COMMENTARY

Resilience and the Fragile City

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Humanitarian, security, and development actors are witnessing two distinct but intertwined trends that will have a dramatic impact on their operations. The first relates to the fact that the locus of global poverty and vulnerability to disaster are increasingly concentrated in fragile and conflict-affected states. The second trend is associated with the notion that the world has entered a period of unprecedented urbanization. For the first time in history, more people live inside urban centres than outside of them. As the world continues to urbanize, global emergencies will increasingly be concentrated in cities, particularly in lower income and fragile countries where the pace of urbanization is fastest. Yet, despite the growing risks facing urban populations living in fragile and conflict-affected countries, there is very little understanding of what can be done to reduce the risks posed to these cities and their populations.
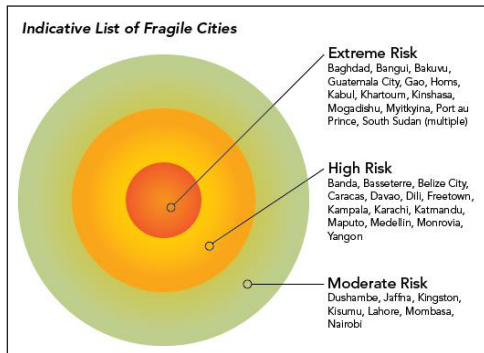
Fragile cities: the epicentre of extreme vulnerability

Over the past 40 years, the urban population in lower income and fragile countries has increased by an astonishing 326 per cent (IDMC 2014). Continuing population growth and urbanization are projected to add another 2.5 billion people to the world's urban population by 2050 and nearly 90 per cent of that increase will be concentrated in Asia and Africa. Some of the world's fragile and conflict-affected countries – including Angola, Cote d'Ivoire, Iraq, Mali, Sudan, and Uganda – are projected to add more than 20 million people to their urban populations while other already overburdened countries such as Bangladesh, the Democratic Republic of Congo, Pakistan, and Ethiopia will each see more than 50 million

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people flood into their cities. Meanwhile, conflict and disaster-prone countries such as Afghanistan, Burundi, Rwanda, and Somalia will see their urban populations multiply by fourfold over the next thirty years, possibly pushing cities in these countries to the brink of collapse (see **Figure 1**).

How will these countries cope with such rapid urbanization? According to the World Bank's list of fragile situations,[1] these are some of the poorest, most violent, and most disaster-prone countries in the world. As their populations aggregate in cities at a breakneck pace, it is plausible that the capacity of their governments to deliver services, respond to disasters, provide security, and govern effectively will be pushed to the brink. With these growth rates projected to continue, what is certain is that the humanitarian crises of tomorrow will be more urban than rural and that the urban centres of fragile and conflict-affected countries are some of the world's most vulnerable zones (see **Figure 2**).

Figure 1: Indicative List of Fragile Cities (based on figures from UN DESA, *World Urbanization Prospects 2014*).
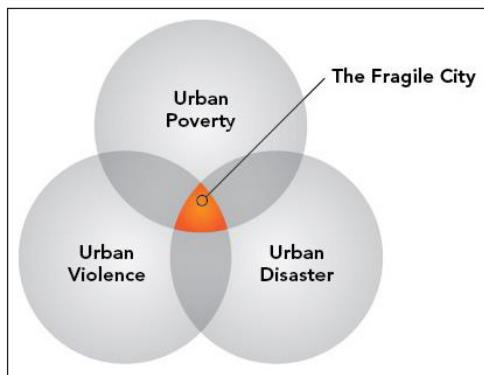
Figure 2: The Fragile City: the epicentre of vulnerability.

Yet, notwithstanding the growing risks facing urban populations living in fragile and conflict-affected states, international organizations, governments, and non-governmental organizations are ill-prepared to deal with this impending reality. Existing mechanisms for aid, relief, and security have traditionally been concentrated at the national level and have been limited to formal armed conflict. Today's risks revolve around smaller, irregular armed groups and disaster-prone areas that are often beyond the purview of international aid packages or peacebuilding activities, and demand a more flexible and targeted response. Determining how to respond effectively in densely populated environments where violence intersects with disaster and

extreme poverty is no simple task. To be effective, humanitarian, peacebuilding, and development actors need to develop feasible options to reduce the vulnerability and enhance the resilience of urban populations in fragile cities most at risk to multiple and interlocking crises.

What makes cities in fragile and conflict-affected countries so vulnerable?

