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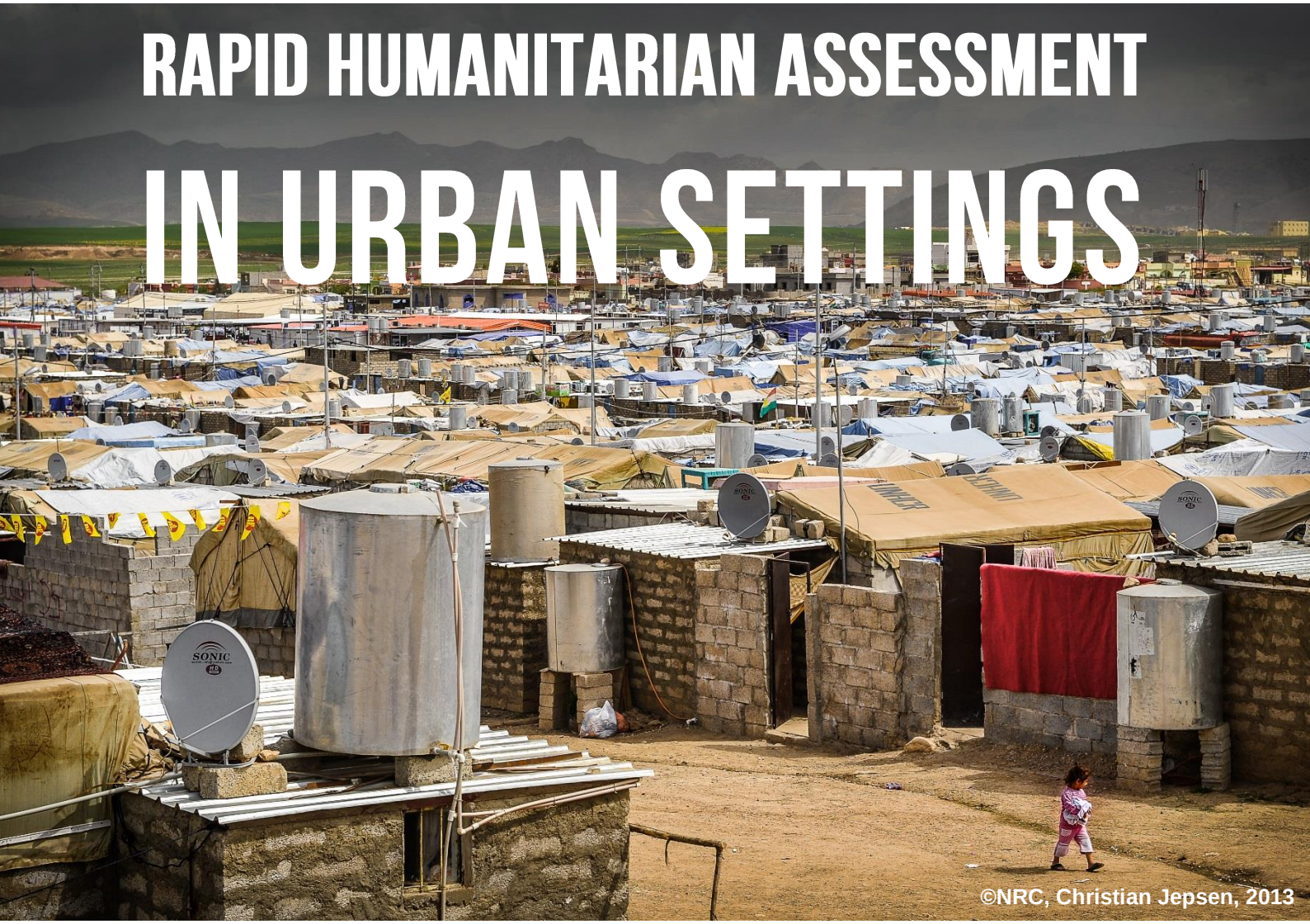
TECHNICAL BRIEF

RAPID HUMANITARIAN ASSESSMENT IN URBAN SETTINGS



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Acknowledgements

This Technical Brief has a long history. In early 2013 ACAPS commissioned a paper, *Networks and Neighbourhoods, a guide to rapid assessment in urban space*, from Kimberly Howe, PhD., and Courtney Adams Brown (CHF International); later in 2013 ACAPS assessment experts Sandie Walton Ellery and Susan Erb reviewed and updated the paper. The Brief you are reading now was researched and written by Paul Currion, incorporating these previous documents as well as a range of other resources, and represents a ground-breaking approach to needs assessments in urban areas. This Brief also draws on the assessment framework described in the Good Enough Guide to Humanitarian Needs Assessment, which can be ordered or downloaded from the ACAPS website here. The final document was edited by Jane Linekar.

Between 2014 and 2015, ACAPS learned many lessons from its support to several multi-cluster assessments in urban settings, notably in Syria, Bangladesh and the Ukraine. Several interviews with organisations or individuals participating in recent urban assessments (e.g. in Gaza, Port au Prince, Mogadishu, Benghazi, Bangkok, Manila, Aleppo and Homs) were also conducted in order to further expand ACAPS' understanding of current practice in urban assessment. Newly available literature on urban assessments was also reviewed, especially from the Food Security cluster and from the ALNAP Urban Response Community of Practice. Lessons drawn from all these sources provided ACAPS with more in-depth knowledge of good practice, a better understanding of challenges faced during urban assessments, and a number of relevant case studies included in this Brief.

In particular ACAPS would like to thank the individuals and institutions that contributed to the learning process that created this Brief, including Natalia Baal and William Chemaly (JIPS), Susan Erb, Sandie Walton-Ellery and Patrice Chataigner (ACAPS), Monica Ramos (WASH cluster), Kevin Savage (WVI), Esteban Leon and Ansa Massaud (UN-HABITAT), Agnes Dhur (ICRC), Richard Garlfield (Columbia University), David Sanderson (ALNAP), Lewis Sida (DFID), Ben Ramalingan (ODI), Jesper Lund (UNDAC), Xavier Genot (IFRC), Rene Nijenhuis (OCHA preparedness branch) and Jacobo Quintanilla (Internews). ACAPS is grateful to these experts for all the comments and suggestions received during the drafting of this Technical Brief.

1. INTRODUCTION

Why is there a need for this Brief?

In 2008 the estimated proportion of the global population living in urban areas reached 50% for the first time in human history, a figure projected to rise to 70% by 2050 (UN-Habitat 2008).

The share of the urban population living in slums in the developing world declined from 39% in 2000 to 33% in 2010; yet in absolute terms, the number of slum dwellers in the developing world is growing, and will continue to grow in the near future. The number of urban residents living in slums in 2010 was estimated at 828 million, compared to 767 million in 2000 (UN 2010a). Despite perceptions that urban populations are better off than rural, there is increasing evidence that levels of urban poverty may in fact be higher.

And while the increasing number of megacities with populations of more than 10 million is a novel feature of urban growth, more than 90% of urban populations live in small or medium-sized cities, which may be more vulnerable to disaster due to poor infrastructure, finance and governance.

Urban centres are engines for economic growth, but recent urban expansion has been badly planned and poorly managed, if it is planned or managed at all. As a result towns and cities are associated with a range of social, political, economic and environmental problems, particularly in rapidly developing economies where increased population density can increase vulnerability to natural disasters, tension or conflict, especially among the poor.

As a result of these trends, an increasing proportion of humanitarian emergencies take place in urban environments. Historically, the humanitarian sector has responded to emergencies predominantly in rural areas, often based around refugee camps, internally displaced people (IDP) shelters, and similar spatially defined sites. By 2012, however, approximately half of the world's estimated 10.5 million refugees and at least 13 million IDPs were thought to be in urban areas (WDR 2012).

Case study: Three effects of rapid growth (Kabul, 2009)

"First, while Kabul's population has tripled in size since late 2001, the physical area of the city devoted to urban activities has increased four-fold. Few cities could manage such rapid and expansive growth, but a local government with limited capacity – the Kabul Municipality – has been further stymied by its reliance on a master plan dating from 1978, designed to accommodate up to two million people.

Second, with negligible access to formally recognised land, returning refugees and displaced persons have largely gravitated to unauthorised informal settlements. Although few city residents are truly homeless – a reflection of settlement construction keeping pace with displacement and return rates – the rapid expansion of informal areas has resulted in one of the highest rates of informal housing in the world. Approximately 80% of the total population now resides in officially unrecognised areas.

