

## Tracking the Development of Urban Food Security Assessment Tools: 2010 to 2015

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# **Steering Committee Members**















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#### Introduction

This desk review is a key deliverable of the "Adapting to an Urban World" project co-managed by the Global Food Security Cluster (gFSC) and the United Nations World Food Programme (WFP). In 2010, WFP and Oxfam Great Britain (GB) commissioned a desk review of urban food security assessment tool development. The review reported as follows:

Few agencies (ACF, IFRC, HEA and WFP) have developed specific guidance for urban contexts. ACF is the only agency that has developed a comprehensive guideline for food security assessments, while the other agencies have added technical guidance to the existing guidelines. The level of additional information varies from brief introductions to urban context features (IFRC) to technical suggestions on how to adapt food security indicators and sampling methods to urban contexts (WFP). Creti (2010, p. 22)

The tool development trends have, however, evolved since 2010 partly because the urban space is becoming a growing new humanitarian paradigm. Consequently, this second review identifies and analyzes several relevant initiatives, and classifies them into two categories<sup>1</sup> as follows:

Category I - Deliberative attempts to develop urban food security assessment tools: This category is constituted by the creation of urban food security assessment tools. Some of the Category I tools are not creation of new tools, but rather integration of multiple existing tools. This review, however, argues that comparatively, few efforts are devoted to this first category, as accurately articulated by the Emergency Nutrition Network that "There has been a large number of papers written on the challenges of urban....and how it differs from rural... however, there are very few guidelines" (Phelps, 2014, p. 2). This paper recommends that gFSC partner organizations should prioritize this deliberative development, testing and subsequent standardization of tools. These processes should be pursued through functional synergies and partnerships. This means recognizing that lot of common initiatives are inevitably occurring in silos, and although we cannot merge or integrate them, we can, and should link their results.

Category II – Desk Reviews: This category is constituted by initiatives driven partly by the assumption that there are too many urban food security assessment tools being developed,

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<sup>&</sup>lt;sup>1</sup> Some documents straddle categories I and II

therefore, new initiatives should be desk reviews that will lead to cataloguing and standardization. This assumption is flawed - there are more desk reviews and cataloguing than the development, testing and standardization of tools. Additionally, most of the reviews provide generic guidance that emphasize adherence to orthodox assessment procedures, for instance, being conscious of security risks and political sensitivity, ensuring team training and coordination. While these might be useful, they do not translate into the much needed development and standardization of tools.

The purpose of the categorizations is mainly to provide insight into the various trajectories that characterize urban food security assessment tool development, but it also allows gFSC partner organizations to identify where new efforts should be focused, and this review recommends that thenceforth, category I should be the priority.

## **Objectives**

The objective of this second desk review, therefore, is to track progress by the humanitarian community on urban food security assessment tool development. Specifically, the review verifies whether the challenges and recommendations contained in the baseline have been addressed through the development, field-testing and subsequent standardization of urban food security assessment tools.

#### **Structure of the Review**

This paper unfolds by briefly articulating its methodology, followed by an examination of the meanings of urban and household within the context of assessing urban food security. The succeeding sections are focused on an examination of the evolution of guidance for assessing income and expenditure, food consumption and coping strategies as key indicators of household food security, and finally, sampling, conclusions and recommendations.

## Methodology

Drawing on the "Review of approaches, methods and tools used by humanitarian agencies" (Creti, 2010) as the baseline, this second review uses submissions from gFSC partner organizations to track evolutions in the development of urban food security assessment tools. Internet resources were also explored in order to gather specific details, for instance, to provide Uniform Resource

Locators (URLs). These are contained in the reference list so that readers are able to electronically access the referenced documents, where possible.

### **Conceptual Fluidity: Urban and Household**

Although the baseline (Creti, 2010) did not characterize some of the key concepts associated with assessing urban food security, it is always helpful to explain the central concepts of any text (Smith, 2001). Consequently, this paper begins with the examination of "urban" and "household", which according to research are fluid and do not have standard definitions. The fluidity and lack of standard definitions challenge (Weeks, 2010) and complicate the assessment of urban food security, as Levron (2010) and Currion (2014) argue.

#### Urban

A study by the Human Settlements Group International Institute for Environment and Development points out that many governments define urban based on population numbers, livelihood activities and other characteristics, for instance, "between 5,000 and 20,000 inhabitants; density, between 400 and 1,000 people per square kilometer; administrative function; and percentage of the adult population engaged in non-farm activities" (Tacoli and Satterthwaite, 2003; cited by Tacoli, Bukhari and Fisher, 2013, p. 8). But as these authors also accurately reflect, the foregoing definitions do not allow for comparability of different urban areas, and ignore the changing context of contemporary urbanity.

