies in cities where “natural” and human hazards compound are increasingly challenging humanitarian responders and development partners. Yet, climate finance continues to exhibit and perpetuate striking global inequity, with fragile and conflict-affected states and cities accessing a slim share. At the same time, both climate shocks and stressors and conflict are increasingly forcing people to leave behind their homes and settle in urban areas. With cities poorly prepared for this influx, it can place pressure on land, housing and basic services, extend informality and inequality, and deepen both climate and conflict risks. The impacts of climate change on resource security, housing adequacy, and livelihood stability are already triggering grievance and conflict in cities across the world where informality, inequality, injustice and ineffective governance systems create vulnerability. Closing the circle, urban conflict is a significant source of greenhouse gas emissions through military operations, housing and infrastructure destruction, displacement, and their responses.

Addressing these complex risk dynamics calls for tailored research and action. An opportunity to promote interlocked climate resilience and security presents itself in the significant urban growth expected over the coming decades, combined with the growing readiness of urban stakeholders to address issues of both sustainability and peace. The fundamentals of urban resilience are increasingly well understood, comprising plans, designs, policies, financing and governance frameworks that support inclusive and sustainable land use, housing solutions, infrastructure, and service delivery. Such developmental responses are core to preventing both climate change related loss and damage and conflict

in cities. At the same time, climate action cannot be neglected in urban areas that are already experiencing high fragility or conflict, calling for bolstered finance and innovative approaches that integrate solutions for climate resilience, peace and stability. In addition, cities and territories must become better equipped to forecast the implications of climate change- and conflict-related mobility and to inclusively and durably integrate displaced populations. They should also be supported to understand localized, context-specific pathways from climate impacts to conflict, and to address these through tailored approaches. Finally, the recovery process of conflict-affected cities presents a window to a greener and more climate- and conflict-resilient urban future, which must be harnessed.



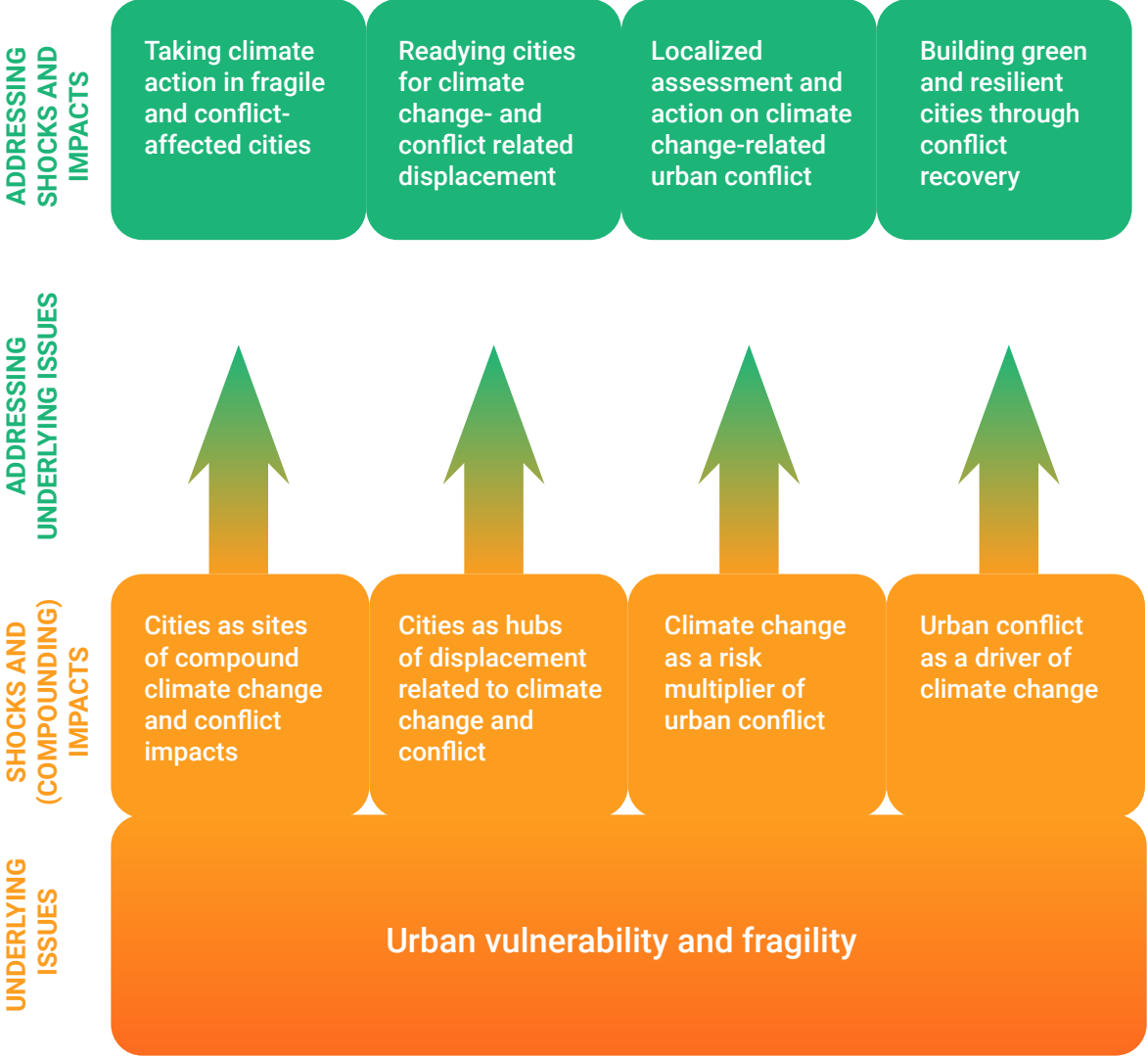


Table 1. Framework of key interlinkages and corresponding interventions at the climate change and urban conflict nexus.

The above framework encapsulates the proposition presented by the publication: outlining – in the two bottom rows – key ways in which cities, climate change and conflict interlink as issues and – in the two top rows – critical responses corresponding to each type of issue linkage. The framework features throughout the publication, its various sections highlighted at their corresponding subchapters, to help guide the reader.

As critical settings where climate and conflict risks converge, cities must be explicitly included in efforts to build resilience, foster peace, and enable transformation. Tailored research and interventions across prevention, response, and recovery are urgently needed to support cities in fulfilling their potential as hubs of sustainability, inclusion, and safety – rather than epicentres of vulnerability and fragility. This publication seeks to reinforce the role of urban systems and stakeholders as essential components of integrated stability and sustainability in a world of rising temperatures and rising tensions.



Background

CITIES AS CULPRITS AND VICTIMS OF CLIMATE CHANGE

Human activities have caused global average temperatures to increase steadily since the mid-19th century. 2024 was the clearest sign of anthropogenic climate change to date, marking another global temperature record, and the first to exceed 1.5°C above pre-industrial levels (WHO, 2025). Unless decisive action is taken to change the trajectory, the global mean near-surface temperature is likely to reach a consistent 1.5°C above the 1850-1900 average between 2030 and 2050: a tragic milestone which would be accompanied by increasing heat extremes, heavier precipitation and higher probability of drought, among other hazards, along with concomitant risks to health, livelihoods, food security, water supply and economic growth (IPCC, 2018). Cities are key actors in the climate crisis. While they occupy only some three per cent of global land, cities concentrate populations, economic activity and infrastructure (McManamay, 2024). At the time of the last World Urbanization Prospects study, 55 per cent of the global population lived in urban areas and it was projected that by 2050, this number would rise to 68 per cent (UN DESA, 2018). Cities' greenhouse gas emissions, meanwhile, account for around 70 per cent of the global total (IPCC, 2022a), and urban areas are behind three quarters of the world's energy consumption (IEA, 2024).

At the same time as urban systems perpetuate global warming, cities are major victims of climate change. Urbanization is driving exposure, while the social, economic and environmental conditions of many cities are behind growing vulnerabilities, together cumulating overall urban climate risk (WCR, 2024). 64 per cent of the global urban population now has a high level of exposure to disasters (Gu, 2019) and 56 per cent of cities report already experiencing significant

impacts from climate hazards (CDP, 2024). Loss and damage from climate change-related disasters in urban areas can reach staggering heights, as exemplified by the \$125 billion-bill from Hurricane Katrina for New Orleans (Colten et al., 2008) and the loss of \$46 billion from the 2011 flooding in Bangkok (Eriksen et al., 2015). This susceptibility to loss is partly explained by the complex and interconnected nature of urban economies, which are vulnerable to widespread disruption even from single shocks (Das et al., 2024). The monetized economy of urban areas also means that access to material resources to cope with environmental variations and stressors is limited, especially for poor communities (UN-Habitat, 2021; Zetter, 2014).

Cities are uniquely susceptible to extreme heat due to heat island effect: a phenomenon arising from the heat-absorbing properties of materials like concrete and asphalt, waste heat generated from human activities, and heat trapping from urban morphological features such as densely erected tall buildings. As a result, cities are warming at twice the global average rate (UNEP & Cool Coalition, 2021) and are sometimes as much as 10 to 15 °C hotter than their surroundings (Mentaschi et al., 2022). By 2050, more than 1.6 billion urban residents are likely to be exposed to extreme temperatures of at least 35°C (UCCRN et al., 2018), with only 1 per cent of the urban population globally set to be spared temperature increases (UN-Habitat, 2024b). Meanwhile, nine out of ten cities are situated on coastlines where they are the first to feel the impacts of sea level rise, coastal flooding and storm surges (UN-Habitat, n.d.b). By 2100, projections indicate that global average sea levels could rise by as much as 1.8 metres, seriously imperilling billions of urban residents (White, 2020). Increasing

“
68 per cent of the world's population is expected to live in cities by 2050.”

“
Cities account for about 70 per cent of global greenhouse gas emissions.”

precipitation compounds sea level rise to increase the risk of flooding, which in urban areas is further exacerbated by impervious surfaces, inadequate drainage (WCR, 2024) and the removal of natural storm buffers (Gencer et al., 2018). Since 1975, exposure to flooding in cities has increased 3.5 times more than such exposure in rural areas (UN-Habitat, 2024b).

Cities with high degrees of inequality and secondary and smaller cities – which are growing at record speed, yet which lack sufficient resources and capacity for effective adaptation – present particular challenges (UN-Habitat, 2021). The urban poor and the 1.1 billion residing in informal settlements experience the impacts of climate change most devastatingly on account of inadequate housing, basic services, infrastructure and financial resilience (IPCC, 2022a).

Housing inadequacy is a major driver of urban climate vulnerability, with the poorly or precariously housed facing heightened risks of harm and loss, including homelessness, associated with extreme temperatures and energy insecurity as with storms and flooding (Bezgrebelna et al., 2021; Reid et al., 2024). If extreme weather events

continue to increase at current rates, as many as 167 million homes could be lost by 2040 – homes housing not the affluent but the poorest urban dwellers in all world regions (ShelterBox, 2021). Climate risk is concentrated in developing countries, but the global housing crisis is increasing vulnerability world-wide. Research from California, for example, shows that subsidized housing is disproportionately exposed to extreme heat (Gabbe & Pierce, 2020). In Australia, meanwhile, studies on flooding evidence how climate change is increasing pressure on housing support services, exposing more people to informal tenures and sub-standard dwellings (van den Nouwelant & Cibin, 2022), and immobilizing un- and under-insured households who lack capacity for both in-situ recovery and relocation out of high-risk regions (Plass & Zinn, 2025). Climate change will both shrink liveable and insurable areas and increase insurance costs, thereby exacerbating the already acute global housing affordability crisis (Reid et al., 2024).

“
1.1 billion people live in informal settlements where they are often highly exposed and vulnerable to climate change impacts”



CITIES AS CENTRES AND VICTIMS OF CONFLICT

Conflict in its different manifestations is urbanizing. When it comes to interstate and civil war and armed conflict, our century has seen the most prolonged and intense battles carried out in cities rather than in the field. The wars in Iraq, Libya, Syria and Yemen (King, 2022) and recently those in Palestine and Ukraine, have been waged both for and in urban areas. Indeed, the normalcy of urban warfare is reflected in contemporary military discourse and strategies (Bodnar and Collins, 2019; British Army, 2021; Lacdan, 2018; US Headquarters, 2017). In an increasingly urbanized world, with cities concentrating people alongside economic, political and social assets, activity and power, it is not surprising that they now constitute one of the most common environments for armed conflict (Konaev, 2019; King 2021; Ljungkvist, 2022). In 2022, 50 million people were estimated to be experiencing urban warfare, calling for special engagement from the international community (UN SC, 2022).

Wars and armed confrontations in cities have unique and devastating effects. When explosive weapons are involved, 90 per cent of those affected are civilians (UN SC, 2022). Damage and destruction of civilian infrastructure and housing stock are also, as a rule, extensive, reaching about 13 per cent of the housing stock in Ukraine (World Bank Group et al., 2025), 30 per cent of that in Syria (BMZ, 2025) and 92 per cent of that in Gaza (UN OCHA, 2025b) at the time of writing, all while housing construction and maintenance are also put to a halt (Seneviratne et al., 2013). It is not unusual for structures such as fiberoptic networks, power plants, electricity grids, and water and transport systems to become 'soft targets' (Greenberg, 2017). Within highly connected urban systems, breakdown in one area can quickly cause the widespread collapse of essential services such as supply of utilities and healthcare, as well as disruption to productive sectors

and institutional functions. As a result, urban conflicts tend to have severe ramifications in surrounding rural areas and at national scale (UN-Habitat, 2022). Humanitarian operations are also complicated by urban warfare, especially with regard to access and protection (Earle, 2016a). Unsurprisingly, urban wars generate large-scale displacement as observed, for example, in the millions fleeing the bombing, destruction and besieging of Syrian cities during the civil war (IDMC, 2018a).

At the same time, the sudden and large-scale influx of Syrian refugees to cities of neighbouring countries placed pressure on their urban systems, sometimes sparking local conflict. Jordan's 2015 housing and population census revealed that 80 per cent of the 1.3 million Syrians living in the country resided outside of camps, in urban areas. Their sudden presence increased the demand for housing by 86,000 units annually, to which construction supply could not immediately respond. This resulted in increased rental prices and contributed to reduced expenditure on food, education and health for impacted host- and displaced communities, among whom informal sector workers, youth and people with lower educational attainment were the most affected (Rozo & Sviatschi, 2021). Tensions arising as a result exemplify a more localized form of (potential) urban conflict. Cities are not only targets in civil and interstate war but can also become incubators of discord and antagonism, manifesting, for example, as community-level clashes, protests, riots, insurrections, gang warfare, and responses thereto.

In fact, conflicts are increasingly waged between domestic groups such as political militias and criminal units, rather than between states (UN, 2020.). More people now die as a result of such 'civic conflicts' than as a consequence of war, and these

“
50 million people experienced urban warfare in 2022, according to estimates.”

“
90 per cent of those affected by wars and armed confrontations in cities are civilians.”

“
30 per cent : the portion of civilian infrastructure and housing damaged or destroyed by the Syrian civil war.”



deaths are concentrated in cities (Beall et al., 2010). Urban settings register high rates of fatal violence across the board, including consistently above-national average homicide rates. Latin America and the Caribbean account for 37 per cent of global homicides (UN, 2020) and the volume of such incidents tripled in Rio de Janeiro and quadrupled in São Paulo between the 1970s and 2007 (UN-Habitat, 2007). The effects of urban conflicts such as gang warfare, organized crime and identity-based clashes are in many ways not unlike those of larger-scale armed conflict: they trigger high mortality rates (Earle, 2016b) and significant internal displacement (IDMC, 2018a), while compromising the access and effective operation of humanitarian responders (Bolton, 2011). International peace operations have responded to manifestations of urban conflict on numerous occasions, from Mogadishu to Port-au-Prince and Bangui (Muggah, 2012).

While no direct relationship between urban growth and violence has been found (World Bank, 2010), many of today's rapidly growing cities exhibiting a convergence of risk factors, notably deep deprivation and poverty, high levels of inequality and exclusion (a greater

risk factor than poverty in itself), youth bulging and high youth unemployment, weak governance and dysfunctional institutions, and overcrowded and inadequate dwellings (Cockayne et al., 2017; Dodman et al., 2013; IFRC, 2010; UN-Habitat, 2007). Cities are not inherently alienating spaces that trigger conflict, nor is conflict necessarily destructive, but cities which have yet to achieve inclusive governance, effective planning and adequate provision of housing and basic services present a risk of discontent which they have limited capacity to constructively address. Poorly managed, urban development can create conflicts over the use of land and the impact of projects on local communities, while poorly met demand for urban resources such as housing and water can trigger tensions. The centrality of adequate housing to physical, mental and financial wellbeing – indeed, to dignity and emancipation – makes it a particularly political subject, 'inextricable from conflicts over power, resources, autonomy, and agency' (Madden & Marcuse, 2016, p.87). Discriminatory access to land and housing, insecurity of tenure, and poor building regulation and enforcement, therefore, are common urban conflict factors (UN-Habitat, 2024c).

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92 per cent : the portion of homes in Gaza damaged or destroyed as of February 2025.”

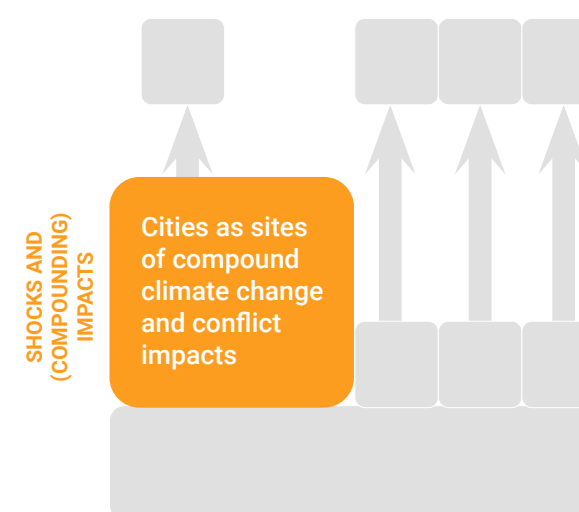


02

Cities, climate change and conflict: Complex interlinkages

2.1

CITIES AS SITES OF COMPOUND CLIMATE CHANGE AND CONFLICT IMPACTS



As outlined in the background section, cities globally are both major victims of climate change and common hubs of conflict. Unsurprisingly, in many urban centres, devastating climate change impacts and different forms of conflict coincide and compound. In fact, evidence clearly shows that fragile and conflict-affected areas are among the most vulnerable to climate change. In 2022, 12 countries with an internationally led humanitarian response were among the 15 most vulnerable to climate change, (UN OCHA, 2022). Between 1989 and 2018, the disaster occurrence and disaster-related mortality rate of countries experiencing armed conflict were 5 per cent and 34 per cent higher, respectively, than those of peaceful states (Caso et al., 2023). And such compound events are on the rise: between 1949 and 1958, 18 per cent of countries in armed conflict recorded a disaster in the same year, while between 2009 and 2018, the same figure reached 81 per cent (Caso et al., 2024).

