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# Vulnerability to Hunger

Improving Food Crisis Responses in Fragile States

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#### Abstract

The paper examines the imperative for improved classification and analysis of food crises in different fragile contexts. Recognizing the persistence and protracted nature of food crises, the paper questions how prevention and response mechanisms could be improved to help decisionmakers better address the underlying causes of vulnerability and hunger. The paper draws on case study information to examine real life opportunities and constraints in applying a recently developed food security classification system, named the analytical frameworks at country level, the Integrated Food Security Phase Classification (IPC). Developed originally in Somalia, this classification framework is now being applied in a range of country contexts within and outside of Africa by national governments, UN agencies, donors and NGO organizations. The paper draws on early applications of the IPC to consider opportunities and constraints in the application of common classification systems, taking into account issues of institutional adaptation, methodologies, data and analysis.

Keywords: food security, humanitarian assistance, complex emergencies

JEL classification: O1, O19

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#### Acronyms

CAPS	consolidated appeals process
FAO	Food and Agriculture Organization of the UN
FAO-FSAU	FAO's Food Security Analysis Unit
FEWSNET	Famine Early Warning Systems Network
IPC	Integrated Food Security Phase Classification
KFSM	Kenya Food Security Meeting
KFSSG	Kenya Food Security Steering Group
LAF	Livelihood Analysis Platform
WFP	World Food Programme

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#### Introduction

The paper examines the imperative for improved classification and analysis of food crises in different fragile contexts. Recognizing the continued persistence and protracted nature of food crises, the paper questions how prevention and response mechanisms could be improved to help decisionmakers better address the determinants and the dynamic nature of hunger at both national and regional level.

The starting point to the paper looks at vulnerability to hunger and the challenges raised by the increasing number of food crises, particularly in the African context. Drawing from the recent literature, the paper brings into focus a number of operational bottlenecks that decisionmakers face in addressing food crisis situations. In particular the paper looks at the implications raised by the absence of system-wide frameworks to compare the severity of different crises. In this context the constraints raised by competing methodologies, institutional buy-in and the heterogeneity of different crisis situations emerge.

Of particular interest is the case study information presented, based on the early application of a food classification system named the Integrated Food Security Phase Classification (IPC). Originally developed by the FAO Food Security Analysis Unit (FSAU) Somalia, the potential utility of this tool has emerged in a number of different contexts to provide a comparable situation analysis based upon technical consensus. The paper examines emerging lessons from this common classification framework, covering institutional adaptation, technical approaches and questions on data and analysis.

The paper is organized as follows: Section 1 examines the context and challenges arising for decisionmakers tasked with responding to food crises across diverse crisis contexts. Section 2 presents an emerging framework for food security classification and response, based on the joint efforts of a number of UN and international agencies, including the Food and Agriculture Organization of the UN (FAO), World Food Programme (WFP), the Famine Early Warning Systems Network (FEWSNET) and Oxfam GB. Section 3 presents emerging country-level analysis based on the initial adaptation of the IPC framework in the East African context. Main conclusions and recommendations for future consideration are presented in a final Section.

### 1 Context and challenges

The imperative to better understand the nature and severity of food crises is reflected by the persistence and protracted level of hunger in different fragile contexts. The total number of chronically undernourished in the world is estimated at 854 million. As of February 2008, 36 countries faced food crises and required emergency assistance (FAO 2008). Within this group the protracted nature of crisis reflects unsettling trends. According the UN-FAO, the number of food emergencies has risen from an average of 15 a year in the 1980s to more than 30 since 2000, with the majority of crises reflecting continuous vulnerability rather than one-off crisis events. Of further concern is the persistence of crises in the African context. In Sub-Sahara alone, the annual number of food emergencies has tripled during this period.

While many African countries have the potential to reduce national levels of hunger, the persistence of hunger is further threatened by increasing food prices, potential tighter grain markets, conflict, diseases and climate change (FAO 2007a). The lack of progress in reducing hunger and the increasing number of food crises indicate that, among other things, risk management, prevention and response mechanisms need to be improved to address the determinants and the dynamic nature of food insecurity at household, national, regional levels. The inadequacy of prevention and response mechanisms has been highlight in key literature in recent years. Darcy and Hoffman's study 'According to Need' (2003) highlights system-wide issues facing agencies and donors at national and international level. Emerging strongly within this critique was the absence of system-wide frameworks for defining the relative severity of crises and for aligning responses accordingly. The study marks a departure from narrow methodological debates to the policy, management and process issues underlying response. In turn it also focuses attention on the need to strengthen simultaneously a number of short, medium- and long-term needs assessment and responses mechanisms.

To understand the challenges faced by decisionmakers in responding to different crisis scenarios, it is useful to consider how hunger and vulnerability are understood amongst practitioners and within the literature. This paper defines hunger through a food security perspective. In 1996, the World Food Summit defined food security as a situation which exists 'when all people at all times have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life' (FAO 1996). The now widely accepted World Food Summit definition reinforced the multidimensional nature of food security incorporating food access, availability, biological food use and stability.

