

Concern Disaster Risk Reduction - Urban Contexts



Centre for
Humanitarian Action

CONCERN
worldwide



Acknowledgements

This publication draws on ten years of experience from Concern Worldwide's disaster risk reduction programming experience in urban contexts. The publication is part of a series documenting Concern's approach to disaster risk reduction. The series consists of five context papers focusing on DRR approaches in mountainous, dryland, coastal, urban, and riverine contexts. A sixth paper synthesises conclusions from these context papers and identifies how Concern uses DRR to contribute to building community resilience.

The success of our programmes is largely due to the invaluable insights and commitment of thousands of programme participants, community leaders, local government officials and other community members. It is our great honour and privilege to partner with local organisations, communities and ministries. We would also like to acknowledge Concern's dedicated field staff, who have devoted countless hours ensuring that our programmes are constantly striving to reach the most vulnerable with the highest quality of programming possible. Special thanks are due to devoted teams leaders, programme managers, advisers and country directors that have championed Concern's work on disaster risk reduction.

We gratefully acknowledge the support of our donors, both public and institutional, which have supported Concern's disaster risk reduction programmes. Concern also wishes to acknowledge the valuable support of other agencies implementing and researching disaster risk reduction and the various consultants that participated in evaluations.

Finally, this publication would not have been possible without the technical expertise and editorial support of a range of individuals. Key contributors to this publication are listed below.

Lead Author

Aaron Clark-Ginsberg
Disaster Risk Reduction Documentation Officer
Concern Worldwide

Editing

Dom Hunt
Disaster Risk Reduction Adviser
Concern Worldwide

Design and Layout

Kai Matturi
Knowledge and Learning Adviser
Concern Worldwide

Cover Image

Waste being sorted in the Korogocho slum, Nairobi, Kenya, 2013. Photo by Aaron Clark-Ginsberg, 2013



Contents

Executive Summary	4
Introduction	7
Urban areas and disaster risk reduction	9
Overview of the urban case studies and Concern	12
Concern's approach to disaster reduction in urban areas	17
Conclusion	59

Acronyms and Abbreviations

CA	Contextual Analysis
CBO	Community Based Organisation
CC	Community Conversation
CODMERT	Community Disaster Management and Emergency Response Team
CFW	Cash for Work
DDG	Digital Data Gathering
DMC	Disaster Management Committee
DRR	Disaster Risk Reduction
DRM	Disaster Risk Management
EWS	Early Warning Systems
EWEA	Early Warning, Early Action
GAM	Global Acute Malnutrition
HCUEP	How Concern Understands Extreme Poverty
HFA	Hyogo Framework for Action
IDSUE	Indicator Development for the Surveillance of Urban Emergencies
NGO	Non-Governmental Organisation
PDC	Pavement Dweller Centre
PEER	Preparedness in Emergency Response
RAG	Risk Analysis Guidelines
UNISDR	United Nations International Strategy for Disaster Reduction
WASH	Water, Sanitation, and Hygiene



Executive Summary

This report describes Concern Worldwide's approach to disaster risk reduction (DRR) in urban contexts. This context was chosen to showcase Concern's approaches to addressing hazards common to urban areas – conflict, criminality, discrimination and marginalisation, unemployment, price spikes, contagious diseases, floods, and fires.

Concern Worldwide is a non-governmental, international, humanitarian organisation dedicated to the reduction of suffering and working towards the ultimate elimination of extreme poverty in the world's poorest and most vulnerable countries.

Concern works closely with and for the poorest and most vulnerable people in these countries, directly enabling them to improve their lives. Concern understands that disasters are a central factor causing and maintaining poverty, and has, for more than a decade and across more than 25 countries, been using DRR to address risks associated with disasters and contributing to building community resilience.

To innovate, improve, and capture good practices and lessons to be learned, Concern has documented its experiences in DRR and has produced a series of papers, based on its DRR programming in ten countries. Practitioners, policy makers and academics can use these papers to understand how Concern reduces risk in different geographic contexts and with different hazards.

The series consists of five context papers focusing on DRR approaches in mountainous, dryland, coastal, urban, and riverine contexts. A sixth paper synthesises conclusions from these context papers and identifies how Concern uses DRR programming to contribute to building community resilience.

Globally, more and more people are living in cities: 2010 was the first year more people resided in urban areas than rural ones, and urban populations have grown from 20% of the world's population in 1900 to a projected 60% by 2030. The risk of disasters in urban areas is growing alongside this growth in urban populations, increasing the importance of reducing risk in urban areas. Within urban areas, slums are also rapidly expanding, and are uniquely risk prone, being pockets of extreme poverty within sometimes rich cities.

Important urban characteristics that need to be taken into account for urban DRR include the density and size of population, heterogeneity of community, the orientation of livelihoods towards the market, employment, services and industry, and the complexity of administrative and institutional structures.

To outline how Concern reduces risk in urban contexts, this report compares Concern's work in four different urban areas: **Port au Prince**, Haiti; **Dhaka**, Bangladesh; **Nairobi**, Kenya; and **Freetown**, Sierra Leone.

Concern's work in these areas falls into three categories: **preparedness and response to crisis**; **direct services provision**; and **building social inclusion**. These categories are interrelated yet distinct, and interventions need to be integrated with each other.

Preparedness and response to crisis in urban areas includes establishing or linking to early warning systems (EWS), including adapting surveillance mechanisms for EWS; contingency planning and building response capacity of local institutions; and responding to early signs of crisis.

Local level disaster management committees (DMCs) are crucial for linking communities to EWS and for leading emergency responses, but they need to be well linked to intermediate municipal administration institutions.



Surveillance of urban emergencies – such as emergencies arising from food insecurity or infectious diseases – can be adapted to function as EWS, but for surveillance to be of real value, thresholds need to be in place that actors respond to. A consultative process with multiple institutions that are then held to account for early emergency responses can be a means of building support. Cash transfers generally work better than other forms of emergency response, largely because urban areas are so heavily oriented towards the market.

Service provision includes improving environmental health (water, sanitation and hygiene; and waste disposal), improving urban livelihoods, and mitigation against hazards.

Environmental health programming is challenging in slum areas where municipal authorities are reluctant to allow for permanent improvements, often because they would like to evict residents from areas. Engaging people to do voluntary community work can sometimes also be difficult.

Improving livelihoods in slums is difficult as within the slums prices tend to be low, unemployment high, with security issues hampering effective business management. Urban criminality and violence is often directly related to poverty and the difficulty of making profitable livelihoods in unsafe slums, so, in spite of the difficulties, livelihoods programming and peacebuilding should often be central components of urban programming. Work outside slums is also often limited, and countries often have few labour laws and employment guidelines to prevent exploitation. As such, efforts should also be made to engage in broader labour reform processes.

Structural mitigation for natural hazards such as floods and fires is extremely important in urban areas, given the density of population and the built environment in urban areas. Non-structural measures can also be implemented against human derived urban hazards such as gender based violence and criminality.

Building social inclusion includes the strengthening of representation of marginalised people in governance institutions, advocating for improved service provision to the marginalised, and peacebuilding.

The heterogeneity, politicisation and complexity of urban areas places additional importance on multi-stakeholder platforms and dialogue. Where insecurity is a major hindrance to accessing the extreme poor in slums (as was the case in Port au Prince, Haiti), protection and peacebuilding must first be engaged before other DRR programming can be considered. Peacebuilding should address the underlying drivers of conflict, which include politics, livelihoods and education. It should not stop when other initiatives start, but should become integrated into further programmes once trust is built and access provided. Peacebuilding is highly technical and should only be attempted with the appropriate expertise. Advocacy must also be a central component of urban DRR, aimed at alleviating some of the systemic risk factors such as the constant threat of eviction, severe marginalisation and exclusion from 'normal' services, or the manipulation of conflict for political ends.

Consistent with all DRR approaches, the fundamental starting point of urban DRR is through a risk analysis, but given the complexity and dynamism of urban areas, there is a need to go to a greater level of detail, focusing more on institutions, power dynamics and the underlying and systemic causes of risk.



Urban DRR needs to take the complex context into account, be innovative, and take a more systems approach to DRR. Programmes need to be a combination of short and medium term interventions addressing specific issues alongside longer term advocacy, behaviour change and livelihoods aimed at changing systemic issues and chronic poverty. Designing programmes like these require significant investments into the analysis of the context and the underlying risk factors, as well as the time investment needed to build trust and address some of the longer term issues. The marginality of urban extreme poor imply a greater amount of funding is needed for urban DRR.

The following lessons can be learned for DRR in urban contexts:

- Extreme poverty can be found in many urban areas, including urban areas that are better-off overall than rural areas.
- The extreme poor may not be able to access many services present in urban areas, either because those services are not available in poorer areas or for poorer people or because costs are prohibited.
- Improving livelihoods and reducing conflict are very important for DRR in urban areas, especially as urban areas are so market oriented.
- Many of the extreme poor live in slums, but slums are heterogeneous and can have a mix of rich and poor. Slums also often contain a mix of social, ethnic, and political groupings, meaning that notions of community are often different from rural areas.
- DRR governance systems are important in urban areas, and have similar structural characteristics to rural governance systems, but need to be adapted to the complexities of urban contexts. Efforts should be made to establish disaster management committees in urban areas, and link those committees to higher levels. In urban areas this includes city municipalities and national levels.
- DRR in urban areas requires a flexible mix of short and long-term support, both in terms of interventions and in funding.

1. Introduction

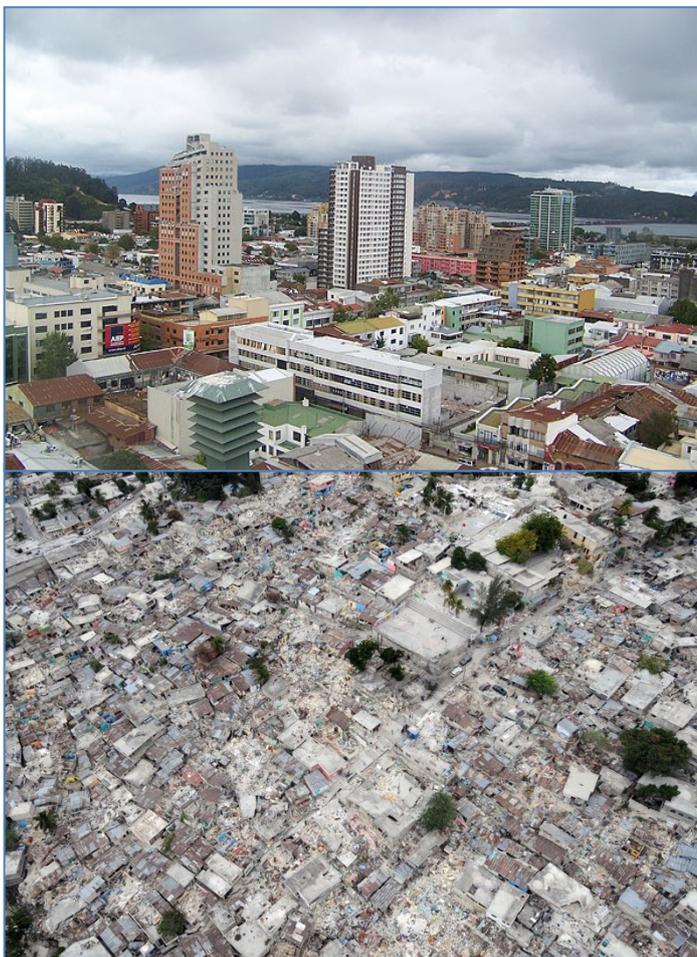
In 2010, a magnitude 7 earthquake struck Port au Prince, Haiti, levelling much of the city and killing over 200,000 residents. A few weeks later, a magnitude 8.8 earthquake struck the city of Concepción, the second largest city in Chile. It was the sixth largest earthquake ever recorded by a seismograph, and was more than 500 times more powerful than the Haitian earthquake. This earthquake caused minimal damage and only 525 deaths.

The two cases above are examples that show the importance of managing risk in urban areas. In the subsequent analysis of two events, it became clear that certain human factors - including Chile's familiarity with earthquakes, its significant investment in earthquake proofing buildings and emergency response mechanisms, its strict building codes, and Concepción's lower population density - all contributed to the comparative low levels of earthquake damage (Bajak, 2010).

Globally, more and more people are living in cities: 2010 was the first year more people resided in urban areas than rural ones, and urban populations have grown from 20 percent of the world's population in 1900 to a projected 60 percent by 2030. The risk of disasters in urban areas is growing alongside this growth in urban populations, increasing the importance of reducing risk in urban areas.

This report describes how Concern Worldwide uses disaster risk reduction¹ (DRR) to reduce risks and build resilience of the poorest and most vulnerable living in dryland contexts.

Concern Worldwide is a non-governmental, international, humanitarian organisation dedicated to the reduction of suffering and working towards the ultimate elimination of extreme poverty in the world's most poorest and most vulnerable countries. It operates in over 25 countries around the world and takes a multidimensional approach to addressing extreme poverty, and responds to humanitarian emergencies when the community capacity to cope and recover from crisis are overwhelmed. The organisation uses its knowledge and experience to influence decisions made at a local, national and international level that can significantly reduce extreme poverty.



Above is a picture of Concepción, taken after the 2010 earthquake. It shows that while a number of buildings were damaged, few were destroyed. In Port au Prince, on the other hand, the 2010 earthquake caused widespread destruction.

The lack of, or low returns from assets defines poverty and is caused and maintained by inequality and risk and vulnerability. These three dimensions of poverty are conceptualised in figure 1.

Concern's understanding of DRR, first articulated in 2005, identifies four components; risk analysis², preparedness, mitigation, and advocacy, which together contribute to building community resilience.

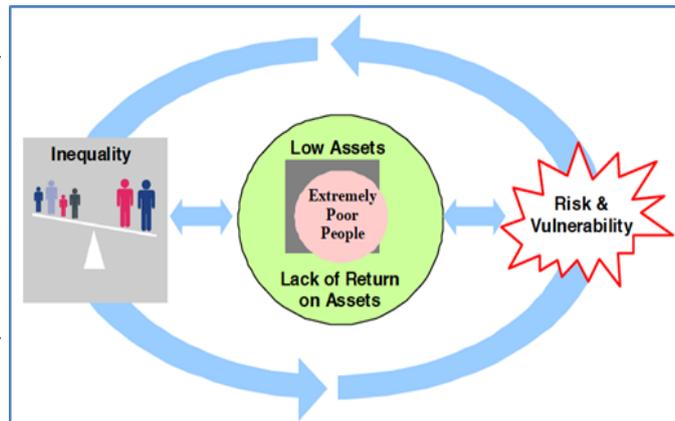


Figure 1: How Concern understands extreme poverty (from Concern, 2010)

Methods of comparison and structure of the report

To develop an understanding of how Concern reduces risk in urban contexts, this report systematically reviews Concern's DRR activities in four different urban areas: Freetown, Sierra Leone; Dhaka, Bangladesh; Nairobi, Kenya; and Port au Prince, Haiti. These areas, while all urban, have different risk profiles, so comparing them is a means of developing an understanding of Concern's good practice for DRR in urban areas. The report has been divided into four sections:

- The first introduces the concept of urban risk and DRR.
- The second presents and compares each case to identify DRR activities common to urban areas.
- The third reviews each activity in detail and develops lessons to be learned.
- The last concludes with overall lessons for DRR in urban contexts.

This structure builds an understanding of Concern's approach to DRR in urban contexts from the activities of the organisation itself. The report is based on 2-4 week country visits (Haiti in August 2013; Sierra Leone, January, 2014; Bangladesh, August, 2014; and Kenya November, 2014) consisting of focus group discussions and key informant interviews of Concern staff, partners, and beneficiaries and collection of secondary data. It is part of a larger two-year project documenting Concern's approach to DRR.

This report describes how Concern uses disaster risk reduction to reduce risks and build resilience of the poorest and most vulnerable living in urban contexts.

2. Urban areas and disaster risk reduction

In the past, urban and rural areas tended to be viewed as binaries of each other; today they are increasingly being considered two parts of a continuum:

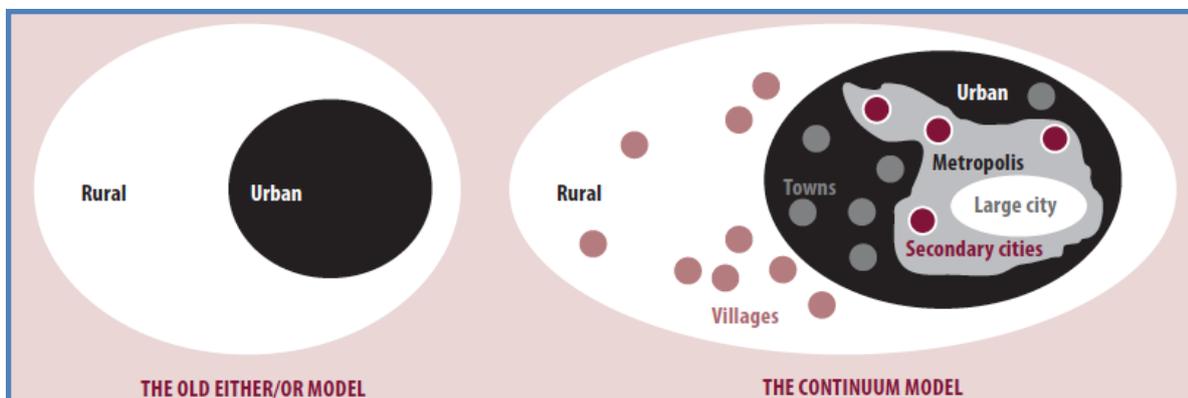


Figure 2: urban geography - from binary to continuum (World Bank, 2009, in Ramalingan and Clarke, 2012)

The figure shows that there is a large number of steps between urban and rural areas, and a number of different settlement types that can be considered urban.

Urban and rural areas can differ in a number of ways, including settlement density, population size, administrative system, and cultural association and identity (Parnell, 2013). These can be placed within the continuum model:

Type	Village	(Town) (Secondary city)	Metropolis
Settlement density	Low		High
Economic functionality	Agriculture		Industry and services
Population size	Small		Large
Administrative system	Simple		Complex
Cultural identity	Rural		Urban

Figure 3: differences between rural and urban settlements

Settlements are often urban in some ways and rural in others. They might, for example, have an economy focused on industry and services (an urban characteristic), but have a 'rural' cultural association (a village characteristic).