The co-occurrence of disaster and conflict has several possible explanations, the best evidenced being that climate change and conflict share and exacerbate mutual factors of vulnerability. Urban conflict negatively affects urban adaptive capacity and resilience to climate change effects (and vice versa – more on this below) (Caso et al., 2023). Depending on its form, conflict can damage or destroy urban housing stock and infrastructure, disrupt essential service delivery, erode the physical and mental health of communities, deepen inequality, and disturb governance systems, all contributing to the breakdown of climate resilience (World Bank, 2022). Armed conflict, gang war and community clashing in cities can also impede or even hijack the delivery of disaster relief and reconstruction efforts (Peters et al., 2020; Rosvold, 2023).

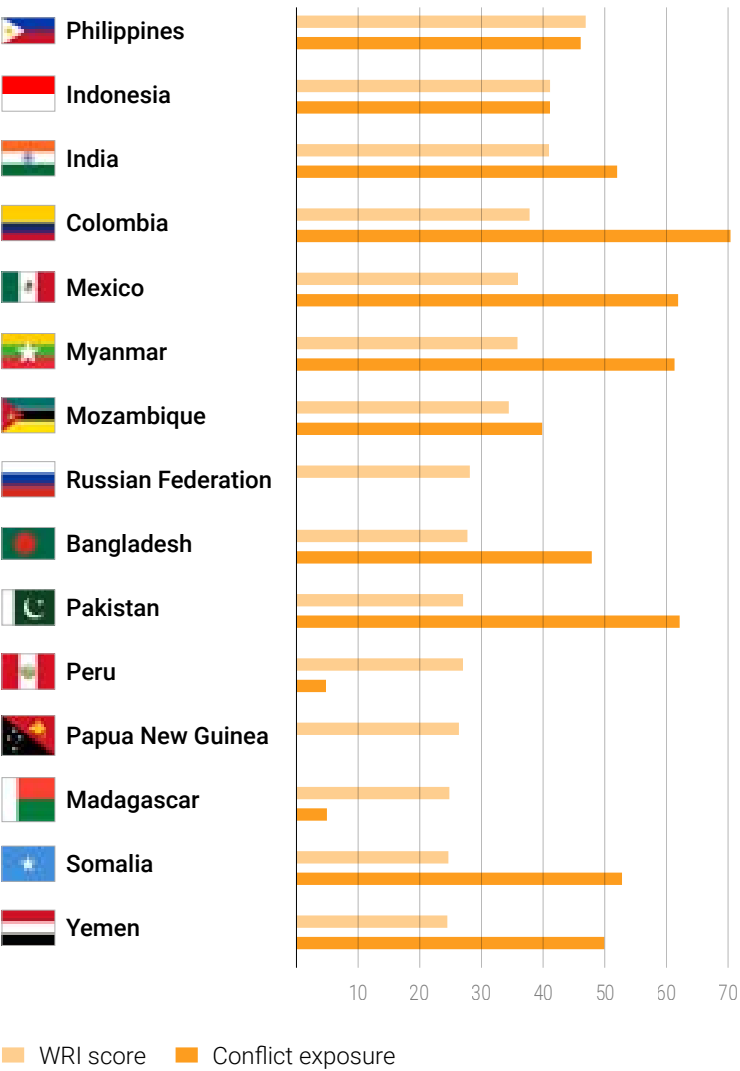


Figure 1. World Risk Index (WRI) (2024) and conflict exposure (2023) scores of the top 15 WRI-ranked countries (adapted from Bündis Entwicklung Hilft / IFHV, 2024).*

* The WRI indicates disaster risk from extreme natural events and negative climate change impacts. It is calculated per country as the geometric mean of exposure and vulnerability. WRI scores above 5.87 are considered 'high' and those above 12.88 'very high'. Conflict exposure is calculated as the geometric mean of exposure to battles, explosions and remote violence, riots, and violence against civilians.

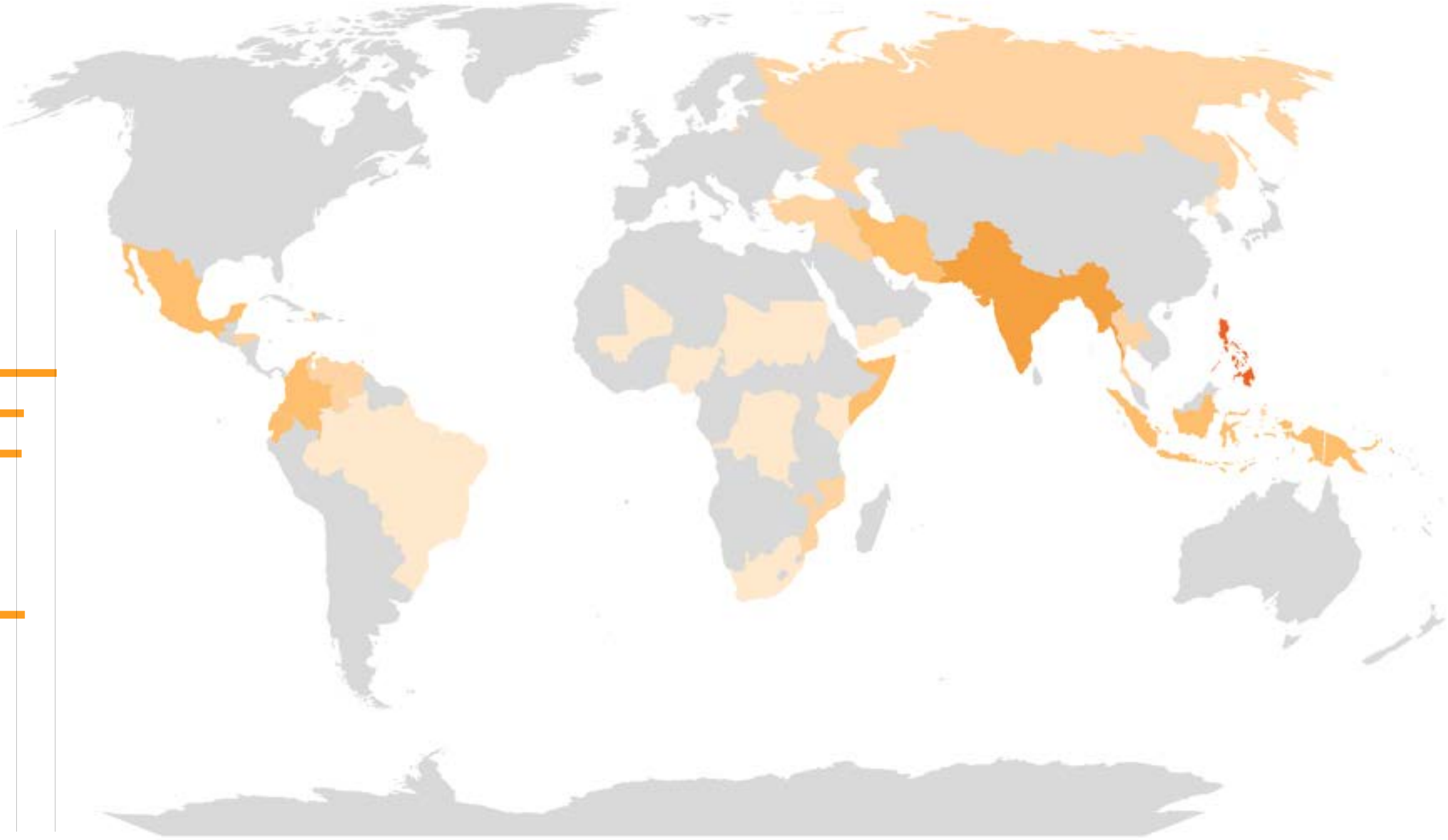
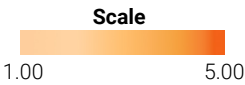


Figure 2. Countries with overlapping natural and human 'hazard and exposure' in the INFORM RISK Index 2025. Natural hazards cover earthquakes, river and coastal floods, tsunamis, tropical cyclones, droughts and epidemics (not all of which related to climate change). Human hazards are defined by projected conflict probability and current conflict intensity. Countries with both natural and human 'hazard and exposure' scores ≥ 8 represented here as 5 (only the Philippines); ≥ 7 here as 4; ≥ 6 here as 3; ≥ 5 here as 2; and ≥ 4 here as 1. Countries with either natural or human 'hazard and exposure' scores below 4 are greyed on the map (adapted from European Commission, 2025).

State fragility – entering into academic literature with vigour in the 1990s and representing a key focus area for international organizations like the World Bank and certain UN agencies since the start of the century – presents high risks of both conflict and climate change-related impacts. Though not necessarily in conflict (World Bank, n.d.a), fragile states have extremely low institutional capacity to maintain peace and foster climate-resilient development, and they are disproportionately affected by endogenous and exogenous shocks and stresses. Recent years have seen engagement with the nascent concept of urban fragility. Fragility as a property of cities has similarly been defined by institutional weakness or a lack of capacity to deliver on the social contract binding urban authorities to local communities. It is a condition usually created by a number of political, economic, social and environmental factors, resulting in instability, insecurity and climate vulnerability (de Boer et al., 2016; Scheiber et al., 2016). Fragile cities are not contained to fragile states nor to the Global South: for example, over half of Europe’s cities have been assessed as having a medium level of fragility (de Boer et al., 2016). This includes London on account of its high income inequality, crime rate, air pollution and threat of terrorism. However, urban fragility is both most concentrated and most elevated in rapidly urbanizing, low-income areas of South and Central Asia, Sub-Saharan Africa, and Latin America and the Caribbean (Misra, 2016).

Complex emergencies is another concept akin to the notion of multi-fronted breakdown. In UN terminology, it refers to humanitarian crises occurring in places facing far-reaching institutional failure, the response to which requires intervention from numerous agencies (UN, n.d.c). Such emergencies are also experienced, and increasingly call for engagement, in cities (UCLG et al., 2024). Haiti offers a striking example of a complex emergency with a stronghold in urban areas. In Haiti’s cities, civil unrest, insecurity, economic instability and disease combine with recurring climate change-related hazards including droughts, floods and hurricanes, as well as geophysical threats such as earthquakes, to create a spiralling polycrisis (USAID, 2024; World Bank, n.d.b). Haiti’s gang wars, violence and control is heavily concentrated in and around Port-au-Prince where government presence is on the brink of collapse. At the same time, the country’s urban areas are particularly hard hit by natural hazards, their devastating effects ranging from housing and infrastructural collapse (GFDRR et al., 2016) to outbreak of diseases such as cholera (Eisenberg et al., 2013). This complex urban crisis presents a profound challenge to humanitarian responders unaccustomed to dynamic and multi-layered emergencies in such concentration (Alexander & DiPierro Obert, 2022).

Paradoxically, despite fragile and conflict-affected settings experiencing heightened impacts from climate change, they access a slim share of global climate finance. In 2020, they received less than two thirds of the

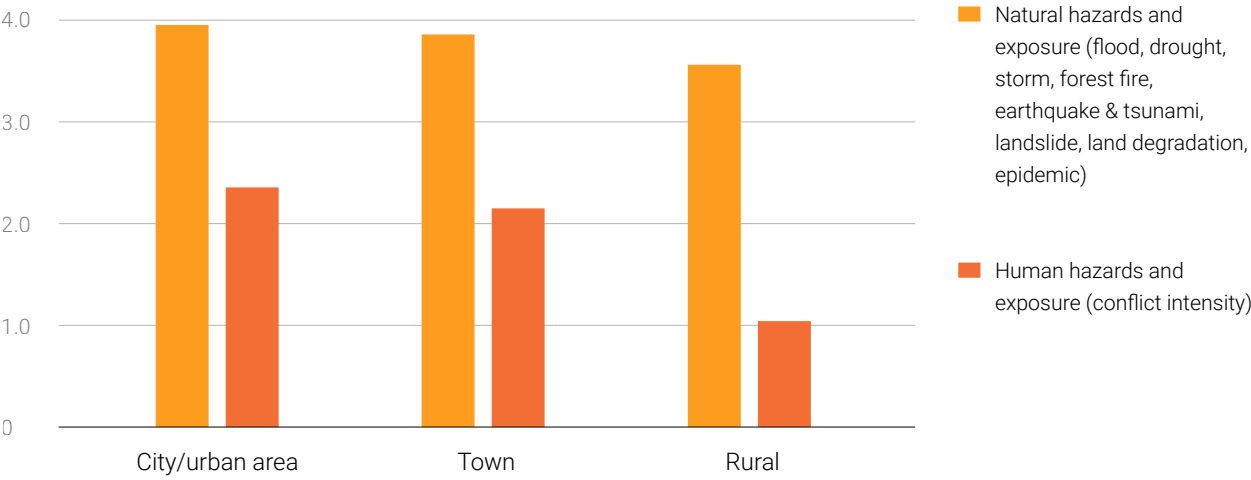


Figure 3. Average natural and human hazard and exposure scores for cities, towns and rural areas of Lebanon. Scores from European Commission (2024); municipal classification by UN-Habitat. The data shows that cities and towns of Lebanon experience a higher degree of hazard compounding – overlapping of, notably, climate change and conflict risks – than the country’s rural areas.



Figure 4. Fragility of >2,100 cities with populations of 250,000 or more. Fragility here is defined by 11 variables: urban population growth, unemployment, inequality, service access, pollution, homicide, intensity of protests and violence, exposure to terrorism, floods, cyclones and earthquakes, national fragility and presence of national armed conflict. (Igarapé Institute et al., 2016, © [OpenStreetMap](#), CARTO).

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Despite fragile and conflict-affected settings experiencing heightened impacts from climate change, they access a slim share of global climate finance.”



per capita adaptation funding provided to peaceful and stable low-income countries. Within this, high-intensity conflict settings received half as much per capita as settings facing medium-intensity conflict or social and institutional fragility (World Bank, 2024). The major vertical funds cover (some) fragile states, but their contributions to extremely fragile settings are marginal to overall flows and composed of far smaller projects than average (UNDP, 2021). The Green Climate Fund’s (GCF) Readiness Program, while designed to help bolster project development capacity, channels less than 25 per cent of resources to fragile and conflict-affected countries (Cao, 2021). Rapid, largely unplanned urbanization in many of the impacted countries, as well as the ubiquitous presence of fragile and conflict-affected cities, call for an urban lens in climate adaptation frameworks and financing mechanisms. Yet, cities are recipients of less than ten per cent of direct climate finance from multilateral development banks: and cities in fragile and conflict-affected settings see only a fraction of this (Muggah, 2025). Climate finance for cities is predominantly channelled to developed economies and China, with emerging markets and developing economies receiving only 11 per cent of the total, and the least developed countries (LDCs) as little as 1 per cent (CCFLA & CPI, 2024).

A number of factors are behind the discrepancy between the climate vulnerability and the climate financing of fragile and conflict-affected settings. The World Bank concludes from its Closing the Gap analysis that financial readiness rather than vulnerability shapes global climate financing patterns (Jones, 2024). Most donors have low appetite for programmatic, financial and reputational risk, often translating to rigid governing instruments with institutional and behavioural requirements beyond fulfilment by stakeholders in fragile and conflict-affected states and cities (ICRC & World Bank, 2021). For example, less than 20 per cent of the 500 largest cities in the developing world are creditworthy (World Bank, 2013). Territories beyond government control or dominated by violent non-state actors – such as Port-au-Prince in Haiti, among other cities across the world – are especially unlikely to receive official funding (Cao et al., 2021; Edwards & Banks, 2023). Other times, the issue is demand-related, with weak institutions lacking capacity or technical expertise to develop robust climate policies and projects or to collect and synthesize data to evidence needs (ICRC & World Bank, 2021). Irrespectively, contemporary climate financing approaches are ill equipped to tackle fragility and conflict, especially in urban areas, where these phenomena are now worsening, while knowledge frameworks are only emerging.

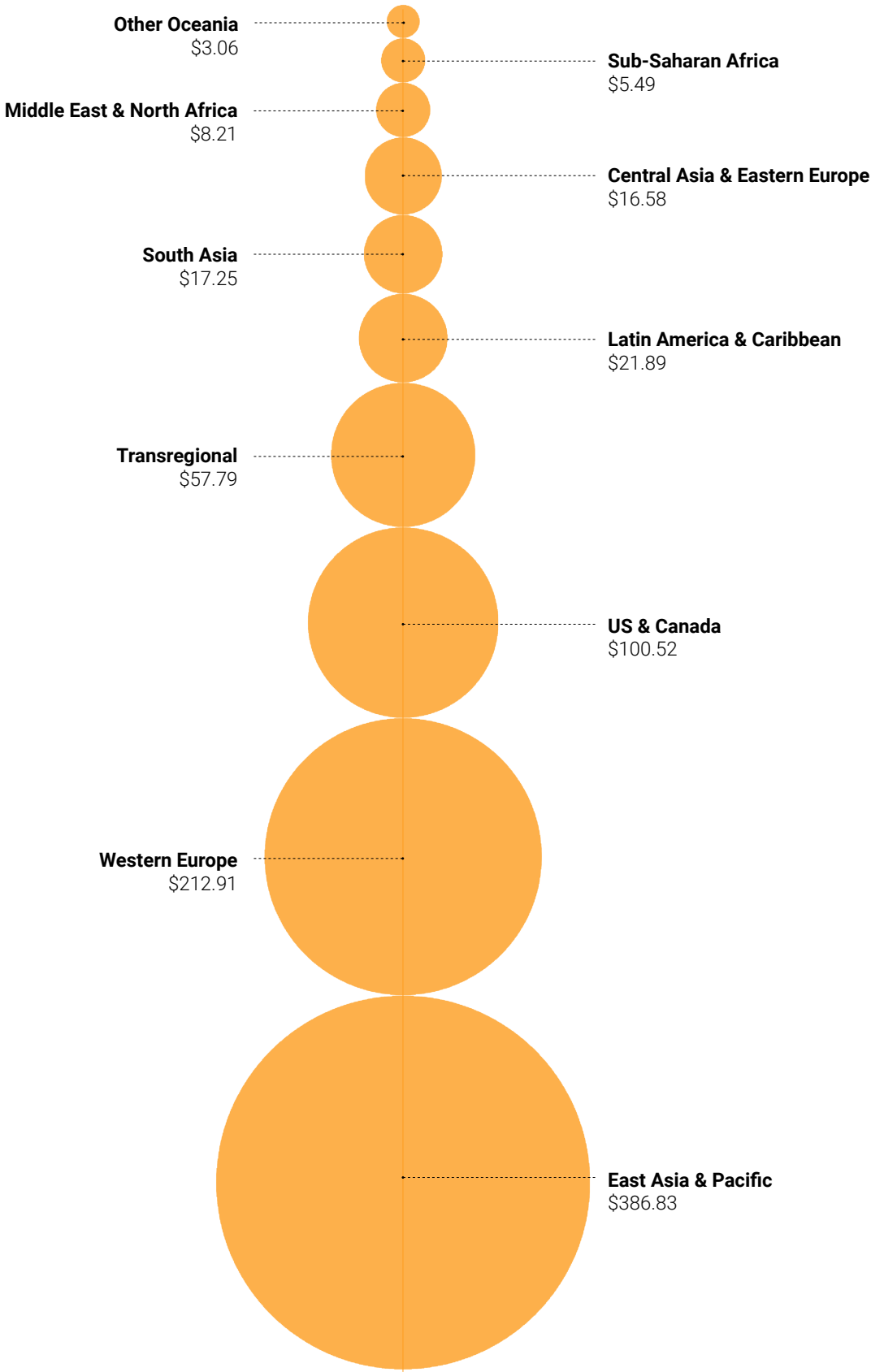
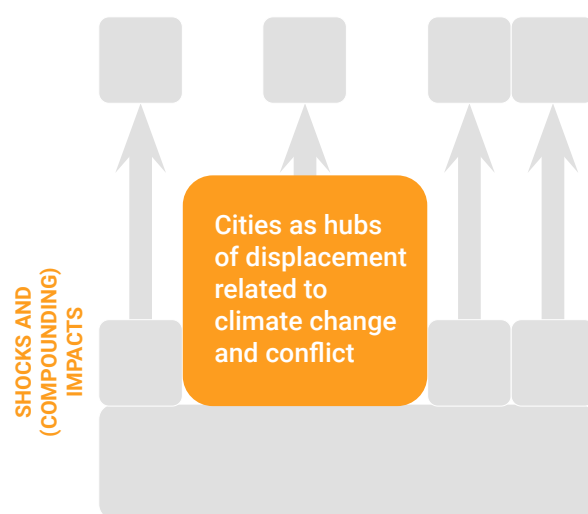


Figure 5. Urban climate finance by region of destination, 2021/2022 (\$ billion) (adapted from CCFLA & CPI, 2024). Nearly 85 per cent was received by East Asia and the Pacific, Western Europe and the United States (US) and Canada combined, despite Latin America and the Caribbean, Africa, South Asia and the Middle East experiencing high urban fragility and, in many cases, protracted conflict.