Existing studies tell us that it is the aggregation of risk – the cumulative effects of multiple risks – that results in the greater likelihood and intensity of urban vulnerability to disaster, extreme poverty, and violence (Muggah 2012). The rapid accumulation of risks, which happens in contexts of violent conflict and humanitarian crises, often overwhelms local coping systems. A major factor shaping violence and vulnerability to disaster in these contexts is the inability of state institutions to respond appropriately. In some cities, systems of law and order, ranging from the police, judiciary, penal systems, and other forms of legal enforcement, are dysfunctional and considered illegitimate by the citizens they are intended to serve. There is also often a serious capacity gap in providing basic and accountable security and other services that would otherwise reduce the city's vulnerability to extreme poverty, violence, and disaster.

The 2010 *World Disasters Report* warned that the world's 2.6 billion urban dwellers living in low and middle-income countries were particularly exposed to disaster risk (ICRC 2010). It went on to note that those worst-affected by natural disasters are vulnerable city dwellers living in slums and unplanned settlements. The report claimed that the world should expect three to five large-scale urban disasters in the next ten years and urged the international humanitarian community to work to reduce the vulnerability of the one billion or more people who live in urban slums worldwide. Since then, the world has witnessed a number of significant

Ranking of fragile countries with high disaster risk [4]

#	Country	Urban % by 2050
1	Somalia	58%
2	Afghanistan	45%
3	Niger	35%
4	Guinea-Bissau	65%
5	Burundi	26%
6	Chad	37%
7	Sudan	50%
8	Democratic Republic of Congo	60%
9	Guinea	56%
10	Haiti	76%
11	Zimbabwe	44%
12	Ethiopia	38%
13	Central African Republic	57%
14	Bangladesh	56%
15	Liberia	65%
16	Sierra Leone	57%
17	Timor-Leste	48%
18	Burkina Faso	52%
19	Burma/Myanmar	55%
20	Rwanda	53%

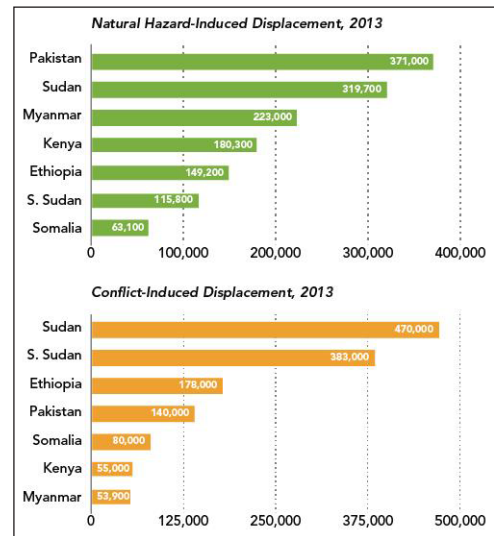**Figure 3:** Ranking of Fragile Countries with High Disaster Risk.

interlocking urban crises that have cost hundreds of thousands of lives and forced millions to flee their homes in Haiti, Indonesia, Myanmar, Pakistan, the Philippines, Somalia, and Syria.

In fact, the number of people affected by disasters in fragile and conflict-affected states is disproportionately high. Somalia tops the list of conflict-affected countries with the highest level of disaster risks (see **Figure 3**) (Harris, Keen & Mitchell 2013; OCHA 2012).[2] When one considers that 80 per cent of the countries on this list will have the majority of their populations living in urban centres by 2050, the need to find feasible approaches that reduce vulnerability and promote resilience in fragile urban contexts becomes even more pressing.

One direct outcome of this heightened vulnerability to disaster and violence among fragile countries has been a record number of refugees and internally displaced persons (IDPs) **Figure 4**. According to the Office of the United Nations High Commissioner for Refugees (UNHCR), the world currently has an estimated 51 million refugees and IDPs. The Internal Displacement Monitoring Centre notes that approximately half of these are in urban areas. In countries such as Jordan, Lebanon, Somalia, Sudan, Syria, Pakistan, and Iraq the vast majority of IDPs (between 60 and 95 per cent) reside in urban settings. This influx of refugees not only places an added burden on already overwhelmed cities, but puts vulnerable IDPs in situations where they are unable to access social support or afford the cost of adequate housing – forcing them to occupy private and public property without permission. This makes them prone to deprivation, disease, and violence and often exposes them to forced evictions and repeated displacement (IDMC 2014).

Disasters have proven to deepen grievances and, as was witnessed in the case of the 2011 East African humanitarian crisis,[3] a combination of natural hazards, violence, and weak government responses can lead to catastrophes that spill over to neighboring countries.