Urban hazards, vulnerabilities, capacities, and risk reduction

Settlement density, economic functionality, population size, administrative systems, and cultural identity all influence risk. For example, disease can spread quickly in densely populated areas, but industry and service based economies are less dependent on the weather than agricultural ones, so are less affected by drought and erratic rainfall.

Some of the hazards, vulnerabilities, and capacities common to urban areas include:

Element of risk	Urban attribute
Hazard	Exposure to common urban derived hazards like violent conflict, criminality, gang warfare, conflict related to discrimination and marginalisation, price spikes, contagious disease, floods, fires, unemployment, and building collapse
Vulnerability	Common urban vulnerabilities including high costs for goods, privatised services, marginalisation, discrimination, and exploitation, growing populations, and large number of actors with overlapping mandates
Capacity	Access to common urban resources including services, markets, and livelihood systems

Figure 4: urban hazards, vulnerabilities and capacities

The urban extreme poor are more likely to live in areas disproportionately exposed to hazards including pollution, alcohol abuse, flooding, and landslides (LaVeist and Wallace, 2000; Morello-Frosch *et al.*, 2001; Wisner *et al.*, 2004). They also tend to have less access to services including roads, schools, hospitals, security, water, and electricity, either because services are privatised or because they are only provided to wealthier areas (Hewett and Montgomery, 2001; Stephen and Quinn, 2008). As such, many are left ‘stuck’ in poverty, forced to resort to negative coping strategies like taking out loans, skipping meals, violence, crime, and prostitution, just to get by.

Disparities between the rich and the poor can be greater in urban areas, as although they are typically economic, cultural, and administrative centres, they can have a dramatic incidence of poverty. Slums, often heavily populated informal settlements with substandard housing and squalor, are some of the most obvious manifestations of failed urban development, and occupy large swathes of urban areas in developing countries. Houses built upon houses, few if any public amenities, high prevalence of hazards, stagnant job markets, and high levels of unemployment are all common in slum areas. According to UN-Habitat, around one third of people living in urban areas live in slums (UN Human Settlements Programme, 2012).

What is a slum?

The term ‘slum’ often has pejorative connotations, but is also used widely as a technical term. UN-HABITAT has one of the most widely used definitions of a slum. It defines a slum as: *a group of individuals living under the same roof in an urban area who lack one or more of the following:*

1. *Durable housing of a permanent nature that protects against extreme climate conditions.*
2. *Sufficient living space, which means not more than three people sharing the same room.*
3. *Easy access to safe water in sufficient amounts at an affordable price.*
4. *Access to adequate sanitation in the form of a private or public toilet shared by a reasonable number of people.*
5. *Security of tenure that prevents forced evictions.*

(source: Moreno *et al.*, 2006)

Rural and urban areas are closely interlinked. Exchange of “people, goods, services, information, income, and even waste and pollution” between urban and rural areas is common and long-standing (Garrett, 2005; Jones and Corbridge, 2010). Risks can also spill over between urban and rural areas; in Namibia rural drought increased rural to urban migration and led to spikes urban unemployment (Jākobsone, 2013). As such, the urbanisation of poverty can partly be attributed to failed rural development, as it increases rural to urban migration. While linked, institutional arrangements are often compartmentalised and biased in favour of urban areas, overemphasising the benefits that urban areas provide to the detriment of both rural and urban poor (Jones and Corbridge, 2010; Garrett, 2005). 2014).



Since urban areas are often viewed favourably, the urban poor are looked at as having numerous opportunities for development, when neglect and exploitation leave the urban poor in effect stuck in a poverty trap. More than being urban, such a bias is *metropolis* focused, with smaller and more rural urban areas receiving less attention and fewer services (Bene *et al.*, 2014).

Reducing risk in urban areas poses a number of challenges. Understanding urban environments can be difficult, as they are made up of large and disparate populations, numerous administrative bodies, a mixture of economic systems, and a complex interplay between rural and urban areas. Identifying and targeting the poor can also be difficult: poverty is often concentrated in slums but it can also occur outside of slums. There is also high variation within and between slums, with some slums and their residents being much better off than others (Concern, 2013; Montgomery and Hewett, 2004). This situation is made more difficult by the fact that most international aid agencies have historically worked in rural areas and are less experienced working in urban ones.

Approaches to DRR in urban areas can be divided into two general categories: those treating disaster risk as a negative externality attributed to nature to be controlled via technocratic measures, commonly known as the *hazard paradigm*, and those understanding disaster risk as an internal product of both society and nature, which are inseparable from each other, known as the *vulnerability paradigm*. In the past, most urban DRR focused on controlling risk under the hazard paradigm, through, for example, conducting scientific risk assessments to determine levels of risk and then developing expert risk management systems. Today, as DRR is increasingly recognised as everyone's business, organisations are moving towards a vulnerability paradigm that emphasises the social, political, and economic roots of risk. In urban areas this is particularly appropriate, as risk is primarily a distributional issue, the result of inequitable resource distribution. Indeed, good governance, developing a political and social system supportive of DRR, is widely viewed as a key component of urban DRR (UNISDR, 2012).

3. Overview of the urban case studies and Concern

Concern uses DRR to address extreme poverty in the urban areas of Port au Prince, Haiti; Dhaka, Bangladesh; Freetown, Sierra Leone; and Nairobi, Kenya.

Port-au-Prince, Haiti

Port au Prince is Haiti's rapidly growing capital. It is a port city, and is exposed to tropical storms and hurricanes; it is also located near active fault lines and faces earthquake and tsunami risk; lastly, its terrain is mountainous, making landslides, flash floods, and water erosion common. Socially, the city faces problems related to insufficient services, unplanned growth, unclear systems of land tenure, corruption, and widespread gang violence.

The central area of Port au Prince has a population of close to a million people, and another two million live in within its peri-urban periphery. The poor and the rich live in distinct and separate areas of the city. The poor can be found in the cramped lowland urban inner city areas and the peri-urban peripheries, whereas the rich are mainly located in developed neighbourhoods. Poorer areas tend to have more hazards and fewer jobs and amenities, although there is great diversity in these services among these neighbourhoods.

In Port au Prince, Concern works in the urban slums of St. Martin (population: 70,000) and Martissant (population: 200,000)³. Both are located in the city centre and have high levels of poverty and vulnerability.



Criminality is common in both areas, as is gang violence, to the extent that, in the past, Concern has had to cease programming at times, due to security concerns. The poor in these areas tend to have few productive assets and use casual labour, petty trade, small businesses, and remittances as main livelihood sources. On average, they spend over half of their income on food, and over 25 percent on education.

The city of Port au Prince, Haiti.

Concern has been working in Haiti since 1994 and, today, focuses on water, sanitation and hygiene (WASH); health; livelihoods; and education, with specific DRR interventions focused on: strengthening community disaster management committees (DMCs); peace-building; infrastructure improvements; shelter; and small business support. Peacebuilding is one of Concern's main focuses, and the organisation has been implementing a peacebuilding programme since 2004. It works with the poorest slum residents, which include households headed by economically marginal informal sector workers; female headed households without a stable source of income; and households with heads who are unable to work. It also responds to emergencies when needed. Some of its recent large-scale emergency responses include those to the 2010 earthquake and subsequent cholera outbreak, and Hurricane Sandy of 2012.



Freetown, Sierra Leone

Freetown is the capital of Sierra Leone. Like Port au Prince, it is a port city with mountainous terrain. Its population is also growing rapidly, a phenomena that started from the Sierra Leone civil war, which ran from 1991-2002 and killed anywhere between 50,000-300,000 people and displaced 2.5 million. The city has six main slums, whose residents face challenges related to storm surges, landslides, flash floods, disease (including the outbreak of Ebola, which is currently on-going), corruption, unplanned growth, joblessness or marginal employment (as in Port au Prince most of the poor in Freetown work as small businessmen, petty traders, or day labourers), land tenure issues, and a lack of services. Land tenure is particularly challenging, and the government has tried to evict and demolish certain slums in the past and today bans structural interventions. As with Port au Prince, slum residents have difficulties in accessing basic services: police presence is low and insecurity is high; waste and sanitation facilities are poor (most are privatised); electricity is often only accessible illegally; and few slums are connected to the city via roads. However, the nature of the hazards differs from that in Port au Prince: tropical storms are much less intense, rainfall is more extreme, waste management is a massive problem, but gang violence is less pronounced.

The poor live throughout Freetown. Many live in the slums, but residents in some slums are better off than others, and some of the poor can be found outside of the main slums, within better-off neighbourhoods in what might be considered 'micro-slums' of a few houses.

Concern started working in Sierra Leone in 1996. Today it works in all six of the main slum areas within Freetown as well as some of the rural areas within the official city municipality. Its main focus is WASH and DRR, with specific activities including strengthening community DMCs, improving local health systems, and small-scale projects focused on mitigating a variety of hazards. It also responds to major emergencies as they arise: it responded to the cholera outbreaks of 2011, 2012, and 2013, and is currently responding to the Ebola crisis.

AWD

- *Open defecation/ hanging toilets*
- *Improper waste handling*
- *Poor garbage disposal*
- *Poor refuse disposal*
- *Poor drainage*
- *Selling food close to dust bins, pig stalls, dirty and muddy sites*

Floods and landslides

- *Poor drainage*
- *Deforestation*
- *Poor embankment*

Other

- *Overcrowding in urban areas*
- *High populations*
- *Free range animals/living with animals*
- *Shelter overcrowding*

Maternal/child health

- *Female/male genital mutilation using unclean equipment*
- *Home delivery of children*

Timely response

- *Poor road infrastructure flooded*
- *Damaged bridges*

Fire

- *Open fires*
- *Poorly constructed buildings*
- *Fuel in dwellings*
- *Illegal wiring*

Building collapse

- *Poor housing*
- *Drainage poor*
- *High risk location*

Figure 5: Immediate causes of some hazards in Freetown (adapted from Concern, 2010)



Susan's Bay (left), is one of Freetown's slums. Susan's Bay is densely settled and built on reclaimed land next to the ocean. Kroo Bay (right) is another slum in Freetown. It is located near the mouth of a river, and floods regularly during the rainy season. Waste is a major hazard in the slum, as waste from the rest of the city is transported by the river down into the slum.

Dhaka, Bangladesh

Dhaka is Bangladesh's capital, and with an official population of around 15 million in the broader metro area, is the country's largest city. The city is burgeoning, and unplanned urbanisation is occurring at rapid rates. As in most countries, Bangladesh's cities are its economic, social, and political centres, but some of its urban residents have few assets and face many risks.

In Dhaka Concern works with pavement dwellers, long-term homeless people who are some of city's poorest and most vulnerable residents. Pavement dwellers spend an average of six years living on the streets. Their spot on the streets is highly insecure and many face threats of eviction on a daily basis. They tend to have few assets; work as petty traders, day labourers, or in other low paying jobs; and, since many lack official government birth registration and national identification cards (both require a permanent address), often cannot access government services like schools and health centres or secure formal employment. They are, at best, 'invisible poor', ignored by mainstream society, but often they fare much worse: they are stigmatised for living on the streets and face violence at the hands of the public and the police as well as kidnapping, prostitution, protection racketeering, and other forms of exploitation. An estimated 25,000 people live as pavement dwellers in Dhaka.

Who are the pavement dwellers?

Pavement dwellers:

- *Sleep without a fixed roof overhead*
 - *Do not pay rent for a place to stay or sleep (may pay protection money)*
 - *Have no other place to stay in Dhaka*
- (Adapted from Salma 2008)*



A pavement dweller settlement in Dhaka (Photo: Syed Zakir Hossain, Dhaka Tribune, 2013)

Concern has been working in Bangladesh since 1972, and started working with pavement dwellers in 2008, making it the first organisation to work specifically with this group. Concern's goal is to help pavement dwellers become recognised as citizens of Bangladesh, fully entitled to the rights that other citizens receive. To do this, it works to protect and expand pavement dweller assets and improve the institutional environment and public attitudes toward pavement dwellers - activities that ultimately seek to address many of the risks pavement dwellers face on a daily basis. It implements most of its work through pavement dweller centres (PDCs), facilities developed by Concern that are designed to provide pavement dwellers with basic services in the areas of shelter, water, security, health, and livelihood support. It also engages heavily in advocacy across multiple levels to address inequality and marginalisation.

Nairobi, Kenya

Nairobi is the capital of Kenya, and, with a population of three million, is the country's largest city. The city is expanding rapidly due to population growth and migration.

Nairobi is a city of disparities: some areas are extremely wealthy and others extremely poor. It has eight slums, which are where many of the poorest residents live. They are similar to the slums in Freetown and Port au Prince in that population densities are high (they house 50% of the city's total population, but only cover only 5% of the city's residential land); services, including water, sanitation, health and education are limited and mostly privatised; joblessness and marginal employment are high; violence, criminality, and other forms of insecurity are rampant; and they tend to be located in hazardous areas such as along the banks of rivers.



Korogocho, one of Nairobi's eight slums. Around 200,000 people live in the slum, which occupies just 1.5 square kilometers land.

Concern has found that in Nairobi some families "...exist on the edge of survival and urban slum populations are highly vulnerable to shocks, from price increases, to disease outbreaks, to political unrest, to a more subtle combination of all of these that cause a substantial proportion of these families to tip over the edge and experience a rise in morbidity and mortality" (Concern, n.d.). Indeed, while some people can advance in the slums, most are caught in a vicious cycle of poverty within which they can barely survive.

Concern has been working in Nairobi since 2003, and currently works in all of the slums. It focuses on improving access to and the delivery of services, including health, education, and solid waste disposal. It also works to improve livelihoods through cash grants and skills training. Some of this work involves policy reform, such as by working with the government to establish policies that are more favourable to the poor. Concern also responds to emergencies when needed, its most recent response being to food insecurity in 2014.



Discussion

Nairobi, Port au Prince, Freetown, and Dhaka have certain similarities in terms of their poverty and risk profiles, however there are also some key differences. All of these areas are urban in all senses of the word, including population density (high), economic functionality (industry and services), population size (large), administrative system (complex, with multiple actors), and cultural association and identity (city). None, however, is *exclusively* urban, and all have more rural areas within the city municipality. The poor face remarkably similar challenges, including privatisation of services and high cost of living; marginalisation, discrimination, and exploitation; and widespread unemployment with very limited access to a steady income. The incidence of natural hazards varies depending on geography, but human derived hazards including violence and insecurity, price shocks, and long-term unemployment are common for all contexts.

Marginalisation and the high cost of living are core challenges faced by the poor in all areas, and are deeply interrelated. High costs mean that residents have low relative returns on their assets. They also create greater incentives for people to ignore or actively exploit the poor, as profits from such activities can be high. Criminality and violence exemplify this case. Criminality is one of the few survival strategies available for many living in economically marginalised areas with few job opportunities. Criminality can, however, also be used as a political and economic tool to exploit and control populations; seemingly the case in Port au Prince and Nairobi.

4. Concern's approach to disaster risk reduction in urban areas

Concern has documented its approach to DRR in a series of policy and guidance papers. These include *Approaches to DRR* (2005) and *Risk Analysis Guidelines* (2012).

Concern uses risk analysis as a first step to better understand the hazards and vulnerability that communities face, and inform where Concern can reduce the scale, intensity and frequency of events while addressing both general and specific vulnerabilities within the community.

Concern has adopted a broad understanding of hazards that includes human derived hazards (e.g. conflict) and natural hazards (e.g. floods) and their often complex interactions. Concern places equal emphasis on intensive risk (large events happening in areas of dense population or economic activity) and extensive risk (small, localised but very frequent events that, are highly erosive to livelihoods and keep people poor). Concern understands that risk can affect all sectors and interventions, and so mainstreams DRR into all sectors and programmes⁴ by ensuring that risk analysis is central to their design, in addition to running selected stand-alone programmes. Concern takes an explicit **community focus** centred on individuals, households, and communities.

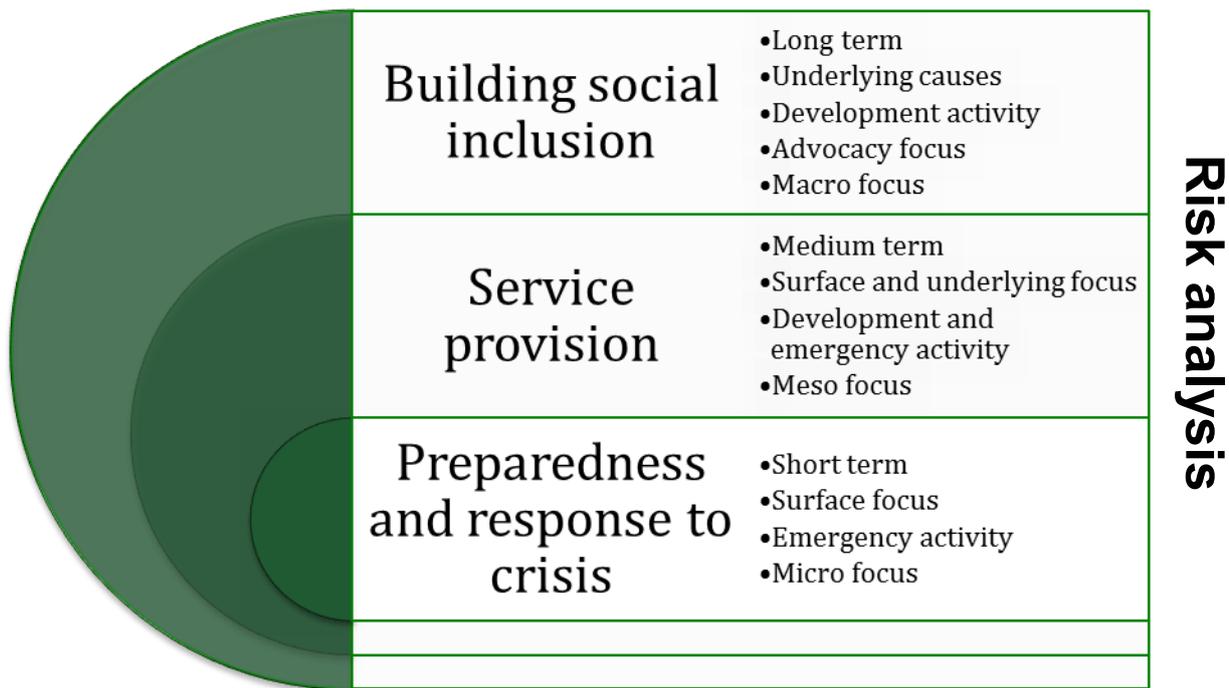
Whatever the context, Concern's practice takes an integrated and holistic approach to DRR that capitalises on and strengthens the asset base of communities. Risk is reduced through various activities including structural measures, supporting early warning systems, building up livelihoods assets and recognising that risk reduction requires a strong social base, strengthening governmental or community DRR institutions.