2.2 CITIES AS HUBS OF DISPLACEMENT RELATED TO CLIMATE CHANGE AND CONFLICT



Both climate change and conflict force millions of people to leave behind their homes each year. The IDMC attributes internal displacement to either disasters or conflict and violence, while recognizing that both factors sometimes contribute to the same displacement event and that a single cause is often hard to establish. When it comes to climate change in particular, the links to mobility are complex and frequently indirect, climate impacts usually forming part of a larger bundle of influences (Khavarian-Garmsir et al., 2019; Peters et al., 2020). Climate mobility takes different forms, ranging across spectra of voluntariness and temporality (Renaud et al., 2011). Some people leave their regular homes

displaced by climate hazards; others escape secondary impacts such as the breakdown of ecosystem services or escalating housing unaffordability; and others yet proactively pursue adaptation pathways (Gemenne et al., 2021; Reid et al., 2024). Housing destruction or damage, un- or under-insurance, and a lack of tenure rights often prohibit people from returning home (IDMC, 2025a; NRC, 2023) or disincentivize investments in long-term climate resilience and adaptation measures (UN-Habitat & GLTN, 2019). The impacts of climate change and conflict do not always inspire migration even where it may be needed or strategic, with some groups 'trapped' by a lack of resources to move (Delazeri et al., 2022; Khavarian-Garmsir et al., 2019).

Factoring in these caveats, estimates still suggest that as many as 216 million people globally could be internal 'climate migrants' by 2050 (World Bank, 2021a). In 2024, weather-related and mixed disasters triggered 45.5 million internal displacements (forced movements) globally – 70 per cent of the global total and a record high. In the same year, conflict and violence caused 20.1 million internal displacements and left 73.5 million internally displaced (compared to 9.8 million for disasters) – a figure also on the rise over the long-term (IDMC, 2025b). Internal displacement represents the bulk of forced movements globally and even among the world's refugees, 67 per cent remain in neighbouring countries. 2024 saw a decrease in the global refugee population by 1 per cent, but its size

Complex interlinkages

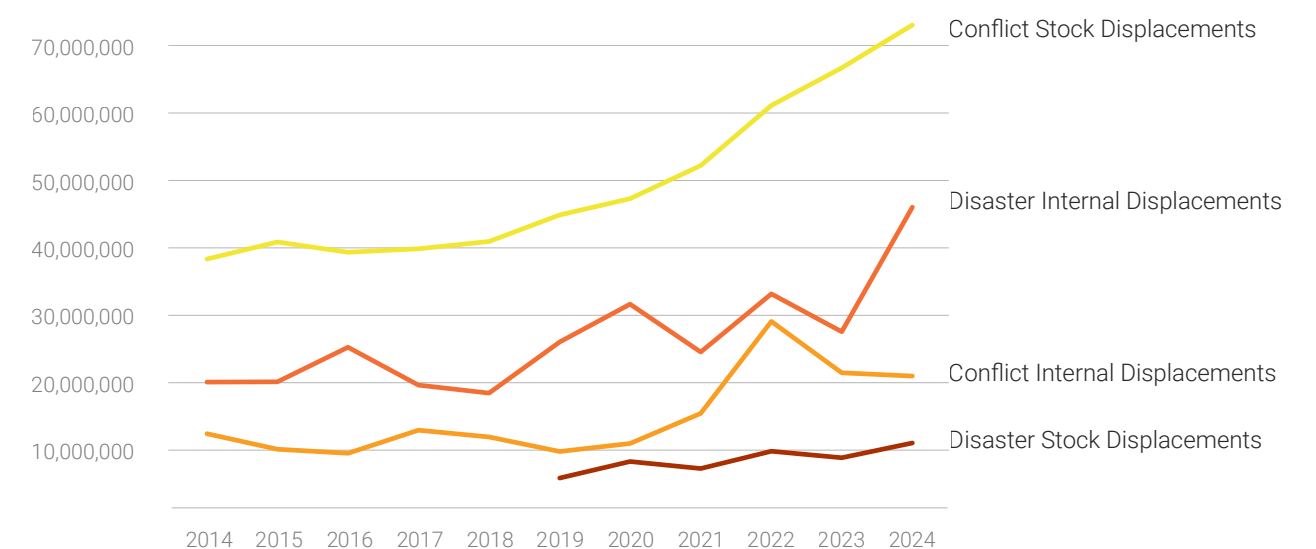


Figure 6. Global internal displacements (movements) and stock displacement (people) due to conflict and disasters, 2014 to 2024. Among the displacements triggered by disasters over the time period, 99 per cent were associated with weather-related events (IDMC, 2025b). UNHCR (2016) estimates that 80 per cent of IDPs settle in urban areas.

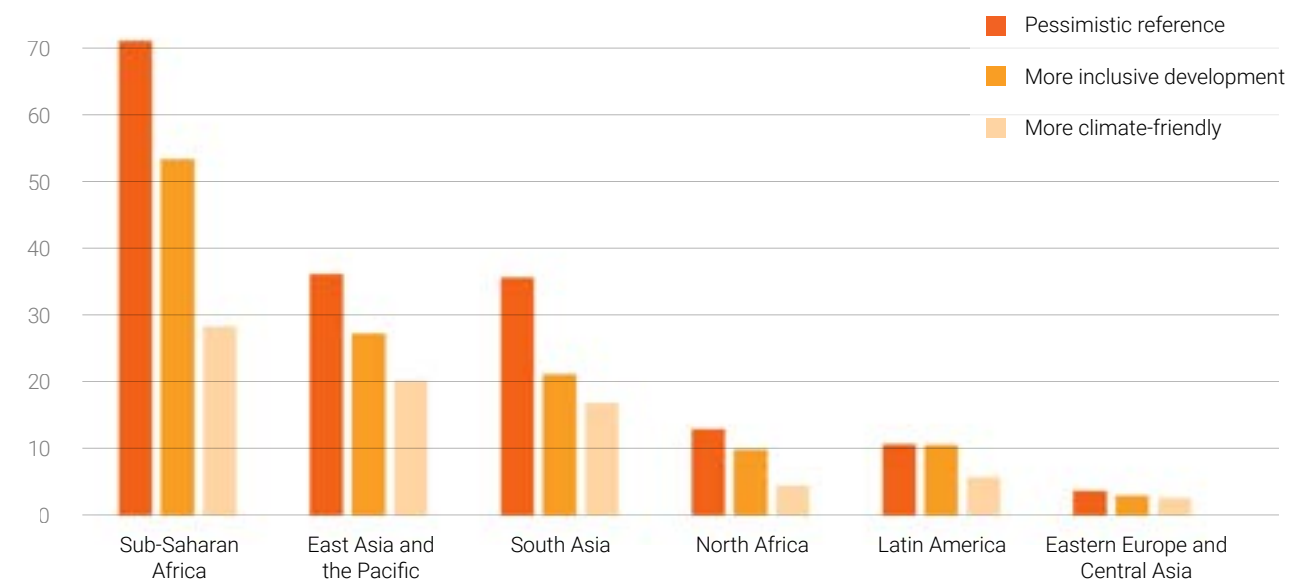


Figure 7. Projected numbers of internal climate migrants by 2050 for six world regions and three scenarios (numbers shown are averages of the minimum and maximum projections within each scenario) (millions) (World Bank, 2021a). Though concentrated in the Global South, climate change-related migration and displacement are not contained here. In the US, some studies estimate that 13 million households may be forced to move by 2100 due to sea level rise alone (Robinson et al., 2020); the country consistently records the highest number of wildfire displacements globally (IDMC, 2025a); and repeated hurricanes force hundreds of thousands to flee, many never to return to their original homes (Wood, 2025). Marginalized and disadvantaged communities are overrepresented in displacement in the Global North. In Canada, for example, though Indigenous peoples comprise only 5 per cent of the population, over 16 per cent of those internally displaced in 2023 were Indigenous peoples living on reserves (Binon, 2024). For many forced to move to urban areas, a loss of traditional ways of life and a lack of urban livelihood capacities create major challenges (Binon, 2024).

“**99 per cent of internal displacements triggered by disasters were associated with weather-related events.**”

Most of those displaced by climate change and conflict are likely to settle in cities. While the data is incomplete and displays some exceptions, the United Nations High Commissioner for Refugees (UNHCR, 2016) estimates that 80 per cent of IDPs and 60 per cent of refugees live in urban areas, and this figure has been increasing over time (Crawford et al., 2022). Research by C40 and the Mayors Migration Council corroborates the future of the world's climate displaced as urban, finding that 8 million people will likely be internally displaced to only ten Global South cities by 2050 as a result of the climate crisis. The Global Centre for Climate Mobility conducts regional and country analysis and has found, for example, that most of the 1.4 million displaced by drought in Somalia between 2021 and 2023 moved to cities. The GCCM projects that while Hudur will shrink due to outward climate migration, Baidoa and Mogadishu alongside Kismaayo, Galkayo, Bursaalax and Sheak Cali will grow on account of climate mobility (Simpson et al., 2023). Similar patterns apply in Asia, with a study on the Mekong Delta estimating in-migration to Ho Chi Minh of 2.7 million people over the coming 30 years under a pessimistic climate change scenario – 760,000 of whom ‘climate-induced’ (Robele et al., 2024). While sudden disasters often (though not always) produce temporary displacement, slow onset climate change impacts increasingly lead to permanent migration from rural to urban areas (Alveria et al., 2023; UN-Habitat, 2021).

Yet, cities do not necessarily act as ‘climate safe havens’, nor rural-urban mobility as a ‘climate adaptive pathway’. Indeed, cities have the potential to offer refugees and IDPs better access to housing, services and income opportunities – and hence greater self-reliance – than camps (UNHCR, n.d.c). Nonetheless,

has nonetheless doubled over the past decade, reflecting a global context of rising conflict, violence, persecution and public disorder (UNHCR, 2025a). There is not yet globally reliable data on international movements resulting from climate change.

cities in the Global South, where most IDPs and refugees stay, often display severe urban deficits, already struggling to meet the needs of long-term urban residents. Large and sudden influxes of people in these settings, if poorly addressed, can put a strain on land and housing stock, natural resources, utilities, infrastructure, and job markets (IDMC, 2018a; Rosengaertner et al., 2023). Displaced persons are likely to settle in informal areas and on urban peripheries (Earle et al., 2020; Kirbyshire et al., 2017; Nunez-Ferrera et al., 2020), where they face particularly inadequate living and working conditions (Gemenne et al., 2021). For example, an inflow of rural-urban migrants and displaced populations is behind much of the growth of Kibera on the outskirts of Nairobi – now one of Kenya's largest slums (Rhabaran & Hertz, 2014). Though different in magnitude, challenges faced by cities in the Global North as a result of climate displacement also encompass exacerbated pressure on land and housing markets, and infrastructure and service systems. Especially when displacement is sudden and large-scale, urban transport, water and healthcare systems may buckle, including in cities in the US (Wood, 2025).

Housing presents especially pronounced and complex challenges in the context of displacement the world around. The majority of IDPs and refugees globally lack access to habitable and affordable dwellings (UNHCR, 2022 – in Solf). Of the 80,000 refugees and asylum seekers present in Burundi, for example, only 7 per cent report living in habitable and affordable housing (Solf et al., 2024). In Mogadishu, meanwhile, which is home to almost a third of those displaced in Somalia, or 1.2 million IDPs, displaced households account for 99 per cent of evictions (IDMC, 2018b), while housing inadequacy and a lack of access to basic services have contributed to IDPs displaying the worst health conditions in the city (JIPS, 2016). The inflow of IDPs alongside parallel dynamics has hiked land and housing demand, pushing rental costs to 40 per cent of renters’ average income – significantly above the international benchmark for housing affordability of 25 to 30 per cent. Most IDPs live on the outskirts of Mogadishu in houses built from corrugated iron sheets, branches and plastic sheets, lacking gender-safe amenities and accessibility features for persons with disabilities (Danwadaag et al., 2024). Similarly in Brazil, weather-induced migration has accelerated growth of the lowest-quality housing, accompanied by an increase of 5 per cent of overall urban housing rent growth (Busso & Chauvin, 2025); and in US cities like Houston and Miami, many displaced individuals reside in informal shelters, while their rapid influx has added to existing housing shortages and rising rents, including for affordable housing (Wilkinson et al. 2022).

Their precarious living and working conditions heighten the climate vulnerability of communities displaced to cities, increasing the risk of re-displacement and exposure to planned relocation. Informal settlements are often located in hazard-prone areas and their housing and infrastructure typically ill-equipped to withstand climate shocks (Gemenne et al., 2021; Kirbyshire et al., 2017). Their informal status itself can pose political and institutional barriers to climate adaptive investments (Earle, 2016a), while high residential densities frequently restrict access for emergency services during disasters (UN-Habitat, 2021). This is well illustrated by Barranquilla, Colombia, where displaced Colombians and Venezuelans are overrepresented in informal settlements expanding into landslide-prone hillsides and flood zones. In two surveyed settlements, 85 per cent of households report being affected by climate change, mostly through flooding, property loss and health impacts (Rosengaertner et al., 2024). New to their location, migrants and displaced persons are sometimes unaware of local hazards and behavioural means to address them. In the steep favelas of Rio de Janeiro, for example, migrants from Brazil's northeast lack preparedness to frequent land- and mudslides (Warn & Adamo, 2014). Despite their vulnerability, the specific perspectives and needs of displaced communities are rarely integrated into municipal climate adaptation strategies, as highlighted in cities like Addis Ababa, Ethiopia, and Kampala, Uganda (Tietjen et al., 2023), as well as across urban areas of Lebanon (Peters et al., 2019).

Finally, and reinforcing the complexity of the interlinkages between climate change and urban conflict, it needs to be noted that urban displaced populations face particular vulnerabilities when exposed to conflict and climate change-related risks concurrently (Alveria et al., 2023). Protracted displacement due to conflict often overlaps with climate disasters: in 2023, 42 of the 45 countries reporting conflict-related displacement also recorded disaster displacement. In Myanmar, for example, the 2021 military coup and subsequent violence, compounded by recurrent climate shocks such as cyclones, floods, and extreme heatwaves, have displaced over 3 million people, many from rural to urban areas (UNHCR, 2025c). IDPs in Myanmar's informal urban settlements and in overcrowded, poorly serviced shelters face daily threats of conflict-related violence combined with extreme climate vulnerability (NUPI & SIPRI, 2024). A similar intersection of risks is evident in the Bangsamoro Region of the Philippines, where recurring armed clashes and intense climate hazards have resulted in repeated displacement for many (Delina et al., 2025). Afghanistan offers a third example – illustrated in **Box 1**.

Box 1

Afghanistan's informal urban settlements: All but climate havens for IDPs and forced returnees

Afghanistan – reeling from decades of conflict – is now ranked seventh among countries most vulnerable and least prepared to adapt to climate change globally. The country faces a multitude of hazards, including regular floods, protracted drought and temperature extremes (University of Notre Dame, 2024). Meanwhile, the population of Afghanistan's cities and towns is growing at a staggering (and yet likely underestimated) annual rate of 3.34 per cent (UN DESA, 2022). This trend is driven by population growth alongside significant inflows of persons internally displaced by conflict and disasters (which overtook conflict as a driver of displacement in 2022 (IOM, 2025)) and forced returnees from neighbouring countries (IDMC, 2023; UNHCR, 2025b).