Third, vulnerability has increased as informal settlements have spread, and acute and chronic needs for basic services and livelihoods have merged almost indistinguishably. By compounding both acute and chronic needs, the physical manifestations of unmanaged growth – refuse accumulation, inadequate drainage, poorly-constructed housing, often perched on steep slopes – also increase disaster risks, particularly from floods and earthquakes." (Setchell and Luther 2009)

Assessment methodologies based on rural experience do not transfer comfortably to more complex population centres, and are more expensive and administratively more demanding in urban areas. In food security work, this has made organisations reluctant to commit resources, and made it more likely that assessments "collect less data in proportion to population size than in rural areas [and] not contribute significantly to the accurate targeting of assistance when it is provided." (Kelly 2003)

A combined lack of experience and resources has caused the humanitarian community to struggle to respond to emergencies in urban contexts, including in highly visible operations such as after the 2010 earthquake in Haiti. Humanitarian actors need to better understand the urban environment, drawing on resources such as ALNAP's Urban Humanitarian Response Portal.

Existing assessment tools need to be adapted to urban areas, and new tools need to be introduced; but humanitarian organisations also need to start thinking differently about how they work in towns and cities.

What is this Brief, and who is it for?

This Technical Brief is intended to be a starting point for improving coordinated needs assessments in urban areas, without which the humanitarian community will not be able to ensure the quality and accountability of urban response itself. It provides guidance on carrying out joint rapid assessments of humanitarian needs in urban environments within the first weeks of a disaster. Organisations can use this Brief to ensure that joint assessments are carried out appropriately in urban areas, and to update their assessment practice.

The Brief **does not cover more comprehensive or in-depth sectoral assessments that may take place in the longer-term**, although the issues discussed are the same and many of the principles are still applicable. It does not provide sector-specific guidance, and does not focus on the needs of specific groups (such as women or the elderly), but it does list references and resources that provide this detail.

The Brief assumes a basic understanding of good practice in needs assessment, and is intended to complement existing specific technical guidance, particularly resources already published by ACAPS (e.g. the Good Enough Guide to Needs Assessment), and the Revised Multi-Cluster/ Sector Initial Rapid Assessment (MIRA) developed by the Inter-Agency Standing Committee (IASC).

Following this introduction, Section Two describes the unique characteristics of urban space, and how these characteristics should shape humanitarian assessment and activities. Section three goes through the assessment cycle, identifying what issues need to be taken into account when planning, designing, and implementing a needs assessment.

Section four presents a short set of supporting materials, including a list of Additional Resources for readers who wish to explore specific topics in more depth.

Case study: The need for better needs assessment (Haiti, 2010)

"Haiti had little baseline data against which to plan and monitor a large scale humanitarian response. Its census data was out of date or else destroyed or rendered inaccessible. Widespread and multifaceted humanitarian and recovery needs necessitated the Rapid Initial Needs Assessment for Haiti (RINAH) undertaken by the international humanitarian community. The RINAH was quick to implement, but slow to publish. As such, many of its findings were out of date by the time they were widely available. Most individual agencies conducted their own needs assessments, but each followed different standards, methodologies and focus thus limiting the usefulness of the results for an overall analyses or strategic planning." (Patrick 2011)

"Several interviewees noted the pressure to respond quickly without adequate assessment. In group discussions one agency member stated 'We just jumped.' Another stated there was 'no diagnosis, just go go go!' Another stated, 'we had no time to analyse.' Another stated, 'there was no time to consult with communities', citing a reason that proposals had to be developed quickly, and in this respect called for greater donor flexibility. One agency member stated 'we were not asking the right questions at the beginning', citing an inadequate understanding of local issues and needs. In this regard another interviewee called for the development of a tool

for measuring/understanding pre-existing social structures." (DEC 2011)

"Largely missing from these assessments however were contextual analyses (particularly on political and economic issues) and capacity assessments of Haitian stakeholders (most notably the Haitian government) which would have allowed the humanitarian community a greater understanding of Haitian social and political dynamics and of the capacities of their natural Haitian partners across government and civil society to engage with and even lead recovery. Compounding these gaps in analysis, valuable studies and assessments conducted by Haitians themselves were largely ignored. In addition to handicapping strategic planning and intervention design, the limited inclusion of Haitians in needs assessments and analyses missed an opportunity to build relationships with Haitian partners." (Patrick 2011)

2. KEY CHARACTERISTICS OF URBAN SPACE

The line between rural and urban is blurred, particularly in rapidly urbanising countries, since many towns and cities have suburban and/or peri-urban "transitional" zones surrounding the urban core. While this brief talks about urban in contrast to rural, this is a convenient shorthand that does not always reflect the experience of a specific urban centre. We must always remember that most urban centres are not megacities, and that every urban centre is a unique combination of characteristics.

We recognise urban space partly because the organisation of physical space is different, but also by the ways human activities – social, economic, political, are shaped by urban parameters. These characteristics may be more or less pronounced in any given urban centre, and we must adapt our assessment practice to them on a case-by-case basis.

This section describes these characteristics, and discusses some of the implications for assessment.

Density

One of the most obvious characteristics of urban areas is their density: of population, but also of buildings, roads, and services. The density of the built environment creates hazards not usually seen in rural areas: for example, the massive amount of rubble left by the earthquake in Haiti was a serious problem in both the short- and long-term. Population density also increases some risks: epidemics spread more easily in cities because of the proximity of large numbers of people, as with the spread of leptospirosis in Manila after Typhoon Sendong in 2011.

Implications: Note that "[a]ccess to certain parts of a city – particularly dense informal settlements – can be challenging even in a non-crisis environment" (HABITAT 2011), highlighting the fact that many of the challenges of responding to urban disasters may exist before the disaster takes place. Density may make access difficult, but it can also facilitate access due to the wide range of transport routes and close proximity between communities. The specific risks associated with density should be taken into account during data collection, but so should the opportunities: human capital is much higher in cities; there is a wider range of skills and experiences to draw on.

Case study: Rubble removal following an earthquake (Muzaffarabad, Pakistan, 2005)

Some disasters can reduce many buildings to rubble: the 2010 Haiti earthquake created 40 million metres cubed of debris, which reduced mobility for residents seeking safety and for external actors trying to help them. Rubble must therefore be located and documented as quickly as possible, and a removal plan developed in partnership with relevant authorities.

However rubble is often in a legal grey area – who owns it? It requires coordination (and possibly advocacy) with government officials to resolve. After the 2005 Pakistan earthquake, rubble presented a legal as well as physical obstacle to reconstruction in Muzaffarabad. The city could not start rebuilding until it was

removed, but there was a legal question of who "owned" the rubble from private buildings.

The Government resolved this by ruling that, after a certain date, all rubble would be considered public property. Residents were given a window of opportunity to recover anything valuable from the rubble from their property, and then the government had authorisation and responsibility to remove that rubble.
Assessments must include both physical and legal issues related to these types of urban waste.

Diversity

Cities tend to be home to a wider variety of social and economic backgrounds and a wider variety of livelihoods and classes. In some cities diversity may also extend to ethnic, linguistic, and religious groups, who may be living together in ways that would not be seen in rural areas. The pressure of urban diversity may lead communities to consolidate into their ethnic or linguistic groups, or to mix with other communities in new combinations that would not occur in rural areas.

Implications: Since stratification is not necessarily spatial, rich and poor may live in close proximity, which complicates assessment activities and requires more rigour in site selection and sampling strategy. It is not always the poorest areas that are worst affected – for example, in an earthquake, richer residents living in high-rises may suffer a higher proportion of casualties and property damage – and assessments must ascertain the specific demographics of urban areas (based on informal as well as formal data sources) in order to ensure that the response is well targeted.

Authority

Cities tend to disrupt traditional social hierarchies, especially vertical lines of authority. Urban residents may have multiple, diverse authorities, such as elected representatives, religious leaders, market governors, and so on, competing and co-operating for loyalty. They may also have greater opportunity to organise with their peers (for example, in labour unions or sports clubs). Disruption of tradition may extend to gender and age relations. Patriarchal structures may be undermined by the necessity and opportunity for women to become wage-earners; older people may fill different roles due to their income or influence.