Natural Hazard-Induced Displacement, 2013

Pakistan	371,000
Sudan	319,700
Myanmar	223,000
Kenya	180,300
Ethiopia	149,200
S. Sudan	115,800
Somalia	63,100

Conflict-Induced Displacement, 2013

Sudan	470,000
S. Sudan	383,000
Ethiopia	178,000
Pakistan	140,000
Somalia	80,000
Kenya	55,000
Myanmar	53,900

Figure 4: Confluence of Natural and Conflict Induced Displacement (Source: IDMC 2014).

It is widely acknowledged that more needs to be done to proactively tackle the risks posed by interlocking crises of disaster, violence, and extreme poverty through preventive programming; however, in practice, as little as one per cent of official development assistance is invested in reducing risks associated with humanitarian crises and violence.

Investing in urban resilience
Urban disasters and violence are already starting to enter the agendas of humanitarian and development agencies (Muggah & Savage 2012). Yet, many questions remain as how best to situate agencies within these new spaces and adapt their methods for providing assistance, which are traditionally modelled around rural contexts. In cities, development and humanitarian agencies need to account for a number of factors: diverse urban populations (including both displaced and host-communities), the presence of a variety of existing state and non-state actors (armed and not-armed, licit and illicit), and a diversity of formal and informal institutions that all play roles (whether positive or negative) in disaster response.

To be effective, a practical and context-driven understanding of the range of actions available when facing disaster is required. Existing approaches and recommendations are simply not useful in these contexts. For example, the United Nations Office for Disaster Risk Reduction's ten point essential checklist to make cities resilient calls for cities to create and budget for an entity responsible for disaster risk reduction (DRR). It also encourages cities to provide incentives for homeowners and businesses to upgrade their facilities. Furthermore, it requires cities to assess the safety of all schools and health facilities; to apply and enforce realistic risk compliant building codes and land use regulations; to implement education programs on DRR; to protect ecosystems and emergency management capacities; to install early warning systems; to invest in and maintain critical infrastructure; and the list goes on.[4] While these may indeed be the first-best measures,

they are simply not feasible for most fragile cities, many of which have slum populations that exceed 50 per cent of their total populations and, at the best of times, have difficulty delivering even the most basic services.[5]

Opportunities do exist to harness the transformative potential of cities to promote development, implement effective disaster response systems, and reduce violence. Cities such as Amman, Beirut, Kinshasa, and Yangon currently serve as sanctuaries for millions of refugees that have fled conflict and disaster. Despite the massive influx of refugees that has placed added stress on ageing and inadequate infrastructure, these cities are islands of relative political stability and sources of economic growth for their residents. Amman for example provides some 55 per cent of Jordan's employment opportunities and Beirut represents 75 per cent of Lebanon's GDP. These cities have demonstrated significant adaptive capacity to collaborate and respond to crises without provoking political upheaval or major social conflict.

As was evidenced by the proposal for a stand-alone goal on cities by the UN Open Working Group on Sustainable Development Goals, the opportunity embedded in cities to promote sustainable development as well as peace and security is being recognized at the global level. If managed well, cities can be engines of growth and provide workers and residents with quality job opportunities, better healthcare, improved housing, safety, and social development. Furthermore, cities can help contribute to national growth through increased revenue generation, political stability, and post-conflict reconciliation. This has been demonstrated by recent developments in Kigali, which, despite its many faults,[6] has emerged as a clean and relatively safe hub of development. There is also an increasing push away from the ethnic politics that once led to genocide toward a more inclusive social and political environment in the city.

An increasing number of initiatives are also investing in and testing smart and scalable solutions that promote resilience at the city level. These include the Rockefeller

Foundation's 100 Resilient Cities Initiative, the DFID and IDRC-funded Safe and Inclusive Cities initiative, the C40 Cities Climate Leadership Group, the Ford Foundation's Just Cities Initiative, the Siemens SENSable City Lab, and IBM's Smarter Cities program. These initiatives are helping to identify and assess the effectiveness of Big Data analytics, technology, innovative land-use policy and planning, infrastructure design, new financing and insurance products, and common crises management platforms, as well as smart and predictive policing. Through these initiatives, we are also witnessing researchers team up with policy makers and private sector actors in a multi-disciplinary way to explore solutions that will make cities more resilient to disaster and violence.[7] Despite the fact that very few of them focus on tackling the pressing challenges facing cities in fragile and conflict-affected countries, there is much that can be learned from these initiatives, lessons that could potentially be adapted to promote resilience in the fragile city.