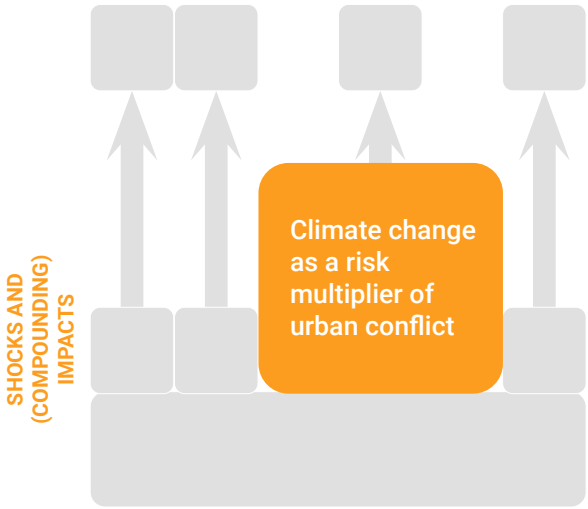


Rapid and unplanned urbanization has resulted in the expansion and densification of informal settlements, now home to 80 per cent of Afghanistan's urban residents (UN-Habitat, 2020). Not only are these settlements formed in hazard-prone locations; they also lack climate resilient infrastructure, housing and basic services (UN-Habitat, 2024c). Reoccurring floods cause severe property damage and present a major hazard to human health and lives, while drought combined with decades of underinvestment in urban water management makes accessing clean water difficult and expensive. Kabul's groundwater is at serious risk of depletion by 2030 (KabulNow, 2024), and many of the city's residents spend more money on water than on food (Amu TV, 2024). This comes at a time when half of the Afghan population already requires humanitarian assistance to survive (UN OCHA, 2024).

In response, UN-Habitat's Afghanistan Country Office is helping to capacitate the country's cities to absorb growing populations in ways that bolster human rights, inclusivity and sustainability. This work, in line with UN-Habitat's Strategic Plan 2026-2029, focuses on promoting adequate housing – encompassing evidence-based urban and land-use planning, safe dwellings, basic services and community infrastructure, inclusive neighbourhoods and public spaces, and robust HLP rights – with a special focus on integrating displaced populations and addressing climate risks (UN-Habitat, 2025b). In particular, work in the country has contributed evidence toward the thesis that strengthened land tenure security incentivizes community-level climate adaptation, such as investment in climate resilient infrastructure (UN-Habitat, 2024d).



2.3
CLIMATE CHANGE AS A RISK
MULTIPLIER OF URBAN CONFLICT



The literature is increasingly unison that the links between climate change and conflict are generally indirect, context-dependent and sometimes inexistent, defying simplifying and sensationalistic conclusions (Koubi, 2019; Peters et al., 2020; Sida, 2018). Nonetheless, several pathways exist through which climate change may elevate the risk of urban tension, conflict and insecurity. Climatic shifts (alongside factors such as changed resource use) can reduce the availability and quality of land, housing, food and water. In contexts marked by weak governance or inequitable social systems, this can intensify competition over scarce resources (Sida, 2018; UNEP, 2022a), fuelling disputes and conflict (UN-Habitat & GLTN, 2022). In several countries, climate change has also curtailed access to viable grazing lands, pushing pastoralists into areas traditionally used by (peri-urban) farmers and triggering conflict. In addition, violent extremist groups have been known to strategically harness climate change-related resource scarcity for recruitment purposes, as documented for exmple in Afghanistan (Peters & Dupar, 2020a) and Somalia (Gemenne et al., 2021).

The connection between climate disasters and conflict has also been unpacked at length in the literature, with similarly nuanced conclusions (Ide et al., 2020; UNEP, 2022a). While loss of lives, property and livelihoods as a result of disasters can produce grievance and violent urban protests, as well as competition over resources and jobs, factors such as poverty, inequality and weak governance are important intermediaries, illustrating

the consequences of breakdown of the social contract between public institutions and urban communities. Studies have documented increases in both cooperative and conflictual behaviour in the aftermath of climate change-related disasters (Nardulli et al., 2015), including, for the latter, heightened risk of civil unrest in the short-to medium-term (Nel & Righarts, 2008) and escalation of ongoing armed conflicts (Brzoska, 2018). Disasters have also been known to increase the intensity of gang violence and warfare, as well as property crime, in cities (Igarapé Institute, 2021; Plänitz, 2019).

The implications of climate change for peace and security are shaped by urbanization and urban form. Well-studied and evidenced is the increased risk of urban violence and crime introduced by extreme heat, the risk of which is



Figure 8. Countries where climate protests (either for or against climate action) gathering at least tens of thousands have been recorded since 2022. Such climate protests tend to take place in cities, with high-profile examples including recurring global ‘Climate strikes’ in cities across the world, the 2022 ‘March against the high cost of living and climate inaction’ in Paris, and rallies in Brussels in connection with COP28 (Carnegie Endowment, n.d.)

exacerbated by urban heat island effect (Igarapé Institute, 2021). Notably, longitudinal research on 50 cities across two regions found a significant association between heat and urban conflict and riots, with heat noted to act as a supplement to other aggression-inducing factors (Yeeles, 2015). The climate exposure and vulnerability introduced by the growth of informal urban settlements are other sources of grievance and conflict. For example, after severe flooding heavily damaged informal settlements in the Ghanaian capital of Accra in mid-2015, informal structures in the slum of Old Fadama were demolished, sparking days-long unrest and clashes between community members and security forces (Plänitz, 2019; Plänitz, 2022). Similarly, homes in Nairobi’s informal settlements were removed and thousands of residents forcibly relocated after floods swept through several areas in 2024, triggering deep community grievance and a high-profile court case (Mutura, 2025). In Mexico City, thousands of neighbourhood protests and complaints have been triggered over decades by water scarcity and a lack of formal processes to communicate adaptation needs in poor and informal areas (Eakin et al., 2020). Social discontent and violent reactions to inadequate or inappropriate climate change adaptation and disaster management approaches have also been documented in Karachi, Pakistan and Lagos, Nigeria, linked to unresponsive urban governance and inequitable service delivery (Vivekananda, 2017).

Upstream responses to climate change in the form of mitigation measures may also trigger urban unrest when designed and implemented in ways that subject residents to injustices or unfortunate disbenefits. This dynamic has been evident in many European countries, with farmers in 2024 staging protests in opposition to fossil fuel subsidy reductions and land use regulations, taking to cities to increase their visibility, and sometimes clashing violently with police (Ide, 2025). Indeed, price volatility and rise resulting from climate change – whether applying to fuel, food, water, housing or insurance – are common motivators of grievance and social unrest in cities, whose residents may experience greater price shocks than less monetized rural areas (Plänitz, 2019; von Uexkull et al., 2024). On the other hand, cities – mostly in the Global North – also concentrate protests against inaction in the face of climate change. To be sure, protests in and of themselves are not harmful, but rather represent a fundamental right to political expression and engagement. However, urban climate protests are increasingly repressed by both non-violent and violent means, revealing a growing conflict of interest between urban communities and key interest groups (Berglund et al., 2024).

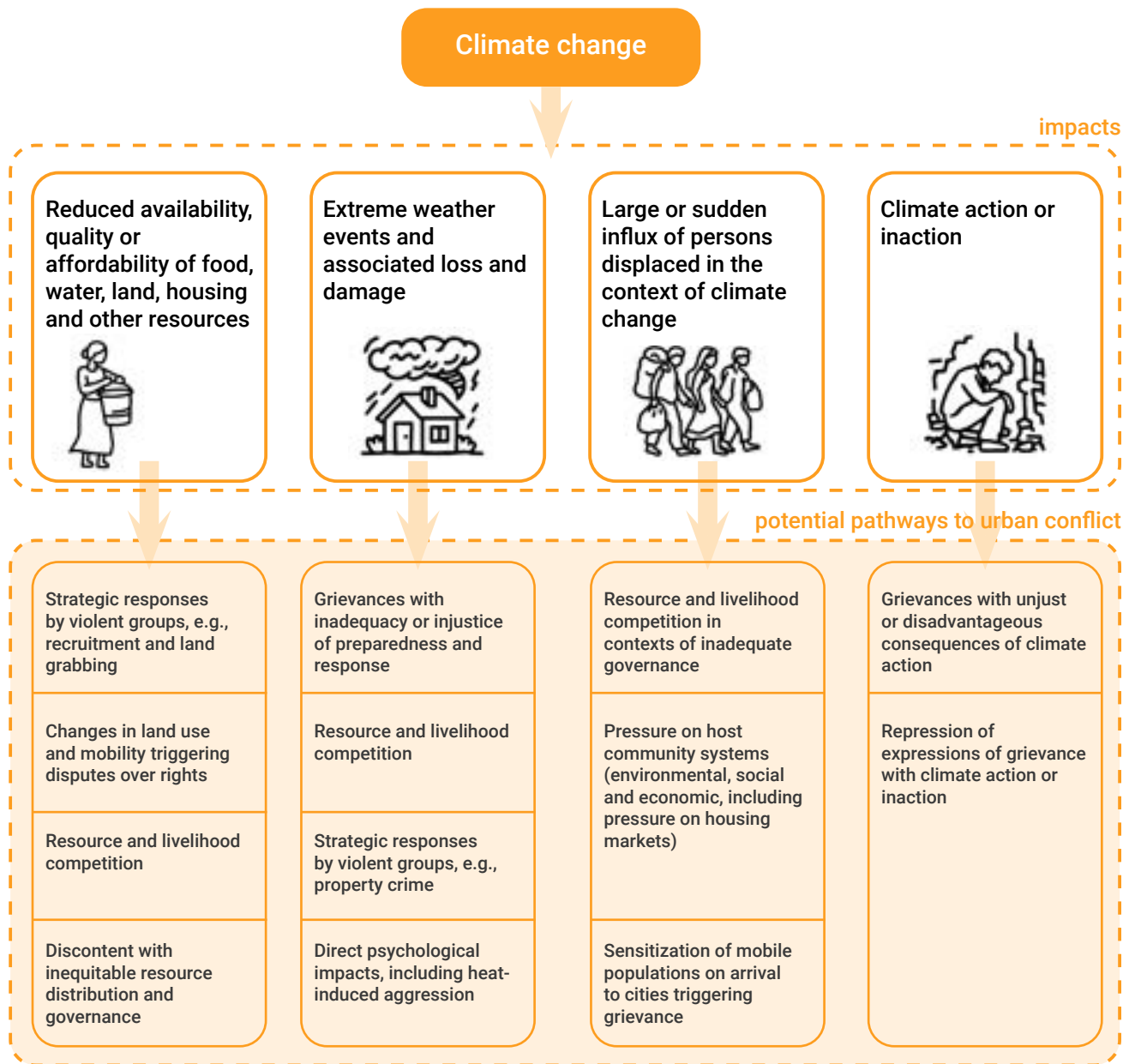


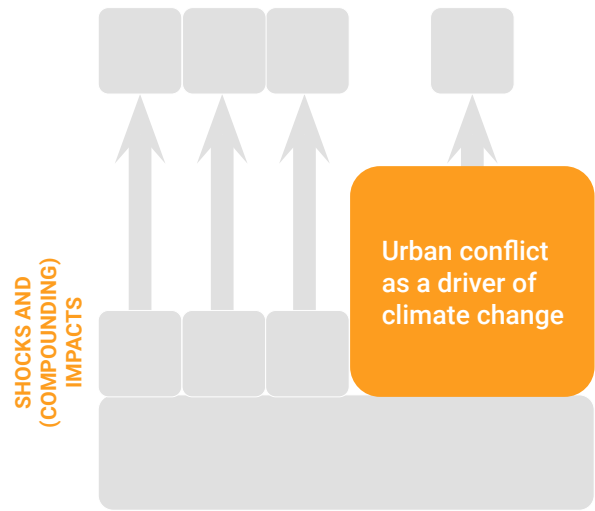
Table 2. Examples of pathways for climate change-related conflict.

Finally, the exclusion and inequality, and the pressure on resources, systems and markets created by climate change-related displacement in contexts of ineffective or inequitable governance, can contribute to urban conflicts of different nature (Earle, 2016a, 2016b; Gizelis et al., 2021). Discontent among displaced communities and the urban poor, who consistently draw the shortest straw in such situations, can motivate unrest (Chawla, 2017). Large-N studies point to sudden disaster displacement into cities acting as a factor of urban social disorder related to disruption of public service provision, prices and wages (Castells-Quintana et al., 2022). Social instability has been observed in Mogadishu, Somalia following the large-scale drought

displacement and ensuing housing scarcity, inadequacy and unaffordability described above (IDMC, 2018b). In Amman and Mafraq, Jordan, meanwhile, tensions between refugees and urban host communities over water resources have motivated engagement between Jordan and Israel for a water-solar deal which, in turn, has sparked protests. This illustrates the potential ripple-effects of urban conflict related to displacement, spilling onto wider territories and additional stakeholders (Alveria et al., 2023; Blaine et al., 2022). Some studies even draw a link between rural-to-urban climate displacement and the drawn-out Syrian civil war, positing that heavy drought-driven urban growth and its aggravation of already dire urban deficiencies scaled grievances and kindled anti-regime protests (Ide, 2018).



2.4 URBAN CONFLICT AS A DRIVER OF CLIMATE CHANGE



An outline of the interlinkages between climate change and urban conflict must acknowledge the role of the latter in damaging ecosystems and contributing to the concentration of greenhouse gases in the atmosphere. War is a major antagonist of the climate crisis. For example, as of February 2025, the Russian invasion of Ukraine was responsible for 230 million tonnes of carbon dioxide equivalent (MtCO₂e) emissions: comparable to the annual emissions of Austria, the Czech Republic, Hungary and Slovakia combined. Emissions directly attributable to the war include those from military operations, destruction of infrastructure, landscape fires and displacement. Destruction of civil infrastructure, often in frontline urban centres, has alone generated 62.2 MtCO₂e, (Planetary Security Initiative, 2025). Considerable amounts of debris tend to be produced by hostilities in urban environments. For example, 55 million tons were generated from residential building destruction during the 2014-2017 conflict in Iraq (UNEP, 2022b). Already in early 2024, the war in Gaza had damaged or destroyed about 300,000 housing units – over 60 per cent of all homes (World Bank et al., 2024), while by February 2025, the figure had risen to 92 per cent (OCHA, 2025b). The breakdown and removal of rubble and the restoration of buildings and infrastructure are all potential sources of significant greenhouse gas emissions.

Deliberate or indirect infliction of damage to facilities containing oil, toxic chemicals and biological agents are other important war-related drivers of climate change and environmental degradation (Darbyshire and Weir, 2021; Peters & Dupar, 2020a; 2020b). Facilities storing or processing various pollutants are often located on the outskirts of major urban centres and, if damaged, pose

a major risk of direct air, water and soil contamination, as of secondary explosions and fires that can extend harms to people, environments and the climate (ICRC, 2022). Similarly, weapons and explosives used during urban hostilities frequently contain toxic chemicals and heavy metals, meaning leaks from unexploded ordnance and left-behind munitions can have a severe impact on local populations and ecosystems (Kellay, 2014). Urban areas are home to a variety of species which provide a multitude of ecosystem services to city dwellers, and whose degradation or loss from the direct or indirect effects of conflict can have detrimental effects for climate change mitigation and resilience alike (Massingham et al., 2023). In other settings, violent criminal groups engage directly in polluting behaviour like illegal logging and mining. This occurs not only in remote areas but also in cities, such as in the forests of Mexico City (Associated Press, 2023).

Large-scale displacement into or within cities as a result of conflict can also trigger emissions and environmental destruction. Displacement, whether temporary or protracted, inevitably generates an environmental footprint through household and livelihood activities in areas of settlement. The growth of settlements in previously less disturbed habitats like the peripheries of cities can especially threaten natural environments and ecosystem services, including carbon sequestration (Peters & Dupar, 2020a), as exemplified by the case of Maiduguri in Nigeria (ICRC, 2020). Without adequate access to housing, land, basic services and livelihoods, displaced populations sometimes resort out of necessity to damaging practices such as deforestation and the burning of various polluting materials (FAO & UNHCR, 2016). Conflict-related disruption to municipal waste management systems combined with difficulties serving large influxes of displaced populations can also lead to solid waste dumping in and around cities, contaminating water and soils and generating methane and carbon dioxide emissions (Massingham et al., 2023). For example, the recent armed conflicts in Syria and Yemen contributed to the near collapse of both countries' waste management systems, leading to extensive dumping and unsustainable burning of municipal and medical waste in their urban areas (Zwijnenburg, 2024). Even when displaced populations return to their cities of origin, socio-economic constraints may lead them to resettle in peri-urban neighbourhoods, potentially exacerbating damaging land use patterns. In some cases, return remains unfeasible even after violence has come to an end, sometimes precisely for reasons of heightened climate vulnerability and a lack of adaptive capacity.

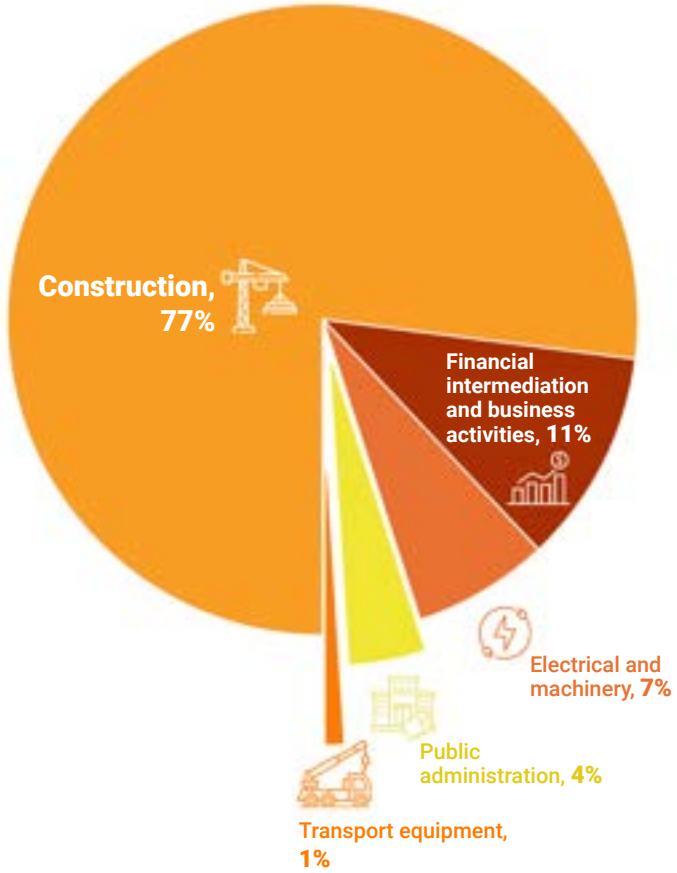


Figure 9. Forecast breakdown of carbon footprint across sectors based on the third Rapid Damage and Needs Assessment (RDNA) for Ukraine. Construction – representing 77 per cent of the total carbon footprint of reconstruction – includes housing and buildings as well as key basic services: energy generation and transmission, roads, bridges, railways, water and irrigation (adapted from Kobayakawa, 2024).