- *Food availability* refers to the physical presence of food at various levels from household to national level, whether from own production or through markets.
- *Food access* refers to the ability to obtain an appropriate and nutritious diet; it is linked to resources, assets and income at the household level.
- *Biological utilization* relates to the ability of the human body to effectively convert food into energy.

The stability dimension of food insecurity underlines the importance of temporal dynamics, where crisis situations are understood not only as a static or once-off event but also in terms of likely future changes, or susceptibility to particular risk factors. In this regard the concept of vulnerability can be instructive. Vulnerability refers to the full range of factors that place people at risk of becoming food insecure, including those factors that affect their ability to cope. While much of the disaster management literature uses vulnerability with reference to a natural hazard, the food security literature define vulnerability in terms of an unfavourable future outcome. Concerning food security, this could include the propensity to fall, or stay, below a given threshold within a certain timeframe (Lovendal and Knowles 2007).

As a measure of deprivation, vulnerability is appealing as it takes into account not just fluctuating standards of living but also the resilience of subsets of households (e.g., landless, smallholders) against covariate (e.g., weather or crops changes) and idiosyncratic risks (e.g., unemployment or illness). It is, however, more difficult to identify the vulnerable not only because there are different measures (e.g., ex ante versus ex post vulnerability) but also because tracking the wellbeing of a particular household over time and after a shock event requires reliable data that are seldom available (Gaiha and Imai 2008)

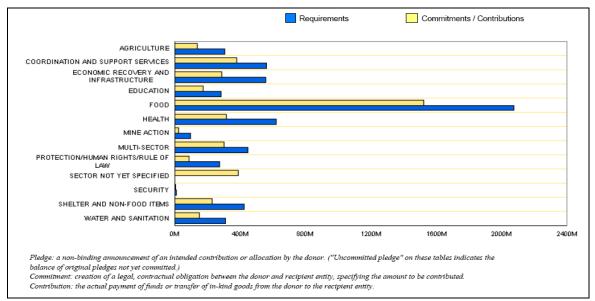
Addressing vulnerability is also complicated by a range of limitations on the response side. Managing risks goes beyond assisting those affected by a particular shock in addressing their immediate food needs. Appropriate responses include long-term interventions to address chronic vulnerabilities. Box 1, for example, considers the inadequacy of response strategies in addressing vulnerabilities during the Horn of Africa drought crisis 2005-06. Here, despite the availability of credible and accurate early warning information, national governments, international agencies and donors were unable to address the crisis effectively in its early stages. Emergency operations did not reach full capacity until March or April 2006, at which time the crisis had evolved into one of the worst faced by the region in a decade. According to UN estimates, at least 11 million people were at risk in Djibouti, Eritrea, Ethiopia, Kenya and Somalia.

The case study and wider literature serve to highlight a number of pertinent challenges in understanding and responding to food crises. First, food security is multidimensional, which presents difficulties for decisionmakers in prioritizing and interpreting different information components. While basic asset categories and livelihood strategy categories are well defined, the interplay with different sectors is less well so, e.g., health, water, sanitation and nutrition. To this end, the setting of warning thresholds can be problematic since increased understanding is often required to assess the vulnerability context, e.g., to consider institutional and policy constraints.

Box 1 The experience from the Horn of Africa drought, 2005-06

A recent study undertaken by ODI (Pantuliano 2006) examines the inadequacy of emergency response during the Greater Horn of Africa drought 2005-06, where at least 11 million people were in crisis in Djibouti, Eritrea, Ethiopia, Kenya and Somalia. The analysis guestions why accurate and credible early warning (e.g., FEWSNET, FAO-FSAU Somalia) first emerging in October did not lead to a rapid and appropriate response and highlights how inadequate contingency planning, limited capacity in livelihood programming and inflexible funding mechanisms resulted in delays and deficiencies in livelihood interventions, and the predominance of food assistance in the emergency response. Drawing on secondary data and interviews the analysis points to the misunderstood nature of pastoralism, particularly across Ethiopia-Kenya-Somalia borders, reporting malnutrition levels far beyond emergency thresholds, livestock losses of up to 70 per cent and the mass migration of pastoralists in search of water, food, jobs and relief aid. As argued within the paper, the crisis reflected a context of chronic food insecurity where emergency alerts were signalled repeatedly, yet humanitarian and development actors found it difficult to distinguish the symptoms of chronic destitution from those of a critically unstable situation. As argued, the chronic vulnerability of pastoralists in East Africa was seen as an indicator of unsustainable livelihoods, without reference to a range of external political and economic factors perpetuating marginalization. Few national governments or external actors recognized this by appropriate policy responses, e.g., addressing access to natural resources such as land and water. Eventual funding appeals and contributions across Ethiopia, Kenya and Somalia were only mobilized around March 2006 and were eventually orientated to food aid responses, i.e., 77 per cent (Ethiopia), 46 per cent (Kenya) and 40 per cent (Somalia).

Figure 1 Global CAP requirements and pledges (2005) across main sectors



Source: Financial Tracking System (OCHA).

