"We're not in the field anymore"
Adapting humanitarian efforts to an urban world

1. Introduction

Urbanisation is a social phenomenon and a physical transformation of landscapes that has been described as 'one of the most powerful, irreversible, and visible anthropogenic forces on Earth' (IHDP, 2005). It may well amount to the most significant change in human civilisation since the coming of agriculture. The total urban population, which stood at just 10 per cent of the global population at the start of the 20th century, has in the past few years reached an unprecedented 50 per cent (UN, 2005). This much-reported event has been described as an irreversible tipping point (Crane and Kinzig, 2005) - the threshold of a new 'urban millennium' (UNFPA, 2007). Much of the available data indicates that urbanisation will continue at a scale and speed that redefines our relationship with each other and with the planet. (IHDP, 2005).

- In 1900 there were 16 cities around the world with populations of 1 million or more people, a lmost entirely in developed countries. By 2000, there were 400 cities with populations of more than 1 million around the world, three quarters of which were in developing countries (UN, 2005).

- By 2030, the global population will stand at 9 billion, and the global urban population will account for up to 60 per cent of this figure (ibid). Almost all population growth in the next 30 years will take place in urban settings. To put this shift into perspective, there will be almost twice as many people living in cities 2030 as there were people living on the planet in 1970.

- Most of this urban growth will be in small and medium-sized cities rather than mega-cities, with about half of the world's urban population residing in cities of 500,000 people or fewer. (UNHABITAT, 2009) These teeming cities will account for up to 90 per cent of all global economic activity (UN, 2005)

- In terms of sheer numbers, Asia will continue to house the largest number of people in its towns and cities. Africa, although the least urbanised continent today, will become home to 1.2 billion urban dwellers by 2050, with a significant youth majority (ibid).

Figure 1: Urban and rural populations, 1950–2050 (UN Department of Economic and Social Affairs (UNDESA), 2010)
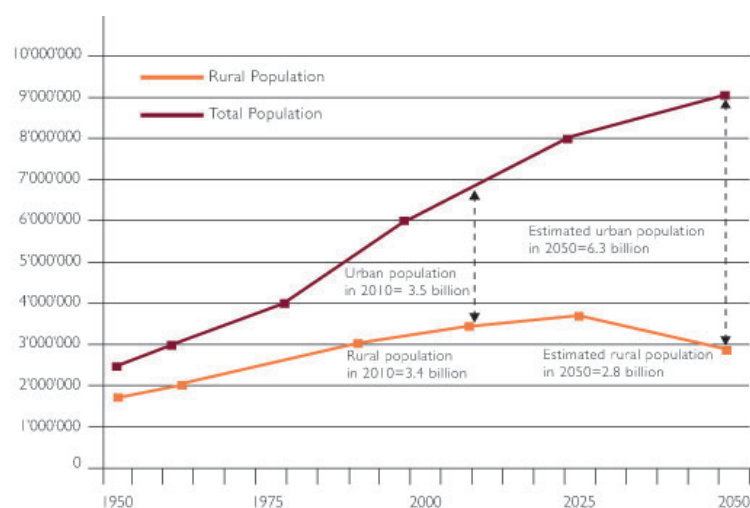
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It is well established that cities can be much more efficient and effective than rural settings (Ravallion et al, 2007; ALNAP, 2009). It can be more straightforward to provide basic needs, as well as social and cultural services for people living closer together in settings with more developed infrastructures (World Bank, 2010). However, urbanisation is far from being an unalloyed good. As cities grow, population density and diversity also increase. Human vulnerability and stresses on the environment and natural resources are typically heightened. As this happens, the cost of meeting basic needs inevitably increases (ibid).

Perhaps the grimmest manifestation of urbanisation is the rise of slums and informal settlements, housing around 1 billion people globally,. This figure is currently growing by an estimated 25 million people per year and is projected to double by 2030 (UNHABITAT, 2009).

While such data sends a powerful message about the scale and pace of urban change, working out specific social, political and economic implications is not easy. There is a great deal of misreporting and misunderstanding of such high-level data and projections – about what they measure, what they mean and how they should be interpreted (Cohen, 2004).

Urban planners working almost 40 years ago developed the term 'wicked problems' with specific reference to the complexity of urban development issues. In particular, they found that urban problems were hard to solve because of incomplete, contradictory, and changing requirements that are often difficult to recognise. The effort to solve one aspect of a wicked problem will frequently reveal or create other problems (Rittell and Weber, 2003). If anything, the challenges of urbanisation have increased in both scope and complexity since that time. In 2005, urban sustainability and vulnerability were identified by the Millennium Ecosystem Assessment as areas where significant knowledge gaps exist and persist.[1] It is perhaps unsurprising that urbanisation is increasingly recognised as one of the most important challenges of the 21st century.

Urbanisation presents a major set of challenges for the international humanitarian sector (ALNAP, 2009; DEC, 2011, Satterthwaite, 2007). On the one hand, there is an obvious issue of a growing urban caseload, driven by a combination of factors including growth in population numbers and risk levels (REF). One widely cited text on urban vulnerability published almost 10 years ago found that urban areas in developing countries were facing dramatically escalating disaster risks (Pelling, 2003), and there has been little evidence since to contradict this assessment (IFRC, 2010).

The pattern of urban vulnerability has followed some general trends, which can be summarised as follows: a growing urban population is being increasingly and disproportionately exposed to more hazards and risks – whether meteorological, geophysical, socio-economic or political (Cohen, 2003). Poverty and inequality mean that these populations are becoming increasingly vulnerable. Disasters and crises highlight this vulnerability. The international community may engage, but with highly varying degrees of success. Rapid but poorly coordinated responses often lead to an increase in long-term urban vulnerability, albeit in very context-specific ways. Meanwhile the window of opportunity for taking preventative action against future crises is dismayingly narrow (see Case Study 1 on Sao Paulo for more detail on how this plays out in a particular context).

1. McGranahan et al. 2005

In parallel, the 'rural assumptions' that underpin humanitarian aid delivery have proved remarkably resilient. Some observers, including David Sanderson of Oxford Brookes, have linked this to the large-scale and largely rural famine responses of the 20th century (Sanderson, 2000; IASC, 2010). With the growth in urban crises, however, there is an increasing mismatch between the long-held assumptions and the new urban reality. As one expert drily noted during the preparation of this background paper, 'we're not in the field anymore'.[2]

As a result, we are increasingly seeing a number of serious problems in how major agencies think about and deliver humanitarian aid. There are also serious problems in the related functions of disaster risk reduction (DRR) and disaster preparedness. While many of the failures of the aid response to the Haiti earthquake in 2010 were all too familiar to long-term observers (DEC, 2011; Groupe URD, 2011), there were also numerous issues resulting from the unique urban setting of Port-au-Prince. These ranged from relatively basic issues such as the logistics of putting up emergency shelters or latrines on concrete instead of in soil, to how to engage effectively with municipal authorities, legal codes and structures, and urban civil society. The urban context proved that many humanitarian standard operating procedures were difficult to implement at best and irrelevant at worst (DEC, 2011).

This lack of operational progress belies the attention that has been paid to the issue over the years. There are a number of initiatives currently underway which seek to address the challenges of humanitarian action in a predominately urban world (see Box 1). Urban disaster initiatives are not new – a number were in place 10 years ago. But they do not (at time of writing, at least) seem to have had the necessary influence on how the sector goes about its work. As in many other contexts, the gaps between policy dialogue, academic debates and operational realities are considerable.