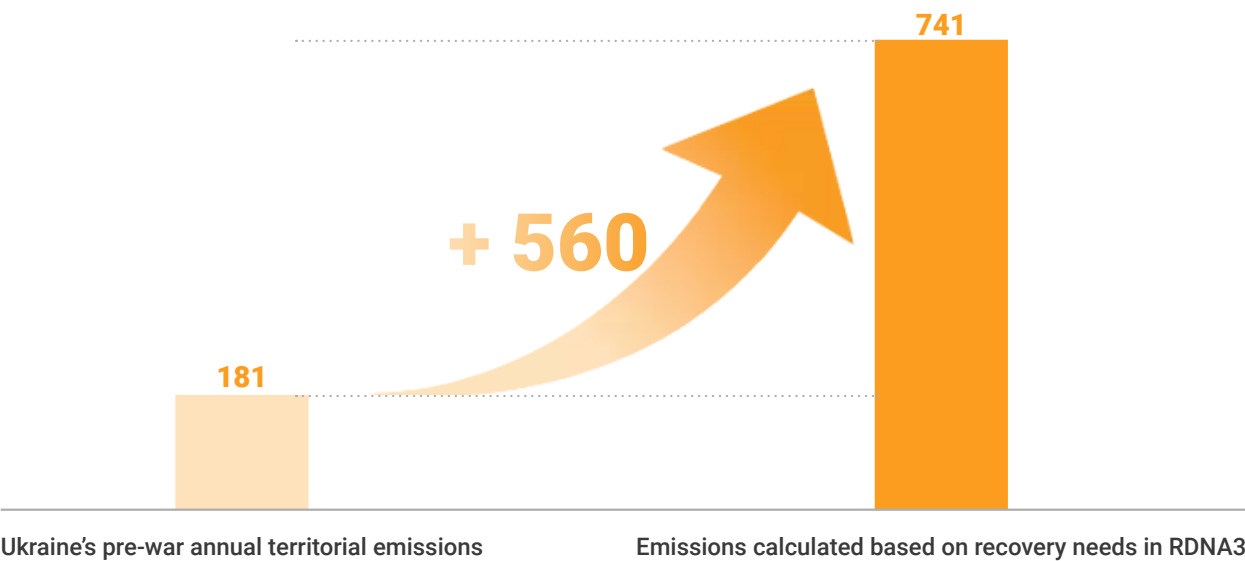


Figure 10. Annual national emissions (Mt-CO₂) pre-war (left) and the emissions forecasted to result from Ukraine's recovery based on the third RDNA (right). The latter amounts to over four times the former (adapted from Kobayakawa, 2024).

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As critical settings where climate and conflict risks converge, cities must be explicitly included in efforts to build resilience, foster peace, and enable transformation.”



03

Integrated solutions to interlinked issues: Recommendations for multi-level and multi-sectoral research and action

Chapter 2 makes clear that the links between climate change and urban conflict are myriad and complex. These phenomena share underlying vulnerabilities, variously intersect, and function as reciprocal risk factors. Policy and programming measures to address the nexus need to reflect the intricacy and nuance of the same. There is a strong case for intervening proactively to mitigate urban conflict and displacement risk through climate action, and to mitigate urban climate risk through peace making. More concerted and strategic climate change adaptation and resilience building efforts are needed in cities impacted by conflict and displacement. Meanwhile, the aftermath of urban conflict and displacement crises present opportunities to build back greener, more resilient and more peaceful cities. Underpinning policymaking and action toward urban climate peace and security must be a robust qualitative and quantitative evidence-base, necessitating multi-methods research and data collection at the local and territorial level, in line with the GRAA.

It is imperative that the historic neglect of urban dimensions to the climate change-conflict nexus be rectified. If climate security risks are already evident in cities, without action, they will only continue to mount over the coming decades as urbanization remains on a steady upward trajectory. Unsustainable urban development that deepens marginalization and inequality, stifles local economic growth and livelihoods, degrades ecosystems in and around cities, and generates climate vulnerability, would exacerbate suffering, grievances and conflict risk. On the other hand, sustainable urban development – supported by sound land governance, urban planning, design, management and finance specially addressing challenges related to housing, land and basic services

– has the potential to transform the global peace and resilience outlook. Most of the massive urban growth expected by 2050 will take place in developing countries, and 90 per cent will occur in Africa and Asia (UN, 2018), where urban fragility and vulnerability are already concentrated (Igarapé Institute et al., 2016). As we double the floor area of buildings on Earth between 2020 and 2060 – mostly through residential construction – there is an immense opportunity to ‘build in’ the fundamentals of resilience and security (IFC, 2019).

Yet, the urban climate change-conflict nexus should not be understood simply as an issue for Global South cities. As shown, urban tensions can spill over into wider domestic and regional conflicts and can trigger displacement within and beyond national borders. Urban fragility, besides, exists in all regions, and grievances with climate injustice and inaction are increasingly being expressed in cities around the world. Across the Global North and the Global South, the urban poor, informal settlement dwellers and displaced populations suffer the worst impacts of escalating insecurity and climate vulnerability. United through solidarity, cities of the North and the South have formed numerous networks and coalitions which are displaying growing agency to tackle not only climate and sustainability matters but also, increasingly, peace and security issues (Acuto & Rayner, 2016). Networks such as C40 Cities, ICLEI - Local Governments for Sustainability, United Cities and Local Governments (UCLG), the Mayors Migration Council and the Municipal Alliance for Peace in the Middle East offer platforms for intercity learning, collaboration and solutions replication, and highlight cities’ readiness to engage with policy topics traditionally reserved for national governments. This readiness is timely, as analysis indicates that at least 105 of the 169 SDG

13 CLIMATE ACTION

13.1

Strengthen resilience and adaptive capacity to climate related disasters

13.2

Integrate climate change measures into policies and planning

13.3

Build knowledge and capacity to meet climate change

13.b

Promote mechanisms to raise capacity for climate planning and management

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

16.1

Reduce violence everywhere

16.2

Protect children from abuse, exploitation, trafficking and violence

16.3

Promote the rule of law and ensure equal access to justice

16.5

Substantially reduce corruption and bribery

16.6

Develop effective, accountable and transparent institutions

16.7

Ensure responsive, inclusive and representative decision-making

16.b

Promote and enforce non-discriminatory laws and policies

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At least 105 of the 169 SDG sub-targets cannot be achieved without subnational authorities.”

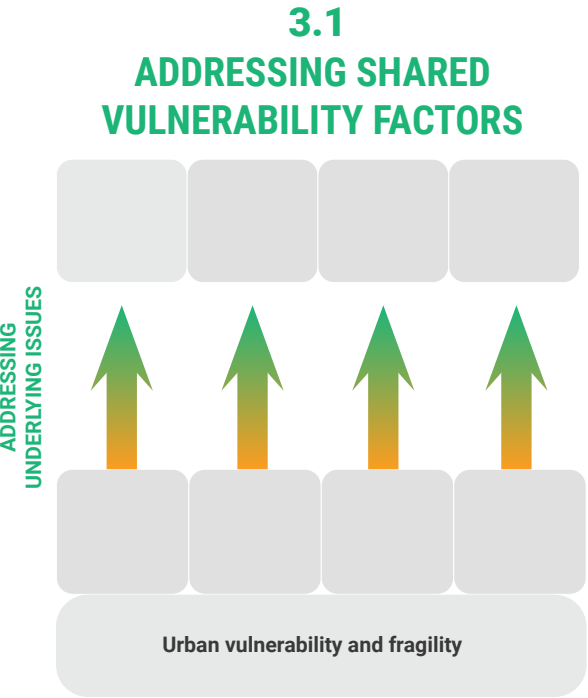


sub-targets cannot be achieved without subnational authorities, including four sub-targets to SDG 13 on climate action and seven sub-targets to SDG 16 on peace and institutions (OECD, 2020).

With better knowledge and tools to understand and address the urban dimensions of climate peace and security, funding and action can be scaled. It cannot be assumed that urban issues and solutions mirror those of rural areas or national and international dimension. Urban systems offer unique challenges and opportunities in addressing climate change, conflict and displacement, and call for special design features in prevention, response and recovery assessment and programming. Settlement-based approaches that take a geographical area as its primary reference for planning and delivery of assistance offer many benefits over sectoral or demographic entry points. Such approaches are likely to better reflect the functioning of cities and towns under non-crisis circumstances and to avoid distortion of complex service systems. They may also reduce the risk

of alienation between urban groups, such as host and displaced communities, and they are often more relatable to local governments and stakeholders (Earle, 2016a; 2016b). Indeed, leadership by legitimate municipal authorities offer a powerful opportunity for urban climate change and conflict action to remain anchored in existing policies and functioning urban processes. Their unique ability to leverage existing urban systems make integrated climate and conflict responses in cities important test cases for the humanitarian-development-peace (HDP) nexus (OECD, 2025): while cities are theatres of complex emergencies, they also lend special salience to longer-term developmental and adaptive solutions.

In short, tailored prevention, response and recovery research and action are emphatically called for to help cities fulfil their potential role as hubs of sustainability, inclusion and safety rather than vulnerability and fragility. The following sub-chapters outline key priorities for such action and research.



Similar factors underlie suffering resulting from both climate change and urban conflict. Concentrated poverty, unemployment, social and income inequality, discrimination, injustice, exclusion and weak governance are some of their shared root causes (Muggah, 2016; World Bank, 2020), and they are conspicuous in cities around the world, including in many parts of the Global North. Climate change-related hazards need not translate to disasters but often do so when communities lack the conditions, resources and capacities to cope. Conflicts, similarly, need not arise and turn violent where effective governance and justice systems are in place from the local level to the international. Mitigating the negative impacts from climate change and urban conflict starts with addressing shared root causes before fragility is entrenched.

Fortunately, the recipe for sustainable, safe, inclusive and resilient urban development is since long under co-creation by dedicated urban practitioners and academics, local and national governments, city networks, and community and international organizations. Though their links to urban climate peace and security need to be better understood, the fundamentals of sustainable urbanization are increasingly well known. They include urban and territorial development plans, designs, policies, legislation and finance frameworks that foster inclusive, equitable and needs-responsive cities and communities, whose land, infrastructure and services effectively deliver social and ecological functions. Supporting them are strong local technical and financial capacities, and participatory multi-level governance and justice mechanisms.

Centrally, today, these efforts must be geared toward ensuring adequate housing for all – encompassing tenure security, basic services, affordability, habitability and accessibility – and they must serve the interests of the urban poor and people living in informal settlements (UN-Habitat, 2025a). Secure land tenure and robust land governance are essential enablers of both climate adaptation and social cohesion, promoting long-term investment in sustainable and resilient land and housing practices, fostering greater acceptance of adaptation measures, and minimizing the risk of conflicts arising from their implementation (UN-Habitat & GTLN, 2019). Existing UN-Habitat and partner initiatives such as RISE UP, the City Resilience Global Programme, SDG Cities, Waste Wise Cities, and others exemplify the efforts called for to promote broad and robust urban resilience.

Simply put, reducing urban climate and conflict risk and avoiding cities slipping into fragility is a matter of strengthening the social contract between city dwellers and urban governance mechanisms, ensuring effective delivery of core urban functions. While an emergency response approach tends to dominate the discourse on climate peace and security, policymaking and action for long-term sustainable development, systemic change and urban transformation provide the bedrock for addressing urban crises (UN-Habitat, 2008; UN-Habitat, 2022). This also means that a wide range of stakeholders, including local and national governments, civil society organizations, research institutes and development partners – and not solely humanitarian actors – are central agents for urban climate peace and security, and ought to be empowered as such.

Action priorities

- ✓ Address shared vulnerability factors for climate change and urban conflict
- ✓ Prioritize policy, legislation and financing for adequate housing for all, including habitability, affordability, accessibility, tenure security and basic services
- ✓ Include informal settlements and the urban poor in policymaking and budgeting and ensure that urban development serves inclusion and equality
- ✓ Plan and design cities to be safe and secure, for example through mixed development and well-managed streets and public spaces
- ✓ Strengthen and diversify local economic development
- ✓ Strengthen governance, justice and financial management capacities of local authorities

Aligned with GRAA action priorities related to infrastructure and housing, climate change adaptation and mitigation, informality, health, water, food, energy, governance and finance, especially priorities #5, #199, #207 and #254

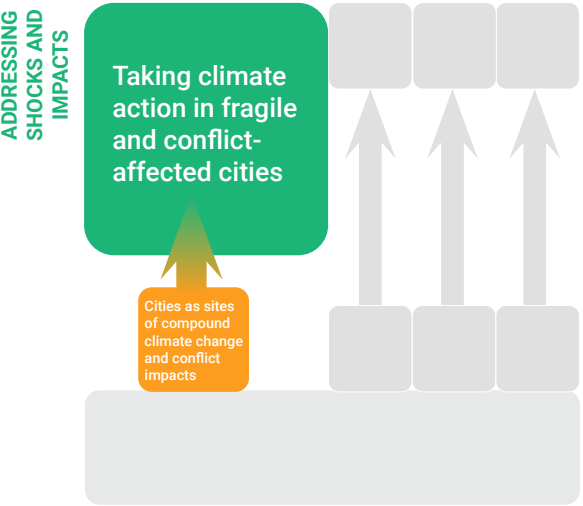
Knowledge gaps

- ✓ Validate and complement budding research on urban fragility and resilience factors, especially the links between housing inadequacy and climate conflict risk
- ✓ Compare climate and conflict vulnerability in rural and urban areas to understand similarities and differences and identify context-specific solutions
- ✓ Within cities, identify risk hotspots and inform local action plans by spatially overlaying climate and conflict vulnerability indicators.

Aligned with GRAA knowledge gaps related to conflict and crisis, informality, risk, scale and uncertainty, especially gaps #64 and #102



3.2
TAKING CLIMATE ACTION IN FRAGILE
AND CONFLICT-AFFECTED CITIES



As demonstrated in Chapter 2, highly fragile and conflict-affected urban areas are major victims of climate change, yet they are the target of a disproportionately slim portion of climate finance and action. This paradox needs urgent resolution to avoid compound suffering, additional breakdown of urban resilience, and escalating humanitarian need. Meaningful engagement with climate threats is needed in fragile and conflict-affected settings not only when disasters have occurred but proactively and systematically in the form of anticipatory action and adaptation. A requisite step is for actors with sway in global climate financing to recognize and bridge the gap – signs of which are visible for example in the ministerial dialogue at the 75th United Nations General Assembly (UNGA) (Peters & Dupar, 2020a) and commitments such as the Conference of the Parties (COP) 27 Climate Responses for Sustaining Peace initiative (UN CSM, 2022), the COP28 Declaration on Climate, Relief, Recovery and Peace (COP28 UAE, 2023), and the COP29 Declaration on Climate, Relief, Recovery and Peace (COP29 Baku Azerbaijan, 2024). Such signs now need to become trends and to translate to real transactions and implementation on the ground. Importantly, this must include action in cities.

Enabling more adequate climate finance for cities experiencing high fragility and conflict requires both demand- and supply-side action. The capacities of national and local institutions and other stakeholders in such settings to mobilize and manage climate finance

need to be strengthened, but reorientation on the part of finance providers is also called for. The Adaptation Fund (2024) has documented lessons from its portfolio in fragile and conflict-affected countries, highlighting a need for flexibility and adaptability to dynamic circumstances, strong partnerships, as well as local project ownership. Ensuring that funding reaches the local level and that adaptation and disaster risk reduction are locally driven – especially in settings where central governments have limited capacity – are similarly priorities highlighted by the International Committee of the Red Cross (ICRC) and the World Bank (2021). These recommendations speak strongly to the role of urban actors in addressing climate risk in contexts of fragility and conflict. More funding needs to be unlocked for municipalities and community-based organizations and groups through their integration into existing global climate finance mechanisms and the introduction of new innovative vehicles. Local access to finance would also be facilitated by simplification of access requirements to reduce transaction costs and, in some cases, increased risk tolerance, where climate donors can learn from approaches used in humanitarian, peacebuilding and disaster risk financing.

Indeed, climate action in fragile and conflict-affected cities needs to be tailored to their unique dynamics and risks. Urban conflict settings and complex urban emergencies can challenge conventional approaches to mitigation and adaptation in several ways, from the deliberate obstruction of delivery of materials, to difficulty

Action priorities

- ✓ Enable greater access to climate finance for cities experiencing fragility and conflict
- ✓ Strengthen the capacities of local actors to mobilize and manage climate finance
- ✓ Enhance the flexibility, risk tolerance and diversity of climate finance mechanisms
- ✓ Foster strong partnerships with local actors and promote local ownership
- ✓ Step up climate action, including mitigation, adaptation, anticipatory action and responses to loss and damage, in fragile and conflict-affected cities. Design and implement projects that address both climate and conflict risks, for example:
- ✓ Support local mechanisms for inclusive resource governance
- ✓ Use context-tailored nature-based solutions to address both environmental and social pressure points

Aligned with GRAA action priorities related to empowering cities to take action, conflict and crisis, risk, governance, finance, engagement and participation especially priorities #75, #94, #147, #177 and #259.

Knowledge gaps

- ✓ Document innovative approaches to channelling climate finance to cities experiencing fragility and conflict, and lessons learned
- ✓ Investigate how conflict increases urban vulnerability to climate change (Peters et al., 2019)
- ✓ Document existing examples of local urban conflict and climate risk governance mechanisms, or climate risk management systems in urban conflict settings (Peters et al., 2020)
- ✓ Compile approaches to using NbS in urban settings impacted by conflict in different climatic conditions

Aligned with GRAA knowledge gaps related to conflict and crisis, informality, risk, uncertainty and governance, especially gaps #1, #73 and #134



unpacking and navigating complex multi-actor dynamics, and reputational risk related to coordination with illegitimate de facto authorities or influential non-state actors. Innovative arrangements are needed to ensure that climate action can nonetheless be strengthened in these environments. Local ownership becomes more important than ever, calling for close collaboration of international organizations, national governments and the private sector with local governments and community-based groups and organizations. Local leadership can support climate action effectiveness – as local actors are well placed to assess and manage local risks and navigate complex conditions on the ground – as well as sustainability – where communities and local stakeholders are empowered to maintain and embed solutions. Lived experiences of compound climate and conflict shocks indeed underscore the importance of aid being used to bolster local capacities for needs assessment and resilience

building as a means to avoid both dependency and band aid approaches (Delina et al., 2025).

Strengthening community-level structures can also be an entry point to integrating efforts toward climate resilience and peace in fragile and conflict-affected cities. Simultaneous attention to climate and conflict dynamics is critical here to ensure that interventions do not inadvertently exacerbate risks. Strategically integrating climate and peace action can further achieve synergies in what are often resource-scarce urban settings. Local governance mechanisms are key to managing both conflict and resources such as land, housing, food and water. Bringing (potentially) conflicting groups together – for example, displaced persons and urban host communities, or (sub)urban farmers and pastoralists – in support of inclusive and

widely supported resource management and climate change mitigation and adaptation can promote dialogue, collaboration and joint climate action for long-term outcomes. Impacted communities, including women and youth, grassroots and traditional leaders, and civil society organizations are central actors in such mediation processes and governance structures. Local and national governments – where in operation and legitimate – have a critical role to play in institutionalizing such inclusive and conflict-sensitive decision-making mechanisms at the local level.