The Niger crisis of 2005 also provides also an interesting case study. Here, it has been argued that the rationale for the food security strategy undertaken—subsidized cereal sales, agricultural inputs, cereal banks and public works programmes—was not analysed or adequately monitored despite the availability of information which might have promoted different strategies for target groups (ODI 2005). The Horn of Africa drought crisis 2005-06 also points to the misunderstood nature of pastoralism despite clear and credible information sources. In both cases, it can be concluded that the analysis of complex situations and the interpretation of technical subject areas require additional support.

Second, the temporal aspects of hunger and food security are a challenge. The increased frequency and severity of crises, coupled with difficulties in disentangling acute and chronic underlying factors, raise complexities for both analysts and decisionmakers (Maxwell and Watkins 2003). The distinctions between temporary and longer-term food insecurity as well as seasonal changes suggest that a range of policy responses are required. Yet there is often a bias in policy response, marked by the provision of food aid and a narrow range of agricultural inputs e.g., seeds and tools. By way of illustrative example, Figure 1 highlights the financial allocations afforded to different sectors in the UN Consolidated Appeals Process (2005), a mechanism aimed at streamlining the approach taken by UN institutions and their partners in appealing for funding to emergency relief operations.

The bias towards short-term response options reflects the separation of relief and longer-term interventions where the response are compromised, inter alia, by short-term funding horizons in donor budgets and the earmarking of donor funds for specific UN or other international agencies (Levine and Chastre 2004).

### 2 A framework for food security classification and response

Until the widely influential 'According to Need' analysis, the linkages between assessments, decisionmaking and response were relatively unexplored. The study, however, marks a departure from narrow methodological debates on measurement and definitions towards policy, management and process issues underlying response. This focuses attention on the need to strengthen simultaneously a number of short-, medium-and long-term needs and response mechanisms.

Arising from these concerns, in recent years international actors have pushed to strengthen analysis and decisionmaking on food crises through a range of different initiatives. In particular there has been a focus on improving assessment methodologies, e.g., WFP's Strengthening Emergency Needs Assessment Capacity Project; WHO's Health and Nutrition Tracking Service. More broadly, the question of system wide reform and aid effectiveness has also come into increased focus through, for example the Paris Declaration on Aid Effectiveness, the Good Humanitarian Donors Initiatives, and the DAC initiative on Managing for Development Results.

From the food security perspective, the IPC has emerged as potentially innovative approach for improving food security analysis and informing decisionmaking (Maxwell 2006). The IPC is a standardized scale that integrates food security, nutrition and livelihood information into a clear statement about the severity of a crisis and implications for food security and humanitarian response (FSAU 2006).

Developed originally in Somalia by FAO's FSAU, the IPC is now being adapted in the wider Horn of Africa region and beyond by a number of international agencies and national governments. Figure 2 illustrates an IPC outlook developed for the Central East Africa region during the Horn of Africa drought crisis from October 2005 to March 2006. The map (cartographic protocol) highlights the potential utility of food security classification through its disaggregation of different crises and handling of trends, whether they are underlying, seasonal or likely future outcomes established through early warning mechanisms.

While the main output of the IPC approach is the above cartographic protocol, the analysis is also safeguarded by a number of supporting tools. In particular, a set of reference outcome indicators are identified with each phase, including threshold values referenced against internationally accepted cut-off points where available. These are matched against appropriate response interventions, summarized in Table 1 (see later).

Some of the main opportunities foreseen within the IPC framework are as follows. First, the analysis provides an organizing framework upon which to promote technical consensus amongst a range of stakeholders. By bringing together a set of diverse information variables, the IPC approach contributes to moving beyond a discussion on methodologies (e.g., anthropometric, biological measurement) towards improved contextual analysis. While the IPC is not an information system in itself, the resulting process of analysis can help to highlight related upstream information requirements concerning data availability, data sources, monitoring and evaluation. The process of analysis can also help streamline information requirements and promote strategic information use.

Second, the approach promotes evidence based analysis, which is particularly relevant given international initiatives around the effectiveness and efficiency of response (e.g., Good Humanitarian Initiatives; Central Emergency Response Fund; CERF). The emphasis further placed on variable 'situation analyses' also responds to many controversies around response strategies that are negotiated around perception, political implications and expected resources rather than evidence-based need. In this context particular controversy has concerned the reliability and objectivity of agency needs assessment processes. As Darcy and Hofmann (2003: 16) assert, 'needs assessment is often conflated with the formulation of responses, in ways that can lead to resource-led intervention and close down other (perhaps more appropriate) forms of intervention'.