Box 1: Initiatives to address urban disaster-related issues

- The Inter-Agency Standing Committee (IASC) project on urban humanitarianism
- United Nations Educational, Scientific and Cultural Organisation's (UNESCO) initiative on urban biospheres
- The Millennium Ecosystem Assessment
- World Bank's Cities Alliance and Cities in Transition
- International Human Dimensions Programme (IHDP) urbanisation science project
- Diversitas science plan on urbanisation
- International Union for the Scientific Study of Population (IUSSP) Urbanisations and Health Working Group
- US National Academies' Panel on Urban Population Dynamics and Roundtable on Science and Technology for Sustainability's Task Force on Rapid Urbanisation
- UN International Strategy for Disaster Reduction's (UNISDR) Asia disaster risk reduction network
- Efforts within specific agencies – International Federation of Red Cross and Red Crescent Societies (IFRC), Oxfam GB, World Vision

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2010 saw the launch of an important new UNISDR campaign on 'resilient cities', to which 58 cities have signed up at the time of writing (UNISDR, 2011). But the findings of the Fifth Asia Pacific Urban Forum in June 2011 were sobering. The forum posed the question: 'Complex urban disasters – are we ready?' The answer from experts in Japan, China and Bangladesh – representing the spectrum from high to low-income countries – was: 'no, not yet'. A common challenge identified by the participants was the institutional complacency that sets in after several years of not facing a particular kind of disaster: relevant expenditure budgets get cut, leaving populations at heightened risk (Alertnet, 2011).

2. David Sanderson, Personal Communication, August 2011

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As the UNISDR campaign statement notes, improvements in urban disaster response cannot be achieved at municipal levels alone (UNISDR, 2011). The challenge of urban disasters requires sustained, coherent and strategic effort from across national and international communities. To date, however, such an effort has been noticeable predominately by its absence. The lessons emerging in particular from the international response to the Haiti earthquake have served as something of a wake-up call.

Against this background, the 27th ALNAP Meeting presents a timely and appropriate platform for discussion of this vital issue. It offers an opportunity to move towards a roadmap for the humanitarian system as a whole. ALNAP's meetings are now widely acknowledged as a key platform for all international agencies to come together and forge new shared agendas for reflection and action. In recent years, themes have included media relations, impact assessments, innovations and most recently collaboration with national actors. These meetings have had considerable influence, bringing key issues into shared strategic focus and giving shape and momentum to numerous new initiatives.

This Background Paper will set out the key ideas underpinning urbanisation, urban vulnerability and urban responses, drawing on a synthesis of the latest research and practice. It will then outline a series of strategic and operational questions faced by the international humanitarian and DRR communities in responding to and preparing for disasters. Discussion of these challenges and ways to navigate them will form the basis of the ALNAP 27th Meeting in Chennai (see Appendix 1 for the key questions to be addressed at the conference).

Case Study 1: A typical urban disaster scenario – Sao Paulo floods January 2011

"Sao Paulo is the largest urban agglomeration in Brazil and the foremost industrial center in South America. But until the 1880s, Sao Paulo was a minor commercial center. In 1890, when Rio de Janeiro had a population of more than half a million, the population of Sao Paulo was only 65,000. Widespread coffee cultivation brought sudden prosperity to the region and transformed it from an isolated frontier to a vibrant economic region. By the early 1900s, manufacturing became established in Sao Paulo and the population grew to 240,000, due in large part to a massive influx of immigrants from various parts of Europe. By 1950, Sao Paulo had become the chief manufacturing center of Brazil. Today, the Sao Paulo Metropolitan Area accounts for about half of Brazil's total industrial output.

Not surprisingly perhaps, Sao Paulo faces many environmental and ecological problems associated with rapid industrialization and population growth. More than 50 per cent of the population lives in substandard housing and many residents do not have access to clean water or sanitation services. Air and noise pollution, crime, overcrowding, and traffic congestion are all pervasive problems. Moreover, despite rapid economic growth, the local economy has only been able to absorb a fraction of the growing labour force so that unemployment and underemployment remain persistent problems. Poor performance of the Brazilian economy during the 1990s coupled with the devaluation of the real in January 1998 further exacerbated weaknesses in the local economy" (extract from Cohen, 2003).

The vulnerability of Sao Paulo to disasters was dramatically highlighted in January 2011, when torrential rainfall led several rivers to burst their banks and caused flash floods across the south of the country. Sao Paulo was the worst hit city, with many roads left impassable and parts of the city submerged. Mudslides in the sprawling favelas, positioned on the high inclines around the city, displaced large numbers of the population, and killed almost 500 people around the country. Although there wasn't an international appeal, some support to the response was provided by USAID and others.

Experts blamed inadequate drainage, which had failed to keep pace with the rapid growth of the city. Resources were promised in the immediate aftermath for improvements during the re-building. There was a widely acknowledged need, expressed especially forcefully by Brazilian civil society, for improvements to be made in a comprehensive and equitable manner if future disasters are to be prevented.

Although it is just one case, the Sao Paulo story is an increasingly common one around the world.

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2. Adapting to an urban world: five key questions

Research done in preparation for the ALNAP meeting has led to the identification of a number of questions that need to be addressed with regard to disasters and crises in urban contexts. These questions can be seen as relating to gaps in humanitarian knowledge and practice. However, this should not be taken to mean that there is no knowledge of how these might be addressed. Rather, there are a number of individuals and groups working in the system who have a keen sense of these issues and ways to navigate them. But the lessons from urban responses such as Haiti suggest that, as with many other areas of knowledge in the system (ALNAP, 2002; ALNAP, 2004)[3] our collective understanding is patchy, informal and largely tacit. As a result, institutional responses are not sufficiently well adapted to these contexts. This has become more apparent with the increased incidence of urban disasters.

The key questions are as follows:

- **What are urban disasters?** What exactly do we mean and understand when we say urban disasters? How do urban disaster settings differ from other contexts in which humanitarian work takes place?
- **What is the nature of urban vulnerability?** How can we better understand its nature, form and dynamics?
- **What are the challenges of urban disaster responses and how should they be met?** What can we say about responses in urban settings, and the challenges they face?
- **What do we need to do differently in urban disaster risk reduction?** What are existing practices – and how can these be improved?
- **How does urban development policy support or hinder humanitarian efforts?** How can development policy and practice take account of urban vulnerability, risk and disasters?

The following sections set out some of the latest ideas and research around the five key gaps, drawing on literature and a series of key informant interviews.

3. What are urban disasters?

3.1 From the 'urban-rural divide' to the 'urban-rural continuum'

Perhaps the most significant challenge in understanding urban disasters is to establish what 'urban' actually means (Cohen, 2003). Despite numerous reports (including those cited in the introduction) that the world is becoming more and more urban in nature, the definition of urban itself is ambiguous and dependent on context (Frey and Zimmer, 2001).[4] Defining the basic terms 'urban' and 'rural' in a universal way is the subject of ongoing debate (Cohen, 2003).

What is increasingly clear is that a simplistic either/or categorisation is unhelpful and does not match the reality of how human settlements are evolving.

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3. See previous ALNAP studies on organisational learning and field-level learning for more details.
4. UN data, which is the basis of many of the projections, is reliant on national statistics. Different countries define urban populations in very different ways. In Angola and Ethiopia, for example, up until relatively recently, any locality with more than 2,000 inhabitants was automatically classified as urban. In other countries, such as Benin, the figure is higher. In some countries such as Bangladesh or Pakistan, urban settlements are those with a certain kind of administrative or bureaucratic structure (Cohen, 2003).

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As the Briefing study Beyond Rural-Urban: Keeping up with Changing Realities (IFPRI, 2005) notes:

The labels 'urban' and 'rural' fall far short of capturing the dynamism and diversity of reality. Conjuring up visions of crowded cities and isolated countryside, they suggest separate worlds and ways of living. They mask the many ways urban and rural overlap and intertwine, as well as the variety of livelihood strategies within urban or rural areas. (IFPRI, 2005)

The same study notes that it would be better to imagine a diverse set of conditions placed on a continuum from the very rural at one end (for example, small hamlets in the highlands of Ethiopia) to the very urban at the other (mega-cities such as Dhaka and their sprawling peripheries), with villages, small towns, regional centres and medium-sized cities in between.