Lastly, to ensure interventions actually achieve what they are designed for and to learn how to improve and build upon its work, Concern **measures interventions** with baseline and endline surveys, evaluations, and other studies.

Concern uses the following activities to address risks in the urban areas of Nairobi, Port au Prince, Freetown, and Dhaka:

- Context analysis (Haiti, Bangladesh, Sierra Leone)
- Participatory risk assessment (Sierra Leone, Kenya)
- Urban surveillance (Kenya)
- Cholera tracking (Sierra Leone)
- Peacebuilding (Haiti)
- Conflict sensitivity (Haiti)
- Disaster management committees (Sierra Leone, Haiti)
- Community conversations (Kenya)
- Peacebuilding committees (Haiti)
- Policy work (all)
- Livelihood support (Bangladesh, Haiti, Kenya)
- Private sector engagement (Haiti, Kenya, Sierra Leone)
- Emergency cash transfer (all)
- Participatory urban planning (Haiti)
- Pavement dweller centres (Bangladesh)
- Urban business development (Bangladesh)
- Physical mitigation (Sierra Leone, Haiti)
- NRM (Haiti, Sierra Leone)
- Solid waste management (Haiti, Kenya, Sierra Leone)
- Water access (Haiti and Bangladesh)

While this list shows that urban DRR is a diverse spectrum of actors, the interventions can generally be sorted under a broad typology. In all cases, Concern starts its interventions with **risk analysis** to understand the hazards, vulnerabilities and capacities of the target community. Some of the organisation's work is focused on providing people in dire situations with basic support that save lives and reduces negative coping - activities that fall under the category of **preparedness and response to crisis**. To reduce the need for preparedness and response activities, Concern also focuses on longer-term interventions. Providing electricity, roads, schools, and improving livelihoods can all be classified as examples of basic **service provision**. Lastly, work like peacebuilding, Community Conversations, and policy change are examples of **building social inclusion**, transformative activities designed to bring about fundamental long-term change in the status and position of the extreme poor. The figure below shows this:



Risk analysis

Risk analysis is an activity carried out to identify which hazards exist, are more likely to occur, and would have the greatest impacts on an individual or community (Concern, 2005). There are four components to risk analysis: hazard analysis, identifying and understanding the hazards within a specific area; vulnerability analysis, understanding the social context that gives rise to risk; capacity analysis, identifying resources and abilities among communities and other stakeholders for risk reduction; and risk-informed action planning, building on existing capacities and addressing risk through preparedness, mitigation and advocacy.

Preparedness and response to crisis

Preparedness and response to crisis describes a system of timely and appropriate response to disasters. It recognises that disasters of varying degrees will happen, and the most vulnerable will need assistance to both survive them, and recover afterwards. Ideally, responses follow signals from an early warning system, but these do not always exist. Even in the absence of functioning early warning systems improved preparedness leads to more timely and effective responses that can also alleviate longer term vulnerabilities.



Service provision

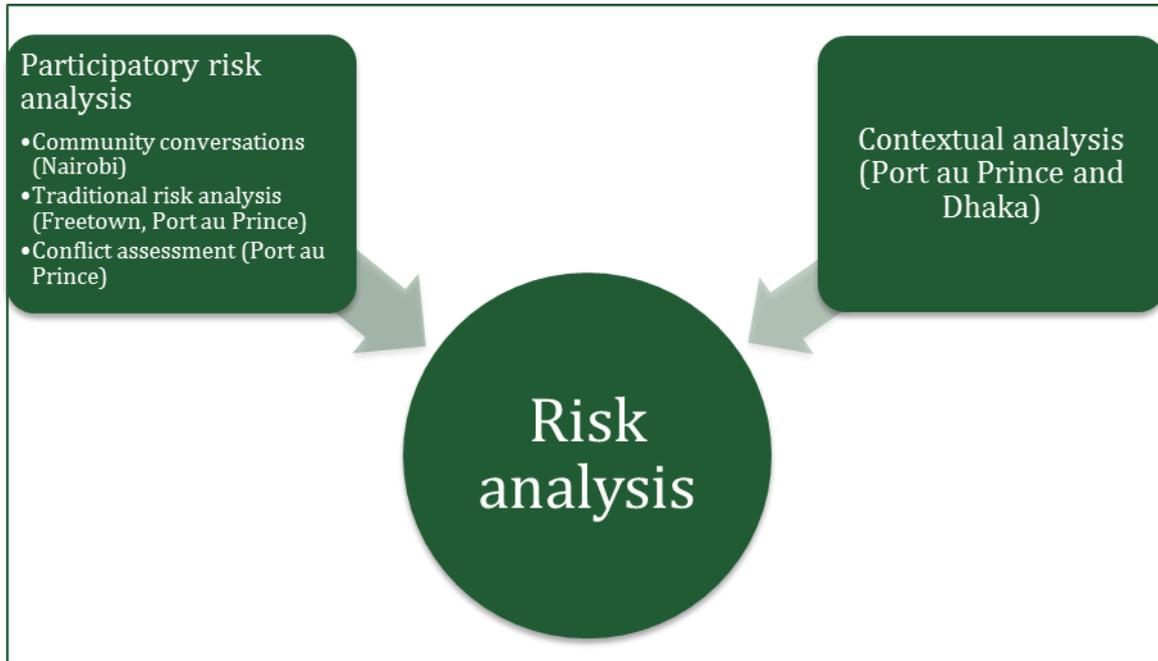
Service provision involves improving people's access to and effective use of basic services including healthcare, education, water, and roads (Narayan-Parker, 2005). Services are provided by a number of actors through a variety of activities including improving information, building participation, and developing local organisational capacity. Many of Concern's service provision activities involve physical delivery of programmes in place of government including in education, health, and livelihood support.

Social inclusion

Social inclusion is the process of improving the terms for individuals and groups to take part in society (The World Bank, n.d.). At individual level, this might involve improving the status of disadvantaged individuals like women and the disabled. At group level, it might involve reducing exclusion of marginalised communities, such as many slum communities, from broader functions –services, representation, feeling of belonging— of the city or country.

Risk analysis

Urban areas are complex, making risk analysis a challenging component of urban DRR. Concern uses a variety of risk analysis tools, two of the main ones being contextual analysis, focused on developing a 'big picture' understanding of how poverty, vulnerability, and risk intersect, and community based risk analysis, designed to provide a detailed risk profile for a specific area.



Contextual analysis

Contextual analysis (CA) is the analytical process that underpins How Concern Understands Extreme Poverty (HCUEP), Concern's guiding document on extreme poverty. Concern developed the CA process in 2010 to assist in designing programme interventions by providing an overall picture of who the poor are, where they are living, and why they are poor. CA provides an overall picture of poverty and vulnerability but is not detailed enough for specific project and programme decisions.

CA was conducted in Port au Prince and Dhaka using a combination of approaches and risk assessment tools. All CAs involve:

- An initial workshop to set the vision for the programme within the country
- Secondary information review
- Primary data collection through quantitative and qualitative data collection
- Stakeholder analysis and SWOT analysis of Concern's existing approaches
- Synthesis workshop to develop findings from the exercise

For the Port au Prince CA, data was collected over a five-day period with three teams covering three established slums (St. Martin, Martissant, and Cité Soleil), using three types of interviews (focus group discussion, individual, and key informant) and a review of background literature. Risk assessment tools that were used included wellbeing ranking, institution mapping, and historical profiling with a focus on hazards and addressing risk. A similar approach was taken in Dhaka.

Both CAs identified who the poor are, what keeps them in poverty, and how poverty and risk relate. The Dhaka CA developed a 'poverty continuum' from the rich to the very poor, with pavement dwellers coming in as the poorest (figure 4). Instead of categorising poverty based on where residents live, the Port au Prince CA identified poor and vulnerable groups within the city's established slums, noting that households headed by economically marginal informal sector workers, female headed households without a stable source of income, and households whose heads are unable to work, tended to be the worst off of all of the slum dwellers.

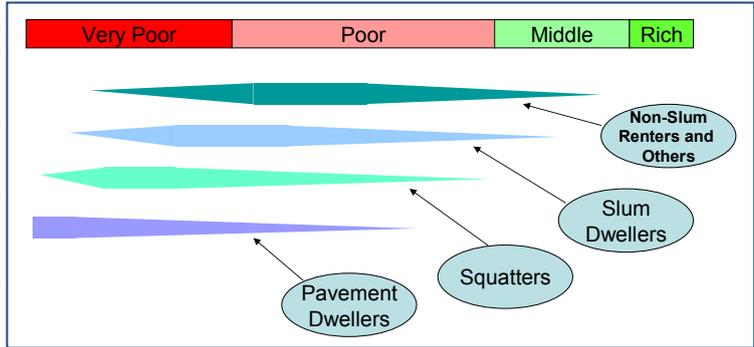


Figure 6: the poverty continuum, Dhaka, Bangladesh (Rasul et al., 2012)

Both CAs also described the role of risk in extreme poverty. The Port au Prince CA noted that insecurity - violence and the threat of violence - has a large direct and indirect impact on slum residents, in that gangs posed threat to personal security, controlled daily life of low income residents, and stifled economic development. It also identified risks related to poor sanitation, drainage, flooding, and fire as having major impacts on the extreme poor and provides a timeline of key disasters and their impact on the poor. The Dhaka CA identified risks at the household level including the death of the breadwinner, illness, and change in marital status; eviction and the threat of eviction; price spikes and inflation; and fire. It also described how the risks varied between the rich and poor, noting that compared to other groups, pavement dwellers were more exposed to personal security related violence, hazardous jobs, human trafficking, and road accidents due to where they live and work.

All studies have limitations. The Port au Prince CA was limited in that it did not cover smaller slum 'pockets', the growing peripheral slums, and areas of insecurity, making it difficult to understand whether Concern was working in the poorest or riskiest slums. The Dhaka CA did not have this problem given its identification of the pavement dwellers as the poorest of the poor. Both also had limitations from a risk analysis perspective: while they identified some of the main hazards, they only used a few DRR risk analysis tools. Impact ranking, trend analysis, seasonality tools, and root cause analysis of the hazards, were missing from both CAs, making it difficult to have a detailed understanding of risk. There is also little assessment of wider context issues such as climate change, and how they influenced the hazard context.

Community-based risk analysis

Community based risk analyses are any risk analytical processes conducted with the active participation of community members. These tools use participatory techniques to capture local perspectives on the risk context. Many are general and focus on the overall risk landscape, while others are specifically focused on particular hazards. Proportional piling, hazard cause and impact analysis, risk mapping, and trend and frequency analysis, are all examples of such tools. Concern's 2012 *Risk Analysis Guidelines* explains these tools, and many are used in in Port au Prince, Nairobi, and Freetown. The table below gives examples of how risk analysis is conducted in these three cities, and the outcomes of these processes:

	Port au Prince	Nairobi	Freetown
Type	General risk analysis Conflict analysis	Community Conversation	General risk analysis WASH analysis
Activities	DMCs trained as part of a 6-day course in partnership with Red Cross. Included in the training were: historical profiling, seasonal calendar; institution analysis; and mapping. DMCs and Concern collect information. Conflict assessment was taught to civil society partners, including historical trend analysis, institution analysis. Information collected regularly by partners.	Trainers (all partners of Concern) trained using a manual produced by Concern. Included in the training were: seasonal calendar; community mapping; transect walk; pair wise ranking. Partners assess activities within Community Conversation groups.	DMCs trained by Concern with refresher training by local organisation established by Concern. Included in the training were: historical profile, seasonal calendar, institution analysis, and mapping. DMCs and Concern collect information from community.
Outputs	Knowledge for Concern, partners and DMCs on risk context. Knowledge on how to conduct analysis.	Knowledge for Concern and partners on risk context.	Knowledge for Concern and DMCs of risk context. Knowledge on how to conduct analysis. Documents and reports.
Benefits	Residents understand risks. On-going knowledge of conflict. Capacity building of committees.	Residents understand risk. Explicit focus on using assessments to develop actions. Strong prioritisation of community DRR.	Participants understand risks. Capacity building of committees. Facilitation creates community buy-in.
Limits	Lack of documentation. Lack of secondary sources.	Lack of documentation. Lack of secondary sources.	Lack of secondary sources. Not systematically compiled and transmitted upwards.

Figure 7: risk analysis processes used

Concern’s approach to community risk analysis is similar between contexts. In all cases, the organisation relies on general participatory methods as a primary means of gaining an understanding of the context, works with and through partners, and through analysis builds knowledge, skills, and often the motivation of local communities to reduce risk. It uses specific assessments to develop an understanding of risks with potentially high impacts, such as gang violence and criminality in Port au Prince, and cholera in Freetown. The weaknesses of Concern’s approach across these contexts are also similar, the main ones being a lack of reference to secondary sources and a lack of longer-term data management.

The risk analysis in Freetown is an example of a general risk analysis. Concern utilised hazard mapping, historical review of disasters, and seasonal calendars as risk analysis tools. Analysis was conducted in conjunction with the disaster management committees (DMCs) who were trained by Concern and the government. DMC facilitators target and involve all groups, particularly those living in higher hazards areas (such as near the banks of rivers prone to flooding). Community representatives describe the techniques as useful for understanding community perspectives on risk and for starting the process of galvanising communities to reduce risk. They state that the discussions held as part of risk analysis improve community risk awareness. They also note the importance of taking a bottom-up approach as a facilitator, to improve understanding of risk, help to instil a feeling of agency over the ability to reduce risk, and to challenge common disaster myths (such as that malaria is caused from drinking beer).



These are examples of two participatory hazard assessments conducted in Freetown. The picture on the left shows a fire analysis and that on the right shows a community hazard map. Concern and DMCs work together to perform hazard analysis, involving local community members as participants. Involving communities also helps to educate them on the risks.

Once conducted, results of the analysis are shared with relevant stakeholders including Concern, higher-level disaster management officials, and other organisations working in the area. They are also used to develop community risk strategies for each slum. Strategy documents, which were developed in 2010, include a brief description of the area, the main livelihood activities, recent disaster histories, a risk/impact assessment including of who is the most vulnerable and why, and the activities of each actor to reduce risk.

Community analysis is important in building an understanding of the community's needs in relation to risk. For all cases, staff, beneficiaries, and government officials believed Concern's community analysis was strong in identifying hazards and encouraging participants to take actions to reduce risk.

All community risk analyses, however, are hampered to varying degrees by the broader institutional environment. Concern has established government DMCs in the Port au Prince and Freetown slums in which it works, however in both instances these committees are highly dependent on Concern's support to function. In both cases DMC members are volunteers and also receive little in the way of material support for their actions. National level structures, furthermore, are generally weak in all areas, and do not offer a standardised methodology for risk analysis or a repository for information from risk analysis, and in both cases there is little evidence of risk analyses being saved or used outside of Concern. DMCs are not operational in Nairobi or Dhaka. As such, Nairobi risk analyses are a limited component of Concern's other development projects and are not shared with others, and in Dhaka risk analysis is not conducted beyond the basic analysis within the CA.



Conclusion

Overall, generic risk analysis tools work well for DRR in urban areas, and urban risk assessment should follow general risk analysis good practice. Urban areas are often the most developed of all locations in the country, yet still contain people who are extremely poor and high levels of risk. The extreme poverty that exists in such urban areas is often ‘masked’ within broader statistics. In Dhaka, Concern is able to overcome this problem by identifying pavement dwellers as a single group and analysing the reasons for their poverty and vulnerability accordingly. In the other locations, such demarcation is less clear, and risk analysis might miss certain groups. Rather than taking a geographic perspective to risk analysis, it is therefore better in urban areas to take a group-based perspective on risk, understanding that often communities are based on interest (for example, church, youth, or football associations) or livelihood types (as garbage pickers or factory workers) as much as they are geography.

Concern has not consistently applied either risk analysis or contextual analysis within these four cases. As a result some key hazards may not be identified or analysed fully, and drivers of changes to the risk context, such as climate change, might be inadequately considered. Furthermore, documenting risk analysis shows weakness; as a result potential opportunities to use results from risk analysis as evidence for influencing higher administration levels or as the basis of decision-making are being missed.

The standard elements of a risk analysis, such as detailed analysis of the causes and impacts of hazards, vulnerabilities and capacities, are of paramount importance and can be applied to urban contexts; but in urban areas it is extremely important to be aware that (a) many hazards are human in origin and hazard identification therefore cannot be limited to natural hazards only, (b) power dynamics and multiple stakeholders often characterise urban contexts, so a robust institutional and power analysis must be included in urban risk analysis, and (c) the most vulnerable groups does not necessarily follow ‘typical’ lines (such as women, the elderly or disabled) but may instead be more about livelihood types. The dynamic nature of risk in urban areas is especially important considering the human origin of many hazards, and reinforces the importance of updating risk analysis on an annual basis.

Conflict often gets mentioned as a human derived hazard in urban areas. Conflict, however, is a broad-brush term that can describe a number of different conflict situations—from small and localised violence to full-blown war. Being specific with conflict terminology can be a means of avoiding any sort of confusion over what the term conflict means and can add to greater understanding of the role of conflict as a hazard.