Concerning agriculture, for instance in Harare, about 50 to 60 per cent of households practice agriculture (gFSC, 2014); and food security assessments in other 11 African cities confirm a similar trend (Tawodzera, Zanamwe and Crush, 2012; Battersby, 2011). The aforementioned definition, therefore, glosses over the particularities of contemporary urban dwellers, whose composition is increasingly being morphed by the arrival of rural-urban economic migrants whose new way of life straddles rural and urban livelihoods (see Action Contre La Faim's by Levron, 2010).

Continuing from the vantage point of demographics, Action Contre La Faim (ACF) proposes that "A local administrative unit is defined as urban when it includes over 10,000 residents, and the main agglomeration is home to over half the population" (Levron, 2010, p. 29). Conversely, "If

the city is defined as an area that provides superior services, a rural area becomes urban when its population numbers 7 to 8,000 inhabitants (e.g. in West Africa)" (ibid). This review recommends that gFSC partner organizations should attend to this contribution from ACF, particularly because it exposes the increasingly geographically and socially blurred dichotomy between urbanity and "rurality". But perhaps more importantly, ACF argues that "for purposes of data collection, the commonly accepted definition of a city is: an urban agglomeration (United Nations Statistics Division), characterized by one or several cities, each with its own jurisdiction, historic center, and adjacent suburbs" (ibid).

Many actors within the nascent urban food security paradigm are concerned about the definition of urban. For, example, the Cash Learning Partnership (CaLP) extensively examined several definitions of urban, including contribution from the US Population Reference Bureau, which also emphasizes "not being dependent on agriculture" (Cross and Johnson, 2011, p. viii). The Partnership highlights UN HABITAT's use and definition of the term "urban slum dwellers" as "individuals residing in housing with one or more of the following conditions: inadequate drinking water; inadequate sanitation; poor structural quality/durability of housing; overcrowding; and insecurity of tenure" (ibid). Anyone working on urban food security, particularly, gFSC partner organizations cannot afford to ignore the introduction of this concept because it speaks to sociodemographic attributes, and the listed services are often intertwined with, and contribute to food insecurity. This review also welcomes the additional contribution that the definition of urban for the purpose of assessing food security should consider density, diversity, authority, industry, security, mobility, complexity, fluidity, commodity, legality and connectivity (Currion, 2014). The review recommends that gFSC partner organizations should consider a deliberative attempt to define urban, including relevant contextual and thematic issues as noted above.

#### Household

What constitutes a "household" is another contentiously unfolding issue in assessing urban food security. Many rural sociologists working on food security adapt and use the Business Dictionary's (2015) definition "All persons living under one roof" by adding "contributing and eating from the same pot". The CaLP, however points out that "Urban houses may be occupied by multiple and transient groups/families, frequently including individual adults that have migrated for economic reasons into the city, but their family may actually still be living in the rural areas" (Cross and

Johnson, 2011, p. 26). This argument confirms that the urban space is increasingly becoming blurred by the liquidity of its social inhabitants – the household in this case.

Focusing only on refugees as one of the social strata of contemporary urban population, WFP and United Nations High Commissioner for Refugees (UNHCR - 2013) postulate that "Urban refugees are a dispersed and busy population. They are often very mobile for protection, legal and economic reasons" (p.7). Also, "In Greater Cairo... the majority of households in informal settlements are tenants. To keep rental costs at a manageable level, housing is often overcrowded" (Tacoli, Bukhari, and Fisher, 2013, p. 18) and some occupants straddle more than one home (Cross and Johnson, 2011) thereby making it difficult to clearly determine the makeup of the household. These discussions are indicative of an unfolding challenge in defining household in the context of assessing urban food security. And, although this paper did not find any attempts to address the challenge, gFSC partner organizations should consider it as an issue that needs to be addressed because it cannot be divorced from how urban food security can be analyzed and understood.

#### **Income**

The main challenge in assessing income, according to WFP and Save the Children (SC) is the difficulty faced by data collectors to gather comprehensive data on the income of a household. This is because urban jobs and incomes differ so much: they can be daily, weekly, temporary, numerous, diverse and fluid (Creti, 2010). WFP and SC proposed the use of household surveys to capture up to six sources of income, and expenditure analysis in lieu of income, respectively, to engender cost effectiveness by simply shortening interviewing time. The challenge, however, remained. This is mainly because the former (maximum six income sources) does not reveal the implications of income and job multiplicity on household food security, while the latter (expenditure analysis) ignores the relevance of how income is generated to household food security.

