

# Responding Early to Urban Crisis

Concern Worldwide's Research on Indicators for Urban Emergencies

## Introduction

### Why urban?

Africa is rapidly urbanising. Thirty-eight per cent of Africa's population was estimated as urban in 2010; this is projected to rise to 50% and 60% by 2030 and 2050 respectively<sup>i</sup>. Poverty is also urbanizing. Increasing numbers of people live in informality in unregulated, non-serviced urban settlements and slums<sup>ii</sup>. The proliferation of slums and urbanised poverty has contributed to increasing inequities. Income inequality in African cities remains the second highest in the world<sup>iii</sup>. Despite a changing demographic landscape in Africa (growth centres depicted in Figure 1), urban vulnerabilities are under-represented or masked in national data sets while surveillance systems are geared to rural early warning and response, often linked to cyclic drought. There is increasing awareness amongst humanitarian and development actors as well as national governments of the need to recognise vulnerable urban population sub-sets and respond to crises as experienced by the urban poor.

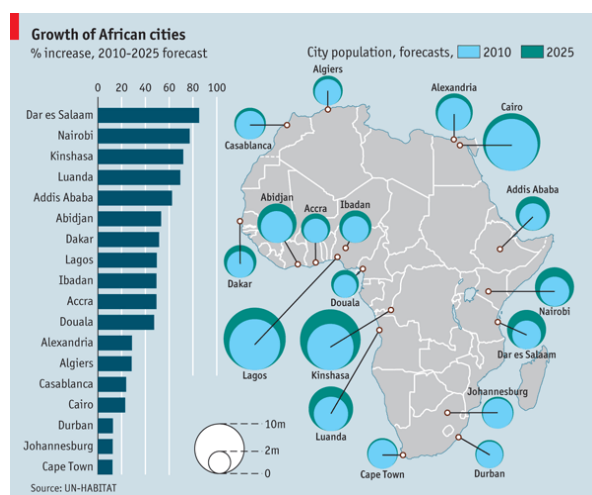


Figure 1: Growth of African cities (2010-2025)

when they are included, data is rarely disaggregated between wealthier urban localities and slums, leading to a homogenization that hides the true situation in both areas. The central question that IDSUE seeks to address is: *How do we know when a situation has gone from chronic poverty to an acute crisis in an urban slum?*

In order to answer this question, IDSUE has collected large-scale routine household data on water, sanitation and hygiene (WASH), food and personal security, livelihoods and negative coping strategies in five informal settlements in Nairobi and Kisumu in Kenya. This brief outlines the objectives and methodology employed by IDSUE and presents findings from the most recent rounds of data collection. Findings have been interpreted for humanitarian and development practitioners and explore implications for early warning systems and response. Recommendations are presented for consideration by state and non-state actors.

### Why an urban early Warning System?

The Indicator Development for Surveillance of Urban Emergencies (IDSUE), a study funded by the United States Agency for International Development – Office of Foreign Disaster Assistance and implemented by Concern Worldwide Kenya (Concern), was born out of growing interest in predicting and averting urban food security crises. This was in recognition of the high rates of urbanisation taking place, particularly within the sub-Saharan African region. Despite growing recognition of vulnerability associated with urbanisation, urban environments and the actors working in them have been plagued with a dearth of information suitable for monitoring changes in urban contexts. Until recently urban areas were often excluded from or under-sampled in national and sub-national surveys. Even

## Framework

### Box 1: IDSUE Suite of Indicators

**Livelihoods:** Median monthly household income; food expenditure/household monthly income; percent of households which depend on casual labour as a source of livelihood; proportion of female headed households

**Food security and nutrition:** Household food insecurity (HFIAS); % severe household hunger; number of meals taken by children per day; percent of children (6-59 months) reporting severe, moderate and at risk of acute malnutrition

**WASH:** Average quantity of water used per person per day (litres); % households using 15 litres per person per day

**Health:** Prevalence of illness in the last 2 weeks

**Personal security:** Percent who experienced at least 1 shock in the last 4 weeks; proportion who felt unsafe/scared in the community in the last 4 weeks; percent of those who have used avoidance measures due to insecurity; percent of those who rated security as bad and very bad

**Coping:** Proportion who had to remove their children from school due to lack of school fees, taken an additional job, sold an asset, taken on additional debt/loans, resort to begging for money.