Nature-based solutions (NbS) present a different entry point to integrating climate and security action. Addressing at the same time environmental and social or economic issues is at the core of NbS, making them especially relevant in fragile and conflict-affected settings which are also facing climate change-related hazards (SPHERE, 2023). They hold particular value in urban settings whose vulnerability is often increased as a result of removal or degradation of natural environments. Examples of potentially climate and conflict resilience-strengthening NbS include mangrove plantation for

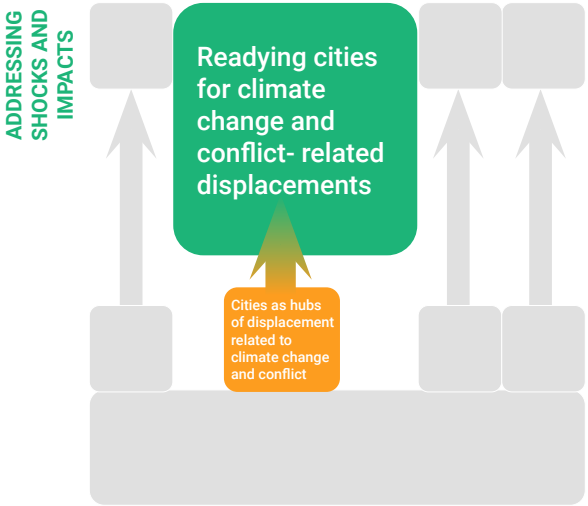
urban flood protection and livelihood creation among disengaged youth or displaced populations, and urban rooftop rainwater harvesting to enhance water availability and mitigate the risk of water-related conflict during drought. However, net social benefits do not flow automatically from the implementation of NbS, which can even hamper peace and stability if delivered without consideration to broader local contexts – more on this below.

Nonetheless, executed using deliberative inclusive approaches, innovative and integrated financing, governance and action hold a key to strengthening urgently needed climate change solutions in cities affected by conflict and fragility. The approaches introduced here are by no means exhaustive; rather, communities and local and national governments, with the support of humanitarian and development partners, are called on to design, fund and implement context-specific policies, systems and projects that address unique urban climate and conflict dynamics. This includes strengthened engagement with the housing sector as an entry point for climate action that also supports urban peace and security.



3.3

RRREADYING CITIES FOR CLIMATE CHANGE AND CONFLICT-RELATED DISPLACEMENT



Data collection efforts to corroborate and complement emerging trends on climate change and conflict-related mobility to, from, through and within cities are needed to inform policymaking and action. Research interest in climate displacement has increased significantly in recent years, and a better understanding of internal displacement has been driven by the Secretary-General's Action Agenda on Internal Displacement. Looking ahead, it will be increasingly important for continued analysis and action planning to adopt an urban lens, from global modelling to local profiling and needs assessment. Despite residual data gaps and uncertainties, however, the existing evidence base and signs of what the future holds already merit accelerated action to address urban displacement connected to climate change and conflict.

Where in-migration to cities is expected as a dominant mobility pattern, preparatory inclusive urban planning and design will be critical. A growing body of research on urban internal displacement stresses the need to acknowledge both the often-protracted nature of such displacement, and the complex nature of cities. It encourages a focus on systems and areas over individuals and sectors, and long-term comprehensive solutions that see displaced persons as urban citizens with rights and responsibilities, over short-term project-based assistance (Archer & Dodman, 2017; UN-Habitat et al., 2021). Displacement-driven urban growth projections should inform national and local strategies, land use and local economic planning, housing and infrastructure investments, as well as adjustments to municipal service delivery.

Inclusive policymaking and programming to increase the availability, affordability and adequacy of land and housing will be of utmost priority in all cities. In many urban areas in the Global South, such measures are key to mitigating the growth of informal settlements in high-risk areas, escalating housing costs, and re-displacement on account of hazards, conflict or indeed urban upgrades in contexts of weak tenure security. In many parts of the Global North, meanwhile, efforts to grow housing availability and affordability are critical to prevent the current crisis from deepening amid growing demand from displaced populations, who themselves suffer the most from said crisis (Rana et al., 2025). In all climate vulnerable cities, emergency plans should integrate both short- and long-term shelter and housing solutions in order to avoid affordable housing squeezes and precarious living situations in the aftermath of hazards (UN-Habitat & GLTN, 2024; Wood, 2025).

To ensure that climate change adaptation and disaster risk reduction efforts across urban sectors address the needs of urban displaced populations, community-led solutions should be supported, and official policies and plans designed with meaningful participation. Presently, effective approaches to such co-creation – especially involving displaced persons living and working informally in cities – are poorly explored, calling for reinforced research, monitoring and evaluation (Peters et al., 2019; 2022). Reducing the climate vulnerability of urban displaced communities is also a matter of, more broadly, ensuring equitable access to essential urban services such as healthcare, social protection and education. To inform policy and practice improvements in this regard, better and more localized insights into the legal, social and economic drivers of urban exclusion, for internally as for internationally displaced persons, will be instrumental. In contexts where urban displaced populations are subject to both acute climate threats and ongoing conflict, reinforced responses are needed to meet basic needs, uphold dignity and reduce risks, while sowing the seeds of longer-term sustainable urban development.

In cities for which climate change and conflict mean population outflow rather than growth, a different set of responses is called for. Climate mobility away from cities is likely to arise due to livelihood loss – whether directly as a result of changing climate conditions or because of economic transition away from emissions-generating

Action priorities

- ✓ Recognize the long-term nature of much urban displacement and understand displaced populations as urban citizens. Develop national and local strategies for addressing displacement and integrate mobility forecasts into planning, design, investments and service delivery, especially toward adequate housing for all
- ✓ Address climate vulnerability among urban displaced populations, ensuring their input into local climate action planning and their access to preparatory and emergency services
- ✓ Address both immediate and longer-term needs of displaced populations experiencing concurrent conflict and climate threats
- ✓ Where climate change is driving involuntary urban outflows, support in-situ adaptation efforts, for example through livelihood transitions and provisions for resilient and affordable housing
- ✓ Assess push- and pull-factors of displacement at a territorial scale to support sustainable territorial development planning
- ✓ Empower local authorities to play a central role in addressing climate displacement and migration and to champion inclusive urban transformation

Aligned with GRAA action priorities related to conflict and crisis, engagement and participation, water, food, energy, waste, infrastructure, housing and finance, especially priorities #46, #200, #207 and #254.

Knowledge gaps

- ✓ Corroborate and complement emerging patterns of urban climate displacement to understand the role of cities as recipients, centres and sources. This includes unpacking the impacts of climate mobility on urban informality
- ✓ Gather insight on drivers of exclusion and vulnerability among internally and internationally displaced persons living in cities, especially related to housing policy
- ✓ Explore effective approaches to co-creation of adaptation and disaster risk reduction measures with displaced urban populations, especially those in informal living and working conditions
- ✓ Investigate dynamics of repeat (urban) displacement in contexts of concurrent and continuous conflict and disasters and the role cities can play in achieving durable solutions
- ✓ Study the role of climate change in city shrinkage, and strengths and weaknesses of existing responses

Aligned with GRAA knowledge gaps related to conflict and crisis, engagement and participation and informality, especially gaps #10, #16, #48, #73 and #74.

in-depth analysis of the (potential) impact of human flows for territorial and settlement transformation in the Sahel, using this to develop a framework for territorial investment that promotes connectivity, community stabilization, sustainable resource use, and resilience.

Critically, conceptualizing mobility to urban areas as a nuanced phenomenon which carries social, economic and environmental opportunities alongside risks is critical for optimizing its impacts and mitigating division (Dodman et al., 2013; World Bank, 2021a). In fact, cities can and have been playing a leading role in shifting the often negative discourse on migrants and displaced persons, as exemplified by the Marrakesh Mayors Declaration, the Mayors Migration Council, and the Sanctuary Cities movement (Adger et al., 2020). To champion inclusive urban transformation in response to climate change and conflict-related mobility, local governments can draw on international agreements like the Inter-Agency Standing Committee framework on Durable Solutions and the African Union Convention for the Protection and Assistance of Internally Displaced Persons in Africa (the Kampala Convention), integrating their principles into urban policy and action plans. International partners can support such processes through technical assistance and capacity building and by giving voice to local authorities in humanitarian and development interventions related to displacement.

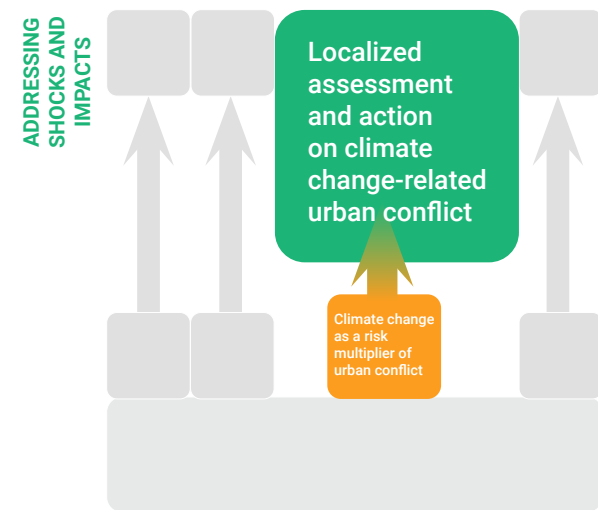
activities – and can also result from growing housing inadequacy and unaffordability. Oftentimes, households prefer to adapt in situ over uprooting and settling in new environments (Ekoh et al., 2023; Tabak, 2024) and local governments and collaborators ought to back their agency to stay, where it is safe to do so. Here, adaptation may involve reskilling and investment for alternative – green and resilient – livelihoods, or policies and investments facilitating the growth of resilient, affordable and insurable housing stock. Territorial-scale assessments that identify push and

pull factors, in turn, can help to identify attendant development opportunities and promote positive impacts of mobility among wider rural and urban areas. Studies in the Mekong Delta, for example, have identified several secondary cities as latent immigration hubs, suggesting their development could attract people on the move, and divert inflows to Ho Chi Minh City which is likely to experience capacity constraints in the near future (Robele et al., 2024). UN-Habitat and partners have similarly conducted



3.4

LOCALIZED ASSESSMENT AND ACTION ON CLIMATE CHANGE-RELATED URBAN CONFLICT



The literature is clear that climate change contributes to conflict in mediated and context-specific ways. Climate action, then, can serve to mitigate conflict risk, but solutions design must be informed by a thorough understanding of localized mechanisms. Climate change-related conflict risks in urban areas are likely to differ from those in rural hinterlands. Given the diverse populations and complex economies of cities, trigger points can be both more numerous and more difficult to disentangle, which ought to be matched in research efforts. Yet, several systematic literature reviews reveal consistent neglect of urban areas in studies of climate peace and security (Gizelis et al., 2021; Plänitz, 2019; Scheiber et al., 2016). The CSM (n.d.) prescribes integrated analyses, defined as comprehensive methodologies to both identify diverse risks and understand how they intersect and interact – an approach particularly germane for complex urban systems. Plänitz (2019) in turn recommends future research investigate both climate change-related drivers of urban conflict and the conditions under which these translate to violence, recognizing, again, the importance of distinguishing shocks from the factors that make their impacts catastrophic.

Plänitz (2019) uses African examples to highlight that extreme weather events alone need not cause social unrest, but that inadequate or inappropriate climate change adaptation and hazard response by municipal

authorities can be critical mediating factors. As pathways to conflict are better understood, they can be directly and proactively addressed. In the situations outlined by Plänitz (2019), appropriate solutions will take the form of better evidence-based and more timely and inclusive local climate action. Climate solutions that disproportionately benefit some neighbourhoods or groups – for example, because they are unevenly distributed, or because their application in an area triggers price inflation and eco-gentrification – can deepen inequality, marginalization and social tension. To prevent conflict, urban climate action and disaster risk reduction strategies should be designed through participatory processes, informed by diagnostics of intersectional disadvantage, and accommodating grievance mechanisms.

Other pathways to urban insecurity and conflict call for distinct approaches. In cities where heatwaves and pollution are known to correlate with spikes in certain types of violent unrest, for example, law enforcement and social service delivery capacity can be made more micro-climate responsive (Igarapé Institute, 2021), while cooling and cleansing urban redesign can structurally reduce security risks longer term. Where resources and resource-based livelihoods are threatened by slow-onset climatic shifts or climate change-related extreme events – in turn threatening to deepen social fractures – impact forecasting and adaptive measures such as improved

Action priorities

- ✓ Enact tailored responses to localized findings on the links between climate change and conflict. For example:
- ✓ Make provisions for climate resilient housing and basic services, including tenure security
- ✓ Support food, water and energy security in the face of climate change and climate change-related displacement through urban adaptation such as rooftop farming, rainwater harvesting and solar panel installation
- ✓ Establish inclusive and transparent land management practices to address tensions between (peri)urban farmers and pastoralists exacerbated by climate change
- ✓ Approach urban climate action and disaster risk management using participatory processes and diagnostics of social risk
- ✓ Prioritize local adaptive development in urban climate and conflict risk hotspots
- ✓ Mitigate extreme urban heat through redesign, and use early warning system to support capacity surges in violent crime response

Aligned with GRAA action priorities related to conflict and crisis, governance, engagement and participation, water, energy, infrastructure and housing, especially priorities #75, #199, #200, #207, #226 and #259.

Knowledge gaps

- ✓ Conduct mixed methods localized assessments of urban climate change-related conflict and security risks, and their complex interrelations. Explore both climate-change related drivers of urban conflict and the conditions under which they tip into conflict (Plänitz, 2019)
- ✓ Investigate conflict-sensitive approaches to urban climate mitigation and adaptation that go beyond do-no-harm principles (Froese & Schilling, 2019)
- ✓ Explore the potential role(s) of city network in awareness raising and solutions design and scaling for urban climate peace and security

Aligned with GRAA knowledge gaps related to conflict and crisis, engagement and participation, scale and risk, especially gaps #1, #9, #48, #71, #102, #131, #136.



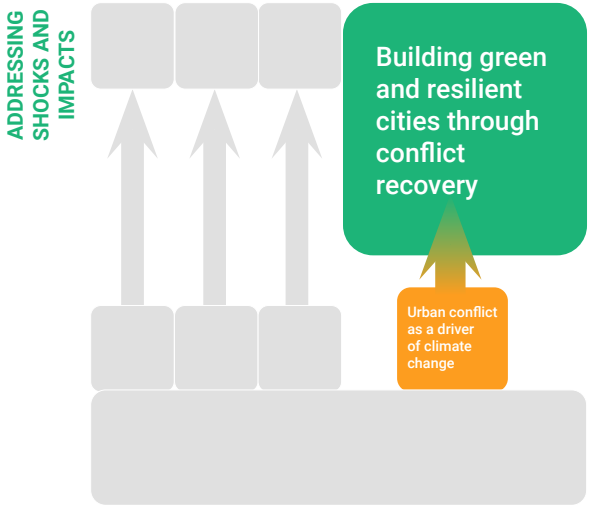
water management, climate resilient land use shifts, and upskilling for green jobs, may be called for. This underscores the need for more granular, place-based research and action that centre city and neighbourhood-specific risks.

This said, there are certain common measures likely to prevent climate impacts from translating to grievance and conflict in most cities. They mirror in many ways those comprising the cornerstones of resilient, as opposed to fragile, cities (see above), centring housing, land and basic service adequacy for all, and inclusive and responsive governance, finance and justice systems supporting social and economic equality. Housing resilience, affordability and price stability, as well as robust housing, land and property (HLP) rights and their enforcement, are particularly critical to avoid climate shocks tipping into conflict, and this so in both Global South and Global North cities (UN-Habitat,

2024c). Sustainable urban climate peace and security demands responses that address root causes rather than simply manifestations of tension and conflict. This means fostering a culture of prevention, avoiding reliance on criminal justice systems alone to manage risk. It takes working closely with urban communities and centring responsibility with local governments. The potential role of city networks in raising the profile of urban dimensions of the climate change-conflict nexus, advocating for developmental approaches to urban climate security, and scaling solutions that promote peace and stability in cities and broader regions, merits exploration.

3.5

BUILDING GREEN AND RESILIENT CITIES THROUGH CONFLICT RECOVERY



As described in Chapter 2, urban conflict can have devastating impacts on natural environments and give rise to deplorable levels of greenhouse gas emissions. The international community needs to advocate strongly for effective protection of civilians and human settlements, as well as of valuable ecosystems, during all forms of conflict and violence. Aggressors need to adopt ethical principles to minimize harm to people, animals and nature. Cities experiencing or which are at risk of conflict can also take action to protect critical environmental assets as well as facilities and infrastructure especially harmful to humans and nature, if targeted. Unfortunately, however, many conflict situations sanction limited engagement with climate change and environmental protection. In such circumstances, post-crisis recovery, reconstruction and rehabilitation processes present important moments to restore natural systems, mitigate ongoing hazard, and enhance sustainability and resilience into the future.

In urban areas in particular, correct destruction of weapons in the immediate aftermath of hostilities is critical to avoid ongoing pollution and risk of injury and death (Massingham et al., 2023). Safe removal of debris and rubble is often of evident priority in post-conflict cities. Debris recycling for reconstruction purposes can be a way to achieve the dual purpose of clean-up and

affordable and environmentally sustainable rebuilding. This approach has been used in a number of cities, including in Mosul, Iraq (UNEP) (2022b) and Beirut, Lebanon (UN-Habitat, 2025c). When large parts of a cities' housing stock and infrastructure are rebuilt, as can be the case after especially devastating conflicts, there are also broader opportunities to apply circular economy principles across waste management, energy and other utilities; to use low-carbon and resilient materials and construction techniques while integrate NbS; to make provisions for green urban spaces, green-blue networks and sustainable urban transport; to bolster infrastructure resilience to slow- and rapid-onset climate impacts; and to promote strategic land use and compactness, all in the interest of both human and environmental health (UNDP et al., 2023).

