

Concern Worldwide's Research on
Indicators for Urban Emergencies

Implications for Policy and
Practice in Kenya

CONCERN
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**URBAN
EARLY
WARNING**

Korogocho Slum , Nairobi
Photo: Kenya, Concern Worldwide



INTRODUCTION

Why urban?

Kenya's population has grown by ten million within a ten year period making it the seventh most populous country in Africa and the third most populous in the East African regionⁱ. Kenya's increasing population has created greater density of population. The rate of urbanization in Kenya, estimated at 4.4%, is one of the highest in the worldⁱⁱ. Urbanisation is a factor of population movement towards growth as well as rural–urban migration. For many migrants, urban living is not necessarily better living. More than half of Kenya's urban residents live in poverty; they dwell in peripheral urban areas on meagre incomes and in unsanitary

and overcrowded conditions. This is particularly so for the urban poor living in Kenya's informal settlements or slums, particularly those found in Kenya's larger cities. Nairobi alone is home to 45% of the country's urban population of which 60% live in slums on 4% of the city's landⁱⁱⁱ.

Kenya's new constitution and Vision 2030 take cognizance of Kenya's growing urbanization and the need for urban development. A National Urban Development Policy (draft) and an Urban Areas and Cities Act (2011) have been formulated. These provide foundation for strengthening

governance, productivity and inclusivity, in Nairobi and the 46 other settlements classified as "urban" found in the country. While the intent is there, many urban poor, particularly those in informal settlements, live a vulnerable existence where impacts of hazards such as global financial shocks and ethnic violence are magnified^{iv}. There is increasing awareness by the Government of Kenya (GoK) as well as humanitarian and development actors of vulnerable urban population sub-sets and the need to respond to crises as experienced by the urban poor.

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. IDSUE commenced in 2010 shortly after Kenya's post-election violence (PEV) where the effects of increasing urbanisation, coupled with extreme vulnerability and ethnic violence were most acutely born out.

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 informal settlements were under-sampled in national and sub-national surveys. Even 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, morbidity, and coping strategies in five informal settlements in Nairobi and Kisumu. 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 policy and practice in Kenya. Recommendations are presented for consideration by Government of Kenya and non-state actors.

FRAMEWORK

IDSUE has the following objectives:

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 objectives 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.

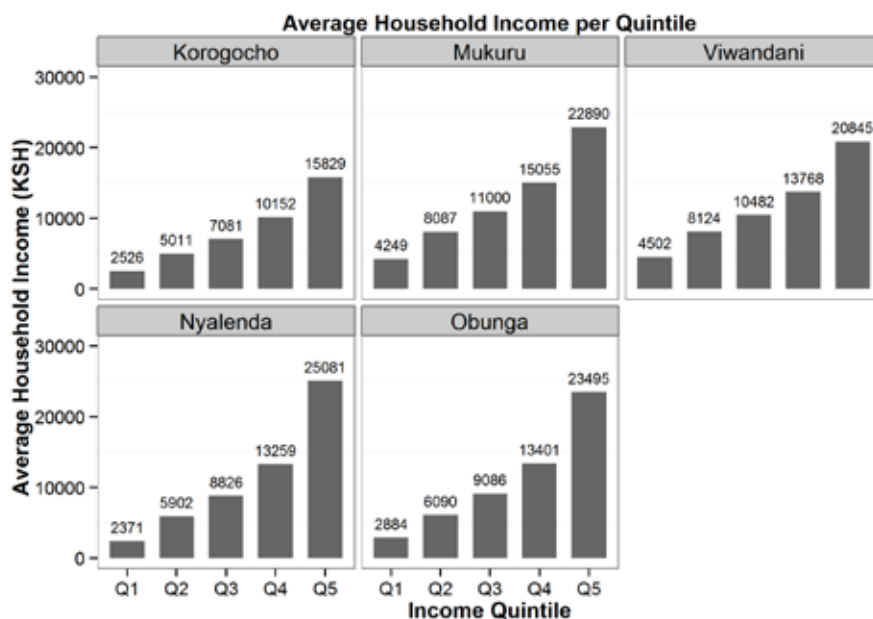
FINDINGS

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*. This analysis has guided IDSUE to know where to focus data collection and who to monitor. Through indicator refinement using the relevance, sensitivity and usefulness criteria test, IDSUE increasingly knows what and how to monitor changes in vulnerability.

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 1)¹. 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 1: Average household income per income quintile by location



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 2 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.