The 2009 World Development Report (World Bank, 2009), which focused on economic geography, represented the shift as follows:

Figure 2: Beyond Rural and Urban from World Development Report 2009
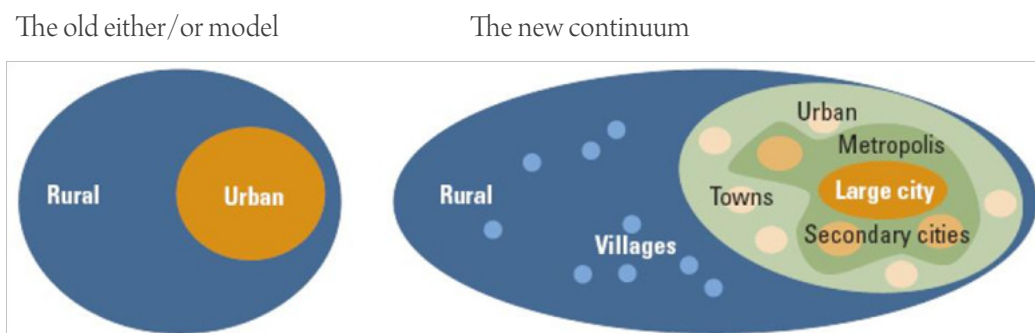
Underpinning the continuum are issues of diversity, density and dynamics. These factors have been described as distinguishing rural from urban contexts, and can be observed in a whole swathe of different trends and phenomena. These include population size and density, mobility, economic factors such as livelihood strategies and infrastructure, key social indicators such as service delivery systems, and environmental factors (ALNAP, 2009).

One useful way of capturing these in a comprehensive fashion is the STEEP framework used in risk management and strategic futures work, which underpins some of the work of the Humanitarian Futures Programme (HFP, 2008). The STEEP approach enables us to think about a particular situation in terms of Social, Technological, Economic, Environmental and Political factors. Box 2 illustrates how this might be applied to large urban contexts – i.e. the 'large cities' end of the continuum.

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Box 2: STEEP Analysis of Large Cities

	Diversity	Dynamics	Density
Social	Social diversity can be in terms of ethnicity, class, gender, sexuality, culture, religion, age and disability. Challenges for service delivery to meet these different needs.	Urban populations are very mobile, both on a day-to-day and longer-term basis. Dynamics of social interaction are complex and change rapidly.	There are many more kinds of groups living together in close proximity. Cultural conflict sits within and alongside cultural integration.
Technological	Many more forms of infrastructure and technology. Many different levels of technological development simultaneously.	Technological change is rapid and poses risks and opportunities.	Infrastructure is under considerable pressures from population growth. Urban sprawls make for a dangerously high density of land use which increases vulnerability to risks.
Economic	Greater range of economic actors from large multinationals to small businesses. There is considerable diversity in wealth and income – the very wealthy and very poor often living in close proximity.	Globalisation makes cities more vulnerable to shocks and stresses. Trajectories of growth and recession can be rapid and unpredictable.	Economic clusters occur – for example, of similar kinds of businesses. Many more forms of livelihoods co-exist and are interdependent.
Environmental	Many kinds of land use form a complex tapestry.	Ecological stresses are considerable, and natural disasters can have very rapid effects	Pollution and waste are perennial issues which result in risk of health epidemics etc. Greater levels of degradation.
Political	Institutions are diverse, both formal and informal, to serve different needs and constituents. Urban inhabitants can have diverse political status – citizens, internally displaced persons (IDPs), unofficial refugees etc.	Political change can be very rapid and turbulent, or the political situation can be very entrenched and resilient to reforms	Greater density of formal political mechanisms. Representation is an issue due to sheer number of groups and fluidity of urban identities. Greater potential for marginalisation. Issues such as land rights are especially challenging to tackle.

As this very preliminary document-based analysis indicates, it is not simply that urban societies are more diverse, more dynamic, or denser that their rural comparators. It is that, in the extreme, large urban centres can be all three of these things simultaneously. The importance of each of these three factors, and how they play out in different social, technological, economic, environmental and political contexts, varies considerably from city to city and region to region (Resilience Alliance, 2007).

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What is clear is that the particular mix of factors contributing to a given urban context carries wide-ranging implications for policies and practices. This affects all kinds of actors operating in urban contexts, from governments to businesses and civil society (ALNAP, 2009), whether they work in health, education or planning. Organisations that focus on disaster response and management are no exception to this (Satterthwaite, 2007).

At the very least, the diversity, dynamics and density of urban contexts reinforce demands for disaster management and humanitarian aid to move away from a 'cookie cutter' model[5] and instead to actively take a more refined and nuanced approach to crises. To some extent, this means delivering on those changes that have long been called for – to pay more attention to context, to work with local stakeholders, to learn and manage knowledge, to be more accountable, to be more innovative.

In the most challenging urban contexts, these hoped-for changes will not be 'nice-to-have' considerations, but rather 'must-have' requirements. But there are also more challenges posed by the three factors of diversity, dynamics and density, which will test policies and processes alike.

These challenges mean that humanitarian agencies will need to work hard to develop a more detailed understanding of urban livelihoods and vulnerabilities. Section 4 looks at this in more detail.

There are challenges to types of response. For example, many of the strategic and operational approaches used in humanitarian aid delivery are challenged by urban contexts. Implementing aid in line with humanitarian principles requires a good understanding of the crisis-affected population. But urban contexts pose considerable challenges to standard data-gathering methods, especially in informal settlements. Techniques, from needs assessments to targeting, monitoring and evaluation – are very difficult in dynamic and diverse contexts. Operational delivery also faces major challenges. Some of these are consistent with those facing any form of service delivery effort in highly dense and diverse urban contexts. But others are unique to disaster response: for example, many of the practical kits delivered through aid may simply not be configured to work in urban environments – as was seen with the latrines that could not be installed in the concrete setting of Port-au-Prince. Section 5 looks at these issues in more detail.

Disaster risk reduction (DRR) needs to be better configured to the urban environment. In particular, the unpredictable nature of urban vulnerability means that efforts may need to be broader in scope, and take a systemic approach to understanding how different kinds of risks and vulnerabilities might compound each other. Section 6 looks at the challenge of urban DRR in more detail, focusing on some of the key lessons from the literature and the ongoing UNISDR campaign.

Finally, these issues do not merely concern disaster-related efforts. Vulnerability and exclusion are development issues as much as they are humanitarian, and there is a vital need for urban development policy to take account of these issues. Section 7 looks at these issues in brief.

5. From comment made by Peter Walker during a plenary session of the World Humanitarian Studies Conference, Groningen, the Netherlands, 7 February 2009.

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4. What is the nature of urban vulnerability?

It is almost a cliché to point out that while cities promise great potential for growth and innovation, they are also sites of extreme poverty, inequality, unemployment, exclusion and violence. As of 2008, estimates were that one third of all urban residents were poor, representing a quarter of all the world's poor (Ravallion, Chen and Sangraula, 2007). This amounts to approximately 290 million people in urban areas in developing countries living below the poverty line of US$1 per day in 2002. If the US$2 per day figure is used, the figure rises dramatically to 750 million people. With continued urbanisation, the numbers of urban poor are predicted to rise, making poverty increasingly an urban phenomenon (ibid).