Lessons to be learned for risk assessment in urban areas

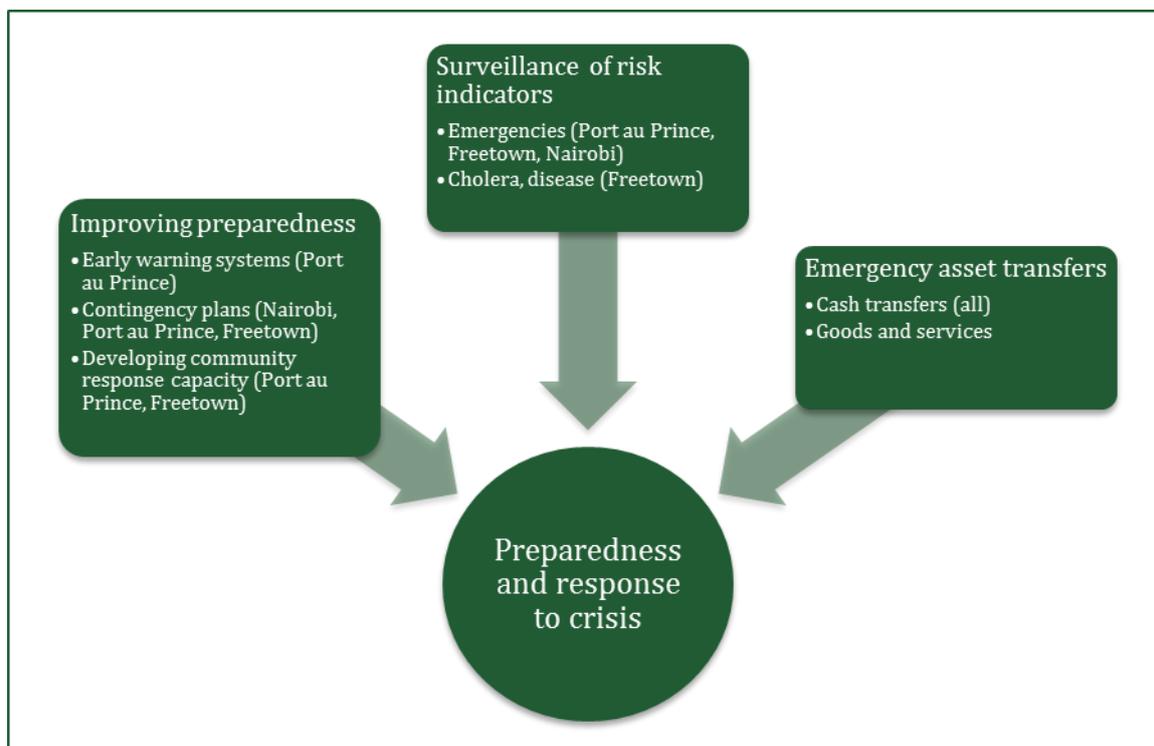
- General DRR analysis tools can be adapted to urban contexts, but they need greater emphasis on human derived hazards, power dynamics and institutional capacity and must take into account that an urban community may not look like a rural one and that vulnerability also may look different.
- The extreme poor can sometimes be scattered throughout urban areas, but can often be found in slums.
- Participatory analysis methods can be used to build an understanding of risk and for building support for risk reduction in urban areas.



- There may be pockets of poverty and vulnerability hidden within supposedly well off urban areas; something that a properly implemented risk analysis can help to uncover.
- Risk contexts differ at the household and neighbourhood level, so specific assessments should be made per location and per vulnerable group.
- Risk profiles change, so risk analysis should be conducted regularly.
- Participatory analysis can motivate communities to reduce risk.
- Assessments take time, and time needs to be taken for detailed analysis.
- Analysis should start with a broad multi-hazard assessment before narrowing down to a more specific analysis focused on particular groups or priority hazards.
- General assessments can help identify the extremely vulnerable, so are useful for targeting and strategic planning.

Preparedness and response to crisis

Poor urban households often live on the brink of survival, so when disaster conditions arise, they tend to quickly turn to negative coping strategies⁵. Preparedness and response to crisis focuses on providing emergency support in a timely manner, ideally early in or even before a crisis based on triggers from an early warning system, to prevent people falling into negative coping strategies and to reduce the loss of life. Concern uses a number of tools as part of its preparedness and response system, including:



Improving preparedness

Disasters can occur anywhere - even in areas with strong mitigation - meaning that planning and preparing for disasters is always a necessary component of DRR. Concern prepares to respond to disasters in all of the areas in which it operates. In the case study areas, it also works to support community preparedness in Port au Prince and Freetown.

In Freetown and Port au Prince, Concern works to strengthen community level disaster management committees (DMCs), which are the local government bodies responsible for implementing DRR. This includes establishing the DMCs, training them in preparedness, providing them with resources to conduct preparedness activities, and linking them with the appropriate government bodies. Concern establishes and trains DMCs based on its own criteria. Freetown DMC members, for example, need to be fit enough to perform basic labour, so include younger residents in good health. Concern does this because, while in both countries DMCs are mentioned within government policy, policy guidelines are lacking for certain specific functions. Concern has established DMCs in all of the slums in which it works in both locations.

Freetown's disaster response challenge



Photo 1: fire department extinguishing the blaze as residents watch



Photo 2: local youth extinguishing the fire



Photo 3: rubble of one of the 26 houses destroyed by the storm surge

Freetown's DMCs can sometimes find it difficult to respond to disasters. Two disasters in Susan's Bay, a fire in July 2011 (pictures 1 and 2), and a storm surge in August 2013 (picture 3), are cases that illustrate these challenges.

Susan's Bay is a coastal slum that began as a fishing community of a few houses in the 1980s. Since then, its population has grown to around 2,000 residents, and the land has been expanded by piling rocks from the ocean. The slum has high rates of marginally employed and unemployed, and lacks basic amenities including electricity, sanitation, and clean water. In 2009 Concern, in conjunction with the national government, established a DMC for the slum. The DMC received training, basic equipment, and financial support for small-scale mitigation and preparedness activities.

Fires are common in the slums, and in July of 2011 a fire broke out in the Bay. It was started by cooking with an open flame, which, along with electrical fires, are common causes of fires in the city. The fire spread quickly from one house to another due to the settlement's density and the fact that most houses were constructed from wood. DMCs and community youths rushed to contain the blaze, but their lack of tools (they only had access to basic hand tools and buckets) and lack of specialised knowledge on fire suppression (they received training on fire prevention and response but not to an advanced level) hampered their ability to contain the fire. One member called the fire department, national DMC representatives, and Concern. It took the fire department around 30 minutes to arrive on scene, but they then found it difficult to reach the fire given the lack of roads leading into the slums and the dense settlement pattern. They eventually managed to gain access and extinguish the blaze.

The fire destroyed 10 houses. There was debate among government officials, NGOs, and community members as to whether to assist the victims. The national government made it clear that there needed to be a distinction made between 'accidents' and 'disasters' and warned that if support was given to a few houses for this fire, it would have to be given for all future events of this magnitude.

Freetown experiences storm surges during August and September, which residents of Susan's Bay are particularly vulnerable to as they live close to the sea on loose reclaimed land. In August 2013, surges destroyed 26 houses in the Bay. DMCs could do little to respond to the surges other than to assist in evacuation during the storm and report the resultant damage to the government and NGOs. Following the storm, three organisations - Concern, another NGO, and the national government - came to assess the damage. Unfortunately, none of the organisations provided post-disaster reconstruction support, nor did they inform Susan's Bay residents of their decision. Concern lacked the funds for reconstruction so did not provide support. The government stated that it did not want to provide material support as they feared that if they did so it would incentivise further settlement on what they considered marginal, uninhabitable, land.



These two cases reveal a number of issues. First, it is clear that community DMCs can reduce risk with the right support, since, in both instances, DMCs were able to use their training to respond to disasters. However, DMCs are volunteers with limited resources, not response professionals, so require external support for disasters where response is highly technical and when post-disaster reconstruction is necessary. This support can be difficult to secure, however, as there are often both financial limitations and political barriers (e.g. not wanting to provide incentives for settling in a marginal area) hampering response.

Following establishment, members are trained in how to reduce risk across the disaster cycle, from analysis and preparedness to mitigation and recovery. In both Freetown and Port au Prince, training covers a wide number of hazards, not just normal ones like floods, earthquakes, and fires, but the full hazard spectrum including health hazards, car accidents, and conflict. Training is conducted in conjunction with local organisations with technical capacities including the Red Cross (both cases) and the municipal fire department (Freetown).

After training, Concern provides members with tools and other forms of support to carry out risk analysis, preparedness, mitigation, and response activities. DMCs in Port au Prince focus on preparing for earthquakes and hurricanes, the two main sudden onset hazards in the city, while Freetown DMCs focus on fire and disease outbreaks, including cholera outbreaks, the two priority hazards in the area.

In both cases, DMC members state that the training they receive from Concern is appropriate, but that they are not always prepared enough to respond, sometimes because they lack necessary materials and training, other times because political will for response is difficult to secure. The case study above on Freetown's disaster response illustrates these challenges.

The government of Sierra Leone has not established an intermediary between local and national disaster management structures. Because of this, in Freetown Concern has also established Community Disaster Management and Emergency Response Team (CODMERT), a community based organisation (CBO) that acts as a coordinating body for DMCs and has a mandate focused on disaster management. To set up CODMERT, the six Freetown slum DMCs each nominated four representatives to the organisation: two facilitators, an executive to chair meetings, and support staff. Each DMC also donated 60,000 Leones (about €13) as initial start-up capital to register the organisation with the government and set up a bank account. CODMERT staff state that the organisation's goal is to eventually become an umbrella organisation for all DMCs in Sierra Leone. As part of this, 11 DMCs from the rural areas outside Freetown that Concern has supported have joined CODMERT. Representatives state that supporting rural areas is vital, as they have received less training and their technical capacity is lower than that of their urban counterparts.

DMC members describe CODMERT as useful for coordinating DRR activities and building upon existing capacity, noting that it functions as a repository for technical DRR knowledge. National government officials also view the CBO as useful and have considered making it the official link between national and local DRM structures. Unfortunately, CODMERT has few financial resources for projects (currently, members fund most work themselves). However, as a CBO CODMERT can apply for funding on its own or in partnership with other NGOs.

DMCs have a number of strengths but also some limitations, which are shown in the table below. Despite limitations, Concern, community, and government representatives of both countries acknowledge the importance of local level DMCs in building preparedness and reducing risk. While Concern has not established local-level DMCs for Nairobi and Dhaka, staff in those countries also believe in the importance of developing community response capacity and establishing DMCs, but state that there are few funding streams available for longer-term urban DRR.

The figure below summarises Concern’s work with DMCs in Freetown and Port au Prince:

	Port au Prince	Freetown
Organisation	DMC	DMC CODMERT
Process	<p>DMCs:</p> <ul style="list-style-type: none"> Establish DMCs from neighbourhood leaders Train DMCs in DRR through the Red Cross DMCs each perform assessment, preparedness, mitigation, and response, funded by Concern 	<p>DMCs:</p> <ul style="list-style-type: none"> Establish 15 member DMCs from existing committees, with leaders elected Train DMCs in DRR itself and through the Red Cross, municipal fire department, and the state DMCs jointly perform assessment, preparedness, mitigation, and response, funded by Concern <p>CODMERT:</p> <ul style="list-style-type: none"> Establish CBO by taking leaders of DMCs working together and each donating funds Help develop bylaws, mission, mandate Use CODMERT for training, coordinating DMCs, and special DRR events such as international DRR day
Outcomes	<ul style="list-style-type: none"> Local DRR capacity; large mitigation projects; 	<ul style="list-style-type: none"> Local DRR capacity; high quality risk assessments; widespread sensitisation; basic localised response; small scale mitigation; embedded DRR institution
Benefits	<ul style="list-style-type: none"> Improved DRR capacity of residents 	<ul style="list-style-type: none"> Improved DRR capacity of residents Connecting slums to government and other organisations Foundations laid for CBO sustainability Greater cross-community advocacy Broader institutional support from state and donor from CODMERT
Limitations	<ul style="list-style-type: none"> Little operationalisation post-Concern Funding limitations Difficulty in engaging in root causes of risk Few links with city municipality 	<ul style="list-style-type: none"> Funding limitations post-Concern Difficulty in engaging in root causes of risk Lack of self help Few links with city municipality

Figure 8: how Concern works with DMCs

Surveillance systems

Surveillance systems are the tools for monitoring and sharing information as a disaster unfolds. Tracking disasters can help agencies respond to disasters quickly, making it a necessary component of preparedness. Surveillance is similar to early warning, as both preparedness and surveillance are focused on gathering and sharing information and have similar requirements including: a clear understanding of the hazards; monitoring and warning services; dissemination and communication; and preparedness planning. The main difference is that an EWS is designed to provide information in order to react to a hazard before it happens, while surveillance focuses on providing information as the hazard unfolds. Using a surveillance system as an early warning system is only appropriate for slow onset disasters, since thresholds indicate a worsening situation which, in turn, can be used to galvanise agencies and communities for disaster response.

Concern supports multi-hazard emergency surveillance systems in Nairobi, Port au Prince, and Freetown. In Port au Prince and Freetown, the systems are basic and mainly consist of reporting disasters of a certain scale within a certain geographic area to government officials. In Nairobi, Concern is developing an advanced surveillance system to provide detailed information for a wide variety of stresses.

In Freetown and Port au Prince, surveillance focuses on training DMCs to report disaster events and multi-sector needs in the immediate aftermath of disaster events, to relevant authorities; important to contextualise and speed up responses. In both cases, Concern trains and supports DMCs to collect this information, and report it to government bodies. While DMCs are consistent in reporting disasters, there are issues in Freetown. DMCs do not have a standardised format for reporting disasters; national government officials note that information does not always reach them; and there is no easily accessible repository of past disaster information.

In Port au Prince Concern has also developed an informal early warning mechanism for tracking gang related violence. Local partners collect information in the slums, which they then share with Concern. Concern uses the information for its own work, including determining when and where it is safe to enter the slums, but is unsure how to share the information with others as Concern does not want to be viewed as a potential party to the combat.

In Nairobi, Concern is working on Indicator Development for the Surveillance of Urban Emergencies (IDSUE), a five-year project focused on building an urban slum surveillance system, aimed at developing and empirically testing a set of indicators for triggering humanitarian response in urban areas of sub-Saharan Africa. Concern uses IDSUE to monitor the changing poverty and vulnerability context in Nairobi slums, which allows the organisation to identify when slum residents might need support. The project has three objectives:

- I. To determine indicators for early detection of humanitarian emergency situations and coping strategies in the urban settings in sub-Saharan Africa
- II. To develop surveillance systems for detection of early warning signs of a humanitarian emergency/crisis in urban settings in sub-Saharan Africa
- III. To identify thresholds/cut-offs/decision algorithms for defining when a situation has reached an emergency/crisis stage in an urban context in sub-Saharan Africa



The resulting surveillance system has four components: surveillance of urban areas, tracking food insecurity and some of the primary causes of urban food crisis; early warning to get information before the situation becomes advanced and overwhelms systems; thresholds to determine scale of emergency; and action triggers - levels at which actors have agreed to provide support. The system is a form of EWS as it ensures that there is information being issued on an emerging slow onset disaster. The next steps are to determine exactly what the appropriate early actions are for the different stages of crisis, identify the right stakeholders for implementing these actions in a timely and consistent manner, and ensuring that donors are in place to provide the necessary financial support.

IDSUE mainly tracks food security, which is a proxy for other shocks since in Nairobi price fluctuations, insecurity, fires, and other shocks all cause spikes in food insecurity. Along with tracking emergencies, data from IDSUE is also used to understand general patterns of poverty and vulnerability, including issues related to sanitation, health, employment, consumption and expenditure, personal security, interpersonal relationships, coping strategies, food prices, and malnutrition.

Urban-specific surveillance systems are necessary for two reasons. Firstly, existing surveillance systems largely focusing on rural areas and are not designed to capture urban risks. As such, they consider food security from an agricultural perspective, using weather forecasts, aerial photographs of vegetation, and other forms of meteorological and ecosystem data to determine when crops might fail. This is relevant in areas where agriculture is the main livelihood activity, but in urban areas livelihoods are mostly linked to markets and services, meaning that they provide little information about the situation in urban areas.

Secondly, different urban thresholds are needed because of the population size in urban areas. When populations are large, even a small relative change in food security may create a large response need that can easily overwhelm emergency systems. For example, a 15% global acute malnutrition (GAM) rate (commonly considered to be the threshold of a food security crisis) in Marsabit District, a rural district in northern Kenya in which Concern works, would mean that 7,939 children would be affected - a critical but manageable situation. However, a 15% rate in Nairobi would mean that 41,568 children would be affected, and would constitute a major humanitarian crisis. In order to not overwhelm humanitarian capacities, surveillance systems in large urban areas need to be precise, focus on early detection, and have clear thresholds set at appropriate levels.

IDSUE has four phases of development. Phase one focuses on developing an initial list of indicators through a literature review and focus group discussions, and piloting those indicators in select slums. Over 50 indicators were initially selected, which were then narrowed down using an evaluative criterion of ease of measurement, accuracy, reliability, sensitivity to change, internal validity, agreement to other measures, and applicability, using in-depth qualitative data. Phase two involves testing the indicators for different locations and crisis situations, using regression analysis to examine how accurately they represent each context. A surveillance system is established during phase three. It has been established in Nairobi and will be adapted to other slum areas with large populations within sub-Saharan Africa. While the tool was developed from data collected across slum areas, the system is focused on the poorest and most vulnerable slums, since stresses are most likely to affect these areas first, meaning that the system can act effectively as an EWS for the entire slum population. Phase four focuses on identifying thresholds and cut-offs for what is considered an emergency and disseminating results to international stakeholders. Phase four is currently underway in Nairobi.

IDSUE is a research project, and data collection and analysis are key components of the project. Concern uses software for statistical analysis and spatial analysis and collects most of its quantitative data using digital data gathering (DDG) techniques, a form of data collection where data is collected using smartphones, tablets, and other electronic devices. Concern uses DDG widely and has found that it saves time and improves accuracy as results can be entered directly into a computer rather than being written by hand then entered, so reducing the possibility of incorrect data entry. Data is geo-referenced using GPS, which allows for spatial analysis.