IDSUE has been developed:

1. To determine indicators for early detection of humanitarian emergency situations and coping strategies
2. To develop surveillance systems for detection of early warning signs of a humanitarian emergency/crisis
3. To identify thresholds and triggers for action for defining when a situation has reached an emergency/crisis stage

To date, IDSUE has focused on objective 1 and 2. IDSUE initially explored a large number of indicators in several domain areas. These were tested for relevance, sensitivity to change and the usefulness of the information they provided. Indicators were systematically eliminated if they did not pass this three criteria test – relevance, sensitivity to change and usefulness for early warning. Box 1 presents the suite of indicators employed by IDSUE.

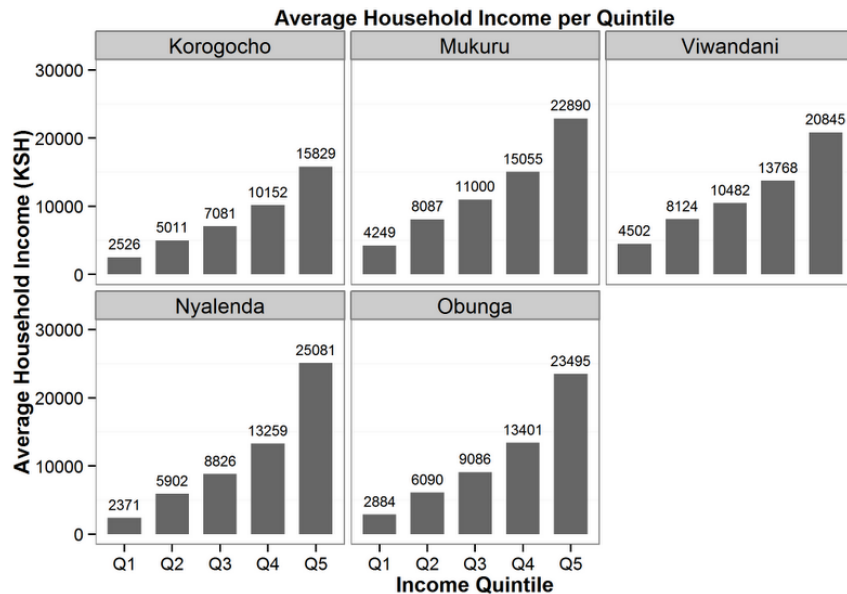
Household surveys have been administered in five informal settlements in Nairobi - Korogocho, Mukuru and Viwandani – as well as Nyalenda and Obunga in

Kisumu. Weekly market price data has also been collected to assess fluctuation in food prices in study sites. Focus group discussions have been held with informal settlement groups in order to probe findings from data analysis. Geo-spatial analysis has also been conducted in order to identify “hot spots” based on a number of criteria – income, household hunger and household food insecurity.

## Findings

Key findings from IDSUE reveal a heterogeneous picture in the five urban slums. They also reveal worsening trends, between and within slums, as well as over time. Key findings from IDSUE data analysis for the period Aug 2012 - Feb 2014 are presented below; more detail is provided in the IDSUE factsheet<sup>iv</sup>.

**Averages mask reality for the most vulnerable in the poorest slums:** There is significant variation **between slums** and **within slums** in terms of income and expenditure. While households in the lowest income quintile report spending over 100% of their 4-week income on food, the overall food expenditure average is 63.8% amongst respondents from all income quintiles. Household incomes also vary significantly with households in the lowest income quintiles earning anywhere from 9.5% (Nyalenda) to 21.6% (Viwandani) of the highest income quintile household income (Figure 2). In addition, while a greater number of households in all study sites report higher rates of food insecurity, coupled with a decline in dietary diversity, residents in the two study sites in Kisumu – Nyalenda and Obunga - and Korogocho in Nairobi are more affected than those in Mukuru and Viwandani. Residents in these locations experience higher levels of informality and are more reliant on micro businesses, hawking, and use of remittances in addition to casual labour. Very few are engaged in the formal sector.