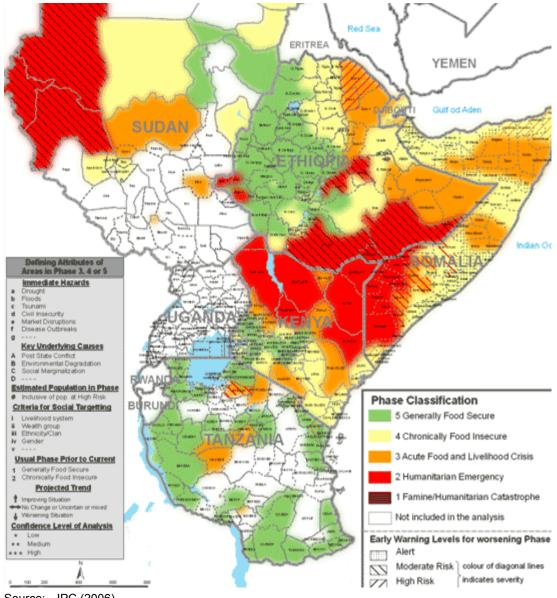


Figure 2 IPC outlook for Central East Africa

Source: IPC (2006).

Finally, the IPC approach has been viewed as an entry point for institutionalizing country level ownership and buy-in around food security issues. Institutional aspects within a country need to be considered in food security analysis to ensure ownership and transparency of approach and ultimately the translation of food security objectives into national programmes and poverty reduction strategies where they exist (Pingali, Alinovi and Sutton 2005). This involves the early identification of relevant decisionmaking, as well as coordination structures (Flores, Khwaja and White 2005). A recent review of Early Warning Information systems in Africa identified that information was often not linked to decisionmaking processes as an early priority, which often resulted in the separation of short- and longer-term policy responses (Tefft, McGuire and Maunder 2006). The typically diffuse nature of coordination structures at national level often poses complications. Amongst national authorities the responsibility for crisis response and food insecurity may rest across a number of different ministries with different sub-working groups also informing decisionmaking processes.

Section 3 now examines recent country-level experiences in the implementation of the IPC approach, examining the opportunities and emerging challenges with particular attention to institutional aspects, the technical framework and data/analytical requirements.

### 3 Initial experiences in Central and East Africa

The IPC is in early stages of adaptation outside of the original Somalia context. Already a number of national governments, international agencies and donors have pledged their commitment and interest in developing and implementing the IPC further, particularly in the African context. At international level a number of agencies have committed to devising a common approach for the longer-term development of the IPC, including Care International, the European Commission Joint Research Centre, FEWSNET, Oxfam GB, Save the Children UK and US, the FAO and WFP.

Although modalities to support longer-term IPC development are being finalized, implementation exercises continue at country level and have been most concentrated in East and Central Africa owing to the region's strong humanitarian imperative, coupled with existing information and institutional structures. The following examines these early implementation activities to determine how identified challenges are being met, i.e., (i) national ownership and buy-in; (ii) adaptation of IPC framework and (iii) data availability and analysis.

### 3.1 National ownership and buy-in

The IPC aims to provide a platform to broker technical consensus amongst a broad range of stakeholders including government authorities and international agencies. National ownership and buy-in is, therefore, critical to ensure the inclusion of relevant information and decision makers and to ensure that the IPC complements rather than duplicates existing information and institutional structure

Initial implementation exercises within East and Central Africa have been based on a *system-based approach* to IPC development, involving the promotion of the IPC

Box 2 Kenya food security institutional structure

Kenya's food security institutional structure includes (i) the Kenya Food Security Meeting (KFSM): the main coordination body which acts as an open forum of high level presentation of a broad grouping of organizations at the national level with interest in food security; (ii) the Kenya Food Security Steering Group (KFSSG) a restricted group of stakeholders which acts as a technical 'think-tank' and advisory body to all relevant stakeholders on issues of drought management and food security; and (iii) Data and Information Subcommittee of the KFSSG (DISK) which focuses on improving the quality, quantity and timeliness of food security and disaster management information through increased data sharing, coordinated investments in developing capacity and systems, and through continuous improvements in methodologies and techniques. The institutional structure points to advanced information collection and early warning analysis, also under the Arid Lands Resource Management Project (ALRMP).

through existing information structures and institutional frameworks. Central to this approach is the need to ensure that IPC analysis is nationally owned and supported across relevant decision making and coordination structures to ensure future sustainability. In this sense, nationally supported food security and nutrition networks provide the primary entry point to facilitate IPC development. Implicit in this approach is that IPC draws upon existing information structures, instead of launching duplicative approaches.

The initial experiences of Kenya and Southern Sudan—recently presented to delegates at the Committee on World Food Security 33rd session—illustrate the way in which national ownership and buy-in is being achieved in contrasting contexts (FAO 2007b).

Kenya has detailed institutional structures to support food security requirements (see Box 2). Within these structures, in March 2007 the IPC was employed as the analytical framework for the 2007 short rains assessment under the management of subcommittee through a process facilitated by FAO and the Arid Lands Resource Management Project (ALRMP) (KFSSG 2007). Despite the detailed institutional structure, it is significant to note that the IPC appeared to address a number of specific information and institutional requirements recognized by national authorities. For example, enabling consistency in terminology and technical consensus; providing a framework to integrate early warning information and situation analysis thereby capturing dynamic aspects of a crisis; providing definition on the relevance and cutoffs of various outcome indicators related to food security, nutrition and livelihoods.