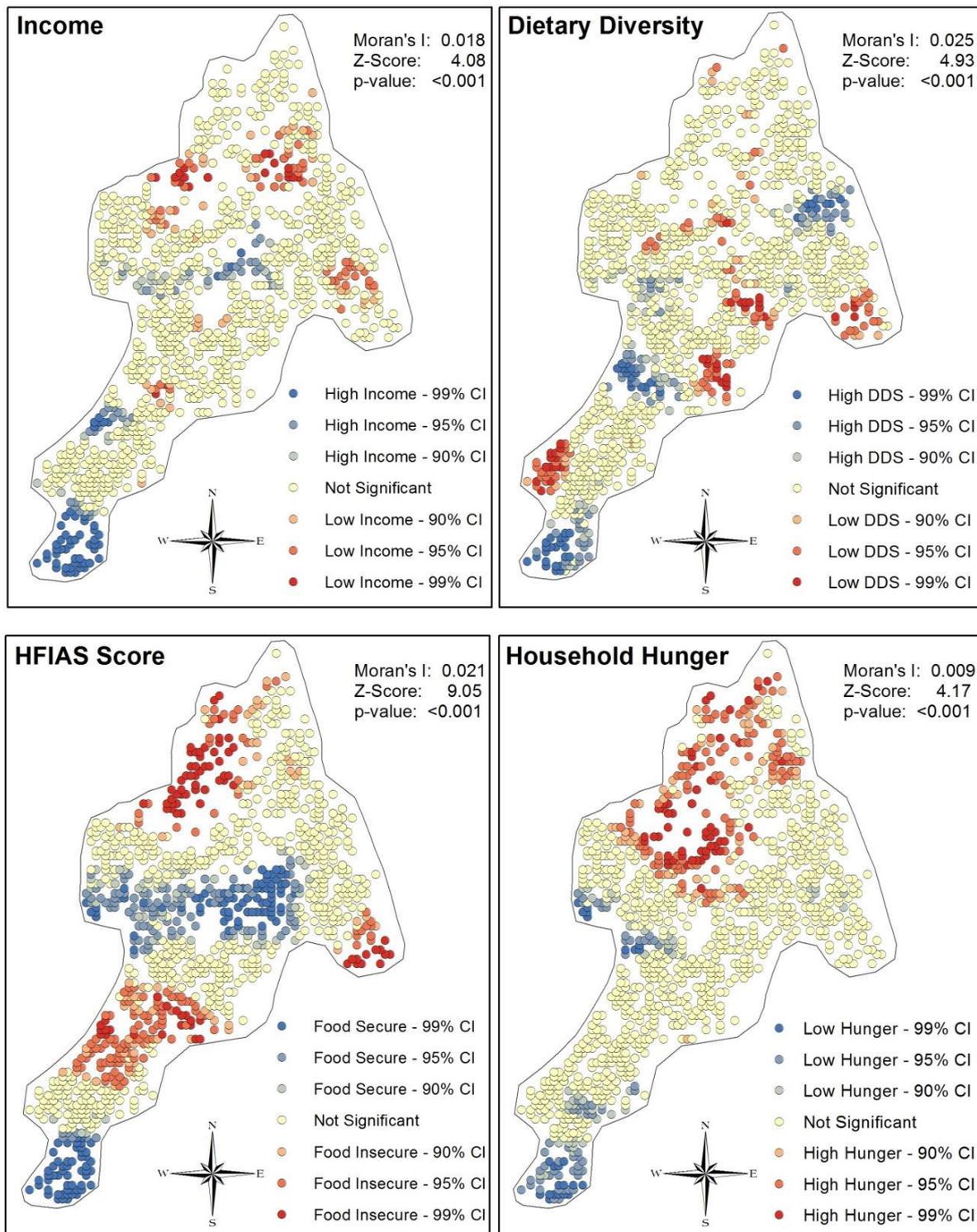
Concern has a DDG team in each slum area to collect data, made up of a supervisor for coordinating activities, two team leaders who act as quality control, looking at and approving collected surveys, and five enumerators responsible for data collection. Staff are trained in an initial workshop and receive refresher trainings each time they collect data. Most of the team have been working on the project for over two years, which staff states helps improve the accuracy of the survey results. Enumerators are from the local community, which helps in accessing areas and collecting data.

IDSUE is in the final phase in Kenya: Concern has developed and tested the surveillance system in three slums in Nairobi and is in the process of developing thresholds. Thresholds are a means of ensuring any response is regular and proportional. Unlike indicators, which are developed using a scientific methodology, thresholds should trigger action so must be established through multi-stakeholder consultative processes to ensure action would happen when thresholds are passed. The actions themselves may vary depending on the capacity of the actor, their mandate, and their willingness to respond. Concern is also working to share and institutionalise its results and has partnered with the municipal authorities and the Kenya Red Cross, one of the largest disaster management organisations in the country, to expand IDSUE to all slums in Nairobi.

While IDSUE is not complete, it is starting to show results. Concern can now say with confidence when an emergency is emerging in the areas where IDSUE is in place. In the last six months of 2014, for example, Concern identified a spike in food insecurity in Korogocho slum which it used to develop a project to provide emergency cash transfers to members of the population most in need. If Concern did not have IDSUE, it would not have known this and would not have been able to respond. Since food crises are slow onset, early detection and response can prevent crisis from deteriorating further.



Enumerators in the field for data collection



Spatial analysis can help to quickly understand differences within and between slums. The figure above, taken from the IDSUE Year 3 Research Report (Concern, 2013) shows the spatial distribution of income, dietary diversity, household food insecurity and access scale, and household hunger in Korogocho, one of Nairobi's slums. It reveals that for all these categories there are large variations within the slum. Similar figures were developed for the other slums, allowing for cross slum comparison.



Concern has also used IDSUE to better understand poverty and vulnerability within the slums. It has found, for example, that food insecurity and violence are often linked: food insecurity increases during periods of conflict or high crime because people stay off the streets, meaning that they are not able to work. It has also found that areas away from industries tend to be more food insecure, as work is harder to find. The organisation has also learned that people live in certain slums longer than others, and that this correlates with poverty levels - people live in Korogocho, the poorest slum, for an average of 14 to 20 years, while they only spend an average of between 3 and 5 years in Keraganti, a better off slum. This, coupled with the finding that residents' expenditure often exceeds their incomes, indicates that residents get progressively poorer the longer they remain in the slums.

In Freetown, Concern is developing an online cholera surveillance system that can spatially track cholera outbreaks as they arise. The organisation is working in a WASH consortium to develop the system in partnership with Ushahidi, a non-profit software company that focuses on open source information sharing for the real-time monitoring of disasters. Ushahidi is a crowdsourcing platform where data is collected and shared via mobile phones, which allows users to track the development of disasters as they unfold. For cholera surveillance, ground-level health centre staff send an SMS message to higher level officials whenever they suspect a case of cholera. Messages are then validated and included in a central database, a map of which is publically available for download. When tracking outbreaks of highly contagious diseases such as cholera, it is important to identify where response agencies need to intervene to halt the spread of the disease. Again, for slow onset disasters, surveillance can also function as an EWS, enabling early responses to happen. The consortium has also developed a cholera response plan which describes the specific roles and functions of the members and sets out how they will act in the case of a cholera outbreak. It has developed scenarios for three levels of outbreaks based on the vulnerability and capacity structures of the area and number affected.

This type of tracking system could theoretically be used for tracking any type of disaster and was used in Kenya in 2007 to track election violence, and in Haiti in 2010 following the earthquake. The system is currently in pilot, and if it is successful, the Kenyan national health centre plans to adapt it and use it to track other diseases including Ebola, malaria, and typhoid.

A number of things become clear from these surveillance systems. First, IDSUE shows that there is a difference in both requirement and utility in urban surveillance compared to that in rural areas, and that in many cases rural surveillance mechanisms are not appropriate for urban areas. Investment therefore needs to be made to develop urban specific forms of surveillance to be used for different hazards across different urban contexts.

Second, surveillance can be both a technological activity, involving geo-referenced data, mobile phones and digital techniques, or simple, involving pen and paper. Compared to paper-based ones, digital techniques are efficient for large-scale surveillance and surveillance of risks that are geographically dispersed within large, heterogeneous populations, but require greater initial investment. In urban areas where populations are large and risks are dispersed, digital techniques can help agencies to better understand when emergencies are occurring. This is important as when certain dispersed shocks are assessed in aggregate it becomes clear that they are disasters.

Finally, having the ability to respond to information is as important as having the information itself. When emergency information was collected in Freetown and Port au Prince, it was not always acted upon. In Nairobi and Freetown, Concern was working to ensure response by developing response thresholds targeted at different levels of crisis. It is also making to identify and attract other stakeholders who would be important for early action, especially donors. It must, however, be emphasised that because response is related to technical and political capacity and responsibilities, thresholds should be developed in a way that secures buy-in from all stakeholders involved in response, including the government, community, other NGOs and Concern.

Emergency asset transfer

Emergency asset transfers are interventions to provide households with the material necessary to survive. Concern provides different types of asset transfers. They can be sorted based on the type of asset provided (cash based and non-cash based), and the mechanism of provision (conditional versus unconditional).

Asset Type	<i>Conditional cash: cash for work</i>	<i>Unconditional cash: cash transfers</i>
	<i>Conditional item: food or water for work</i>	<i>Unconditional item: food, water, shelter material</i>
Conditionality		

Each type of asset transfer has its strengths and weaknesses, and the choice of techniques depends on the particular situation. Some factors influencing asset transfers include the nature of the emergency, the needs of beneficiaries, the functionality of markets, the desires of beneficiaries, and the capacity of the responding organisation.

Figure 9: Types of asset transfer

In Kenya, for example, Concern often provides cash to beneficiaries facing food crisis transferred to them through their mobile phones. Concern's first experience in mobile transfers in Kenya was in 2008 in response to post-election violence. To transfer money Concern partnered with M-pesa, a mobile-phone money transfer and microfinancing service established in 2007. It found mobile transfers to be less expensive and more secure than paper ones, despite the fact that not all beneficiaries had cell phones (Concern provided SIM cards to overcome this problem). Concern published its experience in an article in *Humanitarian Exchange* entitled: *Mobile phone-based cash transfers: lessons from the Kenya emergency response* (Datta et al., 2008).

Mobile transfers work well in situations where food insecurity is caused by lack of money but where there is food in the market, and are additionally beneficial because beneficiaries can use the money that they receive for a number of other services. However, in other emergency situations Concern sometimes provides items rather than cash. This is often the case in Dhaka, where Concern provides pavement dwellers with blankets and tarpaulins during cold and rainy snaps, and allows pavement dwellers to stay in its pavement dweller centres during emergencies. These examples show that while cash is often an appropriate form of emergency support in urban environments with cash-based economies, there are cases where other types of emergency support might be better, particularly when urban residents lack shelter.



Conclusion

Hazards, ranging from security, storm surges, earthquakes, food insecurity, and disease, occur regularly in urban areas, and preparedness and early response can often make the difference between whether a hazard becomes a disaster. In Nairobi, Port au Prince, Freetown, and Dhaka, Concern supports preparedness and response to crisis through improving preparedness systems, surveillance, and asset transfers. This work helps make sure affected populations receive the support they need. In some cases, proper surveillance mechanisms to understand when and where emergencies are emerging are lacking; in others, institutional mechanisms for response are inadequate. Staff in all areas realise the limitations of the work, however many have found it difficult to secure financial support and political will to build an urban response system. Preparedness and response is everyone's responsibility, and more efforts need to be made to strengthen preparedness and response to crisis for all four contexts.

Institutions are vital for preparedness and response, and investment in their establishment and capacity building needs to be provided. This includes providing training courses, coordination, accessing emergency response materials, and implementing actions that result from risk analysis and planning processes. Each of the four cases had common gaps in resourcing local level DMCs, especially around providing emergency response materials, sustainability, and the difficulty of addressing the underlying causes of risk.

The composition of various DRR related institutions should be related to their function. Groups engaged in highly physical activities such as search and rescue should include a number of fit young people. Local level DMCs must represent all the vulnerable groups in the area, as well as other local level institutions that are important for risk reduction, such as leadership, health facilities, and schools. In turn these local level DMCs need to be linked to multi-sector bodies at the intermediate level – which would include municipal authorities for urban areas – who can guide and coordinate activities. Well-linked institutions make easier the sharing of information on risk, advocating for resource allocations and driving behaviour change.

Surveillance systems can be used for early warning systems. Urban surveillance systems rely on different indicators to rural ones, with market information being extremely important. Using technology such as digital data gathering and mapping tools significantly reduce the time taken to collect information and improve the ability to detect changes in trends and disaster conditions, which can lead to early emergency responses. In Nairobi, Concern's food surveillance shows significant promise as an early warning system, but there is much work to do for ensuring that multiple stakeholders engage with the process and act in response to thresholds. Furthermore, surveillance itself has clarified dynamics of urban poverty by showing how food insecurity and violence are closely linked to the availability of employment, and that slum conditions in themselves tend to deepen poverty – the older slums are poorer, and the people who have lived in slums longer also tend to be poorer.

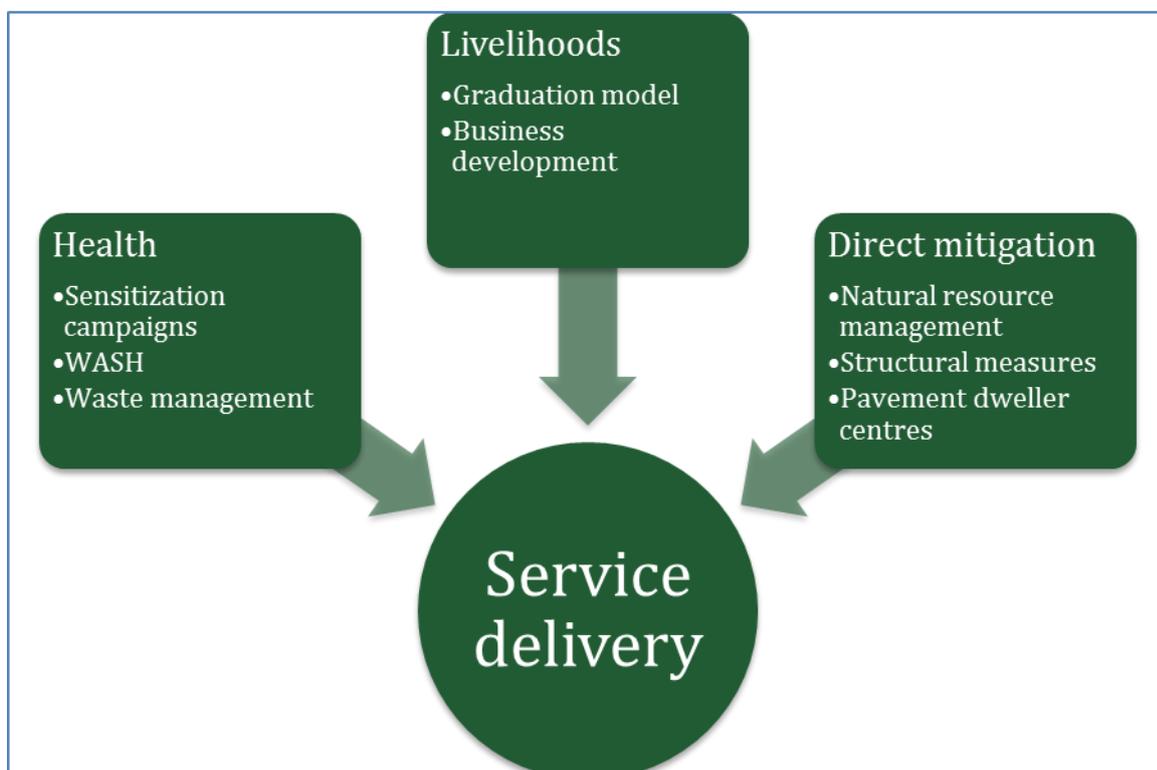
The type of emergency response triggered by a surveillance system need to suit the context and needs, but cash tends to work well in urban areas, given the market orientation of urban livelihoods.

Lessons to be learned for preparedness and response to crisis

- Urban preparedness and response involves EWS, strengthening preparedness systems, surveillance, and asset transfer.
- Urban surveillance systems should, at a minimum, be developed for the poorest residents within poorest areas, to account for differences within and between slums.
- Agreeing on emergency response thresholds is a key step in developing urban surveillance systems, and that these need to be set by a multi-stakeholder platform which also ensures political buy-in and adequate financial or material support for early response.
- Due to the close proximity between slums, in urban areas a multi-slum DMC coordinating entity can be used as an effective mechanism for bringing slum DMCs together to share experiences and support each other, and in turn can act as an intermediate level DRR institution.
- Cash transfers through mobile transfers often work well in urban areas, but there may be times when other forms of support are necessary.

Service provision

The poor and vulnerable in urban areas often do not have access to basic services: services can be privatised, access can be restricted to certain groups, and services might not exist in areas where the extreme poor are located. Lack of services can increase risk since it means people have fewer resources to use to mitigate risk. Concern provides residents of Port au Prince, Nairobi, Freetown and Dhaka with a range of services related to health, livelihoods, and direct mitigation including:



Direct mitigation

Mitigation is “the lessening or limitation of the adverse impacts of hazards and related disasters” (UNSIDR, 2009). Any intervention that strengthens assets also has the potential to mitigate risk, but direct mitigation refers to activities targeted explicitly at mitigation. Concern has direct mitigation activities in Dhaka, Haiti, Port au Prince, and Freetown.

Concern has established ten pavement dweller centres (PDCs) in Dhaka; buildings that function as spaces for delivering services to pavement dwellers. Pavement dwellers can access a range of services through the PDCs, whose importance varies based on local need. Pavement dwellers have very limited possibilities of cooking hot food so are often dependent on buying this from small restaurants. The PDC in Green Road is located in an area with few cheap restaurants, so participants value the PDC’s cooking services. Males who live around Kawran Bazar PDC value its resting space, since it can be difficult to find a space to sleep during the day in that area. PDC staffing is based on the services each centre provides, but typically includes a manager, accountant, field officer, paramedic, teachers, community mobilisers, an office assistant/guard, a cook, and a nanny.

<i>Savings</i>	<i>Social capital group support X</i>	<i>Psycho-social counselling X</i>	<i>Night shelter</i>
<i>Loans</i>	<i>Day care X</i>	<i>Vocational skills training X</i>	<i>Lockers X</i>
<i>Health services</i>	<i>Non-formal education</i>	<i>Life skills training X</i>	<i>Bathing facilities X</i>
<i>Paramedic services</i>	<i>Formal education referrals X</i>	<i>Entrepreneurship training X</i>	<i>Cooking space X</i>
<i>Health referrals X</i>	<i>Adult education</i>	<i>Resting space</i>	<i>Birth registration X</i>

Figure 10: services that PDCs provide

A few of the services Concern provides through the PDCs can be classified as direct mitigation activities. As a night shelter and resting space, PDCs mitigate risk associated with being on the street. Women and children can stay in PDCs at night, protected from physical and sexual violence, kidnapping, cold snaps, and other risks associated with sleeping in the open. Adolescent males face similar risks to adolescent females, but Concern lacks funds to provide this group with facilities.

Lockers and savings schemes can mitigate theft risk. Theft is a major problem for pavement dwellers because they live on the streets and cannot open bank accounts since banks require identification, which most pavement dwellers do not have. Pavement dwellers can also use PDCs to save their money, which helps protect money from theft, including theft from strangers and from relatives and family. Concern provides pavement dwellers with individual pass books with information on how much they have saved and keeps a ledger of savings in each PDC. PDCs are also equipped with lockers that pavement dwellers can use to store their possessions. Demand for lockers is high, and in most PDCs there are two lockers per family.