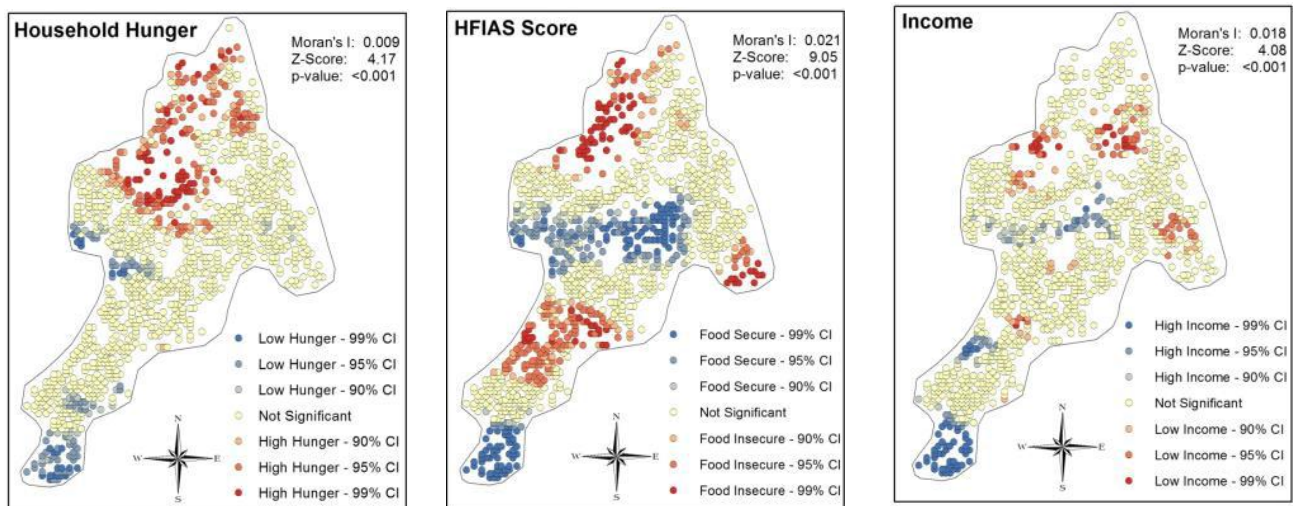


**Figure 2:** Average household income per income quintile by location

Key to X-axis; Q1: Bottom, Q2: Second, Q3: Middle, Q4: Fourth, Q5: Top

**The most vulnerable tend to be clustered in “hot spots”:** Closer examination of households in “hot spots” reveals a vulnerable population that reports very low income, higher food insecurity rates, less dietary diversity, higher prevalence of illness, more insecurity, and higher use of coping strategies such as removal of children from school and purchase of food on credit. Figure 3 presents geo-spatial clustering for one slum, Korogocho using three dimensions of analysis – income; household food insecurity; and household hunger. Geo-spatial clustering suggests that surveillance can be directed to the “hot spots”, the poorest areas of the poorest slums.

**Figure 3: Hot spot mapping**



Concern Worldwide, 2014, Indicator

**Female-headed households are disproportionately poor and more concentrated in “hot spots”:** On average, over 90% of a household’s income is earned by the breadwinner (i.e. the highest earner within a household). Most breadwinners in all areas were male (68.2 %) but this varied greatly between income quintiles, with the majority of female breadwinner households occurring in the lowest income quintiles. Female household breadwinners earn approximately 72% that of male household breadwinners

in all study areas sampled suggesting, irrespective of location, a clear gender dimension to poverty and household vulnerability. There are a higher proportion of female headed households in geo-spatial hot spots. Table 1 provides more illustrative statistics based on analysis of data from the three slum study sites in Nairobi.

**Table 1. Comparison of female-headed households to male-headed households in study sites in Nairobi**

	Korogocho		Mukuru		Viwandani	
	F	M	F	M	F	M
Avg. Household Income (Ksh)	6,666	8,608	11,123	12,845	9,307	12,427
Percent in lowest income quintile	31	17	32	20	37	18
Percent spent on food (average)	100	84	71	62	75	59
Percent spent on debts/loans (average)	41	26	45	33	19	17
Severely Food Insecure	74	60	50	42	36	23
Severe Hunger	12	5	6	3	5	2

**Greater resort to negative coping strategies:** Qualitative research<sup>v</sup> employing focus groups discussions reveal that many people in the lowest income quintile and particularly female-headed households located in Korogocho are resorting to negative coping strategies for their short term survival needs, compromising their own well-being and that of their children<sup>vi</sup>. Coping strategies mentioned include reliance on loans for basic needs such as food and rent; withdrawal of children from school; transactional sex (by women and their older female children); and crime, both petty and serious. In extreme cases, people mentioned abandonment and suicide. Searching for discarded food and scrap metal in the dump sites was widely mentioned as were taking on additional jobs washing clothes and “extra-marital” relations with men to supplement one’s income. Box 2 highlights views from women in Korogocho on their abilities to cope.

**Box 2: View from the inside**

“I am a sex worker and as a sex worker you don’t look down upon any job. I got into this job so as to support my children.”

“If a young boy has no job, they will engage in insecurity. So what we would request is that employ our youth so that the security can improve.”

“Since life is very difficult, even six months old baby can survive on water alone.”