However notable initiatives on data collection and tool development were undertaken since the baseline, and this review has chosen the following three case studies. The first case study is focused on data collection and analysis - WFP's Kenya Urban Comprehensive Food Security & Vulnerability Analysis (CFSVA, Nzuma and Ochola, 2010). The assessment aimed to "Establish a baseline to inform future urban food insecurity and malnutrition monitoring, analysis and

reporting, specifically devised for low-income, high-density urban households" (p.7). In assessing income, it developed livelihood profiles "established based on the relative contribution of various activities to a household's livelihood" (p.8) into ten categories. The process used is time efficient, and the results provide critical insight. Additionally, the assessment "focused on expenditures as a proxy of cash income" (p.37), which in this case is a precise field-testing of SC's recommendation contained in the baseline.

This review recommends that gFSC partner organizations should, however, examine the reliability of the value proposition of "using expenditures as a proxy of income" in urban areas. This is mainly because it saves time by abandoning the task of comprehensively accounting for sources of income in contexts where financial transactions are not always recorded. But also, because it presents a hypothesis, which coalesces with a key tenet of linear equation – the postulation that if food insecurity is a function of an inversely proportional relationship between income and expenditure, and if income is the only unknown, then it is derivable.

The second notable case study is uniquely innovative in providing considered guidance for assessing income in urban contexts. This initiative is Oxfam GB's (2013) applied integrated Household Economy Approach (HEA) and Participatory Capacity and Vulnerability Analysis (PCVA). "PCVA is a multi-stakeholder risk analysis and planning process designed to ... engage with communities in contexts where natural disasters are significant drivers of poverty and suffering" (p.4). Oxfam GB and partners applied the combined tools in the flood-prone riverside areas of Quezon City in 2013 "In order to better understand the vulnerability of the population to flooding and to other types of shock" (ibid. p.3). A key objective was to test if the application could "provide deeper, more informed, and targeted analysis of economic interventions for vulnerable communities at both household and community levels, especially focusing on vulnerable women, during emergency and development planning" (p.4).

The integration of the tools occurred at "three levels; 1) identifying common tools, 2) identifying similar and complementary information to be gathered, and 3) linking the analysis of the quantitative information and the qualitative data" (ibid. p. 36). The process concluded that "The common tools that provide complementary information include: the historical timeline, seasonal calendar, resource mapping, Venn diagram and wealth breakdown" (ibid). This review recommends that gFSC partner organizations should attend to this conclusion because some of the

aforementioned tools, for instance, seasonal calendar, resource mapping and wealth breakdown, although unable to provide precise income data, can provide critical perspectives for understanding the income capacities of households.

In the application, PCVA focused on the use of the gendered crunch model, which "analyses the disaster risk to men and women that are associated with the major hazards occurring in the community" (ibid. p.18); and the Capacity and Vulnerability Analysis (CVA) Matrix, focused on "the capacity within and outside the community that can be judiciously mobilized to reduce the causes of vulnerability faced by men and women" (ibid. p.19). On the other hand, application of the HEA tool focused on the use of wealth breakdown, which categorizes population as poor, lower middle, upper middle and better off. Annual income and expenditure patterns were then reported for each category.

Oxfam intends to undertake "validation activities of the HEA-PCVA Urban Study results with the communities" (ibid p. 37). This review argues that although the objective of the applied integration of the HEA and PCVA tools was driven by economic rather than food security interventions, the process is relevant and could be refined and replicated to support income analysis. The integration of the two tools does not directly address the challenge reported in the baseline (Creti, 2010) of not being able to comprehensively capture households' income, it however, strengthens the quality of the data, because the CVA matrix and wealth ranking provide critical insight into the economic profiles of households. This review recommends that gFSC partner organizations should engage Oxfam for mutual learning over the development of the experiment.