PDCs have lockers that pavement dwellers can use for storing valuables (photo: DeVries et al., 2011)

Establishing the PDCs was challenging for Concern. Landowners were often hesitant to rent to Concern as many held prejudices against pavement dwellers. Concern also found it difficult to find safe buildings that were resistant to earthquakes and fires. While it was not able to secure such buildings, it has provided basic training on what to do in event of emergencies. One of the biggest challenges, however, came from the pavement dwellers themselves, in that many were distrustful of external organisations so were initially hesitant to use PDC services. Demand for night shelter, for example, was low, as was demand for the day care centres. It also took longer than expected to convince pavement dwellers to participate in the savings schemes. Concern built trust with pavement dwellers gradually. It demonstrated the credibility of the savings schemes by taking deposits in the morning and releasing them as withdrawals on the same day. It built initial demand for the shelters and day-care by working with interested mothers to build their trust. Today, pavement dwellers trust Concern, as indicated by the fact that demand for all services greatly exceeds supply.



Concern's pavement dweller centres are a safe, fun, space for children 24 hours a day. They operate as a day-care centre during the day and a shelter at night. PDCs help women and children avoid the risks associated with living on the streets.

Port au Prince is a mountainous city, and when rains fall, they often create riverine erosion, in part because of a lack of physical mitigation structures protecting riverbanks, in part because of upstream deforestation and construction. Residents living near the riverbank in the Grand Ravine area of Martissant are particularly exposed to erosion, and many have lost houses as a result. To mitigate this, Concern has constructed two check-dams out of gabions, which residents and staff credit with slowing water and reducing erosion. The check-dams are, however, starting to show signs of wear after a year. Staff originally planned to build five dams but could only secure funding for three. They state that another three dams would slow water down enough to prevent wear, but that they lack funding for construction. Better management of the upstream areas would also reduce run-off, but is a large-scale project, and ownership of the land is unclear.

In Freetown, Concern has provided DMCs with funds to implement small-scale structural mitigation projects. In Kuntorloh, a mountainous peri-urban slum outside the city's urban core, DMCs have planted trees to reduce flooding, erosion, and rock fall risks. Volunteers grow trees from seeds in their backyards and then plant them in higher risk areas, typically areas with steep slopes. Planting has been limited and some trees have been cut down for fuel, however many remain and committee members believe they helped reduce flooding, erosion, and rock fall risk. DMCs implemented a similar project in the low-lying coastal slum of Susan's Bay.



A number of houses near the gully in the Grand Ravine have been destroyed or are threatened by erosion. Concern constructed two check dams to reduce gully erosion, however they are showing signs of wear (bottom right photo).

The Bay is located at the bottom of a cliff, which residents had to walk under to access the settlement. The cliff was prone to rock fall; to reduce this risk DMCs mobilised residents to dig a path out of the cliff. 18 men worked on the project for 26 days.

Structures can place users at risk if improperly engineered. The Allen Town and Kuntorloh health centres, Kroo Bay bridge and floodwalls, and the steps and sea walls in Susan's Bay illustrate this. Concern constructed the Kuntorloh health centre in 2013 in an area exposed to landslides. A landslide in August 2013 destroyed part of the health centre's perimeter wall, and staff worry that if another landslide occurs, it will destroy the facility. Concern's engineers identified the landslide as a hazard but did not have the funds to construct a retaining wall to mitigate the risk. The Allen Town health centre is another example. Another NGO built the centre about a decade ago, but it has fallen into disrepair since: its roof is collapsing and there are major cracks on the building's foundation and walls, to the point that engineers have declared the facility structurally unsound. Concern is currently seeking money to repair the building. Finally, the floodwalls in Kroo Bay and steps and sea walls in Susan's Bay are examples of structures built by communities themselves without any engineering support. They are under-designed for the hazards in hand and are all in danger of collapse. While they could be better built, the government banned building physical structures in many of the slums, since it considers the areas unfit for human settlement, although there are plans for commercial development of the slum areas if the people living there are evicted. These alternative agendas for slum development are serious barriers to the satisfactory reduction of risk in Freetown's slums.

DMCs have also tried to use legal channels to reduce risk of fire, flooding, and disease. In many cases they have tried to convince relevant authorities to issue citations for illegal practices that increase risk (e.g. dumping waste, selling unclean food, dangerous cooking techniques, and constructing buildings with improper wiring). This work only has a limited effect, as fines are not always given and can be easily bypassed with bribes.



These pictures show some typical physical mitigation work in Freetown. The top four are examples of basic physical mitigation - top left is a storm barrier in Susan's Bay, similar to the ones that also collapsed during the 2013 storm surges. Top right is an erosion protection barrier in Kuntorloh, also basic. Below is the cliff in Susan's Bay dug out as a mitigation project (left) and tyres communities have installed as rudimentary flood and erosion protection in Kroo Bay (right). The pictures in the lower middle row are of areas where physical mitigation could be beneficial. On the left are the main steps leading to Susan's Bay. Children and the elderly use the steps daily, and they need a railing. On the right is gully erosion that could be prevented with engineering and better natural resource management. The bottom pictures are of broken structures. On the left is a bridge in Kroo Bay built by another NGO; on the right is the broken wall of a health centre in Kuntorloh built by Concern.

Health and sanitation

In all areas, Concern works to improve health and sanitation to reduce risk. In Port au Prince, Nairobi, and Freetown, slum dwellers lack clean water and waste disposal facilities; as populations are concentrated in these areas, this leads to major environmental health problems. Furthermore, there are few clinics and health services to go to in case of emergency. In Dhaka, pavement dwellers often live in more sanitary conditions than slum residents; however they all lack access to health and sanitation facilities.



Concern, CODMERT, and DMCs use sensitisation campaigns to mitigate a number of hazards. The top four pictures show signs used in parades designed to reduce risk, and the bottom picture shows one of the parades (photo: CODMERT)

which focus on improving health practices and other activities that mitigate risk. Concern, through the DMCs and CODMERT, enlists volunteers to participate in the activities who then go out and try and change behaviour. Some of the work targeted certain groups (for example, those living in areas prone to flooding), while other work is general, targeted at the entire slum.

There are few waste disposal services in the slums of Nairobi. Furthermore, the settlements of Korogocho, Ibadadogo, Lucky Summer, and Dandora, all sit next to Dandora dumpsite, one of the largest municipal dumps in the city. As in Freetown, there is no regulation on what households and businesses in Nairobi can dispose of, so everything, including toxic chemicals and medical waste, ends up at dumpsites. The dumpsite is an open landfill with few barriers, and pollutes the surrounding soil, water, and air. Concern has found that the dumpsite negatively affects over 200,000 people. However, around 10,000 people work as waste pickers, scavenging garbage as a source of income. They only earn around €1/day and many suffer from diseases from their job including infections, particularly of the respiratory tract (53% of children and youth at the dumpsite have respiratory tract infections, cough, or asthma), and injuries from scrap metals and toxic waste, including cuts and high levels of lead in the bloodstream (Concern, 2012). Because their livelihoods are tied to the dumpsite, most oppose closing down the site.

Waste disposal is a challenge throughout Freetown, and much of the city's waste ends up in its rivers. In addition to having poor waste facilities itself, Kroo Bay is located on the mouth of a river, so is inundated with waste from the rest of the city. This creates health risks and clogs the river, which can lead to flooding during the rainy season. To reduce flood and health risks Concern has worked with DMCs to clean out waste from the river. Committee members organise volunteers and paid workers to clean out the river and surrounding drainage areas. Crews work for a day, the city municipality donates the use of trucks to haul waste to a landfill, and Concern pays the transportation costs. When this work was undertaken in 2013, the only flood in the area was as the result of storm surges. Although successful, the work was discontinued because communities were discouraged over the prospects of on-going cleaning.

Concern also uses advocacy to reduce health risks. This includes sensitisation campaigns consisting of plays, marches, and posters,

which focus on improving health practices and other activities that mitigate risk. Concern, through the DMCs and CODMERT, enlists volunteers to participate in the activities who then go out and try and change behaviour.

Some of the work targeted certain groups (for example, those living in areas prone to flooding), while other work is general, targeted at the entire slum.



The top two pictures show flooding in Kroo Bay in 2011. The river is often filled with solid waste, and is treated by the rest of the city as little more than an open sewer. The waste creates health problems and exacerbates flood risk. Residents have constructed flood defenses (on the left-hand side of the bottom picture is a flood wall constructed from discarded tyres), but they are not enough to prevent flooding. Cleaning out the waste can reduce flood risk, but is a labour intensive activity that must be performed regularly. Constructing better flood-walls and improving waste disposal could also reduce floods, but structural measures have been banned in the bay and waste disposal is a citywide problem requiring a citywide solution.

Concern has a number of activities focused on reducing the impact of waste in Nairobi. In 2011 it ran a pilot programme to provide 100 solid waste workers with livelihood grants and vocational skills training, focusing on improving existing work and developing alternative sources of employment. Many started their own small businesses related to waste management, the most popular being making charcoal from discarded wood scraps, followed by scrap trading and raising chickens fed on organic waste products. 69% of the businesses remained in operation after twelve months, with profits averaging around 30% of turnover. Concern has also commissioned studies on waste disposal, which led to an advocacy agenda focused on better management of the dumpsite, including converting it to a sanitary landfill to reduce its environmental impact. Lastly, the organisation, through its Community Conversation (CC) groups, is working to clean up waste in the slums. CC members volunteer go around their neighbourhood once a month for two hours and clean waste from gutters and streets and then take it to the dumpsite for disposal. When asked, one volunteer said he participates because he wanted to give back to his community and that he wanted a safe place for his children to play. Unlike in Kroo Bay, where the residents have to deal with waste produced from the entire city, resident of the slums of Nairobi only have to handle waste produced within their own neighbourhoods, a more manageable situation.



A gutter cleared by CC members.



The photograph at the top shows waste pickers sorting through recently deposited waste at the Korogocho dumpsite. The dumpsite is both a health risk and a livelihood opportunity. Private recycling companies buy waste scavenged by waste pickers (lower left). Waste is also turned into charcoal (lower right).

Concern also works to improve the health of slum residents through sensitisation campaigns and training, using CC groups to raise awareness of good health practices. Group members receive health training and educate other members of the community on good practice. Training focuses on all issues related to health, from nutrition and hygiene to more taboo issues like birth control and sexually transmitted disease.

Issues of health and sanitation are interlinked with gang violence in the slums of Port au Prince. Water in the slums is privatised, and in the Grand Ravine area, gangs control one of the only sources of clean, potable water. The water point itself is in the ravine and cannot be accessed during floods. Similarly, there is no public waste disposal, and waste disposal is exceedingly difficult given the slum has no roads. Concern is addressing both issues simultaneously. It is training gang members to work as waste removers in exchange for handing over control of the water point to a neutral public body that will ensure equitable water access for all the residents within the community. Waste removal is a relatively well-paid livelihood that can improve sanitation in the area. If gang members relinquish control of the water point, Concern will improve the point and make it more resistant to flooding.



This picture shows children collecting water the water point in the Grand Ravine. Gang members currently control the point, but Concern is working to transfer control to a public body.

Concern has also worked with the Collective for Development of St. Martin, a local CBO focused on development in St. Martin, to set up a waste collection services targeted at all households, institutions, and businesses in the area. The project was designed to provide the CBO with a steady stream of income while also addressing health problems brought about by waste. Participating clients receive two garbage bags per week, and waste is collected bi-weekly by the CBO. Clients are charged a monthly fee, which varies based on the capacity of households to pay.

Freetown's experience in waste disposal points to the difficulty in fostering voluntary action in urban communities. Concern staff point towards the lower community cohesion in urban areas being a significant factor, combined with a market driven economy leading to an expectation of being paid. In both Nairobi and Port au Prince, clean-up campaigns became successful after being commercialised, so that litter pickers could be paid for recycling waste materials.

While water and health facilities are often plentiful in the areas of Dhaka where the pavement dwellers reside, pavement dwellers cannot access either resource. Water is only available privately, so pavement dwellers have to buy water or, more commonly, drink untreated and potentially unsafe water. Free government health facilities are also available in the area, but accessing them requires birth registration and national identification cards, which most pavement dwellers lack.



Concern uses PDCs to provide a range of health services for pavement dwellers living in Dhaka. All PDCs have fresh, clean water that pavement dwellers can access for free, and many have kitchens that can be used as a hygienic space for cooking food. They also have bathing facilities, also free to use. All have staff on hand with basic health knowledge, and many are equipped to provide health care services to participants (this includes a health officer, medical officer, basic emergency materials and medicine). All centres provide consultations, basic treatment, and referral services for when more advanced treatment is necessary, linking patients with health centres and hospitals in the area. Since access to government health facilities is dependent on birth certificate and national identification, Concern's ability to use PDCs as a permanent address for acquiring forms is critical for improving the pavement dwellers' access to health services. Along with work in the PDCs, Concern also runs a mobile medical team that provides outreach services designed to improve knowledge on health and appropriate treatment. The team also runs a monthly clinic that any pavement dweller can access.

Livelihoods

Households with strong livelihoods can invest in their assets to make them more resistant to hazards, and use their assets to recover quickly following disasters. They can, for example, strengthen their homes to make them more resilient to flooding, or establish a business that allows them to work full time. Livelihoods are particularly important in urban contexts where costs are high and most services are privatised. Improving livelihoods is therefore a critical component of DRR. Likewise, DRR is a critical tool for improving livelihoods. Concern works to support livelihoods in Port au Prince, Dhaka, and Nairobi.

In Dhaka, Concern provides pavement dwellers with small grants and livelihood training, promotes savings, offers day-care and shower facilities, and helps pavement dwellers register with the government. Each activity addresses a different livelihood challenge faced by pavement dwellers. Savings, discussed in the section above, help improve returns on labour by providing a guaranteed safe place to save. Participants can use bathing facilities to get clean for work, which is particularly important for women who work as maids. Training and grants improve the human and economic assets for work. Concern's support in this area is minimal but can sometimes have substantial results: one woman was given a 2,000 taka grant (approximately €22) and livelihood training, and increased her daily income from less than 200 taka to 300-500 taka. Parents can drop their 2-6 year old children off at day care centres while they work (children below 2 require more intensive supervision, and those older than 6 are eligible for primary school) for a minimal fee of around 50 taka a month (less than €1). The day care centres offer constant supervision with a ratio of 15 to 20 children per day care staff member, two balanced meals, and early childhood education classes. Lastly, many businesses will not employ citizens without a national identification card, so registering pavement dwellers allows them to access a number of jobs.

Bringing pavement dwellers out of poverty is difficult, but around 25% of pavement dwellers have graduated from homelessness through these interventions, as indicated by the fact that they are no longer living on the street. Staff note that scaling up certain services - particularly, providing larger grants and more training - could improve livelihood outcomes, but currently lack the funds to do so.

Concern uses a combination of training and small grants to strengthen livelihoods in Nairobi. Programmes have two tracks: track one focuses on building employability by providing beneficiaries with technical skills necessary for employment within specific fields, while track two focuses on small business development and includes general business training and small grants for starting a business. In Nairobi, Concern has found that people with technical skills generally have higher and more stable incomes than those without technical skills who are self-employed. Because of this, it focuses on technical training rather than small business development, reserving business development to those who would not be able to secure full-time employment, whether due to disability, age, or family requirements.

Business development and technical skills tracks are structured in slightly different ways. For technical skills training, participants start by identifying a course that they would like to take and then finding an institution in which they can take the course. Most choose to go to an institute approved by Concern; however participants supported by Concern can attend other institutes once they are reviewed by Concern to ensure their quality. Dressmaking, mechanics, mobile repair, driving, computers, and hairdressing are some of the more popular course options. Most courses run over a few months on a part-time basis in the evening, meaning that participants can work during the day, and provide participants with a certificate of completion. Business development trainings only last two weeks and are put on by Concern with the support of a local implementing partner. Training focuses on the fundamentals of running a business, with topics such as market analysis, business planning, book-keeping, and customer relations, and follows a curriculum and course book developed by Concern. Issues of risk are incorporated throughout the training, including, for example, a critical business risk and problem assessment exercise, which focuses on identifying risks and describing their impacts (although the risk analysis does not focus on hazards, only business risk). Following this, the beneficiaries are given a small grant with which to start or improve upon their businesses.

Habiba Bonya (pictured by her store) has lived in Korogocho slum, Nairobi, for 37 years. She participated in Concern's business development project and was able to set up a food stall, where she sells rice chapatti, maize meal, beans, lentils, and other dishes. Habiba has consistent sales, but prices in the slums are low, which makes it difficult to turn a profit and support her large family. Most of Habiba's cooking actually goes to feeding her ten children and six grandchildren, whom she supports on her own (two of her children are of working age but cannot find work). Habiba cannot usually cover basic necessities: food is her biggest expense, followed by school fees, rent, and clothing (she might go 2-3 years without new clothes). One of her grandchildren has a chronic illness, which requires monthly antibiotics and regular hospital visits.



Habiba says that capital is her biggest problem. She used to have a livestock business with ten other women, each of whom invested 50,000 Kenyan shillings (€480) to hire a lorry and buy goats from rural areas for trade in urban areas. While they made upwards of 30,000 Kenyan shillings profit per trade, the business failed because of disagreements within the group. Habiba has not been able to secure the capital necessary to establish a similar business in its place. Although Concern's grant was not large enough for a major business venture, it allowed her to buy a year's worth of stock for her food stall. For now, Habiba is getting by with her shop additional support from Concern through its emergency programme.

Nairobi and Dhaka have different livelihood dynamics which influence the nature and effectiveness of Concern's livelihood programming. Business and markets are very different in these two cities. In the slums, unemployment is high and prices are low, making it very difficult to secure steady employment and to turn a profit from a small business. Security is also a concern. In Nairobi, security can limit work, as during times of insecurity, such as at night or around elections when it can be too dangerous to go out on the streets for work. Credit and savings are also different. While saving is difficult in Dhaka, in Nairobi most residents participate in 'merry go rounds', informal savings groups between friends and neighbours. Members will save a small amount per month, often around 10-20 Kenyan shillings, and describe it as an important element of their monthly budget, the equivalent to food or education spending. On a rotational basis the saved money is given to one member of the group to use for purchasing larger items normally too expensive to buy, such as extra clothing. Residents in Nairobi can also access credit through local lenders - many purchase groceries on credit, for example - but most do not want to fall into debt, and only do so as a last resort. Safaricom, a local mobile phone company, is developing small-scale mobile savings and credit services, but because of the fears surrounding debt, it is questionable whether residents will take advantage of any credit that becomes available.