Implications: Assessment teams must be careful not to privilege one set of institutions over others, particularly as they are likely to be drawn to more familiar traditional or formal institutions that may be more accessible and vocal. Assessment methodologies need to be adapted so that e.g. Key Informants are drawn from a wider pool, to ensure that assessment teams can build an understanding of a range of social and economic institutions. Urban populations tend to be more politically active and visible than rural ones – governments are frequently worried about the potential for urban political activity, including protests and strikes – and assessments may therefore be more politicised in urban areas. As women have more social and economic opportunities in urban areas, they "are better educated and play a more important role in decision-making than rural women do" (ACF 2010). Assessments must take into account the potentially more varied roles that women play in urban areas, ensuring that they are well-represented in the assessment.

Case study: Women facing problems accessing information (Jordan, 2014)

"While a lot of data is often collected, it continues to be marked by rapid assessments and a lack of representational strength. Systematic gender analyses are seldom conducted to assess women's and men's roles and responsibilities and their access to and control over resources.

"... Access to information was identified as a serious problem to accessing services and programs. This particular problem affects women and girls more than men and boys. A study by UN Women had indicated that women and girls residing in urban and rural areas in

Jordan are mostly confined to their house and have limited access to information about services as well as limited access to such services. Some 83% of those surveyed indicated they were not aware of any services on GBV.

"The survey also confirmed that women refugees were aware of food, health and educational services (more than 70%), yet were not aware of other services, legal, safety and security, mental health and psychosocial support, and women and children's centres." (WRC 2014)

Industry

Urban areas are more industrialised, and residents are more exposed to industrial hazards. Such accidents may be the result of a larger disaster (e.g. the Fukushima nuclear accident following the 2013 Japan earthquake and tsunami), or they may constitute a disaster on their own (e.g. the Chernobyl nuclear accident in 1986). The impact of such accidents is exacerbated by high population density, and the presence of informal settlements in marginal or hazardous locations. These locations may have been left empty precisely because they are high-risk, from industrial accidents, or from natural disasters such as flooding.

Implications: Industrial or environmental disasters may not be recognised as a "traditional" emergency by humanitarian actors, and are likely to involve or require specialized government departments or disaster management skills than e.g. flooding. Such hazards tend to be spatially focused, which can complicate general assessments; it may not be useful to draw wider conclusions from the local impact of a chemical spill. Usually an expert assessment will need to be organised to assess specific types of industrial or environmental hazards, the expertise for which may not exist in your organisation. Many industrial accidents present serious ongoing safety or health risks to assessment teams, and caution should be taken in planning site visits.

Case study: An industrial accident in a slum (Nairobi, 2011)

"On 12 September 2011, international media sources reported a major fuel pipeline explosion and fire in the Mukuru-Sinai slum of Nairobi, Kenya. Over 100 people were burnt to death, while an equal amount of people were hospitalized with serious burn wounds. The Joint UNEP/OCHA Environment Unit subsequently compiled an expert team to undertake a rapid environmental emergency assessment. The scope of the mission was to provide scientific information on the extent and nature of pollution and to assist the decision-making and priority-setting by the authorities and other actors for follow-up activities on the affected site. The main conclusion of the mission was that the fire was not caused by a pipeline explosion as reported initially in media, but by an industrial accident that caused a large amount of unleaded petrol to enter a storm water drainage system. A further conclusion was that a repetition of a similar type of accident is considered as highly likely. The area where the accident took place is affected by pre-existing, chronic pollution and therefore no immediate clean-up action is needed for the remaining residues of the accident. There is no immediate threat to the drinking water supply as a result of the accident. The mission established that there is a clear indication of other uncontrolled industrial effluents being released into the storm water drainage system and the Ngong River." (UNEP/OCHA 2011)

Security

Insecurity is generally higher in urban areas, and of a different nature. In addition to the threat to life and property, security conditions have a direct impact on urban economies, affecting people's ability to purchase food and other commodities.

Traditional approaches to security usually focus on civil conflict, but urban assessment must take account of criminality, since incidence of crime (particularly organised crime) is much higher in urban than rural areas. "The State may not have effective control over some parts of the city [and

….] dealing with informal or 'criminal' authorities presents challenges for urban preparedness and response" (UN-Habitat 2011). If state bodies are incapacitated by disaster, security may decrease and criminal activity may increase.

Implications: The location and nature of security threats – including criminal activity such as looting, gang violence, or gender-based violence – should be assessed, bearing in mind that these also pose a risk to assessment teams. To assess risks in advance, security information will need to be gathered from police, military or other security personnel. KIs can provide information about specific neighbourhoods, and FGDs can provide detail about how security issues impact communities. However, experience and perception of security is highly individual and subjective: caution should be exercised around possible exaggeration, but also possible under-reporting, of sensitive issues, such as sexual violence in the home, in the workplace, or on the street. The capacity of public safety bodies, both formal (e.g. police or gendarmerie) and informal (e.g. neighbourhood watch groups), should also be assessed. If there is a civil conflict, it will be important to identify armed groups and active conflict zones, particularly if they are in flux.

Case study: The link between physical security and food security (Mogadishu, 2012)

"Physical insecurity ... explains the overall high level of food insecurity, with more than half of the assessed households to be considered severely food insecure. Malnutrition levels are also extremely worrying, with almost 40% of assessed children considered to be severely or moderately malnourished. Residents and IDPs seem to be equally affected ... Conflict and insecurity are the main reasons for displacement and the main factor of food insecurity. The population living along the location of the previous front-line of the fighting ... is the most food insecure...

"The coping strategies also show that many households do not have the capacity to deal with the situation apart from constantly moving within the city ... According to the market interviews conducted, disruption of main markets such as Bakara market ... had a major impact on the flow of goods within the city. Furthermore, physical insecurity and population displacements also impacted on both the supply to markets and on traders' access to employment." (WFP et al. 2012).

Mobility

Migration in and out of urban areas is common, making it difficult to measure precisely the size and breakdown of urban populations at a given time. Within a city or town, people may commute from the area where they live to another for work, or from the centre to the periphery to trade. Displaced or marginalised populations can move into and around cities more easily and anonymously, making it more difficult to reach them for assistance. Even where displaced populations are relatively stable, they are likely to be in rented accommodation, or sharing accommodation with extended family, making them difficult to locate and raising issues about equity of assistance in neighbourhoods with mixed populations of displaced and hosts. Especially in rapidly-growing urban areas, or where informal settlements are widespread, and where census data is out of date, it will not usually be possible to get precise information about pre- and post-disaster population numbers and conditions.

Implications: Assessment design must take account of these patterns: for example, residents (especially heads of household) may spend more time away from their residence due to work, making it difficult to access them during assessments. High levels of mobility mean that any situational awareness developed by a rapid assessment will be out of date almost immediately. Assessment teams should focus on capturing patterns (i.e. what types of mobility are common, and what they look like on the ground) and trends (i.e. the likely results of mobility patterns if they continue). This type of information cannot usually be captured by observation, and will require the input of Key Informants or Community Groups.

Transport and logistics

Transport is critical to urban life, and urban areas often have multiple transport networks that overlap. They may include pedestrian walkways, roads (carrying private and public transport), railways and tramways, rivers and canals, and subways.

Understanding how these networks function – and how those functions have been disrupted by a disaster – is critical for understanding one of the key problems for residents, who rely on transport networks for their livelihoods. Even when transport networks are fully functioning, they may not be functioning effectively – severe traffic congestion is extremely common in towns and cities that have grown too rapidly for transport systems to absorb.

Assessments must include the mapping of key infrastructures have been impacted by the disaster in order to facilitate search and rescue, plan for removal of human remains and building debris, identify access points for further assessments and logistical barriers to aid distribution, and re-establish basic services, including utilities.

Entry points to the city, such as ports and airports, are critical nodes in the transport network, but so are main highways, and distribution points, such as warehouses and markets; these will need to be mapped early and updated regularly.

Adaptability

Urban spaces can absorb large numbers of people in a short space of time with relatively little impact on their overall function. Urban markets generally recover more quickly from shocks than rural markets, due to higher concentration of resources and higher levels of integration into commercial networks. In some cases, however, cities can be less resilient, as they are more dependent on the functioning of networks to deliver goods and services: if sanitation utilities are damaged, for example, it is not within the power of residents to fix them.

Urban space is flexible: residential, commercial, and industrial activities may occur in a single area; individual buildings may be mixed use, with retail space, office space, and residential space; usage patterns may change over the course of the day, especially in business districts; informal settlements, in particular, cannot usually be easily divided according to use.