The third notable initiative is constituted by the Progress out of Poverty Index (PPI) and Poverty Score Cards tools, which are captured by the CaLP's report (Cross and Johnson, 2011). These tools are used by the Grameen Bank for evaluating the poverty level of individuals based on the international benchmark of "less than \$1 a day" (ibid, p. 3). The Partnership argues that "because the PPI is used frequently by micro-finance institutions in 43 countries, the survey includes questions that would be relevant to urban" (ibid, p. 3), particularly in assessing income. This review supports the recommendation and encourages gFSC partner organizations to examine the adaptability and subsequent applicability of these tools. One problem, however, is that these tools are not electronically traceable, consequently this review failed to closely examine them – a key limitation for this and similar desk reviews.

As the final conclusion under income, gFSC partner organizations are reminded that the key challenge reported in the baseline is the inability of data collectors to gather comprehensive data on the income of a household. This is because urban jobs and incomes differ so much: they can be daily, weekly, temporary, numerous, diverse and fluid (Creti, 2010). There is so far, no success in developing a tool for a comprehensive analysis of household income in urban contexts. And although some of the experiments are continuing and promising, this review recommends that gFSC partner organizations should take deliberative steps in addressing the challenge, for instance, supporting research that will specifically seek alternative ways to account for a comprehensive list of the sources of income and the associated income, while also ensuring time and cost efficiency.

## **Expenditure**

The main challenge associated with assessing expenditure in urban contexts is relatively synonymous to that of income as discussed above. The challenge, as argued by WFP and SC is the difficulty that data collectors face to comprehensively capture the number of food items and how much households spend on them (Creti, 2010). This is mainly due to urban households' tendency to purchase many different food items that they cannot later remember. Commonality of food expenditures among households, particularly in "slums and poor neighborhoods" (ibid, p. 13) also significantly undermined analytic stratifications that draw on expenditures. WFP, however, suggested a revised expenditure list to include debt, and the use of proportional piling to capture multiple expenditures and improve recollection. Conversely, SC proposed the establishment of a minimum level of expenditure on food and nonfood items as a determinant for intervention. SC also proposed "assessing the gap between a standard food basket and household expenditure/incomes expressed in terms of calories" (ibid). Concerning the homogeneity of expenditure on food, WFP recommended estimating total share of food without disaggregating them. These challenges remained, because none of the recommendations was field-tested at the time.

This review did not find direct attempts to advance the recommendations of the baseline, for instance, to field-test proportional piling in assessing expenditure. However, it is important to note that because income and expenditure are strongly intertwined (see CaLP's toolkit by Cross and

Johnson, 2011), they are usually assessed using the same tools as evident by the findings under the income section of this paper. Consequently, WFP's Kenya Urban CFSVA (Nzuma, and Ochola, 2010) and Oxfam's (2013) applied integrated HEA and PCVA provide useful contributions in seeking to address the challenges contained in the baseline. This review recommends that gFSC partner organizations should consider the findings articulated under the income section of this paper for assessing expenditures.

As exposed above the challenges of assessing household expenditure remain (data collection and commonality of food expenditure). As such, this review recommends that gFSC partner organizations should support research to address this issue, particularly if it accepts to use expenditure analysis in lieu of income as discussed under the income section of this paper.

## **Food Consumption**

According to the baseline (Creti, 2010), the main challenge associated with assessing food consumption in urban contexts was the difficulty faced by data collectors to capture information on food that households' members ate outside. "Recalling the food components for the entire household can be more difficult in urban contexts, if a number of household members eat outside the household on a regular basis" (ibid, p.10). To address this challenge, if an assessment team concludes that eating outside is widespread and significant, the Food Consumption Score (FCS) tool should then be adapted to "consider the individual consumption of the respondent including food eaten outside the home, when there are no significant differences between household members" (ibid). Alternatively, the team can "consider household consumption without the food eaten outside the home, when the difference in consumption patterns within households is similar across households" (ibid, p.11). Additional alternatives included "to classify common street foods by their main ingredients prior to data collection, or to treat common street food as discrete food types during data collection" (ibid).

This review has identified the following three new initiatives that are relevant for consideration in seeking ways to address the challenges associated with assessing food consumption in urban contexts. The first initiative is constituted by numerous application of the FCS in different urban contexts. For example, WFP's Mogadishu Urban Food Security and Nutrition Assessment (Guillemois, Renk, and Doehnert, 2012) and Kenya Urban CFSVA (Nzuma, and Ochola, 2010).

The latter points out that it applied FCS "as a proxy measure of food insecurity [based on a] 24-hour recall analysis by household ... and not by individual" (p.9). This review infers that the choice of methodology in this case is an application of the baseline's recommendation that the team can "consider household consumption without the food eaten outside the home, when the difference in consumption patterns within households is similar across households" (ibid, p.11). Additionally the choice to use a 24 hour recall as opposed to the standard 7 day recall seems like an attempt to improve recollection for interviewees.