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

BOX 1

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.

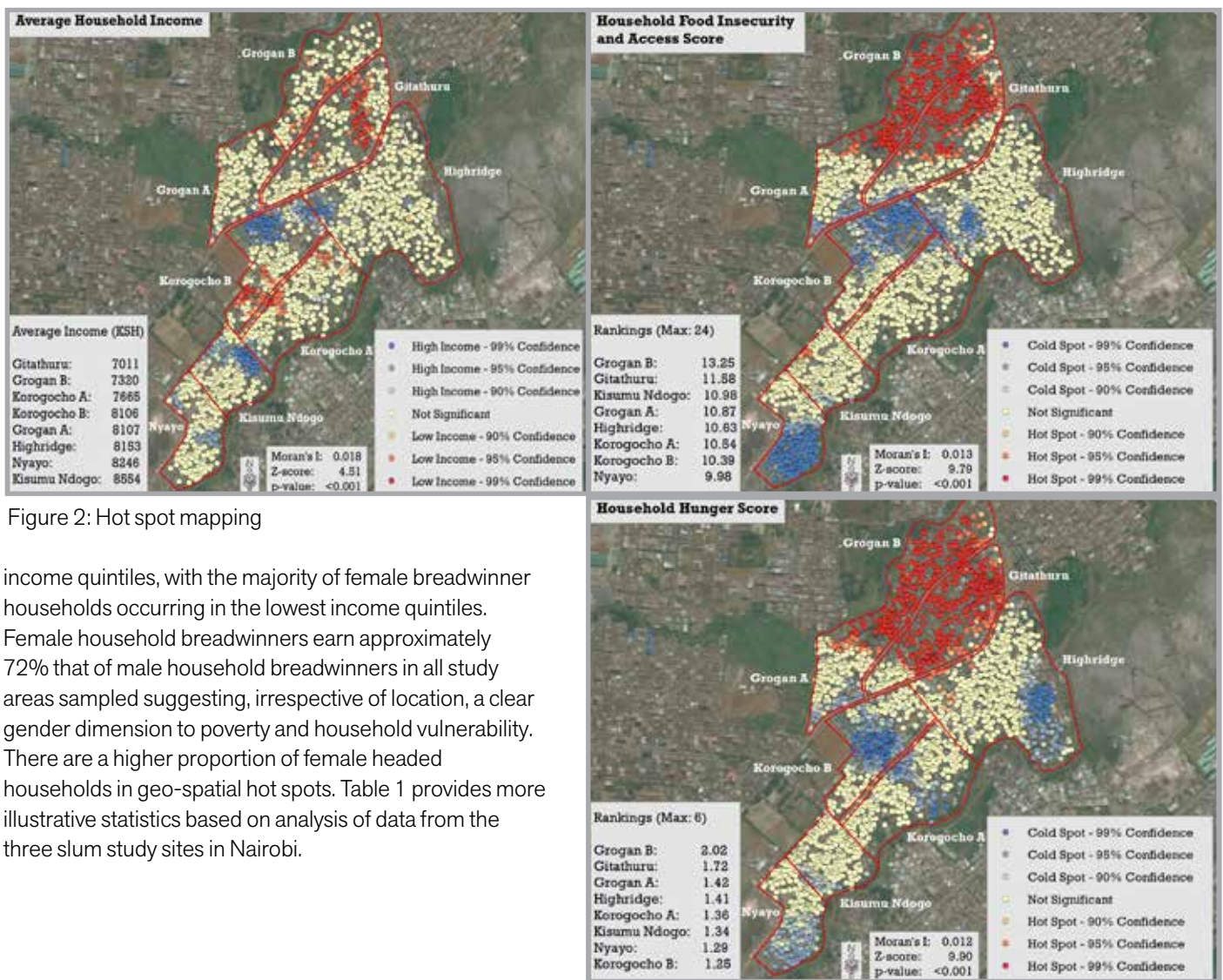


Figure 2: Hot spot mapping

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 vs. male-headed households

	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 (avg)	100	84	71	62	75	59
Percent spent on debts/loans (avg)	41	26	45	33	19	17
Severely Food Insecure	74	60	50	42	36	23
Severe Hunger	12	5	6	3	5	2

¹Key to X-axis; Q1: Bottom, Q2: Second, Q3: Middle, Q4: Fourth, Q5: Top.

Greater resort to negative coping strategies: Qualitative research^{vi} 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 and their children's long term well-being^{vii}. 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.