Implications: These variations in the use of space make assessment complicated, time dependent, and subject to change. Direct observation during a single visit is unlikely to provide accurate information about how space is being used, and local knowledge will be needed to build a complete picture. Particular attention should be paid to open and/or public spaces (such as parks, markets, and plazas) and public buildings (such as schools and hospitals); these institutions are vital to civic life, but their functions may be disrupted following an emergency as they are used for temporary shelter, aid distribution, or debris holding.

Assessing urban resilience – such as the absorption capacity of neighbourhood services following an influx of new residents, or the ability of a market to re-establish supply – is critical.

Case study: Dependence on power and water networks (Aleppo, 2014)

During the Syrian conflict, the city of Aleppo was subject to extensive shelling. This caused widespread damage to city infrastructure, leading to high levels of displacement from and within the city. It also showed how dependent urban populations are on utility networks. An assessment by REACH found that, apart from safety and security concerns, the residents were "particularly concerned with the intermittent functioning of the power and water networks... which were further exacerbated by power struggles between warring parties in April and May 2014 ... Power shortages may deeply impact on such critical infrastructures as hospitals and the water network. While the provision of different health services is already highly insufficient, with most critical health services registering less than 50% of coverage across all eastern Aleppo, power cuts affecting

hospitals are likely to further escalate health needs. Additionally, most of the population of eastern Aleppo is relying on the water network to access safe water, which is heavily dependent on electricity to function" (REACH 2014).

Verticality

Urban space is arranged differently from rural, suburban and peri-urban areas; buildings higher than single storey, often with mixed use, are common in most cities. Such buildings can present new risks.

Many cities also occupy space underground, often in the form of networks that support critical functions requiring specialist knowledge to repair and maintain, such as transport or sanitation. Underground sites may be the location of crisis situations (e.g. the Aum Shinriko sarin gas attack on the Tokyo subway), places of refuge (e.g. bomb shelters in Israel), or have an ambiguous status with humanitarian implications (such as the tunnels under Gaza, which can be used to transport both humanitarian and military material).

Implications: Many of the issues around verticality are similar to those around density (described above), particularly in terms of access. Sampling strategies based on standard assumptions that residential housing is spread evenly on a two-dimensional surface are confounded by multi-storey and mixed use of residential buildings, and these will need to be revisited according to context. In addition, many infrastructure issues (such as unstable buildings or sewage leaks) have vertical components that may be unfamiliar to assessment teams used to traditional approaches, and will need to be explicitly included in the assessment plan.

Complexity

It is not possible to understand a city simply by looking at individual geographic areas, or service sectors, or demographics. It is useful to think about urban space as a series of networks – not just physical, but also political, social, and economic. Residents will be members of multiple, overlapping networks, and those networks will also interact with each other at different points. This system of networks is made more complex by many of the other factors described in this section – mobility, density, adaptability, and so on. This is partly why a purely geographic approach to assessing urban areas is not the best approach.

Implications: No single organisation will have the whole perspective or expertise to deal with an urban disaster. It requires a range of organisations with different specialisations to work together in a coordinated way to mount an effective response. In the context of assessments, the best way to understand complexity is to draw on a wide range of perspectives. Coordination and collaboration are therefore even more important in urban areas than rural, and, while both may slow the assessment process, they are critical for the overall success of assessments. The most successful needs assessments are likely to be explicitly joint assessments. Thinking about the city in terms of networks requires a considerably different approach to that of traditional analysis.

Networks: a new way of thinking about assessment

Networks are systems that extend across the urban space as a set of layers that are sometimes visible (i.e. road networks that enable travel through the urban area) and sometimes invisible (i.e. social networks that connect people in different parts of urban areas.

Networks can increase or decrease the capabilities of affected communities – if communications infrastructure, such as mobile phone towers, is restored, individuals will be able to connect to a wider support network, as well as receive more information about their situation.

The network effect means that a network's value grows as more people connect to it: if a local market re-opens quickly, its customers will be able to re-establish their own livelihoods.

It is useful to think of networks in terms of functions. Political networks, for example: relief efforts might be facilitated through pressure on critical parts of the political network, such as when a mayor's office prioritises repair of the power network in a specific area of a city.

Assessment must support humanitarian organisations to understand how these networks can help or hinder relief efforts in order to set programming priorities.

Fluidity

Urban environments change more rapidly than rural, and the speed of response is likely to be correspondingly rapid, especially if there are a range of non-traditional humanitarian actors involved (such as private companies, emergency services and community groups). Patterns may be difficult to identify, such as population movements, especially within the town or city limits; and trends may appear with little prior warning, such as individuals beginning reconstruction of their own homes. As a result, problems being analysed during an initial rapid assessment may be resolved during the analysis, leading to inaccurate assessment reports.

Implications: One-off assessments are likely to be of limited use: information needs to be collected regularly and situation analysis updated frequently. This calls for a close to real time primary data collection and reporting system to update situation awareness among humanitarian actors as more information becomes available and response is ongoing. Assessment design must therefore incorporate more points at which updating can occur, either through real time facilities (e.g. establishing call centres so that affected communities can have direct contact), extending existing techniques (e.g. maintaining contact with KIs over an extended period), or expanded lightweight monitoring systems that capture data and process information quickly.

Commodity

Urban livelihoods are oriented around income rather than subsistence, sources of income are more varied, households often have multiple breadwinners, residents have access to a wider range of financial services, and women are more likely to work outside the home.

Urban economies are primarily cash economies: residents rely on cash to pay for basic needs such as rent, food and water, healthcare and school. Cash economies rely on markets – not necessarily physical marketplaces (although these are critical hubs in the network), but "systems that allow buyers and sellers to exchange goods, services and information" (WRC 2011). These markets are usually integrated with peri-urban and rural markets, but also with national and international markets. As a result, urban areas are more vulnerable to macro-economic trends, and price distortion and inflation may prevent households from meeting basic needs following a disaster. For example, food insecurity in urban areas is driven more by lack of financial access to food than by lack of availability; similarly, increases in rental costs (perhaps because displacement has increased population density or because of the arrival of large humanitarian organizations) can undermine housing security.

Implications: As market assessments are highly specialised, agencies may not have the skills to carry them out. At a minimum, however, aid organisations should develop a basic understanding of how markets function, based on existing resources such as the Emergency Market Mapping and Analysis (EMMA 2011) and Cash Learning Partnership (CaLP, Cross and Johnston 2011) toolkits. The physical locations of urban markets can be identified in an initial mapping exercise: direct observation of market activities will be a useful source of data, and key informant interviews with market actors will provide answers to more detailed questions.

Rapid assessments should focus on understanding the overall functioning of the market, e.g. its ability to match supply with demand efficiently, without inflation or price distortion. The priority is to assess the supply

side (the supply chains that support basic market functions) to see if the market can deliver the goods essential for livelihoods, but an assessment of the demand side (in the form of a livelihoods assessment) will need to be planned for the near future.

Existing livelihoods assessment tools should be applied with care: for example, wealth ranking can be complicated by higher costs of living in urban areas, which will affect ratios such as income relative to costs of food and other necessities.

Case study: Food insecurity for displaced female-headed households (Bhuj, 2004)

"This predominantly Muslim group of migrants mainly lives in single room shelters built by an Islamic religious body... They are displaced from their original houses within the Walled City of Bhuj which was destroyed in the earthquake in January 2001. This has resulted in loss of employment and considerable distances from the ration shops that they are registered with. The transfer of ration cards to the closer shops was the issue of top priority that emerged from meetings of this group. The majority of them live in temporary shelter, which negatively affects their health, especially the health of their children.

"The majority of the women were widows belonging to age group 60-70 years. The major reason for food insecurity for the group is insufficient income. They mainly work as servants or doing handicraft work. They earn approximately 700–1000 RS per month (USD 15–22).

"Discussing the amount they earn, one woman said , 'I am not able to provide enough food for my three children in the amount I earn.' ... The women are not able to satisfy even their food needs. One woman said 'Food prices are very high as compared to my earnings'. Another said, 'I can't afford to buy food items like vegetables and pulses regularly from my income.'" (FAO/ADMI 2004)

Legality

Property rights (the question of who owns property) and land tenure (who is allowed to use land, and how) are extremely complex in urban areas. This is especially true in rapidly growing cities, which often have a high proportion of informal settlements. Although this is an unfamiliar topic for humanitarian actors, legal issues impact access to basic services and goods, and it is essential to understand legal frameworks, such as the legal basis for compulsory purchase of land during a state of emergency, and the institutions that implement them, and to be aware that informal or alternative mechanisms may exist at the local level.