The Kenyan urban case study, however, acknowledged some limitations, for example, "Inaccurate recall and quantitative estimates may affect the validity of the findings; [and] a single 24-hour recall which does not accurately show usual food consumption" (ibid' p.9). The authors, therefore, conclude that "Food security and vulnerability are complex concepts to measure. [The] report focuses on food consumption as a proxy measure of food security. The measure has the advantage to be reproducible and comparable over time and location" (ibid). And, although the acknowledged limitations and conclusions do not feedback on the implications of food eaten outside the home, this review argues that gFSC partner organizations should investigate the value proposition of the 24 hour recall, particularly as it relates to capturing food that is consumed outside.

The second initiative that this review has identified is ongoing urban food security research activities by the African Food Security Urban Network (AFSUN). And, although AFSUN's objectives are not collaboratively linked to those of the gFSC, for instance, addressing the challenges associated with assessing food consumption, this paper recommends that gFSC partner organizations should seek to collaborate with them. This is mainly because they have completed food security assessments "in eleven cities in nine SADC<sup>2</sup> countries: Blantyre, Cape Town, Gaborone, Harare, Johannesburg, Lusaka, Maputo, Manzini, Maseru, Msunduzi and Windhoek" (Battersby, 2011, p. 2). Concerning the study conducted in Cape Town, the author mentions that:

The survey instrument was collaboratively developed by the AFSUN partners and utilized a series of food security assessment tools developed by FANTA<sup>3</sup> including (a) HFIAS<sup>4</sup> [,] in which households are allocated to categories according to weighted responses to nine questions. The

<sup>&</sup>lt;sup>2</sup> Southern African Development Community.

<sup>&</sup>lt;sup>3</sup> Food And Nutrition Technical Assistance

<sup>&</sup>lt;sup>4</sup> Household Food Insecurity Access Scale

HFIAS scale provides an image of absolute access to food and access to appropriate food choices; (b) the Household Food Insecurity access Prevalence Indicator (HFIAP) which groups scores on the HFIAS scale into four main categories: severely food insecure, moderately food insecure, mildly food insecure and food secure; (c) the Household Dietary Diversity Scale (HDDS) which asks what foodstuffs household members ate in the previous day. All foods are placed in one of 12 food groups, giving a maximum score of 12 and a minimum of 0; and (d) the Months of Adequate Household Provisioning Indicator (MAHFP) which asks how many, and in which months, households had adequate food within the last year.16 The survey also posed a further series of questions on household composition, income, housing, sources of food, migration and health. Battersby (2011, p. 2-3).

Some of the selected findings (Battersby, 2011, p. 13 - 15) that could be relevant to food consumption are as follows:

According to the HFIAS, 80% of households were either moderately or severely food insecure... Dietary diversity (as measured by the HDDS) was also poor. The median HDDS for food groups consumed in the previous 24 hours was 6 (out of a possible 12). While a median of 6 and a mean of 6.33 may appear relatively diverse, when the actual foodstuffs consumed are considered, it is evident that diversity was quite limited. Of the four most commonly consumed foodstuffs, three are largely nonnutritive: foods made with oils/fats (consumed by 72% of households), sugar and honey (83%) and "other" (usually tea and coffee) (88%). This suggests that although the average diet may have caloric adequacy, it is likely to be deficient in vitamins and other micronutrients. Some 88% of households stated that they had gone without food in the previous six months due to unaffordability, while 44% had gone without once a week or more. A number of respondents spoke of having "too much month for the money." In the light of this, it is unsurprising that 71% had not had enough food within the household within the previous year. The Months of Adequate Household Food Provisioning (MAHFP) score across all households was 9.2.27 However, when food secure households were excluded, the mean fell to 8.1.

There are several inferences that can be drawn from the foregoing excerpt, but as it relates to the challenges associated with assessing food consumption as reported in the baseline – not being able to capture food that households' members eat outside – we can see here that this study in Cape Town used the 24 hour recall, which like the Kenyan case study, has potential to capture food that

people eat outside of the home, whether the focus of the inquiry is at the individual or household level. The earlier recommendation that gFSC partner organizations should collaborate with AFSUN is reemphasized here, because there is potential to benefit from their work.