Greening and resilience measures in post-conflict settings need to be applied with sensitivity to potentially lingering social tensions. Indeed, when carefully designed, green and resilient recovery and reconstruction can actively contribute to reconciliation. This is especially important in the wake of conflict, but also relevant in the aftermath of climate change-related disasters which, as shown, can elevate the risk of urban grievance and unrest. Ensuring the inclusive participation of all affected stakeholders in dialogue, planning, implementation and

Action priorities

- ✓ Ensure the protection of urban residents, civil infrastructure, and ecosystems during conflict, and take measures to limit harm to urban environmental assets and hazardous targets
- ✓ Integrate greening measures into urban recovery and reconstruction efforts. For example:
 - ✓ Safely remove and recycle debris and rubble for reconstruction purposes
 - ✓ Rebuild urban systems and fabrics using circular economy principles, sustainable materials and NbS
 - ✓ Promote strategic compactness, green urban space and sustainable transport
- ✓ Support urban durable solutions for displaced populations that are both socially, economically and environmentally viable. For example:
 - ✓ Ensure access of displaced households to low-carbon housing solutions, green energy, sustainable transport, and circular waste management systems
 - ✓ Integrate long-term displacement projections into sustainable land-use planning and green job creation efforts

Aligned with GRAA action priorities related to empowering cities to take action, sustainable consumption and production, biodiversity, conflict and crisis, uncertainty, water, energy, infrastructure and housing, especially priorities #75, #199, #200, #207, #259.

Knowledge gaps

- ✓ Compile good practices for green and resilient urban recovery and reconstruction
 - Investigate how climate change mitigation and adaptation in post-conflict and post-disaster urban settings can promote reconciliation
- ✓ Explore climate and environmental risks and opportunities related to urban displacement
- ✓ Document case studies of urban mitigation and adaptation that involve the participation of displaced persons and successfully avoid eco-gentrification of the same

Aligned with GRAA knowledge gaps related to conflict and crisis, biodiversity, water, energy, infrastructure and housing, especially gaps #1, #71 and #131.



evaluation of sustainable and adaptive reconstruction is critical to prevent reinforcement of existing injustices and grievances. Similarly, the legitimacy of urban natural resource governance systems that may be established through post-conflict reconciliation processes can address the root causes of conflict, providing a foundation for both lasting peace and sustainable development.

Durable solutions for conflict-displaced individuals are essential not only for upholding human rights and dignity but also for advancing climate resilience and environmental sustainability, as demonstrated in the previous Chapter. Because large-scale displacement, when inadequately addressed, can result in urban sprawl,

unsustainable household practices, and stretching of urban services such as waste management; integrating into its long-term responses environmental sustainability, climate adaptation, and disaster risk reduction is in the shared interest of displaced populations and host communities. Cities dealing with protracted or permanent displacement need to adopt a developmental and sustainable approach, ensuring that all urban residents have access to low-carbon housing solutions, green energy and transport, circular waste management solutions, and food that is healthy for both people and planet. They also need to factor displacement realities into sustainable land use planning and facilitate access to green livelihoods through local economic development planning.

04 Case studies

This Chapter introduces a set of projects that have been implemented by UN-Habitat and partners to address the urban climate change-conflict nexus. Collectively, the cases span the Middle East, Africa, Asia and the Pacific, and cover a range of urban sectors – from housing, buildings, land and infrastructure to water, waste, transport and energy – as well as several components of sound urban management and governance – including community participation, planning, information disclosure mechanisms, policy dialogue, and capacity building. Illustrating the practical application of some of the principles and recommendations outlined in Chapter 3, the case studies respond to the knowledge gaps and action priorities outlined in the GRAA, provide insights relevant for SRCities, and can serve as inspiration for scaled urban action toward interlocked peace, security and climate resilience globally.

A. Tackling hydrological hazards in conflict- and displacement-affected **Aden and the Tuban Delta, Yemen**

B. Advancing climate resilience and social cohesion in displacement-affected urban areas: Lessons from **Jordan and Lebanon**

C. Climate proof buildings, secure tenure and local capacity: Building urban climate resilience and durable solutions in **Mozambique**

D. Fostering climate-threatened peace and security in **Guinea-Bissau** through multi-level inclusive natural resource governance

E. Integrated natural resource management in **Eastern Ghouta, Syria**: Facilitating returns by climate proofing livelihoods, food and water systems

F. Spatial development planning in support of peace building and climate resilience in the Bangsamoro Autonomous Region in Muslim **Mindanao, Philippines**

Case Studies A.

Tackling hydrological hazards in conflict- and displacement-affected
Aden and the Tuban Delta, Yemen



The combination of ongoing conflict and major climate change impact has contributed to the humanitarian crisis in Yemen. At the time of preparation of the 2025 Humanitarian Needs and Response Plan, 19.5 million people were in need of humanitarian assistance and 4.8 million were internally displaced, making Yemen the fifth greatest internal displacement crisis in the world (UN OCHA, 2025c). Though the situation in the country has benefited from a 2022 UN-brokered truce, localized conflicts, unexploded ordnance and breakdown of law and order continue to demand lives. Meanwhile, regional escalation at the time of writing threatens livelihoods and infrastructure.

The war in Yemen has had a heavy toll on the country's cities. While Sana'a and Taiz have suffered especially immense harm, most cities have been impacted (Konaev, 2019). Aden in the south has been a seat of intermittent battles and unrest while also, owing to its relative safety, serving as a place of refuge for a large number of displaced persons (IDMC, 2019). At the end of 2024,

UNHCR estimated that there were almost 280,000 IDPs in Aden (UNHCR, 2024), about a quarter of the city's total population.

Meanwhile, Yemen is the third most climate vulnerable country in the world (European Commission, 2022b) and the twelfth most water stressed (WRI, 2023). Temperatures in the country have been increasing steadily, and rainfall is becoming more variable (UNDP, 2023a). Even before the onset of the civil war, about half of the population lacked reliable access to clean water, and the conflict has only added to the situation through direct damage to water bodies and infrastructure and reduced capacity and resources for adaptation (Khosravi et al., 2024).

Climate change impacts and conflict now compound, creating a veritable crisis. In 2023, the number of disaster displaced persons in Yemen was three times the number of conflict displaced (IDMC, 2024b), while 20.6 per cent of IDPs had been displaced between two and seven times (Cash Consortium of Yemen, 2024). 40 per cent of Yemeni IDPs



Figure 11. The city of Aden at the Tuban Delta where ongoing conflict, the impacts of climate change and unsustainable urbanization together have put a strain on water resources and services and created high vulnerability to water-related hazards. Jorge Albizu, UN-Habitat.



Figure 12. UN-Habitat and stakeholders at work in urban Yemen. In Aden and the Tuban Delta, UN-Habitat has delivered trainings to key stakeholder and co-developed a climate change vulnerability assessment for the water sector, a hydrology study, and a project proposal for climate resilience building. UN-Habitat Yemen.

live in areas at high risk of fire and/or flooding (UN OCHA, 2025c). In the war-torn country, frequent flooding not only destroys homes and infrastructure, but shifts landmines from battlefields to populated areas (IOM, 2024). Water shortages are particularly severe in urban centres due to population influx, and localized conflicts have been triggered in several regions (UN OCHA, 2025c).

In response, UN-Habitat in partnership with the GCF has been working with national ministries as well as local governments in the vulnerable Tuban Delta to help strengthen capacities, data availability, tools and financing prospects for climate adaptive water management. Projections suggest the Tuban aquifer is at near-term risk of depletion, while Aden, the main urban centre in the region, is among the top 20 cities in the world at risk of sea level rise and storm surges. Here, UN-Habitat has delivered trainings to key stakeholder and has co-developed a climate change vulnerability assessment for the water sector, a hydrology study, and a project proposal for climate resilience building (GCF, 2021).

The analyses conducted as part of the project draw on technical assessments, analysis of administrative and spatial data, climate and hydrological models, field visits, focus group discussions and key informant interviews. The resulting hydrology study reveals a 36 million cubic metre water deficit in the Tuban Delta, alongside critical distribution issues. Overuse of surface water upstream have decreased water availability downstream, in turn motivating increased groundwater pumping, which has increased saltwater intrusion and desertification (UN-Habitat, 2024e).

The climate change vulnerability assessment similarly uncovers the lower region of the Tuban Delta as at the highest relative risk of both water insecurity and floods, driven by high population and asset exposure and sea

level rise. The shape of urbanization in Aden is established as a contributor to climate change vulnerability, with overcrowding and poor conditions a reality for many households, and informal dwelling near rivers increasing during drought. Across the city, 44 per cent of households report having reduced water consumption because of unavailability or high costs; and a lack or dysfunctionality of water points, long waiting times, and poor water quality are consistently cited as concerns. Such issues place a particular burden on women and children responsible for water collection (UN-Habitat, 2024f).

The climate change vulnerability and hydrology assessments produced now form an important foundation for evidence-based adaptation planning in the Tuban Delta. Shifting irrigation techniques, treating and reusing wastewater and greywater, and re-charging groundwater with flood- and treated wastewater, the studies suggest, could together make up almost 70 per cent of the regional water deficit, with the remainder recommended to be covered through desalination. The assessment also calls for the improvement of early warning systems and risk management plans to help reduce the impacts of extreme events. Bearing testimony to their cogency and urgency, these recommendations will be realized next through an Adaptation Fund-sponsored project, helping to strengthen water resilience through concrete adaptation measures (Adaptation Fund, 2025). The example illustrates how readiness projects that support data collection on risks, needs and solutions in fragile- and conflict-affected countries and cities can successfully help catalyze much-needed resources for tangible action.

Case Studies B.

Advancing climate resilience and social cohesion in displacement-affected urban areas: Lessons from Jordan and Lebanon

ADDRESSING SHOCKS AND IMPACTS

- Taking climate action in fragile and conflict-affected cities
- Readying cities for climate change- and conflict related displacement
- Localized assessment and action on climate change-related urban conflict
- Building green and resilient cities through conflict recovery



Lebanon and Jordan have two of the highest refugee-per-inhabitant rates in the world. The Syrian crisis in particular triggered a large and sudden influx into these two neighbouring countries. As of December 2024, Lebanon and Jordan hosted over 770,000 and 620,00 Syrian refugees respectively (UNHCR, 2024). Most of them – 82 and 83.5 per cent, respectively – have settled in cities, often in informal areas (UNHCR, 2019). Both countries also host large numbers of Palestinian refugees with varying tenure, two thirds of whom live in and around cities and towns (UNRWA, n.d.). While such urban residence presents opportunities for host and displaced communities alike, it has also created challenges in a context of stretched local government capacities and resources, and weak urban planning and climate adaptation. Many refugees find themselves in communities without adequate basic infrastructure and services, raising water and sanitation issues of particular concern (UNFCCC 2015a, 2015b; Government of Lebanon & UN Lebanon, 2019).

Climate change will have significant repercussions in both Lebanon and Jordan, most notably threatening water security. By mid-century, Lebanon is projected to see average temperatures increase by 1.7°C and precipitation decrease by between 4 and 11 per cent: two phenomena compounding to exert tremendous pressure on water resources. Annual drought periods are expected to be nine days longer and exploitable water supplies may shrink by 8 per cent, come 2040 (Ministry of Environment et al., 2016). Trends are similar in Jordan, with a hotter and drier climate anticipated to reduce water availability and rainfall reliability and intensify droughts. Already, water demand distinctly exceeds supply, and groundwater is being extracted at twice the rate that it is replenished (Ministry of Water and Irrigation, 2017).

The rapid influx of refugees into urban areas has added to existing water stressors and to difficulties associated with basic service delivery. In Lebanon, already in 2014, the incremental increase in domestic water demand for refugees was expected to reach 43 to



Figure 13. A water truck delivering drinking water in urban Lebanon. In urban areas of Lebanon and Jordan, activities implemented by UN-Habitat and partners have supported a suite of sustainable and replicable water management solutions to increase adaptive capacity in vulnerable, displacement-affected communities. UN-Habitat Lebanon.



The project has introduced a suite of sustainable and replicable water management solutions to increase adaptive capacity in vulnerable communities.”

70 million cubic metres, or approximately 10 per cent of the national total. Similarly, displacement contributed to an increase in wastewater generation of between 8 and 14 per cent (Ministry of Environment & UNDP, 2015). Where refugee settlements have formed near sensitive water bodies, and where sustainable water provision has not been ensured, overextraction and water degradation have sometimes occurred. In Jordan, meanwhile, it has been estimated that each Syrian refugee costs the water sector some \$620 per year (Ministry of Water and Irrigation, 2017).

The lack of resources and capacity to accommodate displaced persons may present a risk to social stability and urban safety. Host community fatigue and local tensions have arisen in cities and towns across Lebanon and Jordan. Between 2014 and 2017, for example, the portion of Lebanese people who did not report any inter-community tensions dropped from 40 to 2 per cent (ARK, 2017). The majority of poor Lebanese citizens as well as displaced Syrians are concentrated in the country’s most vulnerable cadastres (Government of Lebanon & UN Lebanon, 2019). While displacement can introduce challenges in hosting areas, it is also critical to recognize the suffering and needs of refugees. In 2018, Jordans registered an absolute poverty rate of 15.7 per cent, while 78 per cent of the country’s Syrian population lived below the Jordanian poverty line (UNICEF, 2018).

In contexts of protracted urban displacement, a singular focus on host or displaced communities can be counterproductive, at best preventing more sustainable system-oriented solutions, and at worst stoking tensions. To support displacement-affected

communities holistically, interventions that target cities and towns to bolster their services, infrastructure, housing and livelihood opportunities tend to be more effective (UN-Habitat, 2024g). In both Lebanon and Jordan, there is a critical need to strengthen the capacity of local governments and urban communities to manage the compounding climate and displacement crisis, especially water challenges.

An Adaptation Fund-supported project targeting Zahle, Irbid, Mafraq and their surrounding municipalities – some of the most climate change and displacement-affected urban areas of Lebanon and Jordan – has worked to achieve this since 2021. The project has built on available evidence, ongoing initiatives and national commitments in the two countries to ensure relevance, enhance impact, and reinforce local ownership. For example, it has been informed by climate and gender mainstreamed master plans developed by UN-Habitat to support strategic planning and infrastructure development in urban displacement contexts, and it is aligned with Jordanian King Abdullah’s Climate/Refugee Nexus Initiative, supporting host countries in addressing climate challenges (Abdullah II Ibn Al Hussein, 2022). Yet, the project has addressed a gap between evidence, commitments and strategies on the one hand, and implementation on the other, by working with local authorities and communities at the coalface of the compound crises.

At the municipal level, the project ‘Increasing the resilience of both displaced persons and host communities to climate change-related water challenges in Jordan and Lebanon’ has strengthened institutional capacity by embedding climate change adaptation into territorial development strategies and urban master plans. To inform this work, mapping has been conducted of current and projected

water demand and supply options considering climate change impacts, urban growth and agricultural evolution. Workshops and training sessions have been held, particularly targeting women and youth from both host and displaced populations, to foster inclusive participation in the planning process and promote local ownership. The focus has been on maximizing water efficiency within municipal boundaries by identifying practical solutions such as improved spatial planning and demand management.

More concretely, the project has introduced a suite of sustainable and replicable water management solutions to increase adaptive capacity in vulnerable communities. These include rooftop rainwater harvesting systems, treatment and reuse of greywater and wastewater, efficient irrigation systems using upcycled wastewater, and permaculture demonstration sites in both countries. Among some 120,000 direct beneficiaries, approximately one quarter are displaced Syrians.

Reflecting the success of the interventions, a child project funded by the Spanish Agency for International Development Cooperation (AECID) has been in implementation since 2023, this time focusing on innovative nature-based solutions in Zahle, Irbid and Mafraq. In Irbid, Jordan, a rooftop rainwater harvesting system has been installed at a public school to improve water access for domestic and irrigation use, while also serving as a replicable model. In Zahle, Lebanon, an agrivoltaic farm has been established, combining solar energy production with ornamental plant cultivation for public space greening. Finally, in Mafraq, Jordan, a NbS for flood risk mitigation has been designed, capturing and storing excess stormwater,

enhancing urban green space, and promoting biodiversity and resilience through use of native plant species. These interventions are collectively reducing dependency on overexploited groundwater and promoting sustainable water use among both host and refugee populations.

Both projects have emphasized collaboration and knowledge exchange as central pillars for advancing inclusive climate adaptation in urban areas affected by displacement. Awareness materials, virtual information disclosure mechanisms, structured exchange workshops between municipalities, and guided site visits targeting municipal staff, youth, women, displaced persons, and civil society actors have facilitated transfer of practical experience, replication of effective practices, and a shared regional understanding of viable climate action in vulnerable urban contexts.

The two projects demonstrate how climate resilience and social cohesion can be simultaneously advanced in displacement-affected cities, emphasizing participatory planning, inclusive awareness raising, local capacity building, and the institutionalization of solutions. They underscore the importance of integrated, area-based approaches that consider the needs of both host and displaced populations, and illustrate how innovative, nature-based water interventions can be effectively applied even in fragile urban contexts. By aligning with national priorities and building on existing local efforts, the projects have ensured greater impact, sustainability, and ownership. In this way, they offer a model for addressing the climate-displacement nexus in urban settings through collaboration, practical innovation, and inclusive governance.

Case Studies C.

Climate proof buildings, secure tenure and local capacity: Building urban climate resilience and durable solutions in

Mozambique

ADDRESSING SHOCKS AND IMPACTS

Taking climate action in fragile and conflict-affected cities

Readying cities for climate change- and conflict related displacement

Localized assessment and action on climate change-related urban conflict

Building green and resilient cities through conflict recovery



Though Mozambique has taken steps toward peace and stability over the past decades, this Southeast African country still experiences complex security challenges (Ndlocu et al., 2024; Human Rights Watch, 2024). Its violent past and ongoing multi-level conflicts are without doubt contributors to its major climate change vulnerability – the seventh highest globally and the highest in Africa (Bündis Entwicklung Hilft / IFHV, 2024). Since the year 2000, Mozambique has experienced over 75 climate change-related disasters linked to floods, cyclones, storms, droughts and other hazards (Hove et al., 2025). Cyclones in particular have become more frequent and intense – a development attributed to ocean warming linked to climate change (World Bank 2019; IFRC 2022). These events cause cyclical and widespread loss and damage to infrastructure and livelihoods, and so in a country already facing fiscal constraints and high poverty levels. By 2050, it is estimated that temperatures in Mozambique will rise by between 1.5 and

2.7°C (Mavume et al., 2021) while rainfall will become more variable. Combined, the effects of global warming could push another 1.6 million Mozambiquans into poverty by mid-century (World Bank, 2023).

By breaking down rural livelihoods and ecosystem services, climate change is also contributing to urbanization in Mozambique (Anderson & Silva, 2020; Otto et al., 2022), both organically and through creation of new settlements through government-led resettlement processes. Yet, the country's cities remain vulnerable to worsening extreme weather events. UN-Habitat and partners have therefore been working to strengthen urban resilience through several projects over the past two decades (UN-Habitat, 2012). A shared approach has been adopted in a number of regions and cities of the country, combining institutional capacity strengthening, community-centred participatory resilience assessments and planning, resilient upgrades to infrastructure and buildings, and efforts to solidify HLP rights.