Though the urban poor are diverse across regions, countries and even within cities, they tend to face a number of common deprivations which affect their daily life. In the extreme, these deprivations can amount to an ongoing chronic humanitarian emergency – witness, for example, the conditions of Haitians before the earthquake of January 2010 (DEC, 2011).

The main issues raised in the literature include the following (World Bank, 2008):

- limited access to income and employment
- inadequate and insecure living conditions
- poor infrastructure and services
- vulnerability to risks such as natural disasters, environmental hazards and health risks particularly associated with living in slums
- spatial issues which inhibit mobility and transport
- inequality closely linked to problems of exclusion.

There are also a number of negative side-effects, or externalities, of urbanisation, such as traffic problems, the rise of gangs, and inadequate institutional and governance systems (UNHABITAT, 2009).

It is hardly unsurprising that those populations that have the highest levels of urban vulnerability are those who live in informal settlements or slums. There are now around 1 billion people living in poverty in urban slums, facing extreme levels of vulnerability on a daily basis (UNHABITAT). Their conditions are diverse, but some common patterns can be identified.

- High dependence on food produced outside cities make urban residents vulnerable to droughts, flooding, and other extreme weather events. The urban poor are the most vulnerable. Food and Agriculture Organization (FAO) studies in urban areas show that a 10 per cent rise in the price of a staple can hurt the bottom 20 per cent of the income distribution the most.
- 360 million people live in cities in low elevation coastal zones and are vulnerable to sea-level rises. Storm surges and rising tides could damage urban infrastructure and the provision of services.
- Around 1 billion urban dwellers live in poor quality, overcrowded housing in slums or informal settlements that lack adequate provision for piped water and most other forms of infrastructure.
- Cities are particularly vulnerable due to the high concentration of people and economic assets, and in many cases, their hazard-prone location in coastal areas, along rivers, and in seismic zones.

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- Risks are especially high in low and middle-income countries where a third to one half of the population in cities lives in slums. People in these and other low-income neighbourhoods are made even more vulnerable by overcrowded living conditions, the lack of adequate infrastructure and services, unsafe housing, inadequate nutrition and poor health.

Box 3 provides three specific examples drawn from the 2010 Red Cross World Disasters Report (IFRC, 2010).

Box 3: Three examples of urban vulnerability

- In **Bangladesh's capital, Dhaka,** almost 30 per cent of the 14 million people live in slums along the water's edge, exposing them to severe flood risks. Moreover, the Stanford-based earthquake disaster risk index lists Dhaka as one of the 20 most vulnerable cities in the world to earthquakes.

- **Mumbai in India** is the fourth largest city in the world with 20 million people, of whom some 6.7 million are slum dwellers (World Health Organization). Mumbai is one of the top 10 most vulnerable cities in terms of floods, storms and earthquakes and is the most vulnerable city in the world in terms of total population exposed to coastal flood hazard. Like many of Asia's coastal mega-cities, most of Mumbai is less than a metre above sea-level. Moreover, it also lies on an earthquake fault-line. With the city accounting for almost 40 per cent of India's tax revenue, UNHABITAT notes that any serious catastrophe here could have drastic economic consequences for the entire country.

- In **Jakarta, Indonesia,** 40 per cent of the land area is below sea-level. As a result, its 10 million inhabitants are at risk of flash floods, particularly along the 13 river systems that pass through the city. Jakarta also has a moderate risk of earthquakes due to the country's location along the Indo-Asia subduction zone. The high population density, averaging 14,000 people per square kilometre, a significant portion of whom are slum-dwellers, increases the potential of a disaster to cause serious harm.

In many low and middle-income countries – which are the vast majority of those appealing for international humanitarian aid – the negative implications of rapid urbanisation can outweigh the positives. Urban growth in developing countries is frequently haphazard and overwhelming, far exceeding these cities' capacity to plan adequately and control development. Such uncontrolled urbanisation feeds the growth of slums, reinforces poverty, and diminishes cities' ability to deal with disasters.

As a Chinese official at the Asia Pacific Urban Forum in June 2011 noted, during rapid urbanisation, many critical infrastructure and institutional arrangements are ignored in favour of other priorities (Alertnet, 2011). As the 1999/2000 World Development Report noted of African cities: '[they] are not serving as engines of growth and structural transformation. Instead they are part of the cause and a major symptom of the economic and social crises that have enveloped the continent' (World Bank, 2000).

As well as higher levels of vulnerability, this illustrates that there is also greater diversity in the drivers of vulnerability, and a greater degree of inter-dependence in the factors that create vulnerability (Pelling, 2003).

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Box 4: A STEEP view on urban vulnerability

	Common forms of urban vulnerability
Social	The social context in cities may be characterised by crime, fragmentation and other social problems which will reduce the ability of households to support one another in order to further their livelihood strategies. In addition, poor men and women may be excluded from livelihood opportunities due to differences such as culture or ethnicity which result in their exclusion from social networks.
Technological	Urban residents living on illegally occupied land or in informal low cost rental housing lack legal tenure rights. As such, they experience poor housing quality and face the threat of summary eviction. The urban poor may be especially vulnerable to technological hazards such as fires, emissions, etc.
Economic	Those in informal employment generally lack labour rights. They are therefore susceptible to sudden unemployment, and the dangers accruing to unprotected working conditions (long hours, poor pay, insanitary or unsafe conditions). 'Free' goods and services, such as common land, clean water and fuel, are rare in cities. Most of the basic living needs of urban residents must be paid for in cash – making the urban poor particularly vulnerable to market vagaries such as inflation, and the removal of government subsidies. Dependence on the cash economy frequently means that poor households are vulnerable to debt (especially where they cannot rely on informal or social networks for loans). Borrowing, normally at usurious rates, may lead to long-term indebtedness with disastrous results such as bonded child labour.
Environmental	Poor living environments often endanger the lives and health of the urban poor, especially where they are forced to live and work in marginal areas through lack of cheap alternatives. This creates further vulnerability, as ill health undermines one of the chief assets of the urban poor – their labour (Satterthwaite, 1997). Linked to housing rights, those residents undertaking urban agriculture may also lack legal tenure, and risk losing their land and crops.
Political	Many residents will lack legal registration, may be disenfranchised, excluded from political decision-making and, in addition, may suffer from police harassment and bureaucracy (Wratten, 1995).

Note: Extracted and adapted from Meikle, S., Ramasut, T. and J. Walker (2001) Sustainable Urban Livelihoods: Concepts and implications for policy. http://eprints.ucl.ac.uk/35/1/wp112.pdf

The example of Baidoa, Somalia is provided in Case Study 2, and illustrates the multi-faceted nature of urban vulnerability. This is an interesting example because, as a town, it sits around halfway along on the rural-urban continuum presented in Section 3. A response that assumes that Baidoa is a purely rural context is likely to be stymied by the issues arising from the diversity, dynamics and density of the context.

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Case Study 2: Urban vulnerability in Baidoa, Somalia

Baidoa is the capital city of the Bay region, which is located in central southern Somalia. The town of Baidoa is situated 245km west of Mogadishu and 240km southeast of the Ethiopian border. Baidoa has an estimated population of 59,110 people. However, population figures regularly fluctuate due to frequent shifts in IDP numbers. Baidoa is an essential part of the Sorghum Belt, often referred to as Somalia's 'breadbasket'. Situated in the Bay's Agro-pastoral High Potential Livelihood Zone, it serves as an agricultural and livestock trade centre with strong economic links to neighbouring rural and urban centres (Mogadishu, Merka, Qoryoley, Bardera and Beled Hawa). It also conducts trade activities with the Ethiopian cities of Dolow and Qalaafe, and the Kenyan town of Garissa.