View from the inside

BOX 2

"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."

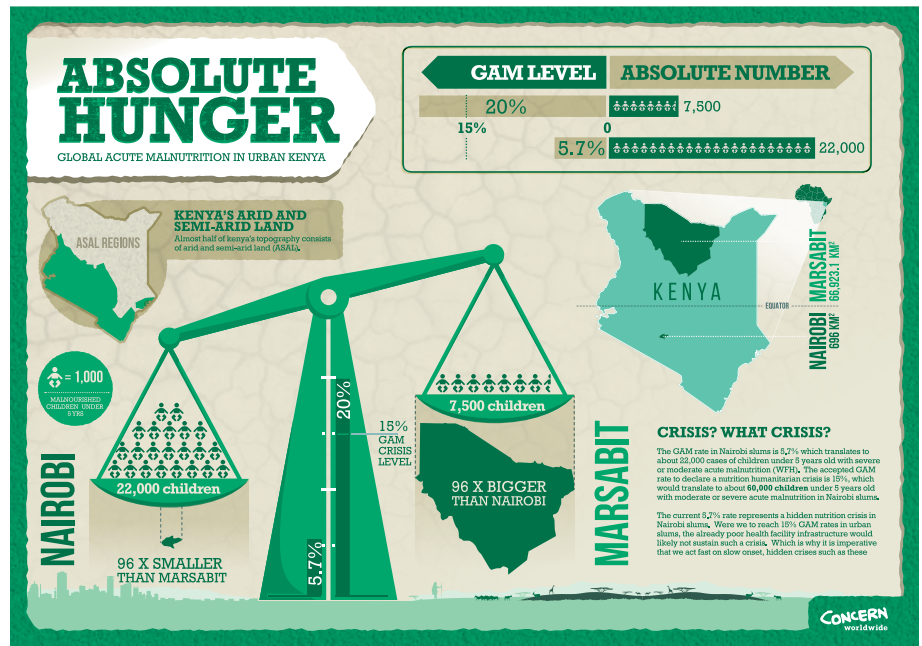
"... The first thing is to ask the man whether he will use a condom. If he says no then he must pay 1000 shillings but if he says yes then it is 500 shillings."

DISCUSSION

Recognising urban vulnerability:

Urban informal settlements are often overlooked due to a lack of reliable census data. As a result, vulnerable urban populations are often overlooked by the state as well as humanitarian and development actors. While there is a National Drought Management Authority to address drought emergencies in the arid and semi-arid lands (ASALs) of Kenya, a similar institutional “home” for urban emergencies does not exist. Similarly, Kenya’s draft Disaster Management Strategy, while grounded in Kenya’s changing demography, is based on the country’s history of disaster, which has been almost exclusively rural in the 40 years of records by the National Disaster Centre. Weak recognition and understanding of urban vulnerability and crises leads to weak responses, if at all.

Figure 3: Comparison of malnutrition case load



Situating urban crisis within humanitarian frameworks:

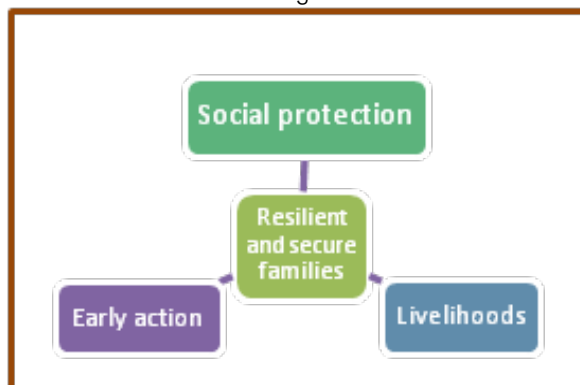
Findings from IDSUE reveal a heterogeneous picture of urban poverty and vulnerability in the five study sites. This has both geo-spatial and gendered characteristics. While findings suggest a deteriorating situation for those living in the lowest income quintile, particularly female headed households,

their situation does not classify as a humanitarian emergency according to current frameworks employed within Kenya as well as more broadly. For example, findings from IDSUE suggest that 'normal' ranges of severe and global acute malnutrition result in large numbers of absolute cases despite being under current standard emergency thresholds. While similar

challenges exist in ASALs where crises can go undistinguished due to chronic background vulnerabilityⁱⁱⁱ, the sheer magnitude of cases in urban locations, given high population densities, suggests that a new paradigm of early warning and action for urban settings is required. Figure 3 illustrates this using the case of Marsabit County and Nairobi.