Concern has included livelihood support as part of its peacebuilding and earthquake recovery work in Port au Prince. Within its earthquake recovery work, Concern's livelihood interventions are designed to give residents the assets necessary for employment in urban contexts. Concern follows an accelerated poverty graduation model starting with training - which includes training focused on employability along with general life training (e.g. nutrition and literacy) - followed by a livelihood grant and a savings scheme. Concern's peacebuilding project is similar in that it involves job training and small business grants, but it is focused on reducing the economic drivers of conflict so targets gang members and includes conflict resolution and other peacebuilding activities. Staff state that because of the depressed slum economy, few of the businesses have succeeded. Many also note that the work in improving economies to build peace is limited, and that greater attention needs to be placed on economic development as part of conflict reduction.



Gang members started this mortuary with funds and training provided by Concern. This business is a joint venture by three former gang members, who pooled their money for initial start-up capital. Livelihood development is an important component of peacebuilding as gangs are often one of the only sources of 'employment' for poor men in the slums.

Conclusion

The extreme poor in urban areas do not often have access to services, which makes it difficult to react to and recover from hazards. This often leaves the extreme poor stuck at the edge of survival, with little chance for development. When hazards like unemployment, criminality, flooding, and disease hit, extreme poor turn to negative coping strategies to survive including skipping meals, taking out loans, crime, and collecting waste.

Concern has found that providing services in the form of direct mitigation, health support, and livelihoods can greatly reduce risk in urban areas. These interventions are particularly effective when coupled with short-term support in the event of shocks as households can advance without risking losing their advancements to shocks.



There are times when Concern's DRR work is insufficient to mitigate the risks faced by communities. In some cases this is because the intervention is underfinanced relative to the scale of the risk at hand (such as many of the physical mitigation structures in Freetown and Port au Prince, and the lack of livelihood support across all areas). Insufficient investment in engineered mitigation structures results in structures that are unable to withstand hazards – and so they break, and the initial investment is wasted. Failure to invest in preventative measures against identified hazards - such as the landslide that damaged Kuntorloh health centre, Freetown - results in unnecessary and avoidable impacts, and end up being more expensive. Similarly, a failure to invest in simple ongoing maintenance of buildings results in the buildings becoming structurally unsound and much more expensive to rehabilitate.

At times risks are created at a different level to where the risks are realised, and so requires many more stakeholders to work together to reduce them. Solid waste generated in the wider city contributing to flooding in Freetown and deforestation upstream in Port au Prince contributing to flooding in the slum areas are two examples of such risk. Addressing these risks a greater emphasis on multi-stakeholder engagement and advocacy than Concern is currently doing, as well as a willingness to work in other areas if the context demands.

Some of the underlying risk factors, such as banning physical mitigation in the Freetown slums, are extremely difficult to address. However, this should not prevent Concern from engaging with collaborative advocacy efforts to protect the rights of slum dwellers, and allow DRR investments to be made, which Concern is doing. Waste disposal and environmental health initiatives in Nairobi and Port au Prince demonstrate, private sector approaches can work – ensuring that financial incentives are sustainably provided in a way that does not result in Concern creating dependency.

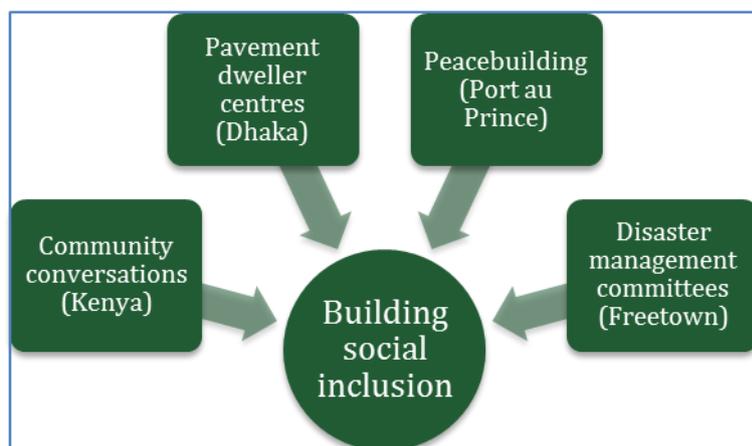
Urban areas require certain new and different approaches to risk reduction. Ultimately, win-win approaches are required – such as the approaches in Port au Prince that benefit both the gangs and the wider community. Livelihoods are also important, and are similarly difficult, as high rates of unemployment, low prices of commodities and security issues combine to make it extremely hard for poor people to make enough money to graduate out of poverty. These factors clearly give rise to the high crime rates and gang warfare in some slum areas, and peacebuilding initiatives must therefore also focus on improving livelihoods and developing economic pathways away from violence. Much greater initial investment in urban livelihoods is needed, but as with urban mitigation, funds are scarce.

Lessons to be learned for service provision

- Although urban areas often have high levels of services, the poor and vulnerable living in urban areas often lack access to these services.
- Slum economies can be depressed, which can make it difficult to improve livelihoods.
- Crime and violence are often interlinked as causes and outcomes of a depressed economy and lack of access to basic services.
- Direct mitigation, health, sanitation, and livelihood support are frequently employed as mechanisms to reduce risk in urban areas.
- Some interventions, particularly those pertaining to construction, can be politically difficult in slums where authorities actively discourage attempts to make the slum permanent.
- Services can be provided at the community level, but they might be ineffective if hazards are not addressed at a higher level. Urban residents can work together to improve services and reduce risk, but the heterogeneous nature of neighbourhoods makes this challenging.
- The causes of economic poverty are complex, and are often rooted in governance issues.

Building social inclusion

Urban areas are riven with inequality, and building social inclusion is critical to urban DRR. Every community has its own assets, and improving how those assets are utilised can help reduce risk. Communities need the skills and capacities to engage with stakeholders outside of their community such as government officials and NGOs. Concern works to build social inclusion in every context, including in Nairobi, Port au Prince, Freetown, and Dhaka:



Community Conversations

Community Conversations (CC) are one of Concern's main mechanisms for building inclusion in Nairobi. Concern describes CC as "a socially transformative approach that galvanises communities to address the underlying causes of underdevelopment and vulnerability" (Concern, 2013). It started using CCs in Kenya in 2009 to address HIV/AIDS and today uses CCs to address all issues. CCs involve establishing conversations groups of around 30 men and women who get together to talk about the issues that they face, with the ultimate goal of finding the resources to solve their problems. CCs are also a vehicle for engaging government, and fill a gap in government policy, as policy states that communities should be involved governance planning, but there is not yet a vehicle with which to do so. CCs are one of the organisation's most important tools in the country, and Concern has CC groups in all areas where it works, including in Nairobi.

CCs is a long-term intervention that follows a six-step process (see figure). Relationship building is a key first step. It involves a facilitator entering the community and getting community members to start to engage in the process using participatory tools and dialogue. This can take time: facilitators do not give *per diems*, money for projects, or any other forms of financial incentives typical in development processes, and state that communities are often initially reticent to engage in Community Conversations. As part of this process, data gathering and situation analysis are conducted through a series of community centred exercises using participatory rural appraisal tools. This takes anywhere from six months to a year to complete, much longer than the few days often given for other community groups. This extends into situations of community dialogue, decision-making, action, and reflection, where after problems are identified solutions are developed and enacted. Some communities can solve these problems with their own resources, while in others they need external support. Concern also provides CC groups with small grants for projects. CC is an on-going process and Concern has been working with some communities using CC for years.



The community conversation methodology (Concern, 2013)

Concern uses CCs to address a range of issues, many of which directly or indirectly pertain to risk. For example, one exercise involves developing a seasonal calendar, which includes identifying seasonal hazards. Some interventions focus on risk reduction; waste clean up, discussed in the previous section, is an example. CCs also get to the heart of governance issues as they focus on empowering communities as a whole and the poor and vulnerable within communities.

Staff and CC members are supportive of the CC process. CC members note that it is useful for sharing new ideas and implementing activities. Staff state that the long term engagement and participatory activities help to uncover how communities work. They do, however, note that, compared to the rural communities in which Concern

works, urban communities are less cohesive and community governance structures are less developed, since people are joined together over a common set of issues (e.g. services, risks, livelihoods), rather than a common culture or tribal affiliation. As such, the community ties are weaker and it can sometimes be more difficult to implement CC activities.



Christina Wajohi, a member of staff of one of Concern's partner organisations, Mukuru Slums Development Programme (MSDP), conducts training to Fuata Nyayo CC group in Mukuru slums, Nairobi, 2012 (photo: MSDP in Concern, 2013)

CCs tie in with Concern's other development activities and the broader governance structures. Concern uses CCs as a base for its work, using the assessments and community development plans CCs produce to guide its projects, including its projects related to DRR. As such, the CCs help to ensure that activities are coherent and reduce the overlap between potential project groups.

Kenya has had a new constitution in place since 2011, which includes the need for devolution in government processes and greater local decision-making. The country is currently working towards devolution, but has not yet developed a mechanism for how this might work. Concern hopes that CC can be used in this regard, and has developed a model that shows how the process might work.



Concern has five years' experience in CCs, which it has codified into a trainer of trainers manual designed to serve as a tool that facilitators can use when conducting CCs (Concern, 2013). The manual covers five topics: introduction; developing the competency of trainers; community entry, immersion, and planning; data gathering and situational analysis; and Community Conversations. It is a practical guide and includes numerous participatory techniques to empower communities and help them realise their challenges and solutions to those challenges.

The CC process is long and focuses on community participants as decision-makers. While this creates certain benefits - supporting the idea that target populations have skills, resources, and a voice, and reducing feelings of helplessness and dependency - it is a hard process to enact within the existing governance contexts. Government officials point out that the CC process, compared to other DRR projects, is long, making it out of sync with other interventions, which tend to be shorter. Concern staff state that they have, at times, had to work hard to convince donors to support an extended CC process rather than a short one, as donors are used to short institution building activities. Lastly, communities are often initially wary of such projects as they do not promise short-term injections of resources or other quick fixes. Concern has to make an effort not to revert to tokenistic involvement of beneficiaries within projects, giving them 'gifts' in exchange for participation, or other acts that operationalise rather than empower communities.

Disaster management committees

Concern's work with DMCs and CODMERT in Freetown has some similarities with the CC work in Nairobi. As described previously, Freetown DMCs are responsible for local level DRR and also function as the links to higher-level institutions. Along with reporting disasters to national level disaster management structures, DMCs are a platform for working with the government and NGOs in a wide range of issues: they have, for example, engaged in a letter writing campaign to try to stop government resettlement. Having an established body for dealing with DRR and related issues also gives NGOs and the government a structure to work with to reduce risk, which helps bridge the gap and create connections between internal and external bodies. However, DMCs still face certain challenges in changing stakeholder relations, as seen by the lack of services and on-going threats of eviction that slum residents face on a regular basis.

Peacebuilding

Concern's transformative work in Port au Prince focuses mainly on peacebuilding to reduce gang violence. Concern first started peacebuilding in 2004 because it had to stop working in St. Martin every summer due to violence. Concern had little experience with peacebuilding work, so partnered with Glencree Centre for Peace and Reconciliation, an Irish NGO with significant experience peacebuilding in Northern Ireland. The programme focused on trying to change the root causes of conflict, mainly by using dialogue processes to engage with those directly and indirectly involved in conflict at grassroots levels, and by providing a series of 'peace dividends' that reduced extreme poverty and improved development in the slums. Most of this work occurred under two programmes, the first of which ran from 2006 to 2009, and the second of which ran from 2009 to 2012.



A building used as a space for dialogue. Dialogue is a cornerstone of the peacebuilding process.

Concern initially started working in St. Martin, using dialogue to build relationships between members within the slums. It started dialogue groups focused on conflict resolution, comprised of community-level actors directly involved in the conflict including health workers, business, churches, gangs, and culture/arts. In 2008, Concern expanded to the programme to Martissant, another slum area, and also began developing peace committees, and larger groups representing the overall stakeholder environment with groups including women, church and vodou (voodoo), elders, local officials, education and health workers, CBOs, and gang members. A 'core group' was also founded, made up of 19 youth volunteers in both areas committed to peacebuilding who could act as leaders. Members received additional training, including a trip to Ireland in 2008. Activities were expanded beyond direct peace engagement to include community projects

(education, art and culture, sanitation, health, training, sports) as 'peace dividends' that provided an incentive to engage in the process and offered valuable services to otherwise neglected areas.

Concern and Glenree used a variety of tactics for the 2009-2012 project, again centred on dialogue and training, but complemented this with a broader range of collaborative activities. Training and dialogue efforts continued with the peace committees in Martissant and in St. Martin (six per neighbourhood). Committees, which were comprised of 25 members each, implemented 13 peace-dividend micro projects, each with a budget of around €25,000. Emerging local and city-level leaders were targeted for advanced trainings in Jamaica and Ireland, including training seven high-level police officials in conflict resolution techniques. Lastly, a summer peacebuilding institute that included key government representatives and other elites was held to codify good practice and build higher-level buy-in to address more structural and cultural elements of conflict that could not be resolved by community level activities alone.

The 2010 earthquake significantly disrupted the project. Project staff had to shift away from the work to assist in emergency response. Key actors were killed in the earthquake, including a particular high-level politician Concern was targeting for engagement. The conflict dynamic also changed when more than 3,000 inmates escaped from prison, many of whom were violent gang members whom reassumed leadership positions within their old gangs. As a result, Concern had to restructure its work, including cutting the summer peacebuilding institute and reducing work with higher-level actors.



A number of new CBOs emerged from the project. This included Kapam, a legal federation with a strategy to focus on economic development through jobs training as a main objective, along with conflict resolution targeted at current gang members and youth. The six peace committees in Martissant established Kapam. It has 12 directors (two per committee) and 180 members in total. The Partnership for Peace and Prosperity of St. Martin is another example. The organisation is comprised of NGOs, community members, and members of culture, education, voodoo, gangs, and the private sector, and is focused on building peace through dialogue and economic development (for example, installing solar panels and lighting in St. Martin). It recently completed a three-month education and peacebuilding project focused on preventing youths aged 9-17 from joining gangs. Lakou Lape (creole for 'peace yard') is another offshoot. It was established after the 2011 trip to Ireland that included civil society, police, and other higher-level stakeholders. It focuses on peacebuilding training, business development, and job creation, using a dialogue process for peacebuilding.

Concern staff, CBO representatives, and former combatants highlight a number of good practices from the programme. Concern's dialogue approach, which consisted of bringing together multiple stakeholders to discuss and resolve differences, was viewed as particularly powerful, and frequently described as the most important element of peacebuilding. Like the CCs, the dialogue process mainly involves conversation, and leads to other work as a secondary output. Concern's position as an impartial and neutral actor in the process was also discussed as important, as it helped the organisation maintain access to communities and allowed it to take on a role of mediator. As with the work with Dhaka PDCs, Concern built trust gradually by providing support to all sides equally and building a reputation via a long-term presence in the area. It also built up its internal capacity to address conflict, learning how to engage with gang members appropriately, and how to manage adverse situations. Overall, lessening of violence not only made the area safer for local populations but also helped build trust of Concern, which allowed the organisation to access the area and address other risks as well as broker other actors (e.g. CRS and Oxfam) to deliver services.

There was also general consensus over how Concern could improve its work. Many believed that the organisation needed to focus more on economic development and education, factors frequently cited as conflict drivers. Some also believed that even though Concern left lasting peacebuilding capacity in the form of CBOs, continued work would not be possible without Concern's financial support. Finally, some believed greater engagement with key stakeholders at national level was needed to attempt to address the root political causes of conflict. Indeed, national level actors were reported to use gangs to maintain political control over slums, reinforcing the conflict dynamics. Concern had plans to engage at higher levels, but they were disrupted when the earthquake hit. Since then Concern has preferred to mainstream peacebuilding within the larger urban redevelopment programme, as opposed to having a stand-alone peacebuilding project. While this is partly motivated by funding concerns, it is also a reflection that the peacebuilding process, which thus far has provided Concern with community access, needed to bring about more fundamental risk reduction and change, and that it is perhaps not as important to pursue peacebuilding as it was when the programme was first initiated.



These challenges aside, respondents gave numerous examples of how the peacebuilding work had helped transform the conflict. Today, the slum areas in which Concern works are physically safer, more people are comfortable walking in the streets, and more NGOs can work in the area. The dialogue approach also changed internal and external relations, which resulted in more external support and less discrimination, and decreased in externally directed violence. During the 2008 food riots, for example, numerous businesses were attacked, but businesses engaged in peacebuilding operations were not. Lastly, many of the CBOs are continuing the peace work and addressing some of the shortcomings of Concern's activities by, for example, conducting employment training and working with higher-level actors.

Pavement dweller centres

Concern started working with pavement dwellers to help them become fully recognised as citizens of Bangladesh. Some its work focuses on building their capacity to engage in political and social structures. This includes work mentioned previously, such as linking pavement dwellers to external services and providing women and children with tools to take control of their lives and livelihoods. Concern has also established 137 self-help groups, which are similar to the CC groups in that they focus on improving the social capital of pavement dwellers. Groups are organised by location, and vary in their composition, with some set up as women's groups, others as men's groups, and others as mixed groups. Like CC groups, they are likely to be more amorphous than in rural areas, coming together for specific issues rather than a common tribal affiliation or identity. The groups meet once a month to discuss and solve issues. They also provide support for each other in times of need and have volunteered for other activities like cleaning PDCs and distributing goods during times of emergencies. Members state that the activities are useful in terms of their outcomes as well as in helping them change their personal self-image from victims to dignified people.

