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Resilience and the Fragile City

Reducing Vulnerability to Complex Urban Crises

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Abstract

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 forty years, the urban population in lower income and fragile countries has increased by an astonishing 326 percent (IDMC 2014).[1] 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 percent of that increase will be concentrated in Asia and Africa. Some of the most fragile countries including Angola, Iraq, Sudan, and Uganda are projected to add 25 million people to their urban populations while other already over-burdened countries such as Bangladesh, the Democratic Republic of Congo, and Ethiopia will each see 50 million people flood into their cities.

How will these countries cope with such rapid urbanization? According to the World Bank's list of fragile situations, these are some of the poorest, most violent, and 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 will be pushed to the brink and collapse. With these growth rates projected to continue, what is certain is that the humanitarian crises of tomorrow will be more urban than rural and the urban centres of fragile and conflict affected countries are some of the most vulnerable.

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.
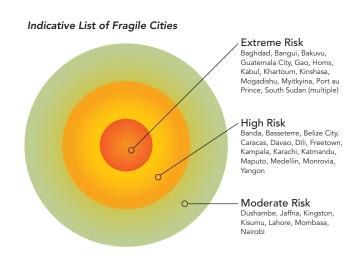
Determining how to respond effectively in densely populated environments where violence intersects with disaster and extreme poverty is no simple task. To be effective, humanitarian, peacebuilding, and development actors need to develop feasible options to reduce the vulnerability and enhance the resilience of urban populations in fragile cities most at risk to multiple and interlocking crises.

What makes cities in fragile & conflict affected countries so vulnerable?

Existing studies tell us that it is the aggregation of risk – the cumulative effects of multiple risks – that result in the greater likelihood and intensity of urban vulnerability to disaster, extreme poverty, and violence (Muggah 2012).[2] 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 who 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 the world's disasters are vulnerable city dwellers living in slums and unplanned settlements. The report claimed that the world should expect three to five big urban disasters in the next ten years and urged the international humanitarian community to work to reduce the vulnerability of the 1 billion people or more who live in urban slums worldwide. Since then, the world has witnessed a number of significant interlocking urban crises that cost hundreds of thousands of lives and forced millions to flee their homes in Haiti, Indonesia, Myanmar, Pakistan, the Philippines, Somalia, and Syria.

Indicative List of Fragile Cities

Extreme Risk
Baghdad, Bangui, Bakuvu, Guatemala City, Gao, Homs, Kabul, Khartoum, Kinshasa, Mogadishu, Myitkyina, Port au Prince, South Sudan (multiple)

High Risk
Banda, Basseterre, Belize City, Caracas, Davao, Dili, Freetown, Kampala, Karachi, Katmandu, Maputo, Medellin, Monrovia, Yangon

Moderate Risk
Dushambe, Jaffna, Kingston, Kisumu, Lahore, Mombasa, Nairobi

In fact, the number of people affected by disasters in fragile and conflict affected states is disproportionately high (Harris, Keen and Mitchell 2013 and OCHA 2012).[3] Somalia tops the list of conflict affected countries with the highest level of disaster risks. When one considers that 80 percent 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.

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%

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 due to natural hazards and violent conflict. According to the Office of the United Nations High Commissioner for Refugees, the world currently has an estimated 51 million refugees and internally displaced persons (IDPs). The Internal Displacement Monitoring Centre notes that approximately half of these are in urban areas. In countries such as Somalia, Sudan, Syria, Pakistan, and Iraq, the vast majority of IDPs (between 60-95 percent) 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 in urban centres - forcing them to occupy private and public property without permission. This makes them prone to deprivation, disease, violence and often exposes them to forced evictions and repeated displacement (IDMC 2014).
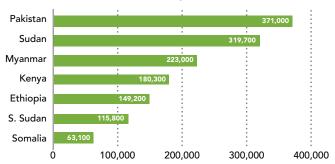
Disasters have proven to deepen grievances and, as was witnessed in the case of the 2011 East African humanitarian crisis, a combination of natural hazards, violence, and weak government responses can lead to catastrophes that spill over to neighboring countries. Yet, while it is widely acknowledged that more needs to be done to pro-actively tackle the risks posed by interlocking crises of disaster, violence, and extreme poverty through preventive programming, in practice as little as one per cent of official development assistance is invested in reducing risks associated with humanitarian crises and violence.
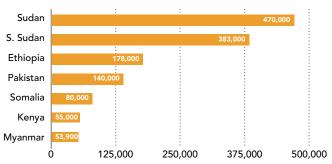
Time to invest in urban resilience

Urban disasters and violence are already starting to enter the agendas of humanitarian and development agencies (Muggah and Savage 2012).[6] Yet, many questions remain as how best to situate themselves 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 diverse urban populations, including both displaced and

Countries with new displacement, induced by natural hazards and conflict [5]

Natural Hazard-Induced Displacement, 2013

Country	Displacement
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

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

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 10 point essential checklist to make cities resilient, calls for cities to create an entity responsible for disaster risk reduction that is equipped with a budget for disaster risk reduction (DRR) and provides incentives for home owners and businesses to upgrade their facilities. It also 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; and to invest in and maintain critical infrastructure and the list goes on.[7] 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 percent of their total populations and at the best of times have difficulty delivering even the most basic services.[8]

Fortunately, there are an increasing number of initiatives investing in 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. Through these initiatives, we are 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.[9] 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 and possibly adapted to promote resilience in the fragile city.