Refocusing urban vulnerability in development frameworks: The location and frequency of urban emergencies in Kenya can be expected to increase over time through processes of urbanisation, poverty and climate change as well as rising insecurity and public health issues^{ix}. Resilience to this changing, urbanised, face of emergency is ultimately found in equitable economic growth. We must ensure existing national, county, municipal and communal structures and systems are enabled to reach the urban poor. This requires equitable access to social protection; livelihoods development; and early action to mitigate and recover from shocks and stresses (Figure 4). Currently, the GoK interprets social protection predominantly from the standpoint of access to government services such as retirement pensions, sickness benefits, maternity protection, employment injury, workers' compensation,

Figure 4: Axis of Intervention



survivors' benefits, disability coverage, family benefits, and unemployment protection. The urban poor, particularly those in the informal sector and based in the slums, are not explicitly recognised by the policy and unlikely to benefit from such services. Indeed the one programme targeted at households in informal settlements, the Urban Food Subsidy Programme, has recently lost its place in the national budget.

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 crisis. Targeted surveillance using a selective cast of indicators including those employed by IDSUE can be used to detect shifts in vulnerabilities before a situation deteriorates. Ideally, these indicators would feature in existing management information systems (MIS) to ensure operability, 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.

"As a social problem, poverty has been transformed. We now know who these people are, where they live and much about their personal conditions. Technological breakthroughs also mean that we can also target them directly with specific forms of assistance." Economist, 2014

CONCLUSION

Well devised strategies and policies are required to steer urban growth into healthy economies, more equitable societies and sustainable cities. IDSUE seeks to direct policy and investment into channels which reduce chronic vulnerability in urban slums and, at the same time, monitor for potential deterioration. Research such as IDSUE allows us to know more; this can be used to do more. This makes both developmental and humanitarian sense.

Urbanisation and informal settlements present a national challenge for Kenya. Urban transition in Kenya will play an important role in determining the country's growth prospects and social

stability, both of which remain fragile. This is recognised in Kenya's Vision 2030 which has identified equitable economic growth as the cornerstone of "a just cohesive society enjoying equitable social development in a clean secure environment." However, both the process of urbanisation and the existence of Kenya's large informal settlements are currently not adequately reflected in traditional emergency early warning and response frameworks. They also feature on the edge of Kenya's development frameworks. As a result, gradual changes in urban condition, from chronic vulnerability to acute crisis, are not adequately detected or addressed

by either. If left unattended, negative trends can have magnified impacts in urban informal settlements due to their spatial and structural characteristics. Indicators that are sensitive to this change in condition can alert the GoK and its development and humanitarian partners 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 include the following:

Clarity of crisis: Findings from IDSUE reveal a heterogeneous picture of urban poverty and vulnerability in 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 classify as a crisis according to current humanitarian frameworks. They also feature on the "edge of the frame" in Kenya's development and policy instruments. Mechanisms to situate those living in acute vulnerability and extreme poverty within these frameworks and instruments are required

Urban resilience: A resilience lens provides opportunity for greater integration of urban informal settlements within GoK emergency

and development frameworks. Current frameworks should be recalibrated in order to better monitor urban slum populations while contextual analyses 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 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 social protection and livelihoods development as well as early response in the event of acute crisis. 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). 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.

END NOTES

ⁱUN Habitat, 2010, State of African Cities– A framework for addressing urban challenges in Africa. UN-HABITAT. Nairobi, Kenya.

ⁱⁱUN Habitat, 2007, Kenya Slum Upgrading Programme.

ⁱⁱⁱUN-Habitat. 2010, The State of African Cities – A framework for addressing urban challenges in Africa, UN-HABITAT. Nairobi, Kenya.

^{iv}Oxfam. 2009. Urban Poverty and Vulnerability in Kenya. Oxfam GB, Nairobi, Kenya.

^vConcern Worldwide, 2014, Indicator Development for the Surveillance of Urban Emergencies Factsheet (April 2014). Concern Worldwide, Nairobi, Kenya.

^{vi}Qualitative research was conducted to gain a greater understanding of negative coping strategies however this does not form part of the IDSUE methodology.

^{vii}IDSUE collects quantitative data on one coping strategy, the proportion of households that remove their children from school due to lack of school fees.

^{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. UNISDR. Geneva, Switzerland.

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