Concern also works to reduce the stigma and discrimination associated with being a pavement dweller. The work itself serves this function in part, as many other stakeholders involved in the project were initially hesitant to work with pavement dwellers, but have been won over through meetings and negotiations, and as positive results are realised. Concern also addresses stigma directly through advocacy and media campaigns. In partnership with Coalition for the Urban Poor, a Bangladeshi advocacy organisation, it has produced and disseminated a number of newspaper articles, posters, and TV spots, held press conferences and rallies, and hosted journalists, ministry officials, and other VIPs on visits. Work includes:

Activity	Examples
<i>Press conferences</i>	<ul style="list-style-type: none"> • Initial announcement of work and launch of poster • Poster presentation on the budget allocation for the urban poor in government budget for 2009-2010 fiscal year • Dissemination of baseline study findings and launching of booklet with VIP statements
<i>Electronic media productions</i>	<ul style="list-style-type: none"> • Video documentary on the lives of pavement dwellers • TV spot on RTÉ • TV talk show with the Concern Country Director on Channel I
<i>Participation in events</i>	<ul style="list-style-type: none"> • Rally for World Environment Day • Rally for World Habitat Day • Rally for World Human Rights Day • Table presentation at the 2009 international conference on urban poverty and urban habitation
<i>Printed materials</i>	<ul style="list-style-type: none"> • Booklet on the project strategy • Poster • Collection from statements from well-known VIPs (including government leaders and NGO representatives)
<i>Field visits by VIPs</i>	<ul style="list-style-type: none"> • Joint Secretary, Ministry of Public Administration • Associate Professor, NIDCH, Mohakhali • Director of the NGO Affairs Bureau • New Chief Slum Development Officer • Journalists from various news organisations

Figure11: Main activities focused on changing public attitudes (from DeVries et al., 2011)



Finally, Concern focuses on engaging the government at local, city municipality, and national levels to protect and support pavement dwellers. At the local level, it works with front-line staff to make sure that they respect pavement dwellers, including with police, hospital, and school officials, to establish positive relations with pavement dwellers. At the municipality level, it has lobbied the Dhaka city municipality to provide pavement dwellers with specific services, and has succeeded in securing a budget line for pavement dwellers, which includes 500 taka education scholarships for buying school supplies and uniforms (around €6), and five million taka (€60,000) for additional PDCs, which the municipality will establish and run itself. It also works at the national level to build PDC support. Concern had to lobby at the national level to allow PDCs to be used as a permanent address for birth registration and national identification. It also mobilised an All Party Parliamentary Group (a non-partisan parliamentary issue-based group) on extreme poverty to modify its focus to explicitly include pavement dwellers and publish a book '*Pavement dwellers' right to survive*' (Shill, 2013). Along with this, Concern is working to increase directed support to pavement dwellers.

Conclusion

The extreme poor in urban areas are often excluded from broader governance systems. Discrimination can be common, as there can be stigmas associated with living in certain areas, engaging in certain lines of work, or just being poor. Furthermore, the extreme poor often have few resources with which to challenge these systems of marginalisation and exploitation. The marginalised within extremely poor communities often fare the worst, as they face exploitation from those outside and within their communities. Concern's work in all contexts shows the importance of building systems of social inclusion at all levels for all groups.

Concern has improved social inclusion in all of the areas in which it works. In each context, Concern uses a different vehicle for addressing inclusion, which depends mainly on the nature of its existing interventions. Its focus is also different in each area, depending on the needs of the target population. However, it uses some common tactics across all of the areas, including strengthening individual and community social capital, linking community structures to higher levels, and engaging in advocacy directly at national level. It also faces some similar challenges and opportunities, chiefly around ensuring adequate resourcing for the representative structures that are put in place. In all of these contexts, Concern is able to tap into existing local capacities and build people's abilities to improve their lives themselves. Equally, there are also difficulties in changing some deep seated beliefs.

In urban areas with high incidents of conflict, protection is a necessary precursor to other DRR work, as the peacebuilding work in Port au Prince clearly shows. Without this work the other DRR initiatives that Concern has undertaken would not have been possible. Peacebuilding, protection and social inclusion are in turn fundamentally reliant on trust – which takes time and effort to build. Concern's role as an impartial and neutral facilitator of peace and protection needs to be constantly maintained. These initiatives also require significant buy-in and participation from multiple stakeholders.

Peacebuilding processes are largely ones of dialogue, but also need to include addressing the underlying causes of conflict. Improving economic opportunities, addressing the use of conflict for political ends, and improving the ongoing financing of representative community based bodies, would significantly improve the outcomes of the process. However, even though there are shortcomings to Concern's peacebuilding approach the work has nonetheless opened up space for Concern to work in the slum areas, allowing other DRR and development work to be brought in.



The importance of reaching out to multiple stakeholders, linking community bodies to intermediate levels, ensuring their financial sustainability and advocacy integrated into the process is also an important feature in improving social inclusion in Nairobi, Freetown and Dhaka.

Lessons to be learned for building social inclusion

- Neighbourhood leaders can and should be involved in DRM committees.
- Volunteerism for reducing risk can more difficult, but can be substituted by engaging local interests.
- Urban slums may have their own governance systems, as seen by the gang governance system in Haiti. These need to be considered in any DRR work.
- Urban areas are not necessarily communities, but there might be communities within urban areas. The idea of community may be centred more around common interests (livelihoods groups, similar wealth levels, youth groups, religious groups) than geographical area; and there may be pockets of one type of community within larger areas of other community.
- CBOs can be used or established to carry on the work that Concern has started, but must be trained in organisation issues, including fundraising and financial management, or are likely to collapse once Concern's support is withdrawn.
- Building trust can take time and can be difficult, but can be accomplished with long-term presence, dialogue, consistency, and fairness of behaviour.
- People can be excluded because of social prejudice or for political or economic reasons. Addressing the root causes of exclusion can be challenging because it requires changing the structures that promote exclusion.



5. Conclusion: overall lessons to be learned and good practices for DRR in urban contexts

Whatever the context, Concern uses DRR to reduce risk as part of its approach to eliminating extreme poverty. This review was a step in developing lessons on how to reduce risk in urban contexts. Comparing the organisation's work in Port au Prince, Nairobi, Dhaka, and Freetown reveals the similarities and differences in both the risks that the urban extreme poor face, and in Concern's approach to DRR in urban areas. This in turn allows for generalisations to be made concerning urban risk and Concern's approach to DRR in urban areas.

Understanding urban areas by their risk characteristics is a key first step in developing DRR strategies and programmes for urban contexts. These cases show that there are some commonalities in urban hazards, vulnerabilities, and capacities. The poor in all cases lack access to basic services and are often marginalised within broader governance systems. This leaves them more exposed to hazards, including common urban ones like fires and building collapse, criminality and violence, unemployment and joblessness, eviction and disease. Overall, this leaves many stuck in a cycle of poverty and vulnerability that is difficult to escape.

Urban risks are growing, partly the result of the increasing number of people residing in urban areas, and partly because of the marginal nature of settlement to which increasing numbers of people are having to resort. As the world urbanises, DRR in urban areas is becoming more important. Concern's work shows how a combination preparedness and early response, direct service provision, and building social inclusion can go far in reducing risk in urban areas. Through these interventions, Concern is able to reduce the short-term impact of urban hazards and address some of the longer-term factors creating risk.

In all cases, Concern is learning how to adapt its programmes to fit urban contexts, a shift from supporting the extreme poor in areas of low population densities, few actors, and mainly agricultural livelihoods, toward areas of high populations, many actors, and service-based economies. This requires new approaches to DRR, such as urban surveillance systems like IDSUE, and adaptation and expansion of existing techniques like Community Conversations. Certain activities also become more important. Since conflicts and violence are often more prevalent in urban areas, there is often a greater need for peacebuilding and other urban activities that build social inclusion. Similarly, agriculture is less relevant for livelihoods; trade more.

This report offers a series of lessons on general good practices in urban areas. Lessons, however, should not be taken as panaceas. They must be assessed based on the specific context. Hazard, vulnerability, and capacity dynamics differ per urban area. Gang violence is an overriding factor in Port au Prince, for example, while the threat of eviction and restrictions on slum development are overriding factors in Freetown. Pavement dwellers and slum dwellers face very different risks. It is clear that the basic DRR components of risk analysis, preparedness, mitigation, and advocacy are useful for urban areas, but those components might take on slightly different forms depending on the specific urban risk profile.



Importantly, Concern's approach to DRR, which takes as wide a possible definition of hazards, not limiting itself merely to natural hazards, makes its DRR approach equally relevant to urban areas as in rural ones. Urban areas are risky places, but many of those risks are generated by human activities – such as criminality, poor access to services and social exclusion. These issues are as amenable to the DRR logic as traditional DRR hazards like floods and landslides.

There are also risks where Concern is still working to understand how to address. Tensions between the extreme poor and the better off are present in many urban areas, and are difficult to resolve. Pressure from politicians to either ignore or relocate slums are difficult to reconcile with ensuring that slum conditions are adequate for safe and dignified lives. International funding for urban focused DRR is limited, making it challenging to implement DRR activities – even for activities that are not traditionally called DRR, like the work on social inclusion. These challenges threaten the organisation's ability to reduce risk in urban areas.

An important feature of urban areas is urban communities are not necessarily the same communities in rural areas – urban slums, for example, show a range of wealth levels, ethnicities and allegiances – even richer areas have pockets of poverty within them. Communities can spring up around other similarities, like interest groups, wealth characteristics, livelihoods or even religions. Unequal access to services is another feature of urban spaces, and addressing these structural inequalities is paramount. Overall, urban areas are much more heterogeneous than rural ones. The financial consequences for urban programming must be recognised and accounted for by both NGOs and donors.

Another feature of urban living is that it is largely market oriented. Livelihood support has proven difficult to improve, which is perhaps not surprising seeing as those living in slums devote most of their time to improving their livelihoods, but find it difficult to remove the many barriers in their way. Again, focusing on the macro-level structural barriers affecting urban livelihoods might be a way to improve urban livelihoods, but is something that is exceedingly challenging to address.

Urban areas have many diverse institutions, and much is politicised. This complex environment poses difficulties for NGOs, but makes it clear that multi-stakeholder approaches, advocacy are fundamental components of successful urban DRR. Typical NGO limits – whether through funding, strategy or capacity limits, mean that Concern has focused its work within certain neighbourhoods like slum areas. This is to the detriment of a more strategic approach which also seeks to alleviate the underlying causes of risk, and which is highly likely to require Concern also working outside of the targeted slum area. Examples include the importance of addressing waste disposal behaviour across Freetown, addressing upstream deforestation for reducing downstream flooding in Port au Prince, or the importance of industry and employment in Nairobi.

Where violence and insecurity is rife protection must be addressed before anything else can – which includes addressing the underlying causes of the violence. Once trust is built, and alternatives to violence are seen, other DRR priorities can be addressed.

While DRR in urban areas poses new challenges, Concern has shown that some approaches do work for risk reduction. The peacebuilding in Port au Prince, the social inclusion work for pavement dwellers in Dhaka and the surveillance of urban emergencies all work well in these urban contexts.



The following lessons can be learned for DRR in urban regions:

- Preparedness and response to crisis; direct service provision; and building social inclusion are key components of reducing risk in urban areas.
- Extreme poverty can be found in many urban areas, including urban areas that are better-off overall than rural areas.
- The extreme poor may not be able to access many services present in urban areas, either because those services are not available in poorer areas or for poorer people or because costs are prohibitive.
- Improving livelihoods, addressing inequalities, especially with regard to accessing available services, and reducing conflict are very important for DRR in urban areas.
- Many of the extreme poor live in slums, but slums are heterogeneous and can have a mix of rich and poor. Slums also often contain a mix of social, ethnic, and political groupings, meaning that notions of community are often different from rural areas. Last, slums can also be very different from each other.
- The extreme poor can live outside slums.
- Urban dynamics are complex, so it is important to have strong risk analysis and surveillance systems in place in any programme designed to reduce risk in urban areas.
- DRR governance systems are important in urban areas, and have similar structural characteristics to rural governance systems, but need to be adapted to the complexities of urban contexts. Efforts should be made to establish disaster management committees in urban areas, and link those committees to higher levels. In urban areas this includes city municipalities and national levels.
- DRR in urban areas requires a flexible mix of short and long-term support, both in terms of interventions and in funding – but funding for urban DRR is limited.



Notes

1. The UNISDR (2009) defines DRR as “the concept and practice of reducing disaster risks through systematic efforts to analyse and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events.”
2. Comprising the analysis of hazards, vulnerabilities and capacities, which leads to action planning period.
3. Concern also works in La Gonâve, an island off the city’s coast. La Gonave is within the official city administrative boundaries but is rural in functionality, with industries focused on agriculture and fisheries, low population densities, and few actors. It provides an example of the breadth of what might be considered urban.
4. Including those aimed at strengthening livelihoods, reducing inequalities, and building human, social, political, natural, financial, and physical capitals.
5. Coping strategies can be either negative or positive. They can be positive if they allow people to recover quickly from disaster and negative if they harm long term prospects for development or exacerbate risk. Skipping meals is an example of what would be a negative coping strategy since it leads to malnourishment, which besides being a problem in itself can increase susceptibility to disease and reduce ability to engage in livelihoods.

References

- Allard, Scott W. "Access to Social Services: The Changing Urban Geography of Poverty and Service Provision." *Metropolitan Policy Program Survey Series*. Washington DC: Brookings Institute, (2004).
- Bajak, Frank. "A Tale of Two Huge Quakes, and Why Haiti's Was Worse." *The Seattle Times* 2010.
- Béné, Christophe, Terry Cannon, Jaideep Gupte, Lyla Mehta and Thomas Tanner. *Exploring the Potential and Limits of the Resilience Agenda in Rapidly Urbanising Contexts*. IDS, 2014.
- Concern. *Indicator Development for Surveillance of Urban Emergencies (IDSUE) Study Briefing Document*. Concern Worldwide, n.d.
- Concern. *Approaches to Disaster Risk Reduction*. Concern Worldwide, 2005.
- Concern. *How Concern Understands Extreme Poverty (HCUEP)*. Concern Worldwide, 2010.
- Concern. *Trash and Tragedy: The Impact of Garbage on Human Rights in Nairobi City*. Concern Worldwide, 2012.
- Concern. *Indicator Development for Surveillance of Urban Emergencies (IDSUE) Geospatial Analysis*. Concern Worldwide, 2013.
- Concern. *Opportunities for Systematic and Inclusive Citizen Participation in Kenya*. Concern Worldwide, 2013.
- Datta, D, A Ejakait and M Odak. "Mobile Phone-Based Cash Transfers: Lessons from the Kenya Emergency Response." *Humanitarian Exchange Magazine*, no. 40 (2008).
- DeVries, Mike, Azizur Rahman Khan, Sylvester Costa, Md. Ershad Ali and Rifat Farzana Sumi. *The Amrao Manush Project Mid-Term Evaluation*. Concern Worldwide, 2011.

- Garrett, James L. *Beyond Rural Urban: Keeping up with Changing Realities*. International Food Policy Research Institute (IFPRI), 2005.
- Hewett, Paul C and Mark Montgomery. *Poverty and Public Services in Developing-Country Cities*. Vol. 154: Citeseer, 2001.
- Jakobsone, Maija. "Indirect Impacts of Rural Disasters on Livelihoods of Urban Poor: Case Study of the 2013 Drought in Namibia." University College Dublin, 2013.
- Jones, Gareth A and Stuart Corbridge. "The Continuing Debate About Urban Bias the Thesis, Its Critics, Its Influence and Its Implications for Poverty-Reduction Strategies." *Progress in Development Studies* 10, no. 1 (2010): 1-18.
- LaVeist, Thomas A and John M Wallace. "Health Risk and Inequitable Distribution of Liquor Stores in African American Neighborhood." *Social science & medicine* 51, no. 4 (2000): 613-617.
- Montgomery, Mark R. and Paul C. Hewett. *Urban Poverty and Health in Developing Countries: Household and Neighbourhood Effects*. The Population Council, Inc., 2004.
- Morello-Frosch, Rachel, Manuel Pastor and James Sadd. "Environmental Justice and Southern California's "Riskscape" the Distribution of Air Toxics Exposures and Health Risks among Diverse Communities." *Urban Affairs Review* 36, no. 4 (2001): 551-578.
- Moreno, Eduardo Lopez and Rasna Warah. "The State of the World's Cities Report 2006/7: Urban and Slum Trends in the 21st Century." *Un Chronicle* 43, no. 2 (2006): 24.
- Narayan-Parker, Deepa. "Chapter 1: Conceptual Framework and Methodological Challenges." In *Measuring Empowerment: Cross-Disciplinary Perspectives*, edited by Deepa Narayan-Parker: World Bank Publications, 2005.
- Parnell, S. Cities at Risk. Durban conference, 2013.
- Ramalingam, Ben and P Knox Clarke. "Meeting the Urban Challenge: Adapting Humanitarian Efforts to an Urban World." *ALNAP/ODI: London*, (2012).
- Rasul, Izaz, Asfia Azim, Shuvashish Karmakar, Farhana Habib, Anowar Hossain, Umme Salma, Nils Den Tex and Martin Whiteside. *Contextual Analysis Urban Programme* Concern Worldwide, 2012.
- Salma, Umme. *Equality in a Livelihood Programme: Bangladesh*. Concern Worldwide, 2008.
- Shil, Shishir. *Parliamentarians Can Make the Difference: Pavement Dwellers' Right to Survive*. All-Party Parliamentary Group, Bangladesh Parliament, 2013.
- Thomas, Stephen B and Sandra Crouse Quinn. "Poverty and Elimination of Urban Health Disparities." *Annals of the New York Academy of Sciences* 1136, no. 1 (2008): 111-125.
- UN Human Settlements Programme. *State of the World's Cities Report 2012/2013*. UN Habitat, 2012.
- UNISDR. *UNISDR Terminology on Disaster Risk Reduction*. UN International Strategy for Disaster Reduction, 2009.
- UNISDR. Making cities resilient report 2012, UNISDR, 2012.
- Wisner, Ben, Piers Blaikie, Terry Cannon and Ian Davis. "At Risk." *Natural hazards, people's vulnerability and disasters* 2, (2004).
- The World Bank, "Social Inclusion", the World Bank.
- <http://www.worldbank.org/en/topic/socialdevelopment/brief/social-inclusion>



CONCERN

worldwide

www.concern.net

Republic of Ireland

52-55 Lower Camden Street, Dublin 2

T 00 353 1 417 77 00 **E** info@concern.net

Northern Ireland

47 Frederick Street Belfast, BT1 2LW

T 00 44 28 9033 1100 **E** belfastinfo@concern.net

England and Wales

13/14 Calico House Clove Hitch Quay London, SW11 3TN

T 00 44 207 801 1850 **E** londoninfo@concern.net

Republic of Korea

Chunji Building, 2F, 374 1 Seogyo-dong, Mapo-Gu Seoul, 121 894

T 00 82 324 3900 **W** www.concern.kr

USA

355 Lexington Avenue 16th Floor New York, NY 10017

T 00 1 212 5578 000 **E** info.usa@concern.net

Published by Concern Worldwide

© Concern Worldwide 2015

Concern Worldwide encourages printing or copying information exclusively for personal and non-commercial use provided that the source is clearly acknowledged.

Concern Worldwide

Working with the world's poorest people to transform their lives

www.concern.net

CONCERN
worldwide