Implications: In general the way in which the humanitarian community deals with land issues remains inadequate, clearly seen in post-earthquake Haiti. While a rapid assessment is not intended to analyse specific legal issues, assessment teams must be aware of them.

Secondary data review may reveal that records have been destroyed in a disaster, or never existed at all; or that existing land records are out of date or fraudulent, particularly where state and municipal legal and administrative institutions are weak. Primary data collection must then account for the fact that where "informal settlement residents ... do not have legally recognized forms of evidence of their land rights, [this] can complicate efforts to reduce risks or respond to crises" (UN-Habitat 2011).

Legal and cultural aspects of property differ from place to place – any individual example is not necessarily a useful guide to other situations – and therefore demand careful analysis.

Case study: Property rights and land tenure following an earthquake (Haiti, 2010)

"Thousands of residents of Port-au-Prince heading for other cities, seeking undeveloped land in rural areas, or returning to land held by relatives, will increase pressure upon and the potential for conflict over land ... Land tenure

and property rights issues will increasingly come to the fore as the Haitian government and aid organizations attempt to relocate people onto undeveloped land." (USAID 2010).

"But before they can even start, they need to determine who owns what piece of land - a major challenge after the earthquake killed some 16,000 civil servants and destroyed an untold number of title deeds and land registry records ... [exposing] the long-standing problem of ill-defined land rights in Haiti, a result of an inefficient judiciary, years of political instability and a weak government unable to enforce land titles and protect property owners." (Alertnet, Unclear Land Rights Hinder Haiti's Reconstruction, 5 July 2010)

"Only a few NGOs are working on the land tenure/land rights issue, and yet it is critical and essential to what most are doing. The emergency Shelter Cluster was designed to assist in the coordination of shelter efforts, and it is one of the few clusters that would transcend periods of the disaster. Yet, according to local participants, it has been ineffective at its primary task of coordinating housing efforts ..." (Etienne 2012).

"The fact that land was on the humanitarian radar is a major step forward. Problems related to land were raised and recognised early on in the response – albeit not soon enough by most, not at a sufficiently senior level and not by enough people with enough resources behind them to tackle the problems ... The analytical support leaders needed to address highly complex problems like land, tenure and resettlement was also inadequate." (Levine et al 2012).

Connectivity

Residents of urban areas have access to more and better communications infrastructure than in rural areas. Most residents will have multiple channels for receiving and sharing information, including electronic media as well as more traditional channels such as word of mouth and religious authorities. In terms of media, there are more markets and more channels, especially print and broadcast media that specifically serve the urban area, creating more opportunities to disseminate information. While this means that urban residents are more-informed, it is no guarantee that they are better informed.

Implications: Mobile phones create the opportunity to collect more real-time information from disaster-affected areas, to collect information from a wider area with less risk to assessment teams, and to use data on phone usage and call patterns to identify trends. Studies looking at the aftermath of earthquakes in Haiti and New Zealand used geo-referenced mobile phone call data to understand the post-disaster movements of affected people (Flowminder 2010, ACAPS 2013), suggesting that this is a new source of assessment data for tracking and forecasting population movements, and thus estimate humanitarian impact. A wider range of channels makes it easier, but more complicated, to communicate with affected communities before, during, and after assessments, with the potential to improve accountability if used correctly.

Case study: A telephone helpline after the storm (Bangladesh, 2013)

In Bangladesh a telephone helpline enabled the Joint Needs Assessment Team to gather more accurate quantitative and qualitative information and identify the unions (administrative areas) most affected by Tropical Storm Mahasen in 2013. An extremely brief set of questions resulted in information about where most people have been displaced to and a prioritisation of seven sectors of impact. Though designed for a non-urban response, this innovation would be equally useful in gathering information from inaccessible urban areas. (Bangladesh Joint Needs Assessment, 2013)

Conclusion: Three challenges of urban vulnerability

The factors described in this section combine to make urban vulnerability more complex than rural, and thus extremely challenging to identify and assess following disaster impact. Assessments must incorporate these parameters, and use mixed methods and

participatory approaches where possible to ensure that the data reflects the urban dynamic, especially when disaggregated.

First, despite the availability of more and better statistics for urban areas, diversity means that these figures "mask pronounced inequalities within cities. Within apparently prosperous city centres, in huge slums or in condemned housing blocks, rates of malnutrition and infant mortality may be higher than they are in rural areas." (ACF 2010). Paradoxically, although greater wealth may mean that there are relatively fewer affected people as a proportion of the overall population, there may be an absolutely greater number of vulnerable people because of higher population density. In displacement scenarios, the relative numbers and distribution patterns of displacement are usually as important as absolute numbers.

Although impoverished areas may be geographically segmented, they are not always the worst affected by disaster. For example, in cities where wealthier segments of the populations tend to live in high-rise apartment buildings, an earthquake may have greater impact on the wealthy in terms of lives lost, injuries sustained, and damage to assets than the poor, who live in single storey homes which may withstand shock waves more robustly. Conversely, urban areas affected by flooding would be more likely to see single-storey, poorly constructed slum housing more affected by a disaster than multi-storey apartment blocks.

Second, the combination of diversity, mobility and complexity means that the "traditional categorisation of vulnerable individuals (such as the elderly, the sick, and women and children) does not capture adequately the interlinked vulnerabilities and capacities of affected populations in urban contexts" (Pantuliano et al 2012). Many vulnerable individuals may not be accessible, be they in private housing or living on the streets. Densely populated areas provide anonymity for specific vulnerable groups who may not wish to be identified and registered by official institutions for fear of harassment, eviction, or detention. Vulnerability is more political in urban areas, creating additional sensitivities around assessments; and this may require the development of alternative strategies to access certain population groups.

Third, "[i]n urban settings, it is often difficult to distinguish between chronic vulnerability and crisis. Conventional approaches to needs assessment, beneficiary identification and the provision of humanitarian assistance become extremely complicated" (UN-Habitat 2011). The task of assessment is to differentiate between chronic (i.e. pre-existing) and acute (i.e. newly occurred) vulnerability, and present them in a context which facilitates humanitarian action. This applies particularly to informal settlements, which may not be within the purview of the government and from which knowledge of pre-existing conditions are often limited.

There are relatively few resources regarding the needs of specific vulnerable groups in urban settings. Good practice insists that we disaggregate data in order to fully understand the needs of affected communities – not just in terms of sex and age, but also to compare different economic strata, formal and informal settlements, and so on. Assessment is the primary tool through which humanitarian organisations can do this (Mazurana et al. 2011).

Case study: Age and disability in the city after the typhoon (Manila, 2009)

"[C]ommunities found that pre-conceived ideas of vulnerability were not those which communities felt caused vulnerability. For example, elderly who were retired and received incomes from grown up children rather than having to support children were often not seen as vulnerable. The evaluation noted that elderly, especially elderly women, often play a more significant role in communities after their children grow-up due to better financial conditions and time – thus they are more active in associations. For targeting criteria to work, guidance can be given but decisions need to be made by the community." (Levers and Pacaigue 2010).

3. THE ASSESSMENT CYCLE IN URBAN CONTEXTS

The characteristics of urban settings increase the challenge of assessment. Each urban setting is unique and demands a modified approach to data collection and analysis to ensure that the information delivered is relevant and timely for decision-making. Nonetheless, the Assessment Cycle is the same.

Coordination

The characteristics of urban settings mean that coordination is vital to successful urban assessment. “Organisations must recognise that while they might be used to working in sector-based clusters, urban environments require a coordinated, multi-sector approach” (Boyer et al. 2011). Without this approach, it will be impossible to build a full picture of humanitarian needs.