“...The first thing is to ask the man whether he will use a condom. If he says no then he must pay 1000 shillings but if he says yes then it is 500 shillings.”

## Discussion

**Recognising urban vulnerability:** Urban informal settlements are often under-represented in surveys. As a result, vulnerable urban populations are often overlooked by humanitarian and development actors. When urban is considered it is often as a counter point to rural. For example, a “catch-all” treatment of urban is employed by the Integrated Phased Classification (IPC), a widely adopted humanitarian early warning system as part of its livelihoods classification. This does not provide for nuanced understanding of urban livelihoods or recognition of vulnerable urban population segments. As a recent resilience study from the region noted, vulnerable urban sub-sets need to be determined and sampling frameworks calibrated to ensure their inclusion<sup>vii</sup>. Weak recognition and understanding of urban vulnerability leads to weak responses - both humanitarian and developmental - if at all.



**Situating urban crisis within humanitarian frameworks:** Findings from IDSUE reveal high variability in urban poverty between and within the five study sites. This has both geo-spatial and gendered characteristics. While findings suggest a deteriorating situation for those living in the lowest income quintile, particularly female headed households, their situation does not qualify as a humanitarian emergency according to current frameworks. For example, findings from IDSUE suggest that ‘normal’ ranges of malnutrition result in large numbers of absolute cases despite being under current standard emergency thresholds. While similar challenges exist in the arid and semi-arid lands (ASALs) where crises can go undetected due to chronic background vulnerability<sup>viii</sup>, the sheer magnitude of cases in urban locations, given high population densities, suggests that a new paradigm of threshold for early warning and action is required. Figure 4 illustrates the case for this.

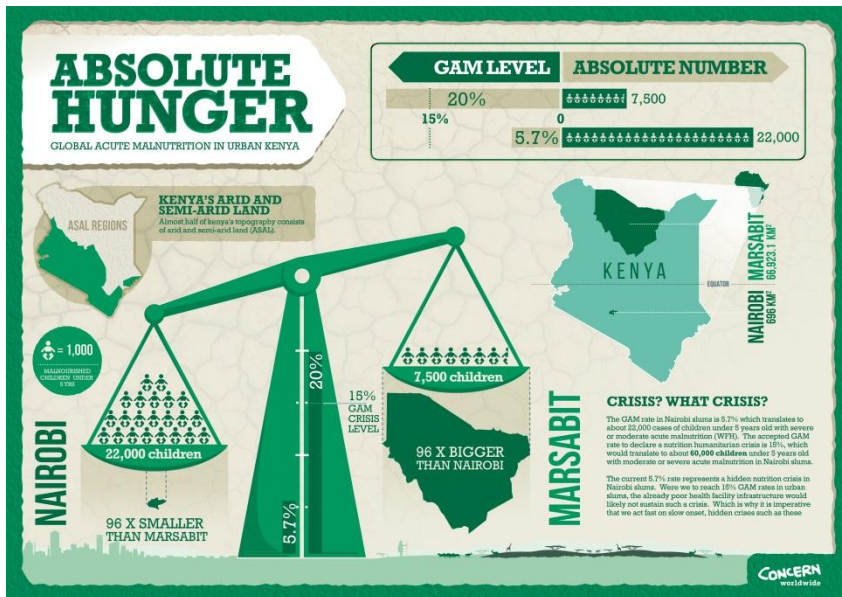


Figure 4: Comparison of malnutrition case load

**Refocusing urban vulnerability in development frameworks:** Urban emergencies are often overlooked humanitarian crises. Their location and frequency can be expected to increase over time through processes of urbanisation, poverty and climate change as well as rising insecurity and public health issues<sup>ix</sup>. Resilience to this changing, *urbanised*, face of emergency is ultimately found in equitable economic growth. Traditional forms of relief or disaster response where external parties, on an ad hoc basis, provide commodities or assistance are not realistic given the scale of urbanisation and depth of vulnerability. We must ensure existing structures and systems are enable state and non-state actors to reach the urban poor. This requires equitable access to social protection - including basic services; income opportunities through livelihoods development; and early action to mitigate shocks (Figure 5).