The main economic activities in Baidoa include business (small, medium and large-scale), casual labour, self-employment, and livestock and agricultural trade. Another notable aspect is the regular labour migration from Baidoa to the towns of Bossaso, Galkayo, Garowe and further north to Yemen and the Arabian Gulf.

Generally, the key driving factors of Baidoa's economy include crop and livestock production, the presence of the TFG (Transitional Federal Government), financial contributions from international organisations, including the UN and other NGOs, and remittances from the diaspora.

Baidoa district has experienced periodic unrest since the 1991 fall of the Siad Barre regime. Regular inter-clan fighting has greatly impacted the livelihoods of the local population. In addition, during much of the 1990s, heavy fighting and frequent changes of control between the SNA (Somali National Alliance) and the RRA (Rahanweyne Resistance Army) also added to the suffering of Baidoa's most vulnerable groups.

After the RRA's recapture of Baidoa in June 1999, a significant number of people who were displaced to other parts of the Bay, Banadir, Lower Shabelle and Gedo regions, returned and livelihood and general security improved in Baidoa. However, recent instability caused by frequent shifts in government control has once again left Baidoa's population vulnerable. The removal of the Union of Islamic Courts and the re-installation of the TFG in 2006, following the Battle of Baidoa, meant that Baidoa temporarily became the seat of Somalia's interim government. This made Baidoa a target for Islamist militants and led to the stationing of Ethiopian troops within Baidoa as protection against attacks. The ensuing violence left many dead and forced hundreds to flee the town. The TFG returned to Mogadishu in 2007, and although Baidoa has seen some improvement in terms of security and its economy, it has yet to fully recover from the effects of the violence. Successive rain failure, recurrent drought, recent inflation and poor nutrition have also made this livelihood highly susceptible to humanitarian crisis.

Analysis of the urban vulnerability identified the following risks faced by all income groups:

- **Security**: civil insecurity affects all wealth groups, causing displacement, loss of life and property and a high rate of unemployment.
- **Inflation**: the average exchange rate during the study year was 14,500 Somali Shillings per US$ and [in May 2008] stood at 35,000 SoSh per US$ (an increase of more than 140 per cent). This will significantly reduce the purchasing power of poor and lower-middle wealth groups. Severe exchange rate depreciations have increased the costs of imported food and non-food items. If depreciations continue, poorer households will suffer most, particularly if their wages and profits do not rise to compensate for such devaluation.
- **Drought (failure of the rainy season)**: crop production is a driving economic factor in Baidoa. Crop failure due to drought will significantly reduce food and income access for poorer groups. Income from agricultural labour and the cereal trade will also decline. Cereal prices will increase resulting in poorer groups not meeting required energy needs.
- **Water shortages**: for the majority of the people in Baidoa, the main water source is shallow wells, which are free to access. During periods of poor rain, there are extreme water shortages, which raise water costs.
- **Unemployment**: job opportunities were generally manageable during the reference year due to relative stability. However, there is currently a high probability of unemployment due to increasing insecurity and reduced trade activities.
- **Increased cereal prices**: during the reference year, cereal prices were low due to a bumper cereal harvest in the '06/07 season. However, recent poor local cereal production, combined with high cereal demand from other parts of the country, has caused cereal prices to increase. Cereal stocks also depleted earlier than expected, which further reduced cereal availability within the Sorghum Belt.
- **Disease (e.g. AWD (acute water diarrhoea) and malaria)**: disease causes high child mortality rates. Risk of exposure is higher during dry seasons when water shortages force the local populations to use dirty water. The absence of mosquito nets also increases the risk of malaria.
- **Other risk factors** mentioned by key informants include limited trade activities, a decline in the terms of trade and an influx of IDPs.

Extracted from www.fsnau.org/downloads/Baidoa-Urban-Baseline-Analysis-Report.pdf

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5. What are the challenges of urban disaster responses and how should they be met?

5.1 The scale of the challenge

The nature of urban contexts and urban vulnerabilities carry many implications for humanitarian efforts. Because cities are home to large populations living in high densities and often in impoverished conditions, the potential impact of emergencies can be huge in terms of loss of life and economic assets. However, cities also generally provide a higher, albeit variable, level of human and institutional resources that may be drawn upon for the delivery of emergency responses and longer-term resilience.

The factors of diversity, dynamics and density mean that urban disasters can have some common characteristics:

- High population density means that more people may be killed and injured within a small space, but diversity of a population will make their needs highly differentiated.
- The dense physical nature of cities means that there will be more damaged infrastructure to contend with – buildings, roads, business areas, sewers.
- The dynamics of change mean that there will be both a greater sense of collapse when a disaster hits, but also faster rates of recovery, supported by diverse economic structures.
- The diversity and density of political institutions means that there is a need for better and more nuanced engagement.

The World Bank's 2010 publication *Natural hazards-unnatural disasters* also argues that increasing and interconnected risks within rapidly urbanising towns and cities are a 'game-changer' in terms of humanitarian response. A recent Disasters Emergency Committee (DEC) evaluation of the Haiti response (DEC, 2011) provides further insights:

[agencies need to] learn 'new rules of the game' in urban post-disaster response. Issues of complexity, range of actors, space, the importance of commerce and trade, services, infrastructure and sheer concentrations of people require a consideration of how to operate compared to rural contexts.

The 10 key lessons from the DEC evaluation are worth setting out in detail (see Box 5).

Box 5: Lessons from DEC agencies in Haiti

This 2010 evaluation is one of a number that focus on the urban nature of disaster contexts. The 10 lessons on responding to urban disasters identified by the report are as follows:

1. Work with and through municipalities wherever possible.
2. Find and use neighbourhood networks and capacities.
3. Work with the local private sector and don't compete unfairly.
4. Focus on long-term homes, not short-term shelter.
5. Keep people in or close to their neighbourhoods, if safe.
6. Assume skills and resources can be found locally.
7. Assume fast-changing environments and have an exit strategy.
8. Use cash to stimulate markets.
9. Use the right tools for working with complex sets of stakeholders.
10. Prepare now for the next big urban disaster.

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There is a clear need to adapt existing international response mechanisms and processes in order that they are more relevant to urban contexts. This includes response mobilisation, planning, needs assessments, targeting, monitoring and evaluation. Perhaps most importantly, the humanitarian response 'toolbox' may need to be radically re-thought in ways that will prove challenging for operational agencies and donors alike (ALNAP, 2009).

Work by Groupe URD[6] on the Haiti response identified that humanitarian and reconstruction aid needs to be better adapted to the specific characteristics of urban contexts. This includes practical issues such as working through existing neighbourhoods rather than creating camps and artificial sites. At a more strategic level, the humanitarian response needs to move from a system that targets individuals and households to one that targets communities in an urban environment with the aim of complementing and strengthening public services (Groupe URD, 2011).

5.2 Addressing the response challenge: Key Lessons from the IASC urban strategy

The IASC strategy for urban humanitarianism (IASC, 2010) sets out some of the specific issues, drawing on a cross-country review. In particular, it identified more effort required in the following areas:

- anticipation, preparedness, and urban surge capacity
- working with new partners
- a new urban analytical and operational toolkit
- new approaches to performance and accountability.

The rest of this section draws extensively from the IASC work, with references to other material where relevant.

Anticipation and preparedness for response

The scale and often unpredictable location of urban-based humanitarian disasters underscores the need for preparedness, risk management and contingency planning to be developed for at-risk urban areas. A growing body of evidence points to the beneficial impacts of preparedness in terms of lowered overall costs of relief assistance, reduced loss of life and livelihoods, greater use of safer techniques, engagement with local capacities and resilience, and enhanced capacity to rebuild and recover faster (IASC, 2010). To quote the IASC strategy directly:

> **"Recent experience in the aftermath of floods in Manila demonstrates that joint implementation plans with host governments and service providers, including the private sector, are most effective if forged prior to an emergency. This is because agencies are reluctant to take the time required to plan when confronted with an emergency and instead resort to pre-established (pre-emergency) ways of doing business. These strategies need to recognise that the host government must lead, or at the very least coordinate, an emergency response" (IASC, 2010).**

6. http://haitiinnovation.org/en/2011/01/29/beyond-emergency-relief-haiti-groupe-urd

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This can be problematic, however, in places where government is weak, as in the case of urban Haiti after the 2010 earthquake.