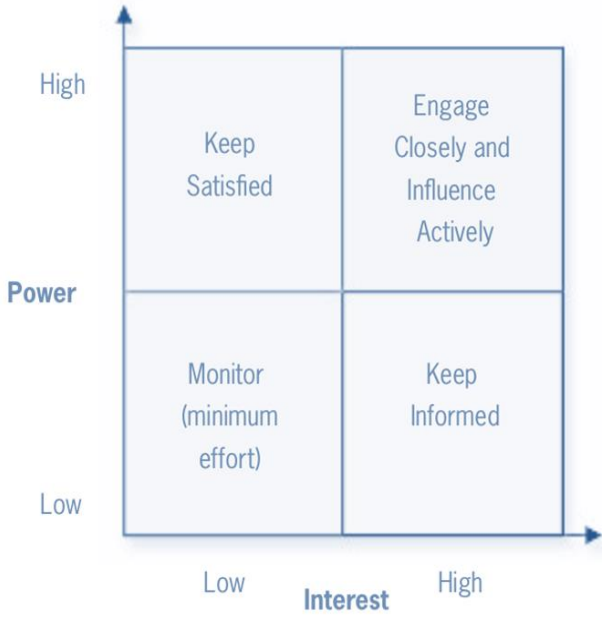
Coordinated assessments should always involve government representatives, and be led by local authorities when possible and appropriate. Urban areas are likely to have more government bodies with greater capacity, and with a greater investment in controlling relief and reconstruction. Such bodies range from national-level disaster management agencies (such as FEMA in the USA or the Department of Social Welfare and Development in Philippines) through city-level services (including health facilities and utility companies) to local bodies (including emergency services, such as fire and police).

Regardless of their political interests (which may not align precisely with humanitarian objectives) or institutional competence (which may be insufficient to implement the necessary measures), government bodies are essential sources of information. Nonetheless, co-operation should be based on a clear understanding of the political context and government bodies’ intentions and capacities.

Response to civil conflict will be different than to natural disaster (e.g. the Filipino government response in Mindanao and to typhoons or earthquakes). Identify if there is a functioning disaster management agency; if a temporary office has been formed in response to the specific emergency; if there is a disaster response plan, and if it is being followed, particularly if it provides for assessment.

Stakeholder mapping is essential for understanding the political dynamics and economy of an urban area and coordinate appropriately, as shown in the next illustration where *Power* measures their degree of ability to help or have an impact on a project, and *Interest* measures their degree of support or opposition to the project’s goals and objectives.

Stakeholder Analysis Grid



The role of the private sector and civil society

As focal points for commercial activity, urban areas have a higher concentration of private companies, with all the resources that implies: staff, transport, property and other assets. The private sector is increasingly active in emergency response, either directly (through re-allocating their resources to help on the ground) or indirectly (through funding other organisations). They also have access to a variety of specialised assets that other organisations do not; for example, telecommunications companies have engineers and equipment. It is therefore vital to identify

what private sector actors have committed or plan to commit to the response, what resources the private sector can deploy and how quickly, and how to co-ordinate to improve response.

Civil society in urban areas is more developed, diverse, and visible than in rural areas. Civil society organisations may take unfamiliar forms for humanitarian actors, such as sports clubs or neighbourhood associations, but very often they are likely to become involved in the response, often before international or governmental organisations arrive, and are potentially valuable sources of information.

Private and public organisations frequently struggle to understand each other due to their different working cultures, so it may take work to forge productive partnerships. Dealing with these two sectors is likely to need specific experience and expertise.

Preparedness and design

The first lesson learned by the British Red Cross in their research on humanitarian action in urban areas was that "resources deployed up front on context analysis and high quality assessments were vital in ensuring programmes were effective, particularly given the relative novelty of urban operations to many staff and the dynamic nature of urban areas" (Kyazze et al., 2012). There will be pressure to begin assessment immediately, but time should be allocated to plan assessment properly. Planning is an investment that will save time later on, prevent mistakes, and help to ensure that results are as accurate and useful as possible.

Assessment design must focus on understanding the specific urban space. In order to develop this understanding, humanitarian organisations must ensure high levels of local participation. This is likely to require extra resources, but "inclusiveness is not necessarily a barrier to speed" if it is managed well (Patrick 2011).

Assessment team composition

Urban assessment teams require additional specific skills, which might include but not be limited to: urban planning and architecture, civil engineering and construction (including debris removal), environmental assessment, and protection. The concentration of resources and diversity of residents in urban areas may see more and better-qualified personnel who can join an assessment team, from national and international NGOs, administrative offices (such as statistics offices and survey units), research bodies (such as universities and polling companies), or community-based organisations.

However this is not always the case, particularly for highly specialised skills. Ironically, while aid organisations may have their offices in urban areas, their staff may be more familiar with rural areas, where their programmes are. As with any assessment team formation, the key is to identify and train potential data collectors and analysts well in advance of any disaster. Since these staff will also be urban residents, it is likely that they will also be affected by any large-scale disaster, and it is therefore vital to build redundancy into assessment teams.

Mapping

Mapping – both spatial and thematic – is a critical tool for understanding and navigating urban space. Maps provide a visual guide to the physical and administrative structure of a city, but can also be used to visualise social and economic networks. Maps improve situational awareness and can be used to engage affected communities.

Data is usually more readily available for urban areas than rural, but their accuracy and reliability must be checked. Spatial maps (and map data) produced by public or private organisations should be gathered during secondary data review. These maps and their associated data can show vital pre-crisis information, particularly for issues such as population density, formal and informal areas, administrative divisions, residential and commercial zones, ethnicity and religion, and even patterns of livelihoods and vulnerability.

Mapping should take place as soon as possible after the disaster. It should ideally update existing maps (particularly from disaster preparedness efforts), and be updated regularly as more information becomes available.

Mapping exercises can identify critical spatial characteristics:

- Locations. Since cities contain a large variety of infrastructure, assessment teams will have to select the most relevant to the particular emergency. This may include:
  - Industrial facilities, especially those using or producing hazardous materials
  - Open/collective spaces, such as parks, sports clubs, school playgrounds, etc.
  - Markets (formal and informal), including warehouses and administration
  - Service providers, including schools, hospitals, community centres, etc.
  - Emergency services, e.g. police, gendarmerie, fire, and ambulance stations

- Boundaries, which are essential for understanding both official, top-down perspectives and unofficial, bottom-up definitions of neighbourhoods, including:
  - Administrative divisions, e.g. electoral districts
  - Catchment areas, e.g. for hospitals and schools

- Networks, particularly those supporting basic services, such as electricity, water supply, drainage and sewage. Logistics networks and supply chains, such as airports and ports, vehicle pools, major transport routes, freight corridors, and public transport networks.

Thematic maps

Thematic mapping can be used to help assessment teams to understand the impact of a disaster. It can cover issues such as levels of damage, numbers and locations of displaced communities, and so on. Maps can represent baseline issues such as access to services, cost of living estimates, and market functions.

Mapping exercises can provide information about pre-existing vulnerabilities and their spatial distribution, through identifying different risks experienced by different strata of the population, hazards they are exposed to, and coping strategies employed in response to previous crises.

Dynamic mapping can be used to visualise complex patterns and variables that change quickly. Typical applications of dynamic mapping might include: the locations of armed groups and frontlines during a conflict[1]; supply and demand across markets; or labour movements before and after the disaster. This type of mapping requires expertise in Geographic Information Systems (GIS), and should not be attempted without the necessary resources.

Sampling strategy and site selection

The spatial and social organisation of cities is radically different to suburban or rural areas. As described in Section 2 above, lack of information regarding informal settlements may complicate site selection, socio-economic diversity within a single neighbourhood may confound more common sampling techniques, population mobility (especially travelling to or looking for work) may impact data collection. For example, a single area might contain a middle class residential area for white collar professionals, the working class domestic workers who service those residences, street vendors who provide goods to the domestic workers, and homeless people who survive by scavenging and recycling.

The process of selecting sites for assessment must be adapted to reflect these complicating factors. Resource and time constraints mean that statistically representative sampling is not usually possible directly after the emergency, and purposive sampling will be most effective for urban rapid assessment.

Assessments demand that the city must be broken down into compact, homogeneous and coherent units. Secondary data and spatial analysis may be used to divide urban areas into smaller, more manageable units for assessment, to rank these units according to the relative level of impact that they have suffered, and to select units which can be assessed using the techniques described below.

[1] Results from the repeated Caerus associates surveys conducted in Aleppo in 2013 and 2014 were displayed dynamically at http://aleppo.firstmilegeo.com/

Existing formal administrative divisions can be used, but these may be too big or too diverse. Alternative units may need to be defined; these may be electoral or school districts, religious subdivisions or networks, or self-defined units that are substantial enough to provide a useful sample (neighbourhood).

The usual criteria for site selection still apply (group and site characteristics, combined with areas where there are gaps in existing knowledge[2]). Additional factors include the different characteristics of urban, peri-urban, and suburban areas; varying population density; the position of older and newer parts of the city; and key features such as transport corridors, municipal services, and marginal areas (such as flood plains). ACF recommends "urban zoning" to "divide the city into different strata with homogeneous characteristics, used to provide an analysis of urban livelihoods that can be extrapolated to the city as a whole", and then "identify particularly sensitive locations, where a complete analysis (social, economic and institutional) may be completed" (ACF 2010).