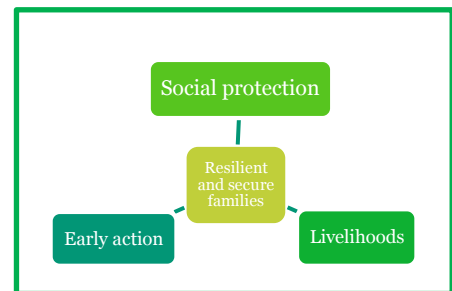


Figure 5: Axis of intervention

**Targeted surveillance integrated into management information systems:** Findings from IDSUE suggests that the most vulnerable households are highly sensitive to slow-onset urban emergencies. Geospatial analysis reveals that in most of IDSUE’s study areas, the most food insecure and lowest-income households are spatially clustered. This pattern may allow for targeted surveillance of the most vulnerable areas, which are also likely to show the first signs of a shift, from a situation of chronic poverty to one of acute vulnerability and crisis. Targeted surveillance using a selective cast of indicators similar to those employed by IDSUE can be used to detect shifts in vulnerabilities before a situation deteriorates. Ideally, these indicators should feature in existing management information systems at national and sub-national level to ensure functionality, coverage (of multiple urban sites) and sustainability. If a shift is detected, more in-depth monitoring and investigation can be initiated similar to the approach taken by IDSUE.

## Conclusion

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Urbanisation and informal settlements are currently not adequately considered in traditional humanitarian early warning and response frameworks. They also feature on the edge of many development frameworks. As a result, changes in urban conditions are not adequately supported by either. If left unattended, negative trends can have magnified impacts in informal urban settlements due to their spatial and structural characteristics. Indicators that are sensitive to this change in condition can alert both development and humanitarian actors to the need for early action to avert crisis, both for those treading on the edge of acute vulnerability and those who maintain a precarious foothold in the formalised economy.

Key recommendations based on IDSUE's findings include the following:

**Urban resilience:** A resilience lens provides opportunity for greater integration of humanitarian and development frameworks and actors. Current frameworks such as the IPC should be recalibrated in order to better monitor urban slum populations while contextual analyses being undertaken as part of large scale resilience programmes can unpack “urban” and situate this alongside, and not as a counter point, to rural livelihoods and vulnerabilities. Progressive engagement of markets in order to make them work better for the poor, irrespective of address (rural – urban), are also suggested.

**National engagement:** Framing of urban poverty within development frameworks requires sustained engagement of national and sub-national decision makers in order to support and influence policy and practice, including resource allocations for responding to urban crises. Early warning systems that monitor for emergencies whether slow onset or acute should be part of wider systems monitoring for developmental progress (or the absence of it).

**Early response:** Key crisis responses should reinforce the very systems upon which an affected population depends, whether rural or urban, and extend the capacity of that system (social protection, security, health, education, labour markets, water, etc.) to meet a change in demand. This form of response has been introduced into humanitarian programming (an example of which is Concern Kenya's surge model for integrated management of acute malnutrition) and can be extended to urban contexts.

**Clarity of crisis:** With increasing appreciation for the *slow onset emergencies* driven by unattended chronic issues, the re-categorisation of what constitutes an acute crisis as well as the relationship between chronic and acute conditions needs to be better understood for urban contexts. Indicators and thresholds also need to be developed and agreed in order to better monitor movement between states of “crises”.

- i Africa Development Bank: Championing Inclusive Growth Across Africa. <http://www.afdb.org/en/blogs/afdb-championing-inclusive-growth-across-africa/post/urbanization-in-africa-10143/>, accessed 23/07/2014.
- ii UN Habitat, 2010. The State of African Cities 2010: Governance, Inequality and Urban Land Markets, UN Habitat, Nairobi, Kenya.
- iii Africa Development Bank: Championing Inclusive Growth across Africa. <http://www.afdb.org/en/blogs/afdb-championing-inclusive-growth-across-africa/post/urbanization-in-africa-10143/>, accessed 23/07/2014.
- iv Development for the Surveillance of Urban Emergencies Factsheet (April 2014). Concern Worldwide, Nairobi, Kenya.
- v Qualitative research was conducted to gain a greater understanding of negative coping strategies however this does not form part of the IDSUE methodology.
- vi IDSUE collects quantitative data on one coping strategy, the proportion of households that remove their children from school due to lack of school fees.
- vii Baseline Analysis for the Impact Evaluation of FAO, WFP and UNICEF's Joint Resilience Strategy: Key Learning from the Resilience Analysis, UNICEF Regional Office, 2014.
- viii International Federation of the Red Cross and Red Crescent, 2014. FRC Early Warning, Early Action: Mechanisms for Rapid Decision Making (Drought Preparedness and Response in the ASALS of Ethiopia, Kenya and Uganda and the East Africa Region). IFRC, Nairobi, Kenya.
- ix UNISDR. 2013. Global Assessment Report on Disaster Risk Reduction. Geneva. UNISDR.