Key measures suggested include:

- The use of local risk and vulnerability analyses and early warning capacities, including mapping 'community hotspots' (more on this in Section 6).
- Strengthening contingency planning and partnership-building in advance of an urban crisis, including community resilience mechanisms with gender and youth sensitivity.
- Improved pre-positioning of emergency stocks of food, temporary shelter, and health providers; preparing logistics chains and establishing 'pro-forma' contracts with local providers.
- Defining roles and responsibilities of different actors and mapping capacities.
- Strengthening citizen security, community policing and monitoring roles by civil society organisations (CSOs).
- Working in partnership to build the capacity of partner national and local governments in responses and preparedness. Stakeholders in these partnerships should include: host national and local governments, disaster response agencies, civil defence organisations, emergency response services (e.g. fire services), national NGOs, civil society (neighbourhood community-based organisations (CBOs)) and business actors in urban areas.

There is a particular need to prepare for more 'mega-disasters' like Haiti, Pakistan, Japan – which have the potential to dramatically affect large numbers of a population, shaping both short-term vulnerability and long-term development. Such disasters will need collaborative preparation efforts across the whole of the international community, including development, diplomatic and military efforts (HFP, 2008).

Another key form of preparedness is in relation to internal capacities. Humanitarian agencies need to adapt and upgrade the skills base of their staff to address urban-based challenges (IASC, 2010). Recent emergencies have served to firmly underline this issue.

Working with new partners

While a partnership approach has become an increasingly important component of the development strategies adopted since the 1990s, disaster response is still lagging some way behind (ALNAP, 2005). The need to collaborate better with national and local actors remains a major issue, highlighted in successive evaluations (for example, the TEC evaluation and the Haiti evaluations), but with seemingly little or no progress. As one paper puts it:

> **…Perhaps the biggest challenge for humanitarian actors – and also a major opportunity – is to develop ways of working with the existing institutional framework of municipal and civil society organisations which exists in most towns and cities in the developing world…**
> **(Zetter and Deikun, 2007)**

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Instead of such partnerships being seen as a 'nice-to-have' (ALNAP, 2005), in urban contexts they should be seen as fundamental to enabling an effective response. In particular, local and national actors have knowledge of the hazards and vulnerabilities of beneficiary communities and of institutional resources to complement delivery of assistance by international actors. They also possess community outreach capacity to engage the most vulnerable beneficiaries.

There is growing recognition of the potential role of the private sector, or public-private partnerships (PPPs), for the delivery of urban infrastructure and housing. There is a need to consider the degree to which the private sector can play a beneficial role, from preparedness to response and recovery.

Recent complex emergencies and natural disasters in Pakistan, Haiti and Kyrgyzstan demonstrate the importance of communities and host families in saving lives when they support affected populations. They can be critical to building resilience of communities and in provision of essential services. Findings from repeated evaluations indicate that putting communities at the core of an integrated response yields higher impacts.

Country case studies[7] conducted by the IASC Task Force have shown that humanitarian assistance is more effective when clear and effective strategies for multi-stakeholder partnerships are developed before a crisis hits, or failing that, as early as possible afterwards.

A central focus of such strategies will be to determine how much of the response can be provided by external assistance and in setting clear indicators for exit strategies, i.e. the point at which external agencies should leave to allow local and national actors to take over the recovery process (DEC, 2011). This means having a clear and collective sense of 'what success looks like' for an effective response.[8]

Adapt and develop new urban analytical and operational toolkits

The IASC assessment of the humanitarian tools, approaches and guidelines used by member agencies and others found that the vast majority were developed for predominant use in rural settings. While some tools are already being adapted, experience suggests that this is not enough, and that new tools will also be needed.

These include a greater range of rapid assessment tools, urban indicators for need assessments, urban market assessment tools, urban livelihood assessment tools and urban-specific assessment tools for each of the key sectors of response (food security, shelter, WASH, health and protection). One of the major gaps identified by the IASC was the need for a standardised 'urban vulnerability and resilience assessment' to define and map the vulnerabilities and resilience of different urban groups and how they might be affected by changing stresses and shocks, a point which is picked up in the next section.

There is also a range of areas where humanitarian practices will need both radical and incremental improvements. Targeted innovation processes will help identify, test and scale up new ideas and processes across all of the key sectors of humanitarian response (See Box 6).

7. IASC Task Force on Meeting Humanitarian Challenges in Urban Areas Case Studies for Nairobi/Eldoret, Manila and Haiti, May-June, 2010
8. David Sanderson, Personal Communication, August 2011

Box 6: Sector-specific innovations needed for urban response

- **Shelter**: There is a need to implement better transitional shelter processes, i.e. not just 'sheds' but activities that involve people, make use of rental markets, etc. Urban planning also needs to be re-thought to take account of land tenure and property rights issues. Approaches for more effective urban rubble removal and disposal need to be developed, which will have benefits in freeing up land for transitional or permanent shelter construction.
- **WASH:** Promising approaches include de-sludging technologies, pre-identified waste disposal landfills, upgrading school sanitary facilities and community-led total sanitation.
- **Food aid:** This needs to consider the challenges of food preparation, distribution and urban-based agricultural production in limited and very crowded urban neighbourhoods as well as navigating security risks related to stockpiling large rations. Haiti demonstrated that working with pre-existing food vendors was an effective approach for meeting some immediate food needs.
- **Livelihoods**: Humanitarians should scale up existing innovative tools, such as microfinance and small business support, and more effectively target these in urban areas, including through strengthened partnerships with local communities and the private sector. New tools are needed for enhanced natural resources management and adaptation to differing livelihood contexts in urban areas.
- **Use of technology** for better communication of issues and of resources, e.g. the use of mobile phones to send cash transfers and to communicate simple messages.
- **Protection:** The security and protection needs of affected populations differ significantly between rural and urban settings. Innovative approaches have been developed by the protection clusters in Nairobi and Bogota to provide protection against needs for increasing numbers of refugees and IDPs who migrate to cities. UNHCR has also developed a new urban refugee policy (IASC, 2010).

Adapt humanitarian evaluation and accountability approaches

Given the vital importance of local and national capacities in disaster response, it is important to identify and communicate clear, accountable roles for the international system in ways that are supportive of local functions. This needs to be done at the outset of a response, through training, secondments and technical support. There is also scope to build such work into preparedness efforts. Urban disaster response poses particular challenges for accountability to disaster-affected people. The nature of local populations demands a more dynamic approach to accountability. Recent innovations, especially in communication technologies, look to play a central role in such efforts in the future.

The nature and scope of urban response means that standard ex post evaluations may not always be sufficient to address learning and accountability needs. In particular, there may need to be a better developed menu of evaluative options. At the very least, this should include new approaches to urban real-time evaluations, more participatory and inclusive forms of multi-stakeholder evaluation, and context-specific ways of dealing with impact assessment in dynamic and fluid environments.

On the evaluation side, this needs to be underpinned with more realistic theories of change employed from the outset of a programme or intervention. Agencies will need to work hard to think through how different interventions might work, and they need to revisit this on a regular basis so as to enable the necessary adaptations to take place. As a result, urban responses may require the balance of evaluation investment to be more tilted toward formative approaches. On the programme management side, this means being open to programmes that end up looking very different to the original proposals.