The challenge with household as a unit

Traditionally, humanitarian organisations have focused information gathering on "households" as the most appropriate unit for assessment. In urban settings, multiple families may live in a single building with shared infrastructure, with livelihoods based on commerce. It is not uncommon for "household members to routinely take some or even most meals outside the home [and] may rent out rooms in order to generate income or decrease expenditures." An improved definition of household in an urban context may be "sharing a common residence, income and expenditures" but, while household-level surveys have been used successfully as the focus of some urban assessments, they "run the distinct risk of either masking diversity and complexity or omitting key variables needed to understand it" (WFP 2008).

[2] Refer to the 2011 ACAPS Technical brief on sampling and site selection for more details and guidance on purposive sampling. Available at http://www.acaps.org/img/documents/purposive-sampling-and-site-selection-purposive-sampling-and-site-selection.pdf

The neighbourhood will usually be the most appropriate unit for rapid assessment: geographic units of limited size, with relative homogeneity in housing and population, sharing a range of essential services and facilities, and with some level of social interaction and symbolic significance to residents.

There is a need for caution in defining neighbourhoods: residents may share the same geographic space but form different social and/or economic neighbourhoods. They may not have access to or use the same services and may have limited contact with each other. Neighbourhoods are defined by individual and communal perceptions, and are therefore unlikely to match official administrative divisions perfectly; they are also flexible and may have changed or continue to change over time (Weiss et al. 2007).

It may be necessary to define a unit to fit the specific urban context and available resources; one such example is the Basic Services Unit approach adopted for mapping in Jordan (UNHCR, UNICEF, British Embassy 2014).

No matter what method is used, it is necessary to take two complementary approaches to define appropriate units: using formal (government) sources to define top-down spatial organisation, and informal (community) sources to understand bottom-up social arrangements. The specific physical context must also be taken into account: for example, limited public space may constrain the type of primary data collection possible. Lack of neutral space to ensure the safety of the assessment team and respondent groups may result in more Key Informant interviews than Community Group Discussions.

Table 1 below shows the range of issues that need to be understood in order to build a comprehensive picture of the concerns of urban populations. While this is taken from Joint IDP Profiling Service profiling of urban displaced, these issues are common to host populations as well.

Table 1. Information requirements for urban profiling (Jacobsen and Cardona 2014)

Common profiling themes	Specific information requirements for urban settings
Housing	• Type and security of tenancy • Risk-prone location • Type of housing materials • Experiences of eviction
Employment	• Number of income earners • Participation in labour markets (employed, unemployed, inactive) • Type of employment (salaried, self-employed, etc.) • Type of activity (agriculture, services, trade, construction, etc.) • Conditions of employment (hours worked per week, type of contract, exposure to risks or harassment, etc.)
Assets and resources	• Productive and/or transferable assets owned (refrigerator, washing machine, computer, motorbike, car, etc.) • Access to remittances or other external transfers • Access to financial services and institutions (formal and informal)
Safety	• Experience of threats (crime, harassment, or physical assault) • Perceptions of risk (at home, in the neighbourhood, on the way to work or study, etc.) • Access to justice, police, local authorities
Social integration	• Coping mechanisms (support from relatives, friends, neighbours) • Access to networks (to find work, housing, etc.) • Participation in community/neighbourhood organisations • Discrimination experiences

A key challenge in the rural–urban shift is "the shift from 'wholesale' service provision in camps, where all residents are potential beneficiaries, to operating in contexts where it is not possible or necessarily ethical to identify beneficiaries by displacement status" (Haysom 2013). Such detail may not be possible in a rapid assessment due to the time investment required, and assessment teams will have to decide which issues to prioritise on a case-by-case basis.

Data collection

Secondary data review

Secondary data review (SDR) gathers data that your organisation or others have already collected, using it to build situational awareness of the disaster and to establish a baseline against which to measure the impact of the disaster. SDR is crucial to the definition of assessment objectives and the need for information requirements. By mapping urban space and its characteristics, SDR is also useful for site selection and identification of the most appropriate unit of analysis.

Since research and archive bodies – government, academic, public or private – are based in urban areas, there is usually more secondary data available for urban than for rural areas. However this should not be assumed: WFP has noted that "[d]espite the rapid urbanisation in developing and middle income countries and the increasing attention given by humanitarian organisations to urban issues, information on urban populations and particularly their food security and nutritional status is still limited" (WFP 2008).

Large-scale disasters can also lead to destruction or loss of data. The civil wars in Sierra Leone and Liberia, and the 2010 Haiti earthquake and 2008 Typhoon Fengshen in Manila saw the destruction of physical data. This vulnerability underlines the obligation to collect secondary data as part of disaster preparedness activities and ensure that they are digitally stored in external facilities.

The role of economic data

Understanding both local and national economies are important to measuring the impact of urban disasters. WFP Joint Assessment Mission Guidelines (2008) recommend collecting macro-economic data, such as prices and consumer price indexes; wage data, especially minimum and average wages; economic trends related to issues such as food security; and poverty data. However, there are likely to be limits to the utility of this type of economic data. They are unlikely to

include information about informal livelihoods, which may provide a significant proportion of household incomes, or about informal settlements, which may form a substantial part of the urban area. They may not be disaggregated for urban areas or specific groups (such as refugees). SDR must therefore include a wide range of sources, including civil society and private sector organisations, and not just official sources.

Primary data collection

The three main techniques of data collection for rapid needs assessment – direct observation (DO), key informant interviews (KI), and community group discussions (CGD) – must be adapted in order to be effective in urban settings.

Direct observation

DO is the fastest way to gather data in the immediate aftermath of an emergency, although it must be complemented by and verified against secondary data and local knowledge. It can be carried out in three ways: on foot, in ground vehicles, or by aerial observation. All observations should be triangulated against satellite imagery and secondary data where possible (MapAction 2011).

If possible, pre-crisis baselines should be established in order to ensure that observational analysis does not confuse acute and chronic problems. In addition to the usual observations of the conditions and status of the population and infrastructures, DO should pay additional attention to risks that impact affected communities but also responding agencies, in order to judge whether specific locations offer permissive working environments.

Safety concerns relate to the physical condition of the city, and may include unfamiliar risks (e.g. the Fukushima nuclear accident following the 2011 Japan earthquake). Live cables, insecure bridges, or unstable buildings are common examples that can be identified through DO; however they may not always be visible to the naked eye, and observations should be supplemented by KI interviews. These should be ranked according to level of danger to life.

Security threats can only be understood in the context of the pre-emergency security situation, including criminal activity, as identified during the SDR. The assessment should establish the capacity of existing security mechanisms, both formal (police) and informal (community). If there is an ongoing conflict, more analysis will be needed to define and track it, particularly if it is dynamic.

Health risks should be identified, whether from hazardous materials or communicable diseases (particularly where there are observed problems with e.g. water contamination or waste management). Observations should again be tested against local knowledge – KIs or local institutions with medical expertise – to check if they are specifically related to the emergency, or a pre-existing chronic problem.

Needs and risks should be noted, mapped and updated as quickly and regularly as possible, and referred to the relevant authorities for follow-up. Assessments should also establish whether local capacity exists to deal with these issues, or whether external assistance will be required.

Key informants

KI approaches must be adapted to mitigate the risks of relying on a single source of information at a single point in time, which is particularly risky in diverse and dynamic urban settings. KIs can help to develop a more nuanced picture of the situation, from defining the boundaries of the neighbourhood and/or the structure of the community, to identifying the diverse groups of stakeholder – government bodies, civil society organisations, private companies, etc. – that humanitarian actors will need to work with, to monitoring the developing impact of the disaster and the subsequent response of the community.

KI selection should be part of disaster preparedness, but may also be identified through DO, or on the recommendation of a local partner.

Traditionally, KIs are religious or community leaders, or representatives of community-based organisations. KIs in urban areas should be

drawn from a more socially and geographically diverse range of stakeholders, including first responders (police or fire services), municipal services (school teachers, health outreach workers), municipal utilities (sanitation engineers), and transport providers (bus and taxi drivers).