The third initiative is closely related to second, because it offers another perspective on the utility of the same tools – HDDS and HFIAS in urban contexts. In this case study, Concern Worldwide (2013) field-tested a combination of HDDS, HFIAS and HHS in urban Kenya based on the following variables reported with their results as follows:

Number of meals eaten by children (under 18 years old): Children (under 18 years old) average 2.96 meals per day. Children in Korogocho consume the lowest number of meals (2.73 meals/day) and this is significantly declining over time.

Meals taken outside the home by adults (over 18 years old): A majority of children (80%) do not consume foods prepared outside the home.

Consumption of street foods by children (under 18 years old): Similar to their adult counterparts, less than half the children consume street food (37%).

Concern Worldwide concludes that these results "will be verified before any further action [and that a] literature review will be helpful in determining the importance of these questions" (p.36). However, using secondary data, Tacoli, Bukhari, and Fisher (2013) has applied HDDS to comparatively analyze food consumption in 10 sub-Saharan African countries' urban contexts, and argues that it "is a useful indicator of food security because of its strong correlation with nutritional status, [and that] "The results suggest that in both [rural and urban] areas [as well as among poor and better off households] income plays a critical role" (ibid, p.11). This review recommends that gFSC should work with Concern Worldwide, CaLP, AFSUN and other relevant stakeholders for a more considered experimentation of the HDDS, HFIAS and HHS, particularly as it relates to addressing the challenges reported in the baseline.

As the final conclusion under food consumption, this review reminds gFSC partner organizations that main challenge reported in the baseline is - difficulty for data collectors to capture information on food that households' members ate outside. Among the three case studies that this

paper has carefully considered, the use of the 24 hour recall seems the most promising way to address the reported challenge. This is because it has potential to improve recollection. But the other initiatives also deserve attention. Consequently this review recommends that gFSC partner organizations should seek to learn more about how the use of the 24 hour recall could be improved to increase the reliability of its results when extrapolated to account for a longer time period in retrospect, while researching the potential of the HDDS, HFIAS and HHS tools as well as exploring adaptations of the FCS tool.

## **Coping Strategies**

The baseline reported that determining which coping strategies were the most severe, irreversible and damaging, and employed to address livelihood or food consumption vulnerability was challenging. This review argues that this challenge is not particular for urban, because it also applies to rural contexts. WFP however, recommends that assessment teams should develop "context specific lists to distinguish between consumption and livelihood strategies....and the use of the coping strategy index" (ibid, p. 16). Concerning how to measure severity, the "Integrated Phase Classification (IPC) classifies the households coping strategies according to three main categories: insurance, crisis and distress" (ibid).

A recent gFSC partners' (2014) report contends that "The tool chosen for the testing was a household questionnaire that included the modules of the WFP Consolidated Approach for Reporting Indicators on Food Security (CARI)" (p.11) in Harare. Some of the modules in the CARI guidance that gFSC partner organizations field-tested include "consumption coping strategies [and] and livelihood coping strategies" (ibid). One inference here is that the module has classified coping strategies into livelihood and consumption categories, which is a direct application of the recommendation contained in the baseline.

The studies conducted by AFSUN in 11 cities also offer interesting applied perspectives, but semantics become a problem because they use the term "alternative livelihood strategies... [as diversification of] livelihood and income generating strategies" (Battersby, 2011, p. 8). Consequently, gFSC partner organizations cannot significantly benefit from its applied experience in distinguishing consumption and livelihood strategies, and particularly for determining severity.

But as previously proposed, AFSUN should be included in advancing the recommendations contained in this review.

Concerning severity classification, this review argues that although the Integrated Food Security Phase Classification (IPC) referenced classifications have not been field-tested in an urban context, its classification of coping strategies could be adapted. Additionally the British Red Cross' (2010) Household Economic Security Technical Guidelines for Assessment Analysis and Program design offers comprehensive guidance on the classification of coping strategies into insurance, reversible, irreversible and risky strategies (see p. 55-58). Although the guidelines are not specifically designed for urban contexts, for instance, the examples for insurance strategies include building up of livestock, etc. they provide an important opportunity for adaptation and standardization that gFSC partner organizations cannot afford to ignore, partly because they have directly addressed the recommendation on "classification" contained in the baseline.