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6. What do we need to do differently in urban disaster risk reduction?

As well as response, disaster risk reduction also needs to be considered through the urban lens. There are a number of key drivers of change and threat to cities on global, regional and local levels. DRR efforts need to be focused on making both international and national actors more sensitive to these drivers. The literature indicates the need for efforts in three distinct areas.

Development of a global Urban DRR assessment methodology

At a global level, there is need to develop useful typologies of cities and their vulnerability profiles – as called for in the IASC strategy covered earlier. One interesting development in this regard is the World Bank's Global Fund for Disaster Reduction and Recovery and support to the development of a multi-hazard Urban Disaster Risk Index (UDRI). UDRI is a tool which provides a baseline against which risks can be mapped and against which progress towards resilience can be measured over time and in relation to other cities. The plan is for UDRI to become a globally accepted standard in assessing and monitoring disaster risks and capacities for resilience in cities around the world (GFDRR, 2010).

The UDRI builds on mapping and identifying the following aspects of urban risk:

- hazards (both slow- and rapid-onset events, e.g. earthquake, volcanic eruption, tsunami, typhoon, precipitation-based flooding, landslide, sea-level rise, temperature increases, and changing precipitation patterns)
- exposure (in terms of potential damage and loss of life, infrastructure, and economic assets)
- adaptive capacity (e.g. national and local policies and institutions, ability to raise finances from local sources, technical capacity/ links to technical institutes, contingency planning).

An UDRI pilot is currently underway across five cities in the Ningbo region of China, with a further four cities in Indonesia and Thailand to follow. These pilots will help refine the methodology by comparing cities across countries as well as within countries.

There is scope for using such a tool to develop a global 'urban disaster hotspots' map, which can help shape preparedness work. This map will need to be forward-looking, anticipating rates of growth of cities and concurrent increases in vulnerability. The URDI work also aims to synthesise existing data, and should be a useful test of what can be done using existing data and information.

Mainstreaming urban issues into DRR efforts

There are many efforts going on in specific cities around the world, including the following:

- UNISDR has established two regional task forces for Urban Risk Reduction (one in Latin America and the Caribbean and the other in Asia Pacific). The task forces are already playing a key role in terms of coordinating urban DRR efforts and providing guidance and structure to the multitude of regional initiatives. This led to the Resilient Cities campaign of 2010–11, mentioned earlier (UNISDR, 2011). UNDP has projects on urban DRR in Kathmandu, Manila, Amman, Aqaba, Kerman and others, and supports regional initiatives. The Global Facility for Disaster Reduction and Recovery (GFDRR) has funded projects in urban DRR in Manila and Quito.
- The Regional Strengthening and Disaster Risk Reduction in Major Cities in the Andean Communities run by UNDP has focused on risk reduction efforts for the capital cities of five Andean countries (Bolivia, Ecuador, Venezuela, Peru and Colombia).
- There is also a lot of work underway on strategies for climate resilient cities, led by different regional consortia, for example the Rockefeller Foundation's Asian Cities Climate Change Resilience Network.
- National governments have recognised disaster risks in their cities and have initiated risk assessment, preparedness and in some cases, mitigation programs. Turkey, Jordan, Indonesia, the Philippines, India, Uzbekistan, Ecuador and Colombia all have active national urban DRR programs.
- Municipal and local governments are increasingly engaged with DRR efforts due to the growing awareness of the risks of natural and man-made hazards. Cities that have developed a comprehensive understanding of their exposure to hazards and have taken steps to improve their capabilities to respond and reduce disaster risks include: Istanbul, Bogota, Tehran, La Paz, Kathmandu and Mumbai.

As part of the Resilient Cities campaign, UNISDR provides the following 10-point checklist for urban DRR:

Box 7: Key lessons for urban DRR

1. Put in place organisations and coordination to understand and reduce disaster risk, based on participation of citizen groups and civil society. Build local alliances. Ensure that all departments understand their role in disaster risk reduction and preparedness.
2. Assign a budget for disaster risk reduction and provide incentives for homeowners, low-income families, communities, businesses and the public sector to invest in reducing the risks they face.
3. Maintain up-to-date data on hazards and vulnerabilities, prepare risk assessments and use these as the basis for urban development plans and decisions. Ensure that this information and the plans for your city's resilience are readily available to the public and fully discussed with them.
4. Invest in and maintain critical infrastructure that reduces risk, such as flood drainage, adjusted where needed to cope with climate change.
5. Assess the safety of all schools and health facilities and upgrade these as necessary.
6. Apply and enforce realistic, risk-compliant building regulations and land-use planning principles. Identify safe land for low-income citizens and develop upgrading of informal settlements, wherever feasible.
7. Ensure education programmes and training on disaster risk reduction are in place in schools and local communities.
8. Protect ecosystems and natural buffers to mitigate floods, storm surges and other hazards to which your city may be vulnerable. Adapt to climate change by building on good risk reduction practices.
9. Install early warning systems and emergency management capacities in your city and hold regular public preparedness drills.
10. After any disaster, ensure that the needs of the survivors are placed at the centre of reconstruction with support for them and their community organisations to design and help implement responses, including rebuilding homes and livelihoods (UNISDR, 2010).

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Integrating DRR into development efforts

Work by Mark Pelling and Ben Wisner (2009) presents detailed case studies of urban DRR from six different countries. Each case study includes specific background information on urbanisation processes, a history of disasters in a given city and an analysis of processes that lead to the accumulation of risks.

- In the case of Accra, Ghana, everyday disaster risks associated with multiple environmental health inadequacies in poor neighbourhoods are described, and various recommendations are made to improve public health and access to basic services.
- In the South African case study on the city of Cape Town, 15 years of consolidated data on everyday fire risks in informal settlements are discussed.
- In the case study on unplanned settlements in Dar Es Salaam, Tanzania, various disaster risks, processes causing them and measures taken by different stakeholders are identified.

In a number of these case studies, the authors find that DRR needs to be integrated with development and urban planning. The same conclusion has been reached by the organisations collaborating to enhance DRR in Mumbai, India, as illustrated in Case Study 3.

Case Study 3: Mumbai DRR programme

Extract from Sinha and Adarsh, 1997:

"Like most major urban centres in our country, Mumbai has grown tremendously in the last few decades due to unabated migration from the smaller towns and rural areas. As a result, the city has developed in a haphazard fashion with little consideration for proper town-planning norms. This has resulted in most areas of the city lacking basic civic amenities. In fact, almost 50 per cent of Mumbai population lives in informal houses (often illegal and of very poor quality) in slums. Even in the non-slum areas, the basic amenities may be lacking and the structures may be of poor quality. Any long-term disruption of normalcy in this city may have extremely adverse consequences for the entire nation. There is, consequently, a need to be prepared against all possible natural and man-made disasters that are likely to occur in Mumbai. For this purpose, it is essential to have realistic understanding of the consequences of likely damage in Mumbai due to different disasters. This will permit rational planning of mitigation efforts in order to minimize effects of these disasters." (Sinha and Adarsh, 1997)

In the past few years, the Government of Maharashtra (GoM), the Municipal Corporation of Greater Mumbai (MCGM), the Indian Institute of Technology (IIT), the Earthquake and Megacities Initiative (EMI) and the Earthquake Disaster Mitigation Research Center of Japan (EdM-NIED) collaborated to identify the range of hazards that have impacted or could potentially impact the city of Mumbai. These included floods, which have the potential to paralyse the city, earthquakes, fires and industrial accidents, nuclear hazards, terrorist attacks, and others.