Expanding the role of KIs beyond simply providing information can help assessment teams to access communities that may not be receptive to external actors (such as IDPs trying to maintain a low profile) or locations that may not be accessible to those unfamiliar with the city. More than one KI should be identified for each neighbourhood and, if possible, groups of KIs should be convened in each neighbourhood, as groups can provide a more accurate overview than any individual can.

The duration and depth of contact of KIs should increase; contact should be ongoing, rather than one-off. Frequency of contact will depend on the nature of the emergency, but may be daily, especially if the situation is rapidly changing. However, putting excessive demands on KI time is unreasonable and counterproductive, especially if the contact is over an extended period, and especially if they or their community have been affected by the disaster.

Identifying multiple KIs in a single neighbourhood can help to reduce the burden, as can using community groups and associations (rather than individuals) as KIs. Contact can also be facilitated remotely, using telephone-based interviews, particularly in situations where there is limited field access. This also works in the other direction: emergency hotlines can enable residents to report urgent needs, and analysis of calls can identify patterns in locations and types of reported needs and related information.

Case study: Assessment fatigue for refugees (Jordan, 2013)

"Assessment fatigue is an issue both within Syria and in host countries, especially where the organisation undertaking the assessment has provided no visible assistance. In Jordan, for instance, assessment fatigue has led to a significant number of refugees refusing to participate in certain assessments. However, relief actors indicated that there is a need to frequently assess the situation, not only to comply with donor requirements, but also because the situation is highly dynamic. Increased sharing of information, joint and inter-sectoral assessments and combining assessments with aid interventions were mentioned as possible ways to partly relieve the burden of assessments on the affected population. In addition, it should be made very clear at the start of the assessment that the provision of aid to the assessed community is not guaranteed." (SNAP 2013)

Community group discussions

While focus group discussions (FGDs) are the best way to generate a comprehensive picture of the situation on the ground, they can be difficult to organise in urban areas. Urban diversity makes it difficult to build representative groups, and particularly to ensure the participation of marginalised groups, as they are harder to access in towns and cities. While urban areas have a larger pool of data collectors, it may not be possible to identify or train individuals in the participatory methods required to facilitate FGDs.

Where it is not possible to meet specific FGD criteria, or to include FGD skills in the assessment team, community group discussions (CGDs, sometimes referred to as neighbourhood group discussions) may be more useful. CGDs are more general discussions with members of the affected community to capture the views and priorities of the affected population and to see where there is consensus. A CGD is larger than an FGD, and has less homogeneity since it crosses gender, age, ethnicity, and other standard FGD parameters in composition.

Another alternative is to gather smaller groups of individuals that represent different strata in specific neighbourhoods. In some areas it might be sufficient to convene small gender-specific groups, while in more diverse areas there will need to be a greater range of language, religious, or class-based groups to ensure

adequate participation and representation. As with FGDs, however, both DO and KI should be used to define the groups and identify participants.

Analysis

At the start of an assessment (or preferably during preparedness), an analysis team should be created that can build a comprehensive picture of the city. The complexity and diversity of urban areas requires joint analysis by a range of stakeholders – not just operational staff from your agency with relevant knowledge and expertise, but staff from other agencies, government bodies, research or academic institutions, and so on. They should not be drawn only from the usual disciplines – disaster management, search and rescue, military and civil defence – but from professional backgrounds relevant to the urban context, such as urban planning, civil protection, first responders and utility providers.

A critical element of analysis is rating and ranking issues in order to define and clarify impact, and determine the areas of greatest need. In a rapid assessment this ranking does not have to be complicated – it could be based on a simple 0-5 scale of severity – but it must be based on observable criteria and consistently applied across sectors and neighbourhoods so that comparison is possible. The first ranking will be obtained by direct observation, preferably supported by handheld GPS units or smartphones with GPS capability for accurate mapping. Observation should be supported by KIs and CGDs where possible.

The "good enough" principle is critical; the situation can change extremely quickly, and analysis can become out of date before it is circulated. Collected data should be entered into a database as quickly as possible (preferably on the day that it is collected), and validation and analysis will need to take place more frequently than on a traditional assessment timeline, i.e. every three days. Daily meetings are recommended to analyse new information as more sites are assessed; and the analysis team should stay operational to provide updated information for the entire emergency phase.

Case study: The danger of delaying assessment reports (Haiti, 2010)

A review of evaluations of the 2010 Haiti earthquake response found that it was "[b]etter to have moderately reliable information and 'good enough' analysis on time than 'perfect' information and analysis that comes too late. Late analysis, no matter how good, is of little use in designing immediate lifesaving humanitarian interventions" (Patrick 2011). The prime example of this was the inter-cluster Rapid Initial Needs Assessment for Haiti (RINAH), which covered shelter and non-food items, water, sanitation and hygiene, food security and nutrition, health and cross-cutting issues between 25 January and 6 February. The final report was made public the 25th of February 2010.

"The delay in release of the RINAH report due to 'a lack of understanding of partners of the [assessment] process' and 'organisational difficulties' ... raised questions about whether the huge amount of resources invested in the assessment was worthwhile considering the limited use of the outdated data and findings." (Rencoret et al 2010). Following the RINAH, other assessments – including cluster-specific assessments and the Haitian government-led Post Disaster Needs Assessment – were more successful (although they were criticised for excluding representatives of Haitian society). But an opportunity had been lost for a more coordinated response in the immediate aftermath of the earthquake.

Sharing

A strategy for sharing assessment results is often overlooked during planning: a lessons learned exercise reviewing the Syria response confirmed that, despite the large number of assessments being carried out, "[i]nformation is often not shared in a timely manner or, when shared, is not comparable" (SNAP 2013).

Reporting should be dynamic and fluid: all sharing mechanisms (private and public) must enable frequent and regular updates that respond to changing decision-making needs. Reporting should be multi-channel, i.e. the same information re-purposed for print, broadcast and briefings with decision makers and key stakeholders, and intervention-oriented, so that any recommendations from the assessment can be incorporated into operational planning quickly.

As well as identifying sources of information, Secondary Data Review should identify main communication channels, and assess how well they function after the disaster as the basis for disseminating and communicating assessment results (CDAC/ACAPS 2014). Information is a vital resource, enabling affected communities and individuals to understand their situation, and make informed decisions about their own response and recovery from disaster. Communication is also linked to accountability, since it creates a connection between service providers and the communities they serve.

Despite the wider variety and greater resilience of media in urban areas – particularly in areas where mobile telephony and internet use is widespread – a number of risks must be managed. Infrastructure remains critical, especially for new technologies: a report on the 2011 Japan Earthquake found that "the impact of the technology ... was blunted by two key factors: large-scale power blackouts and the disabling of telecommunications networks which limited access to the internet and mobile phone systems." While social media is now "a lifeline for those ... with internet connectivity and power" and likely to increase in importance, more traditional channels must not be overlooked: in Japan, "[c]ommunity radio, local newspapers, newsletters – in some instances, hand-written newsletters – and word of mouth played a key role in providing lifesaving information for communities" (Appleby 2013).

There is little analysis available of the varying requirements of urban and rural populations in terms of communicating with disaster-affected communities. In general, economics means that urban populations generally have better access to a wider range of communication channels. This creates a wider range of opportunities, but also requires greater understanding of the local media landscape. Urban diversity means a wider variety of audiences; this may require differentiated messaging, since different groups rely on different media, which may lead to a greater risk of miscommunication.

Great care is needed in selecting and using existing information sources and communication channels, both formal (print and broadcast media) and informal (local leaders and groups), as they may be linked to specific political or religious groups. Urban audiences are more likely to be critical of the media, especially where there is a history of manipulation or abuse of the media by state or non-state actors.

Managing expectations is critical, particularly in politically tense situations. Messaging may need to be supported by "messaging about messaging", i.e. acknowledging mistrust and seeking to build trust with affected communities in order to create a shared understanding of the situation.

Case study: Frustration and confusion for refugees (Lebanon, 2013)

"[R]esearch amongst refugees in camps and urban locations in Lebanon reveals high levels of frustration and confusion amongst refugees about where to turn for help. Many of them are too afraid even to register with UNHCR for fear that their personal details will leak back to the Assad regime. Many more talk of feeling "lost" in a world of rumour and disinformation ... Perhaps the most significant challenge will be how to win the trust of a population in which mistrust of media and officialdom in general has become so deeply rooted over decades of living under the Assad regime ... it is clear from Internews research presented here that all current outreach tactics are fundamentally undermined by a profound lack of trust and/or understanding on the part of the refugees about what they are being told, and by whom" (Internews 2013).

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