Figure 14. A multifunctional refuge centre resilient to extreme weather events in the Chókwè district, Gaza province, Mozambique. The infrastructure – built as part of a project implemented by UN-Habitat, run by Oxfam, and financed by the Adaptation Fund – provides a safe haven for the most vulnerable families in climate emergency situations, mitigating the impacts of the floods that frequently hit the region. UN-Habitat Mozambique.

The coastal Sofala Province, and especially the low-lying coastal city of Beira, displays high exposure to climate change impacts. Cyclones and tropical storms Idai (2019), Chalane and Eloise (2020-2021), Ana and Freddy (2022-2023) and Filipo (2024) have each had devastating consequences for the region. Idai especially took a major human and economic toll on Beira, destroying thousands of homes and severely damaging critical infrastructure such as roads, power grids, hospitals, schools, and the airport. With 90 per cent of Beira and surrounds damaged or destroyed, the event displaced tens of thousands to overcrowded shelters (IFRC, 2019). According to the Post Disaster

Needs Assessment, for which UN-Habitat led the formulation of the Housing and Settlement section, Beira accounted for about a quarter of national reconstruction costs, underscoring the urgent need for investment in resilient housing and infrastructure and broad urban disaster preparedness.

UN-Habitat has responded to the repeated disasters of the early 2020s with a reinforced mission to build back better and promote urban resilience. Starting in the Beira corridor, efforts initially centred on scaled reconstruction of housing, schools and hospitals, ensuring their climate resilience, affordability and social acceptability. Through this long-standing work,



Essential public buildings – constructed in line with government-adopted resilient building codes – now better withstand climate shocks, protecting vulnerable groups and serving as disaster shelters.”

essential public buildings – constructed in line with government-adopted resilient building codes – now better withstand climate shocks, protecting not only the vulnerable groups who use them on a daily basis, but serving also as disaster shelters for evacuating communities.

At the neighbourhood level, meanwhile, resilience building has centred on participatory elaboration of planning and action frameworks, piloting of climate resilient basic infrastructure, and HLP right. In the informal Chipangara neighbourhood – home to many displaced from Mozambique’s protracted conflicts and suffering a heavy toll from the numerous disasters striking the Sofala Province – a programme of inclusive climate vulnerability assessment, joint vision setting, strategic action planning and urban upgrading has been rolled out. The Chipangara Neighbourhood Plan focuses on climate adaptation of infrastructure and public space, as well as on HLP rights, promoting security of tenure as a priority to mitigate cyclical urban re-displacement.

The inland Central Region of Mozambique too faces significant climate threats, in the form of cyclones but also droughts and flooding along the Zambezi e Rovubwe rivers. Tete City is located at the confluence of these two rivers, placing it at special risk. Still, settlements have been growing steadily on the riverbanks and lowlands due to a combination of high birth rates and internal displacement. In 2019, Cyclone Idai triggered severe flooding, forcing the resettlement of households to Chimbonde. At this settlement, however, a lack of basic infrastructure, livelihood opportunities and tenure rights have motivated families’ return to Tete’s lowlands.

In 2022, sadly, Tropical Storm Ana re-displaced some 2,000 residents.

UN-Habitat and partners have worked to make Chimbonde a durable solution where families can and want to stay. These efforts have focused on building the capacities of local authorities to manage disaster-induced urban displacement and engage communities in participatory planning and solutions implementation. Concretely, a resilient land use plan (plano de pormenor) has been jointly advanced, while dialogue and knowledge exchange on urban solutions to internal displacement have been facilitated among national and local government stakeholders. In addition, a comprehensive assessment of HLP rights has been undertaken, recommending a context-specific pathway to strengthened tenure security, while HLP trainings have been delivered to local technical staff.

Mozambique’s experience underscores the urgent need for climate adaptation in urban settings where exposure to hazards is intensified by long-standing vulnerability rooted in conflict, poverty, and institutional fragility. In cities like Beira and Tete, climate change has driven both displacement and rapid urbanization, concentrating risk in informal and underserved settlements. The initiatives led by UN-Habitat and its partners underscore the importance of integrated urban resilience building, combining resilient reconstruction of public and private infrastructure, strengthened HLP rights, and inclusive, locally led planning. These efforts serve to directly reduce disaster risk and support durable solutions for displaced urban populations, but also demonstrate a lasting and scalable model for advancing neighbourhood and city resilience through participatory governance and institutional capacity building.



Figure 15. A resilient 29 m² two-bedroom house using a concrete roofing technique with lost formwork moulded on site and an external dry latrine. This project – first carried out as a pilot to assess the physical resistance of the design as well as its acceptance by the community and local authorities – was implemented in the locality of Guara-Guara, Búzi district, Sofala province, Mozambique. UN-Habitat Mozambique.

Case Studies D.

Fostering climate-threatened peace and security in **Guinea-Bissau** through multi-level inclusive natural resource governance

ADDRESSING SHOCKS AND IMPACTS



Guinea-Bissau, a country of a little over 2 million people on and off the Westcoast of Africa, is experiencing increasing temperatures and worsening droughts as a result of climate change. While currently droughts affect approximately 74,000 people each year (World Bank Group, 2021), this number could rise sevenfold by 2050-2100, presenting a severe threat to water and food security and to agriculture and animal husbandry. Without adaptation, the aggregate impacts of global warming could place another 5 per cent of Guinea-Bissau's population in poverty and eliminate over 7 per cent of its gross domestic product (GDP) by mid-century (World Bank Group, 2025). Already, communities are requesting to be relocated, describing their situations as increasingly unmanageable. Climate change is also a contributor to conflict and violence in the country (Temudo & Cabral, 2021). Behind Guinea-Bissau's long-standing fragility are issues such as low economic diversification, entrenched poverty, inequitable administration

of justice, social exclusion and unsustainable natural resource use, all of which may be exacerbated by climate change (World Bank Group, 2025).

Intercommunal and inter-family conflicts in the country are frequently driven by competition over natural resources essential for housing, subsistence, and commercial activities. Land disputes are particularly pervasive, exacerbated by weak governance structures and the absence of clearly defined boundaries both between and within local communities (tabancas). These tensions are further intensified by urban expansion and the multifaceted effects of climate change, which influence land use patterns, availability, value, and quality. Climate variability is also reshaping traditional practices among both pastoralist and agricultural communities. Diminished access to pastureland and water sources has compelled pastoralists to alter their migratory routes and rely on newly accessible waterbodies. Concurrently,



Figure 16. Community-centred, participatory spatial mapping and joint solutions shaping as part of the PBF projects in Guina-Bissau, aimed at inclusive local and regional climate peace and security. Raquel Guidolin, UN-Habitat.

erratic rainfall has prompted the agricultural sector to expand irrigation practices during the dry season. These shifting dynamics are increasingly bringing pastoral and farming communities into conflict. According to the Ministry of Agriculture and Rural Development, such disputes over land and water frequently result in fatalities.

In response, the Secretary General's Peacebuilding Fund (PBF) has supported a series of projects delivered by UN-Habitat and partners to promote sustainable, inclusive and peaceful natural resource management in Guinea-Bissau. Between 2022 and 2023, dialogue and piloting of transparent land governance mechanisms were supported in the northern regions of Oio, Cacheu and Biombo. To create a shared vision and set

foundations for inclusive governance, formal and traditional institutions, communities, and young men and women were convened for solutions co-design. This included participatory spatial and strategic planning processes at community level. Land concession certificates were also delivered with the aim to reduce internal and external land-related conflicts.

From 2023-2025, the issue of conflict between pastoralists and farmers was directly addressed in the Bafatá and Gabú regions. This project brought key stakeholders to a common understanding of the source of their conflicts and of possible solutions viable for farmers, agro-pastoralists, pastoralists and local authorities alike. The development of information systems on transhumance and

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The project in the Koliba–Corubal basin sought to prevent resource-related conflicts and especially their gendered impacts by facilitating women’s participation in decision making regarding land and water.”

water and pasture resources helped to identify conflict hotspots and strategic interventions and paved the way for a participatory conflict prevention and reduction strategy at the regional level. In addition, direct support of basic services and infrastructure for use by marginalized communities – notably pastoralist youth, women and girls – served to relieve a common source of grievance.

Most recently, peaceful natural resources management has been promoted in the Koliba–Corubal Basin through a focus on women’s inclusion in decision-making. Women are at particular risk from the climate change-related conflicts in Guinea-Bissau. They experience high rates of direct domestic and public violence and, bearing responsibility for vulnerable family members, suffer extended impact from community conflict. While women play a central role in agricultural production, cattle caretaking and water collection – and therefore hold indispensable knowledge of natural resource use patterns and needs – they are marginalized in resource

ownership and governance. The project in the Koliba–Corubal basin sought to prevent resource-related conflicts and especially their gendered impacts by facilitating women’s participation in decision making regarding land and water.

The case of Guinea-Bissau highlights how inclusive natural resource management, participatory planning, and investment in essential services and infrastructure can simultaneously advance climate adaptation and foster peace. By tackling the root causes of resource-based tensions and empowering marginalized groups – especially women, youth, and pastoralist communities – these approaches reduce grievances and strengthen resilience. When climate pressures on land, water, and livelihoods are addressed through equitable, collaborative solutions, the foundations for lasting stability are reinforced.



Figure 17. Women’s empowerment in decision-making about natural resources was at the centre of the Koliba–Corubal Basin project. Women often hold knowledge, insights and skills critical for sustainable and peaceful resource management, but their voices are not always heard. Raquel Guidolin, UN-Habitat.

Case Studies E.

Integrated natural resource management in
Eastern Ghouta, Syria:
Facilitating returns by climate proofing livelihoods, food and water systems



Eastern Ghouta is an agricultural suburb of Syria's capital Damascus, home, prior to the war, to some 2 million people. Boasting orchards, fields and greenery, it was once considered the 'lung of Damascus' and served as the city's breadbasket (UNDP, 2023b). Eastern Ghouta exemplifies a critical urban-rural nexus where rural agricultural productivity directly supports urban food security and environmental health. The last two decades, however, have seen major transformation in Eastern Ghouta. Between 2013 and 2018, the area experienced instability, sustaining considerable infrastructure damage as a result of military operations.

Urbanization in the region has put pressure on Eastern Ghouta for a longer time. The

growth of Damascus, as of satellite towns such as Jaramana, has transformed surrounding agricultural land and contributed to pollution of nature and water bodies. During the conflict, displacement accelerated urban growth, with Jaramana's population increasing from just over 100,000 in 2004 to almost 600,000 people in 2018: 287,000 of whom displaced. Rural Eastern Ghouta saw an outflow of people toward cities like Damascus and beyond to neighbouring countries. While some are now returning, with stability on the horizon, many remain without this option due to a combination of factors, prominent among which are lacking climate change adaptation, disaster risk reduction, and positive development trends (IDMC, 2024c). 7.2 million Syrians remain internally displaced and 6.2 million are refugees (UNHCR, 2025d).



Figure 18. Boasting orchards, fields and greenery, Eastern Ghouta was once considered the 'lung of Damascus' and served as the city's breadbasket. Conflict, climate change and urban development have put pressure on the area in recent decades. UN-Habitat.

Syria is ranked the tenth most climate vulnerable country in the world by the INFORM index and is experiencing increasing temperatures, reduced precipitation and worsening droughts (European Commission, 2022b). Droughts lasting over three years have become more common, with that of 2007-2010 being the longest and most intense for 900 years (Hoegh-Guldberg et al., 2018): an event now clearly linked to anthropogenic climate change (World Weather Attribution, 2023). In Eastern Ghouta, reduced precipitation and increased evaporation have affected groundwater levels and the flows of the Barada River, impacting both drinking and irrigation water availability. Water scarcity is now a critical issue in rural and urban areas alike. At the same time, protracted conflict and missed development opportunities have left stakeholders poorly equipped to manage the natural resource crisis in Eastern Ghouta.

UN-Habitat together with the United Nations Development Programme (UNDP) and the United Nations Food and Agriculture Organization (FAO), sponsored by the Adaptation Fund, has therefore worked with the municipalities of Al Mleiha, Zebdine, Deir El Assafir and Marj El Sultan to strengthen the capacities of institutions and communities to assess and manage climate change-related and post-crisis water and land challenges. Through co-development of an integrated natural resource management strategy, Syrian stakeholders have been supported to navigate the intricacies of resource challenges precipitated by climate change, urbanization and conflict. Meanwhile, the establishment of a resilient water supply system for urban and agriculture purposes – including the rehabilitation of sewage networks and irrigation



Figure 19. On top of the civil war and related disruptions to urban basic service delivery, Eastern Ghouta has been experiencing climate change- related rainfall reductions and evaporation increase, together resulting in critical water scarcity. UN-Habitat.

canals and the installation of a mobile wastewater treatment plant – has directly supported water availability and quality region-wide. In rural areas of Eastern Ghouta, the introduction of water efficient agricultural technologies and practices have bolstered income stability and livelihood security.

Such integrated efforts to protect natural environments, restore livelihoods, and adapt to the impacts of climate change are critical for resilient post-crisis recovery and sustainable development at the rural-urban nexus in Eastern Ghouta. They are instrumental both in addressing negative drivers of rural-urban migration and in facilitating the return of displaced Syrians. Based on a climate change vulnerability

and scenario assessment, as well as a gap analysis on land and water management, UN-Habitat and partners have provided forward-looking recommendations. As Eastern Ghouta charts the course to post-crisis developmental recovery, integration will need to be a key word. Natural resources here are best considered as ecological, economic and social goods whose stewardship requires an understanding of their interlinkages with urban and rural systems and the dynamics of climate change and conflict. Relatedly, governments at all levels – empowered through strengthened mandates and capabilities – are recommended to work closely with communities and civil society organizations for unified, 360-degree management of land and water.



Figure 20. UN-Habitat, UNDP and FAO have supported municipalities in Eastern Ghouta to assess and manage climate change and conflict-crisis water and land challenges through co-development of an integrated natural resource management strategy. UN-Habitat

Case Studies F.

Spatial development planning in support of peace building and climate resilience in the Bangsamoro Autonomous Region in Muslim Mindanao, Philippines

ADDRESSING SHOCKS AND IMPACTS

Taking climate action in fragile and conflict-affected cities

Readying cities for climate change- and conflict related displacement

Localized assessment and action on climate change-related urban conflict

Building green and resilient cities through conflict recovery



The Philippines is the only country in the world to score eight or above on both natural and human hazard and exposure in the INFORM RISK Index for 2025 (European Commission, 2025)*. Situated in the most active tropical cyclone basin in the world, the country experiences on average 20 cyclones per year, some eight of which make landfall. In 2013, Typhoon Haiyan killed 6,000 people and damaged 1.1 million homes. Such cyclones as well as floods, droughts and landslides are intensifying with climate change. Meanwhile, the Philippines is rapidly urbanizing. This is adding to the existing exposure of 74 per cent of populations exposed to hazards (World Bank, 2021b), as 70 per cent of cities and urban centres are located along the coasts (UN-Habitat, 2023c).

Conflict stretches decades back in the Mindanao region of the Philippines, linking to a long-standing political resistance movement

on the part of Moro armed groups, and responses by the Philippines military forces. Since the 1960s, the conflict has involved alternating insurgencies, peace attempts and intermittent armed confrontations triggering loss of life, extensive displacement and humanitarian crisis. A peace agreement between the national government and the Moro Islamic Liberation Front of 2014, and the creation of the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM) in 2019, offer hope of stability. However, violent clashes have continued, involving armed groups not party to the deal; localized conflicts persist between different identify groups seeking power; and disarmament and reintegration of ex-combatants have lagged (UN Philippines, 2024). BARMM, including its three cities, is acutely exposed to climate hazards. The fast-growing population of the region remains one of the poorest in the country at a 63 per cent poverty rate (UNFPA,

** Natural hazards cover earthquakes, river and coastal floods, tsunamis, tropical cyclones, drought and epidemic, while human hazards are defined by projected conflict probability and current conflict intensity*



Figure 21. Consultation toward the development of the BDSF 2021-2050. Participation by a wide range of stakeholders is more critical than ever in complex urban contexts grappling with both climate impacts and conflict risk. The Local Planning Coordination Division of the BPDA.

2024), and it is increasingly concentrating in a few growth centres.

UN-Habitat together with UNDP, the Philippine Business for Social Progress, the National Resilience Council, the Consortium of Bangsamoro Civil Society, and the Department of the Interior and Local Government Philippines – sponsored by the Australian government – has implemented the Strengthening Institutions and Empowering Localities Against Disasters and Climate Change in the Philippines (SHIELD) project since 2022. The project involves among other components co-development of risk-informed local resilience plans, processes, and investment programmes. In BARMM, this work has been geared toward formulation of the Bangsamoro Spatial Development Framework (BDSF) 2024-2050: a comprehensive strategy designed to support long-term spatial development while

protecting the region’s natural resources, building climate resilience and promoting lasting peace, by informing regional land and natural resources use and allocation.

An inclusive participatory process was followed to generate the BDSF. In 2023, a series of technical workshops were held with the Bangsamoro Planning and Development Authority and the Regional Land Use Committee, while in 2024, local governments across BARMM were consulted on drafts. A Matrix of Functions approach was used to understand the role of urban areas within the region and to plan their future development based on territorial-scale spatial challenges and opportunities. Critically, climate and conflict risks were core to the analysis underpinning the BDSF. A Provincial Climate Risk Diagnostics tool and methodology were developed by UN-Habitat in partnership with the Department of Environment and Natural

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Building on our continued collaboration and proactive engagement, we will ensure that our Bangsamoro Spatial Development Framework will leave no one and no place behind in the Bangsamoro Autonomous Region.”

Engr. Amil Abubakar
BPDA Deputy Director General

Resources and the Department of Human Settlements and Urban Development and applied in BARMM. Conflict dynamics and hotspots were also appraised and integrated into spatial development planning to help strengthen the now fragile regional peace. For example, inclusive urban hubs and strong territorial connectivity are on the roadmap for BARMM, fostering positive interaction, shared economic opportunities, and mutual understanding among communities and stakeholders.

The BARMM case underlines that regional development planning can be an enabler of both climate resilience and peace. It shows

how in vulnerable and fragile urban settings, climate diagnostics that intersect with socio-political dynamics can help identify areas of risk as well as integrated solutions. The participatory approach used to develop the BDSF was critical to bridge data gaps and equally to build community trust and buy-in in this post-conflict setting. The Matrix of Functions method, finally, supported comprehensive mapping and planning of spatial and institutional roles and thereby the avoidance of governance vacuums, which is important for conflict and disaster prevention alike.



Figure 22. Climate risk diagnosis was combined with conflict analysis in support of spatial development planning to help strengthen regional peace in BARMM. The Local Planning Coordination Division of the BPDA.



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