Institutional lessons emerging from the Kenyan IPC adaptation include the following. First, the analysis was notable for the participation of a cross-section of government representatives including the ministries of water, agriculture, livestock and health. This provided a platform to discuss and refine analysis also with international agencies specifically FAO, FEWSNET, WFP and World Vision. Second, there is strong potential for future analysis to take place at decentralized level, with national structures providing peer review and quality control support. However, this will require significant investment in capacity building and safeguards to ensure accuracy of analysis.

The government of southern Sudan has endorsed the IPC based on its potential utilization for improving food security and livelihood analysis, disaster preparedness and information management (FAO 2007b). The value added in the southern Sudan

context is particularly relevant post Comprehensive Peace Agreement (2004), where initiatives to strengthen, *inter alia*, food security institutional structures have been made. Within southern Sudan initial activities have focussed mainly on awareness raising and consultation around the IPC.

Efforts have largely focussed on the identification of stakeholders and institutional structures to facilitate an IPC analysis. Sensitization and capacity building efforts have taken place with government officials, including ministries of agriculture and forestry. Stakeholder groups from the Livelihood Analysis Platform (LAF) and other international agencies including CARE, FAO and WFP have also been involved in initial training exercises. The introduction of the Sudan Institutional Capacity Programme: Food Security Information for Action (SIFSIA) points to the formalization of improved food security mechanisms with national support, which points to future opportunities in developing the IPC further.

The experiences of Sudan and Kenya highlight that institutional factors are part of the prevailing conditions upon which the success of IPC will rest. Appropriate institutional support can ensure that the IPC is responding to legitimate demands and complementing existing information systems and structures. Institutional structures will also be critical in resolving the areas of technical debate detailed shortly. The identification of appropriate structures involves detailed awareness raising and consultation, which have been seen in both case studies to result in improved dialogue and coordination.

## 3.2 Data and analysis

The IPC framework prescribes a set of key reference outcomes and the adoption of a number of supporting analytical tools including cartographic maps, analysis templates and population tables. From a data perspective the approach raises a number of questions concerning the adequacy and coverage of reference indicators and data availability to meet these requirements. The utilization of data to enable a 'convergence of evidence' analytical approach is a related issue. In this context the measures to safeguard credible analysis, interpretation and judgement arise.

Initial field-based exercises have assuaged many of these concerns. Table 1 (IPC Reference Table) presents a 'golden standard' of data requirements that may be reached when different stakeholders pool and merge their analysis. The point is to provide guidance on appropriate information inputs, which may vary depending on the context-specific nature of a crisis.

Within Kenya, the *Short Rains Assessment* followed the key reference outcome indicators outlined in Table 1, and recommended in the IPC technical manual. Despite robust information structures, supporting data were found to be weak with regard to key food access and availability indicators, including markets (prices, food stocks), livestock and cross-border information. The possible scope of dietary diversity tools as proxy measure for food access emerged in terms of harmonizing the tool with other approaches. While nutrition and mortality indicators were perceived as widely available, their convergence and interpretation were highlighted as a challenge. Concerning omitted variables attention was devoted to water quality and income measures and the need to improve coping-strategy information was highlighted.

Overall, key data challenges pointed to weakness in data utilization rather than information availability. A comparative review of existing information sources (including FAO ALMRP, FEWSNET, WFP, different line ministries and steering groups) in Kenya was recently undertaken to identify the type of data, frequency of collections, constraints, level of inquiry (household, district, national, facility-based), geographic coverage and format (KFSSG 2007) Through this analysis it was concluded that existing data mechanisms are largely sufficient to meet identified data gaps, however, concerns relate to the analysis and processing of data. Effort is required to improve the use and analysis of indirect evidence; to clarify indicator formatting required (e.g., trends, levels) and to standardize data reporting formats.