There is, also, Concern Worldwide's (2013) Indicator Development for the Surveillance of Urban Emergencies (IDSUE), which this review categorizes as one of the best ongoing initiatives in terms of developing urban food security analysis tools, as equally echoed by Oxfam (MacAuslan, and Farhat, 2013). One minor critique is that as opposed to consumption and geospatial analysis, its contribution towards classifying and measuring the severity of coping strategies needs further work. For example, it field-tested questions such as:

Has any HH member gone begging for food or money? Have you or HH member traded sex for money or had multiple sexual partners? Do you know anyone in the community who had sex for money? Have you stolen food or money to buy food and do you know someone who has done the same?

These questions would be inappropriate and culturally insensitive even in the most liberal western countries, and admittedly Concern points out that they "affect the way people answer; hence the responses could be biased. The question will be modified or done away with completely" (p.43). One of the many reasons why gFSC partner organizations should continue to engage Concern on this project, specifically on coping strategies is that the organization demonstrates a long term commitment to the development, field-testing and subsequent standardization of urban food security assessment tools.

As an overall conclusion on coping strategies, this review reemphasizes that the challenges reported in the baseline were a lack of information revealing as to which coping strategies are the most severe, irreversible and damaging, and employed to address livelihood or food consumption vulnerability. These challenges have been addressed by elements of the IPC and CARI respectively, although with the caveat that the classifications used within the IPC framework have not been field-tested in urban contexts. This review recommends that gFSC partner organizations should extract these tested elements, juxtapose them with new findings from Concern's ongoing experiments to take concrete actions on standardization.

### Sampling

Although the baseline did not consider sampling as a challenging issue in assessing urban food security, this second review introduces it as an area that deserves attention from gFSC partner organizations. This is particularly because the urban space is uniquely clustered and configured. For example, in some contexts, the population that deserves humanitarian attention might be integrated with wealthy households or separately located. This context requires a combination of being both practical and theoretical. Practical sense holds that there is no purpose of using, for instance, random sampling when it is obvious that you will be selecting wealthy households, who do not only need to be assessed, but also could be annoyed. Guillemois, Renk and Doehnert (2012) validate the foregoing argument:

It is often not seen as cost-effective to do a random sample of the whole population in a city, which would mean also including more affluent areas in the sampling frame. The purpose of most urban food security assessments is to assess the state of food insecurity in vulnerable or poor urban areas to get the facts that can serve as a basis for interventions to improve the situation or to avoid further deterioration in those areas. (p. 10).

Although specifically designed for assessing refugees, the Joint Assessment Missions (JAMs) - technical guidance sheets developed by WFP and the UNHCR (2013) provides insightful field-tested guidance on sampling that gFSC partner organizations cannot ignore. The guidance recommends the use of purposeful sampling methods in urban assessments. Purposeful sampling is a "non-random method of sampling where the researcher selects information-rich cases for study

in depth. Information-rich cases are those from which one can learn a great deal about issues of central importance" (Patton, 2001, p. 24).

In the "Technical brief: Rapid humanitarian assessments in urban settings", Currion (2014) also recommends the use of purposeful sampling:

The process of selecting sites to assess must be adapted. Resource and time constraints mean that statistically representative sampling is not usually possible, and purposive sampling will be most effective for urban rapid assessment. Assessment requires that the city must be broken down into compact, homogeneous and coherent units despite these obstacles. Secondary data analysis may be used to divide urban areas into smaller, more manageable units for assessment, to rank these units according to the relative level of impact that they have suffered.

The usual criteria for site selection still apply (e.g. group and site characteristics, combined with areas where there are gaps in existing knowledge), site selection must also take into account: the different characteristics of urban, peri-urban and suburban areas; varying population density between e.g. residential and commercial districts; the positioning of older and newer parts of the city; and key features within the urban space, such as transport corridors (such as rail lines), municipal services (such as city waste dumps), and marginal areas (such as flood plains). ACF recommends "urban zoning" to "divide the city into different strata with homogeneous characteristics, used to provide an analysis of urban livelihoods that can be extrapolated to the city as a whole", and then "identify particularly sensitive locations, where a complete analysis (social, economic and institutional) may be completed." (p. 17 – 18 citing ACF 2010).

Concerning what is already field-tested, the Kenya Urban CFSVA (Nzuma and Ochola, 2010) states that "The sample size was computed using a proportion measurement formula" (p.18). Usually, proportion formulas calculate the required sample size for the comparison of a proportion with a known proportion. But without detailing the statistical conventions of proportion formula, the Kenyan urban assessment reported an important limitation by pointing out that "The results represent the geography and timing of the survey. High-density, low-income, urban locations only were included in the sample" (p.30). This review recommends that gFSC partner organizations should consider this sampling method, while being aware of the aforementioned limitation.