Fast facts about disaster & violence

A recent ODI report noted that more than 50 percent of the people affected by natural disasters lived in conflict affected states.

91 percent of countries affected by armed conflict in 2008-2012, also experienced significant natural hazards forcing millions to flee their homes (Global Estimates 2014).

According to OCHA, 1.2 billion people living in fragile and conflict affected states are particularly vulnerable to disaster.

What is resilience and why is it important?

Resilience is the capacity to rebound from adversity, strengthened and more resourceful. It is an active process of endurance, self-righting and growth in response to crisis and challenge (see Simich et al., 2006).

Resilience enables societies and states to have the robustness to withstand a certain level of shock; to develop systems of redundancy that can minimize the impact of crisis and disaster; to have the tools that enable them to be resourceful in a time of need and threat; and to act rapidly to meet priorities (see Bruneau et al. 2003).

While still a comparatively nascent area of study, there is a growing body of evidence documenting the role that protective factors 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 Medellin (Muggah 2015).[10] Youth risk reduction programs that aim to stimulate income opportunities for youth 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. Urban renewal for security programs in places such as Nairobi and Johannesburg that have developed market-based approaches to enhance the value of informal land by reviving decaying urban areas through the provision of low interest loans and grants to rehabilitate houses, tax incentives to draw in business, social housing schemes and environmental design efforts that bring disparate populations closer together have also garnered attention. 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.[11]

What we need moving forward

The resilience of cities is a crucial feature that 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 develop-

ment actors in their efforts to help affected communities and individuals reduce their vulnerability to multiple and inter-locking disasters.

Yet, we know very little about what interventions are most effective in reducing vulnerability, saving lives, and rebuild-ing livelihoods in urban contexts during and after crises. The evidence base on the required quality and nature of institu-tional 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 demo-graphic groups in increasingly precarious and crowded cities and in particular in informal settlements where 17 percent of the world's population and 27 percent of the urban popula-tion live (IDMC 2014).

In order to develop answers to these questions and help societies prepare for the looming challenge of a fragile city, more research is required to better understand the recurrent risks that actually exacerbate fragility in cities. Research-ers, policy-makers, and practitioners need to find out what

factors and investments actually 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.

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Endnotes

1   See Internal Displacement Monitoring Centre and Norwegian Refugee Council report Global Estimates 2014: People Displaced by Disasters, September 2014, p. 9 (available at: http://www.internal-displacement.org/publications/2014/global-estimates-2014-people-displaced-by-disasters).

2   Muggah, R, Researching the Urban Dilemma: Urbanization, Poverty and Violence, Ottawa, Canada: IDRC, May, 2012.

3   See Katie Harris, David Keen and Tom Mitchell, When Disasters and Conflicts Collide: improving the links between disaster resilience and conflict prevention, Overseas Development Institute, February 2013. Also see OCHA's World Humanitarian Data and Trends 2012.

4   This table was adapted from Katie Harris, David Keen and Tom Mitchell, When Disasters and Conflicts Collide: Improving links between disaster resilience and conflict prevention, ODI, February 2013, p. 9. For projected urban populations see UNDESA's World Urbanization Prospects 2014.

5   Adapted from report Global Estimates 2014: People Displaced by Disasters p. 46.

6   Robert Muggah with Kenneth Savage, "Urban Violence and Humanitarian Action: Engaging the Fragile City," Journal of Humanitarian Action, January, 2012.

7   See UNISDR, "Toolkit for Local Governments," available at: http://www.unisdr.org/campaign/resilientcities/toolkit/essentials.

8   In some cities, those living in slums form the majority. 70.1 percent of Port au Prince's population lives in slums 66 percent Calcutta, and 60 percent of Bogota. See World Urbanization Prospects 2014.

9   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 multi-lateral organizations to assess risk and build a data base on vulnerability.

10   Robert Muggah, "Fixing Fragile Cities: Solutions for Urban Violence and Poverty," Foreign Affairs, January 15, 2015.

11   For more detail on the examples see Robert Muggah, Researching the Urban Dilemma: Urbanization, Poverty and Violence, Ottawa: Canada, IDRC, 2012. Also see IDRC and DFID's Safe and Inclusive Cities Initiative. The Harvard Humanitarian Initiative's Urbanization and Emergencies work and see the Humanitarian Action in Situations other than War project led by the Igarape Institute. Also see Robert Muggah's TED Talk on "How to Protect Fast-Growing Cities From Failing," October 2014.

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