Table 1 IPC reference table

Key	/ reference outcomes	Strategic response framework
(Current or imminent outcomes on lives and livelihoods, based on convergence of direct and indirect evidence rather than absolute thresholds: not all indicators must be present).		Objectives: (i) mitigate immediate outcomes (ii) support livelihoods, and (iii) address underlying causes
Phase classification 1:	Generally food secure	
Crude mortality rate	<0.5/10,000/day	
Acute malnutrition	<3% (w/h <-2 z-scores)	<ul> <li>Strategic assistance to pockets of food insecure groups</li> </ul>
Stunting	<20% (h/age <-2 z-scores)	
Food access/availability	Usually adequate (>2,100 kcal ppp day), stable	<ul> <li>Investment in food and economic production systems</li> </ul>
Dietary diversity	Consistent quality and quantity of diversity	<ul> <li>Enable development of livelihood</li> </ul>
Water access/availability	Usually adequate (>15 litres ppp day), stable	systems based on principles of
Hazards	Moderate to low probability and vulnerability	sustainability, justice, and equity
Civil security	Prevailing and structural peace	<ul> <li>Prevent emergence of structural</li> </ul>
Livelihood assets	Generally sustainable utilization (of 6 capitals)	hindrances to food security – Advocacy
Phase classification 2:	Chronically food insecure	
Crude mortality rate		_ Design and implement strategies to
or ado mortanty rate	<0.5/10,000/day; U5MR<1/10,000/day	- Design and implement strategies to
Acute malnutrition	<0.5/10,000/day; U5MR<1/10,000/day >3% but <10% (w/h <-2 z-score), usual range, stable	increase stability, resistance and resilience of livelihood systems,
	>3% but <10% (w/h <-2 z-score), usual	increase stability, resistance and resilience of livelihood systems, thus reducing risk
Acute malnutrition	>3% but <10% (w/h <-2 z-score), usual range, stable	resilience of livelihood systems,
Acute malnutrition stunting	<ul> <li>&gt;3% but &lt;10% (w/h &lt;-2 z-score), usual range, stable</li> <li>&gt;20% (h/age &lt;-2 z-scores)</li> <li>Borderline adequate (2,100 kcal ppp day);</li> </ul>	<ul> <li>increase stability, resistance and resilience of livelihood systems, thus reducing risk</li> <li>Provision of 'safety nets' to high risk groups</li> <li>Interventions for optimal and</li> </ul>
Acute malnutrition stunting Food access/availability	<ul> <li>&gt;3% but &lt;10% (w/h &lt;-2 z-score), usual range, stable</li> <li>&gt;20% (h/age &lt;-2 z-scores)</li> <li>Borderline adequate (2,100 kcal ppp day); unstable</li> </ul>	<ul> <li>increase stability, resistance and resilience of livelihood systems, thus reducing risk</li> <li>Provision of 'safety nets' to high risk groups</li> </ul>
Acute malnutrition stunting Food access/availability Dietary diversity	<ul> <li>&gt;3% but &lt;10% (w/h &lt;-2 z-score), usual range, stable</li> <li>&gt;20% (h/age &lt;-2 z-scores)</li> <li>Borderline adequate (2,100 kcal ppp day); unstable</li> <li>Chronic dietary diversity deficit</li> <li>Borderline adequate (15 litres ppp day);</li> </ul>	<ul> <li>increase stability, resistance and resilience of livelihood systems, thus reducing risk</li> <li>Provision of 'safety nets' to high risk groups</li> <li>Interventions for optimal and sustainable use of livelihood assets</li> </ul>
Acute malnutrition stunting Food access/availability Dietary diversity Water access/availability	<ul> <li>&gt;3% but &lt;10% (w/h &lt;-2 z-score), usual range, stable</li> <li>&gt;20% (h/age &lt;-2 z-scores)</li> <li>Borderline adequate (2,100 kcal ppp day); unstable</li> <li>Chronic dietary diversity deficit</li> <li>Borderline adequate (15 litres ppp day); unstable</li> </ul>	<ul> <li>increase stability, resistance and resilience of livelihood systems, thus reducing risk</li> <li>Provision of 'safety nets' to high risk groups</li> <li>Interventions for optimal and sustainable use of livelihood assets</li> <li>Create contingency plan</li> </ul>
Acute malnutrition stunting Food access/availability Dietary diversity Water access/availability Hazards	<ul> <li>&gt;3% but &lt;10% (w/h &lt;-2 z-score), usual range, stable</li> <li>&gt;20% (h/age &lt;-2 z-scores)</li> <li>Borderline adequate (2,100 kcal ppp day); unstable</li> <li>Chronic dietary diversity deficit</li> <li>Borderline adequate (15 litres ppp day); unstable</li> <li>Recurrent, with high livelihood vulnerability</li> </ul>	<ul> <li>increase stability, resistance and resilience of livelihood systems, thus reducing risk</li> <li>Provision of 'safety nets' to high risk groups</li> <li>Interventions for optimal and sustainable use of livelihood assets</li> <li>Create contingency plan</li> <li>Redress structural hindrances to food security</li> <li>Close monitoring of relevant</li> </ul>
Acute malnutrition stunting Food access/availability Dietary diversity Water access/availability Hazards Civil security	<ul> <li>&gt;3% but &lt;10% (w/h &lt;-2 z-score), usual range, stable</li> <li>&gt;20% (h/age &lt;-2 z-scores)</li> <li>Borderline adequate (2,100 kcal ppp day); unstable</li> <li>Chronic dietary diversity deficit</li> <li>Borderline adequate (15 litres ppp day); unstable</li> <li>Recurrent, with high livelihood vulnerability</li> <li>Unstable; disruptive tension</li> </ul>	<ul> <li>increase stability, resistance and resilience of livelihood systems, thus reducing risk</li> <li>Provision of 'safety nets' to high risk groups</li> <li>Interventions for optimal and sustainable use of livelihood assets</li> <li>Create contingency plan</li> <li>Redress structural hindrances to food security</li> </ul>