A number of factors are seen as contributing to heightened vulnerabilities and risks in the city, including the fact that Mumbai is an island city with generally poor transport networks, poor building design and construction practices, changing use of buildings without retro-fitting or strengthening, lack of back-up systems for water supply, inadequate sewerage, weak infrastructure, vulnerability to power failures, extensive reclamation of coastal areas, existence of hazardous industries, high population density in commercial areas and slums, and improper and inadequate garbage collection and disposal.

Consistent with the national approach, Mumbai's Disaster Management Plan refers to its goals of mitigation strategy as:
• to substantially increase public awareness of disaster risk so that the public demands safer communities in which to live and work
• to significantly reduce the risks of loss of life, injuries, economic costs, and destruction of natural and cultural resources that result from disasters.

Following on from this, all districts have undertaken an inventory of existing resources to identify gaps and needs, to improve preparedness and response capability to future disasters. District-level Disaster Management Committees have been established to

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review the threats of various disasters, assess vulnerability of the district, evaluate preparedness, and consider suggestions for improving the district disaster management plan.

The administrative structure deals with planning, coordination and awareness issues. This has been on the basis of an integrated multi-hazard disaster plan that is accompanied by resources maps, anticipatory response strategies and the creation of expert groups on different kinds of disasters to provide advice and expertise to response efforts when they do happen.

Effective coordination among all involved agencies for effective response has been one of the major concerns in the process. Communications and awareness raising are key, and have included a number of campaigns to sensitise and embed concepts about disasters and risk reduction among key actors, from educational establishments (schools, colleges, universities), teachers' bodies, through to governmental organisations to NGOs and community-based organisations.

Extracted and adapted from **www.emi.pdc.org/cities/CP-Mumbai-09-05.pdf**

7. How can urban development and humanitarian efforts be mutually supportive?

Although not the primary focus of the ALNAP meeting, it is also important to highlight the role that development actors must play in enhancing urban resilience. The latest thinking from the World Bank on urban development strategies (World Bank, 2009) and others recommends that developing countries take a three-pronged approach to urbanisation, each element of which has tangible relevance for the issues covered already in this Background Paper.

- Design national and municipal policies and institutions that anticipate urbanisation and maximise resilience. At the national level this includes macro-economic policy frameworks that promote trade and capital flows, national frameworks for land and labour markets, and sound inter-governmental fiscal systems which influence how cities manage their finances and development (ibid).

- Ensure that appropriate mechanisms are in place to facilitate national, regional and local policy coordination and decision-making for resilient development. Countries more successful in managing the urban transition have relied on dedicated commissions, forums and other such networked institutional arrangements that link all levels of government and policy-makers with urban planning institutions, universities, NGOs and the private sector. If this approach is to work, it is especially important that it is grounded in sound data collection and analysis systems and in robust means of designing and testing different resilience approaches (ibid).

- Establish closer collaboration across all tiers of government and the international community. Urbanisation is not exclusively a challenge for cities. To be effective, developing countries will need efficient, multi-tiered coordination mechanisms to support policy formulation and coordinated interventions between national, regional and local governments and the international system of actors. New technologies have a considerable role to play here (ibid).

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Research done on donor efforts in urban development suggests some clear shifts in thinking in the international donor community on engagement at the municipal level (Milbert 2004). During the 1990s, urban projects were often negotiated at the national level with minimal engagement of local government institutions. Since then, several donor countries have engaged in long-term partnerships with local governments and have been increasing support for international and local NGOs engaged in urban areas. Such interventions recognise the key role of municipal and local authorities and civil society (Milbert 2004).

Perhaps the most significant new area in development policy has been the growing attention paid to ideas of resilience. This 'new big idea' has had several triggers, from work on climate change, to dealing with global crises in food and finance, through to work on social protection and DRR. It is increasingly seen as a shared framework for bridging the gaps between previously disparate areas of international aid. The relevance for urban crises is spelled out in the UK Government's Humanitarian Emergency Response Review (HERR):[9] 'the need to make resilience a central element of our work … requires us to analyse global, regional, national and local resource stress and make sure our investments do not increase vulnerability. This will require a step change in DFID's development work' (DFID, 2011).

At the very least, strengthening urban resilience requires the coherent application of a wide range of strategies which reduce the vulnerability of those most at risk to shocks and stresses, and which enable more adaptive responses to shocks and stresses when they do occur.

This means that urban disasters are not seen purely as a responsibility of humanitarian agencies, but that such responsibility extends across the aid system and the whole international community.

8. Towards urban humanitarianism: a challenge for learning and leadership

It should be apparent that these five questions are far from trivial issues for the international humanitarian community. However, many of the interviewees involved in the research for this Background Paper were clear that these fundamental issues will need to be addressed in a sustained way, at the level of both policy and practice, if we want to see improved humanitarian action in urban contexts.

The concepts and practices that need to be embraced for effectively working with urban disasters present a considerable adaptation challenge to the international community. The five gaps outlined above are not being addressed sufficiently well or with the necessary sense of urgency. Part of the reason is that there are many other 'game-changing' issues on the table for humanitarian and development aid, of which urbanisation is just one.

However, if the evidence that is emerging is correct, and if the evaluations of responses to Haiti and other urban crises are accurate, then urbanisation may well be a 'game-changer' for the humanitarian community on a par with climate change.

9. http://www.dfid.gov.uk/Documents/publications1/HERR.pdf

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Addressing these gaps will require a lot of things to be put in place, as they have many different dimensions. But two overarching challenges stand out as most important, given the current state of the system's response. These are especially relevant for the ALNAP membership and mandate.

First, a more collective learning agenda to address these gaps, mobilising the resources across the system as a whole, is much needed. This needs to be both technical, addressing issues of data, accuracy and trends; but also human, addressing training, operational guidance, and so on. Such a learning agenda would also need to take account of the inherently complex nature of urban contexts. One interesting idea is for the establishment of a global 'urban disaster observatory' to support research, development and capacity strengthening; such a mechanism would need to be funded collectively by the key actors in the system, and supported by existing mechanisms.

The second challenge is institutional and political in nature. Specifically, there is a significant leadership gap that needs to be addressed, to help put urban issues firmly on the table, and to ensure that the necessary adjustments are championed throughout the system. Moreover, the implications for building urban resilience span the entire international community as well as national authorities. Urban disasters pose a collective action challenge of the kind the humanitarian system has proved particularly bad at tackling in the past.

While it is heartening to see growing efforts to take this issue forward, urbanisation still needs more urgent and strategic attention across all agencies, networks and coalitions in the sector. Mobilisation of leaders of international and national bodies may be one way of doing this – perhaps with the kind of high-level forum that was established for the food price crisis in 2008, chaired by a high-profile figure.

The DEC report on Haiti warned that we can expect three to five urban mega-disasters in the next 10 years alone. And yet, as noted by Care International's President Helen Gayle, international agencies have singularly failed to 'co-evolve' with urbanisation as quickly as it has happened.[10] This continued lack of strategic and operational adaptation is serious. Failure to address the gaps outlined here threatens to make urban disasters yet another area where the international system failed to meet expectations and where it failed to deliver on its goals of mobilising proportionate, equitable, and above all relevant responses to major disasters and crises.[11]

Key questions for conference participants to consider ahead of the meeting

- How can we develop a shared understanding of urban contexts in ways that are relevant to humanitarian action?
- How does the urban context challenge our understanding of vulnerability?
- What is different about the humanitarian response in an urban environment? What are the challenges and possibilities?
- What practical examples are there of bringing urban issues to bear on DRR, preparedness and response?
- What should our next steps be – collectively, and as individual organisations?
- What commitments are needed / possible from across the international community?

10. http://www.irinnews.org/IndepthMain.aspx?InDepthID=63&ReportID=74021
11. http://www.fmreview.org/urban-displacement/FMR34/05-07.pdf

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