While still a comparatively nascent area of study, there is a growing body of evidence documenting the role that protective factors – characteristics of individuals and their environments that strengthen their abilities to confront stresses without resort to violence – can play to enhance the resilience of vulnerable urban populations in contexts of violence, disaster, or extreme poverty. For instance, urban pacification and policing interventions that combine the re-assertion of state authority with efforts to reinstall social services in neglected areas have produced some promising results in places such as Rio de Janeiro and Medellín (Muggah 2015). Youth risk reduction programs that aim to stimulate income opportunities for youths through job training, cash transfer schemes, microenterprise development, and the provision of childcare have also produced positive results. Urban humanitarian interventions that have reinforced existing public services in cities rather than supplanting them have also proven effective in strengthening healthcare and key services such as water and sanitation. Cities such as Nairobi and Johannesburg, have also experimented with market-based approaches to enhance the value of slum land by providing low interest loans, tax rebates, and grants to rehabilitate houses and attract businesses to revive decaying urban areas. Finally, programs that support the devolution and decentralization of certain core governance functions from national and regional governments to municipalities is also being experimented with in cities in Asia and Africa.[8]

Moving forward

The resilience of cities is a crucial feature from which important lessons can be drawn. The concept of resilience has increasingly appeared in humanitarian, development, and climate change circles as an organising principle in relation to preventing, preparing for, and responding to disasters. To be clear, this concept's use in relation to disasters and violence is relatively recent and how best it can help to catalyse more effective responses remains an open question. The value of the concept, however, is that it offers an avenue to promote better linkages between humanitarian and development actors in their efforts to help affected communities and individuals reduce their vulnerability to multiple and interlocking disasters.

However, we know very little about what interventions are most effective in reducing vulnerability, saving lives, and rebuilding livelihoods in urban contexts during and after crises. The evidence on the required quality and nature of institutional and governance frameworks in relation to a country/city's capacity to reduce risk is extremely thin. At the most fundamental level, we do not know the extent to which those directly affected by crises in urban contexts actually receive support. Nor do we know how existing resources are allocated between different socio-economic and demographic groups in increasingly precarious and crowded cities – and in particular in informal settlements where 17 per cent of the world's population

and 27 per cent of the urban population live (IDMC 2014).

In order to develop answers to these questions and help societies prepare for the looming challenges of a fragile city, more research is required to better understand the recurrent risks that actually exacerbate fragility in cities. Researchers, policy-makers, and practitioners need to determine what factors and investments serve to maximize the resilience of communities and cities. We need to find out what works best to reverse fragility in a city that is already pushed to the brink and scale up interventions that are proven to work. Finally, more effort needs to be invested in understanding the most effective roles that external, local, and national actors can play to enhance the resilience of cities that are on the front lines of the struggle against disaster, violence, and extreme poverty.

Notes

[1] See the World Bank's Harmonized List of Fragile Situations available at: http://siteresources.worldbank.org/EXTLICUS/Resources/511777-1269623894864/HarmonizedlistoffragilestatesFY14.pdf

[2] This table was adapted from Harris, Keen & Mitchell 2013: 9. Also see OCHA's *World Humanitarian Data and Trends 2012*.

[3] The 2011 East African humanitarian crisis was provoked by the worst drought experienced in the region in 60 years. The crisis began in July 2011 and threatened the livelihoods of some 13 million people. The crisis was unique in that, for the first time, a significant number of people in crisis were the urban poor, who struggled to cope with sustained hyperinflation in food prices. The urban food crisis was widespread, affecting 25% of the total urban population, or 705,000 people, of which 565,000 were identified as in acute food and livelihood crisis and 140,000 in humanitarian emergency. In addition, according to UNHCR, over one million people were internally displaced

and concentrated in cities such as Afgoye and the Somali capital of Mogadishu.

[4] See UNISDR, 'Toolkit for Local Governments,' available at: http://www.unisdr.org/campaign/resilientcities/toolkit/essentials.

[5] In some cities, those living in slums form the majority. 70.1 per cent of Port au Prince's population lives in slums, 66 per cent of Calcutta, and 60 per cent of Bogotá (see UN DESA 2014).

[6] Tom Goodfellow, "Rwanda's political settlement and the urban transition: expropriation, construction and taxation in Kigali," *Journal of East African Studies*, vol. 8, issue 2, 2014.

[7] See for instance the knowledge-sharing partnership between Swiss Re and the International Committee of the Red Cross. Another example is the Global Assessment Report on Disaster Risk Reduction, which brings together numerous UN agencies with the private sector and other multilateral organizations to assess risk and build a data base on vulnerability.

[8] For projected urban populations see UNDESA 2014. For more detail on the examples see Muggah 2012. Also see: IDRC and DFID's Safe and Inclusive Cities Initiative; the Harvard Humanitarian Initiative's Urbanization and Emergencies work; the Humanitarian Action in Situations other than War project led by the Igarape Institute; Robert Muggah's TED Talk on 'How to Protect Fast-Growing Cities From Failing' (October 2014).

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