Table 1 continues

Phase classification 3:	Acute food and livelihood crisis	
Crude mortality rate	0.5-1/10,000/day, U5MR 1-2/10,000/day	<ul> <li>Support livelihoods and protect vulnerable groups</li> <li>Strategic and complimentary interventions to immediately ↑ food access/availability and support livelihoods</li> </ul>
Acute malnutrition	10-15% (w/h <-2 z-score), >than usual, increasing	
	Epidemic; increasing	
Food access/availability	Lack of entitlement; 2,100 kcal ppp day via asset stripping	<ul> <li>Selected provision of complimentary sectoral support (e.g., water, shelter, sanitation, health, etc.)</li> <li>Strategic interventions at community to national levels to create, stabilize, rehabilitate, or protect priority livelihood assets</li> <li>Create or implement contingency plan</li> <li>Close monitoring of relevant outcome and process indicators</li> </ul>
Dietary diversity	Acute dietary diversity deficit	
Water access/availability	7.5-15 litres ppp day, accessed via asset stripping	
Destitution/displacement	Emerging; diffuse	
Civil security	Limited spread, low intensity conflict	
Coping	'Crisis strategies'; CSI >than reference;	
	increasing	<ul> <li>Use 'crisis as opportunity' to redress</li> </ul>
Livelihood assets	Accelerated and critical depletion or loss of access	underlying structural causes – Advocacy

Phase classification 4:	Humanitarian crisis	
Crude mortality rate	-2/10,000/day, >2x reference rate, increasing U5MR >2/10,000/day	<ul> <li>Urgent protection of vulnerable groups</li> </ul>
Acute malnutrition	>15% (w/h <-2 z-score), >than usual, increasing	<ul> <li>Urgently ↑ food access through complimentary interventions</li> </ul>
Disease	Pandemic	<ul> <li>Selected provision of complimentary</li> </ul>
Food access/availability	Severe entitlement gap; unable to meet 2,100 kcal ppp day	sectoral support (e.g., water, shelter, sanitation, health, etc.)
Dietary diversity	Regularly 3 or fewer main food groups consumed	<ul> <li>Protection against complete livelihood asset loss and/or advocacy for access</li> </ul>
Water access/availability	< 7.5 litres ppp day (human usage only)	<ul> <li>Close monitoring of relevant outcome and process indicators</li> </ul>
Destitution/displacement	Concentrated; increasing	•
Civil security	Widespread, high intensity conflict	<ul> <li>Use 'crisis as opportunity' to redress underlying structural causes</li> </ul>
Coping	'Distress strategies'; CSI significantly >than reference	– Advocacy
Livelihood assets	Near complete and irreversible depletion or loss of access	
Phase classification 5:	Famine/humanitarian catastrophe	
Crude mortality rate	>2/10,000/day (example: 6,000/1,000,000/30 days)	<ul> <li>Critically urgent protection of human lives and vulnerable groups</li> </ul>
Acute malnutrition	>30% (w/h <-2 z-score)	<ul> <li>Comprehensive assistance with basic needs (e.g., food, water, shelter, sanitation, health, etc.)</li> </ul>
Disease	Pandemic	
Food access/availability	extreme entitlement gap; much below 2,100 kcal ppp day	<ul> <li>Immediate policy/legal revisions where necessary</li> </ul>
Water access/availability	<4 litres ppp day (human usage only)	<ul> <li>Negotiations with varied political-</li> </ul>
Destitution/displacement	Large scale, concentrated	economic interests
Civil security	Widespread, high intensity conflict	<ul> <li>Use 'crisis as opportunity' to redress underlying structural causes</li> </ul>
Livelihood assets	Effectively complete loss; collapse	Advocacy

Within southern Sudan, the preliminary introduction of the IPC points to familiar trends (FAO 2007b). Although in the early stages of application, the IPC approach is pulling together information from a number of key sources including agricultural production output analysis undertaken by FAO with the ministry of agriculture; Comprehensive Food Security and Vulnerability Mapping Survey (WFP) and analysis from the Livelihood Analysis Forum (LAF). The analysis is helping different stakeholders to share information, identify information gaps and streamline future data collection and analysis.

In all cases—and based on wider experiences at regional level—the challenges posed by data availability and analysis highlight that greater guidance is required on the overall process of analysis supporting the IPC. This brings into focus the need for more detailed guidance notes and information on the composition of technical teams.

### **3.3 Adaptation of IPC framework**

The IPC framework has been applied at country level in Kenya and informally through a number of regional outlook training and awareness exercises targeted at country experts and representatives. Initial country experiences highlight the way initial challenges are being approaches.

The adaptation of the IPC Framework outside of the Somalia context raises a number of technical issues that are currently being addressed in different contexts. Three key technical issues concern:

- Chronic factors: The phase classifications and general descriptors appear to include chronic aspects only in the second phase. This raises comparison problems because it introduces chronic factors in an apparently imbalanced manner across the classification. It also raises some possible ambiguities in terminology given the confusion that relates to the conceptualization of chronic food insecurity to describe both temporal and severity aspects (Devereaux 2006).
- Analysis-response continuum: The IPC delineates between situation and response analysis, as the first two steps in a response-analysis continuum. The separation of situation and response analysis is designed to safeguard the neutrality of analysis and recognises that response analysis and planning is part of wider negotiated processes. The underdeveloped nature of response analysis raises questions as to whether the IPC could (or should) be tailored to inform response
- Early warning aspects: An understanding of the current situation and its likely evolution is required in order to plan appropriate responses. The combination of both functions under the IPC framework raises methodological and conceptual challenges, for example, concerning the linkage between outcome and process outcomes.