As the major conclusion under sampling, this review recommends that gFSC organizations should work with a combination of practical and theoretical guidance. This means that the choice of a sampling method must be determined by the specificities of different contexts. But overall, the use of purposeful sampling is highly recommended.

#### **Conclusion and Recommendations**

The objective of this second desk review is to track progress by the humanitarian community on urban food security assessment tool development. Specifically, the review verifies whether the challenges and recommendations contained in the baseline have been addressed through the development, field-testing and subsequent standardization of urban food security assessment tools. The results, therefore are summarized as follows:

The need to develop assessment tools is unquestionable, and there are a lot of efforts devoted to address it. Unfortunately, most of the initiatives are focused on desk reviews and cataloguing, as opposed to deliberative development, field-testing and subsequent standardization. This review recommends that gFSC partner organizations should increase efforts on this priority through functional synergies and partnerships. This means recognizing that lot of common initiatives are inevitably occurring in silos, and although we cannot merge or integrate them, we can, and should link their results. For instance, when there is an urban assessment being undertaken by a partner organization, efforts should be exerted to optimize the opportunity by integrating tool development as an objective if possible. This process should be specific by reflecting the findings of the 2010 baseline and this review, as it will avoid some of the lapses over the past years, for instance, not field-testing proportional pilling, although it was recommended by the baseline, and there were numerous opportunities to do so. Additionally, as opposed to another four year period, the next update/review should be undertaken twelve months from this one.

**Defining Urban and Household:** The definition of urban for the purpose of assessing food security should consider density, diversity, authority, industry, security, mobility, complexity, fluidity, commodity, legality and connectivity (Currion, 2014). The review recommends that gFSC partner organizations should consider a deliberative attempt to define urban, including relevant contextual and thematic issues as noted above. And, although this paper did not find any attempts to define household within the urban context of food security, gFSC partner organizations should

consider it as an issue that needs to be addressed because it cannot be divorced from how urban food security can be analyzed and understood.

Assessing Income: gFSC partner organizations are reminded that the key challenge reported in the baseline is the difficulty for data collectors to gather comprehensive data on the income of a household. This is because urban jobs and incomes differ so much: they can be daily, weekly, temporary, numerous, diverse and fluid (Creti, 2010). There is so far, no success in developing a tool for a comprehensive analysis of household income in urban contexts. And although some of the experiments are continuing and promising, this review recommends that gFSC partner organizations should take deliberative steps in addressing the challenge, for instance, supporting operational research that will specifically seek alternative ways to account for a comprehensive list of the sources of income and the associated income, while also ensuring time and cost efficiency.

Assessing Expenditure: gFSC partner organizations are reminded that the difficulties faced by data collectors to comprehensively capture the number of food items and how much households spend on them (Creti, 2010); and commonality of food expenditures among households, particularly in "slums and poor neighborhoods" (ibid, p. 13), both significantly undermine analytic stratifications that draw on expenditures. As these challenges remain, this review recommends that gFSC partner organizations should support operational research to address this issue, particularly if it accepts to use expenditure analysis in lieu of income as discussed under the income section of this paper.

Food Consumption: This review reminds gFSC partner organizations that main challenge reported in the baseline is difficulty faced by data collectors to capture information on food that households' members ate outside. Among the three case studies that this paper has carefully considered, the use of the 24 hour recall seems the most promising way to address the reported challenge. This is because it has potential to improve recollection. But the other initiatives also deserve attention. Consequently this review recommends that gFSC partner organizations should seek to learn more about how the use of the 24 hour recall could be improved to increase the reliability of its results when extrapolated to account for a longer time period in retrospect, while researching the potential of the FCS, HDDS, HFIAS and HHS tools.

Coping Strategies: This review reemphasizes that the challenges reported in the baseline were a lack of information revealing as to which coping strategies are the most severe, irreversible and damaging, and employed to address livelihood or food consumption vulnerability. These challenges have been addressed by elements of the IPC and CARI respectively, although with the caveat that the classifications used in the IPC framework have not been field-tested in urban contexts. This review recommends that gFSC partner organizations should extract these tested elements, juxtapose them with new findings from Concern's ongoing experiments to take concrete actions on standardization.

*Sampling:* This review recommends that gFSC organizations should work with a combination of practical and theoretical guidance. This means that the choice of a sampling method must be determined by the specificities of different contexts. But overall, the use of purposeful sampling is highly recommended.

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