### **3.4** Chronic factors

Initial experiences, particularly from Kenya, Rwanda, South Sudan and Tanzania training exercises, highlight some challenges and early progress in dealing with chronic factors (FSNWG 2007b).

In considering that the term 'chronic' relates to the *duration* of food insecurity the labelling and definition of the phase classifications may be problematic. Phase classification 2 (chronically food insecure) is the only category to introduce a temporal component.

To this end, for countries confronted with persistent or long-term food insecurity the overall utility of phase classifications 1 and 2 in distinguishing diverse sets of interventions to address structural factors may be a relative area of weakness in the framework. Early experiences point to the following recommendations:

- The second phase classification could be relabelled 'borderline food insecure' (FSNWG). This makes the framework more consistent in classifying severity. It also maintains the sensitivity amongst classifications and relevance of current reference outcome indicators. As argued by Deveraux (2006) such information is most important and urgent in an emergency programming context than the duration of food insecurity. It also helps to defuse ambiguity on terminology.
- As recommended within Kenya, temporal factors could be considered through the introduction of a more systematic 'chronic ranking'. For example, a simplified ranking could indicate the number of years all phases have been in a given crisis e.g., (<3 years, 4-7 years, 8-10 years). This may also draw attention to the more detailed analytical templates concerning chronic factors.

The way forward concerning chronic dimensions of food security needs further elaboration and testing, particularly where changes to the IPC framework are envisaged. Further review by a technical working group at international level overseeing the development of the IPC is anticipated.

### 3.5 Situation and response analysis

In the recent Kenyan Short Rains Assessment, the team that developed the IPC situation analysis went a step further to develop a response analysis by phase and livelihood zone. The government of Kenya and WFP included a food sector response including beneficiary numbers and food requirements through the food estimates sub-committee of the KFSM. The latter, while using the IPC situation analysis, is necessarily a negotiated process.

The central question is, therefore, 'where does the IPC stop?'. For some critics the IPC falls short. Lawrence and Maunder (2007) argue that since the situation analysis includes the magnitude of the problem, it should also encompass needs assessment more thoroughly, the outputs of which include estimates of the number of people in need and the deficits they face.

The IPC approach purposely delineates between both situation and response analysis in order to promote the importance of a neutral and multidimensional analysis of food insecurity. To this end, the IPC focuses only on estimating the severity and magnitude of the problem as reflected through phase classifications and population estimates. By defining the problem and identifying its multidimensional nature, the IPC as envisaged is designed to set the parameters of a response analysis. This is informed by evidence based templates and further supported by a strategic response framework. The response

analysis that follows would then most probably include a needs assessment to inform policy formulation and targeting based upon the identified problem.

For the above reasons the emerging lessons from Kenya highlight the importance of *bridging* situation and response analysis—as distinct from introducing a more refined response analysis into the IPC framework. Already the generalized strategic response framework provides a series of non-prescriptive recommendations which can provide a bridge to response analysis. The Kenya experience also highlights that active measures need to be taken to convene appropriate stakeholders in a response analysis forum after a given IPC analysis. Within Kenya this recommendation underpins the continued importance of institutional factors.

### 4 Conclusions

The paper highlights the imperative for improved analysis to enable more appropriate responses to crises. In particular, there is significant potential for food security analysis to be more systematic, using common standards and reference criteria that will enable more comparable analysis and foster minimal standards of rigour. Here, the value added of the IPC is explored as a mechanism to promote more comparable and transparent analysis with the aim of ensuring more strategic, timely and needs based response.

The case study evidence highlights the initial stages of IPC development outside of the original context in Somalia. This points to the unique field-based nature of the tool and the iterative lesson learning which is envisaged to support its more systematic development in the coming years by a range of national and international partners.

Based upon initial experiences in developing the IPC, early evidence points to the following conclusions concerning the development of classification systems to understand food crises and vulnerability

The IPC applications point to the importance of national buy-in the analysis of food security and vulnerability matters. Institutional aspects within a country need to be considered to ensure ownership and transparency of approach and ultimately the translation of food security objectives into national programmes and poverty reduction strategies where they exist.

The value added of the IPC is to bring consistency to the early stages of analysis particularly through the separation of situation from response analysis. Too often, immediate responses to crises tend to prioritize needs assessments, largely based on a pre-determined set of response options. The bridge between situation analysis, the underlying causes and risk and the analysis of response options, has proven to be more accurate in providing a broader basis for policy framework.

From the vulnerability perspective, this suggests that the IPC helps to illustrate underlying elements of vulnerability, such as whether certain hazards are of a covariate or idiosyncratic nature. From here the analysis can be used to determine the potential severity and magnitude of a crisis event, with the early warning providing a valuable signal on future vulnerability patterns.

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