Integrated Food Security Phase Classification



User Guide Version 1.0



Prepared by the IPC in the Central and Eastern Africa Region Project

Integrated Food Security Phase Classification



User Guide Version 1.0

Prepared by the IPC in the Central and Eastern Africa Region Project

Updates to this user guide are available at: www.ipcinfo.org

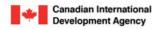
This User Guide was prepared by the IPC in the Central and Eastern Africa Region Project, managed by FAO

Funding Agencies:



The European Union





IPC Global Partners:

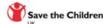
















Please cite this manual as:

Integrated Food Security Phase Classification User Guide, Version 1.0, prepared by The IPC in the Central and Eastern Africa Region Project, 2008, FAO, Nairobi.

The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations and the IPC Global Partners concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The mention of specific companies or products of manufacturers, whether or not these have been patented, does not imply that these have been endorsed or recommended by FAO and the IPC Global Partners in preference to others of a similar nature that are not mentioned. The views expressed in this information product are those of the author(s) and do not necessarily reflect the views of FAO and the IPC Global Partners.

All rights reserved. Reproduction and dissemination of material in this information product for educational or other non-commercial purposes are authorized without any prior written permission from the copyright holders provided the source is fully acknowledged. Reproduction of material in this information product for resale or other commercial purposes is prohibited without written permission of the copyright holders. Applications for such permission should be addressed to:

Chief Electronic Publishing Policy and Support Branch Communication Division FAO Viale delle Terme di Caracalla, 00153 Rome, Italy

or by e-mail to: copyright@fao.org

© FAO 2009

FORWARD

This User Guide is intended to provide step-by-step guidance on how to use the IPC tool in a typical country environment. While it can be used as a stand-alone document, it is best used as a practical complement to the IPC Technical Guide.

The IPC is a relatively new tool and its application is not set in stone. Because of its use outside of the unique context of Somalia and the involvement of more partners, the tool is being developed and refined further in many areas. This has naturally inspired many interesting and constructive debates on different aspects of the IPC. This version of the Guide points out the areas that are currently being debated – mostly as footnotes –, and will be updated on an 'as need basis' to reflect changes as they occur. It should therefore be considered a living document rather than a static reference. While changes are both inevitable and positive, the guide was received very well during initial testing at workshops and trainings. Including feedback from these events and from other partners, this first version is regarded as a useful contribution for practical application of the IPC.

The Guide is an output of FAO's Regional IPC Project (OSRO/RAF/709/CAN, OSRO/RAF/711/UK and OSRO/RAF/712/EC), that targeted five countries in the East and Central Africa region during 2007/8 – Kenya, Burundi, Uganda, Tanzania and the Democratic Republic of Congo – with the aim of introducing the tool and learning from the experience.

FAO is grateful to the donors of the project: the Canadian International Development Agency (CIDA), The UK's Department for International Development (DFID) and the European Commission Humanitarian Office (ECHO).

ACKNOWLEDGEMENTS

The principle author of the IPC User Guide was Calum McLean (FAO IPC Regional Training Coordinator). Substantive writing and editorial work was provided by John Anderson (FAO Regional Emergency Food Security Consultant) and Jonathon Brass (IPC NGO Focal Point), and overall guidance provided by Francesco Del Re (FAO Emergency Food Security Advisor). Comments were kindly provided by World Food Programme, FAO Head Quarters and the FAO Somalia FSAU. The drafters would also like to thank the participants at the: National IPC Analysis Workshops in Uganda and Kenya; Training of Trainers events; and at the Regional IPC Technical Workshop in Nairobi, for providing feedback on the guide and making very helpful suggestions for improvements.





TABLE OF CONTENTS

LIST OF ACRONYMS AND GLOSSARY

INTRODUCTION

Getting Started: Purpose of the Guide and Relation to the Technical Manual

- A. Why the IPC?
- B. What It Is and Added Value
- C. What It Isn't
- D IPC Components
 - Reference Table
 - Evidence Template Protocols
 - Cartographic Protocols
 - Population Table Protocols

MODULE 1: BUILDING YOUR EVIDENCE

- 1.1 Objective of the Module and What You Will Be Able to Do When You Have Completed It
- 1.2 What You Need
- 1.3 Before You Start...
- 1.4 Step 1: Things to Think About Before Entering Your Data
 - 1.4.1 Review your data and hazards, and decide how the analysis should be done
 - 1.4.2 General guidelines
- 1.5 Step 2: Filling out the First Column of Evidence Template 1: An Indicator by Indicator Guide

MODULE 2: DOING THE PHASE CLASSIFICATION

- 2.1 Objective of the Module and What You Will Be Able to Do When You Have Completed It
- 2.2 What You Need
- 2.3 Before You Start...
- 2.4 Step 1: Classifying Each Indicator in Turn
- 2.5 Step 2: Convergence of Evidence and Overall Classification

MODULE 3: RISK ANALYSIS

- 3.1 Objective of the Module and What You Will Be Able to Do When You Have Completed It
- 3.2 What You Need
- 3.3 Before You Start...
- 3.4 Step 1: Developing a Risk Analysis Matrix
- 3.5 Step 2: Making the Prediction on Risk

MODULE 4: THE NUMBERS GAME - ESTIMATING POPULATIONS IN EACH PHASE

- 4.1 Objective of the Module and What You Will Be Able to Do When You Have Completed It
- 4.2 What You Need
- 4.3 Before You Start...
- 4.4 Step 1: Estimating Populations in Each Phase
- 4.5 Step 2: Validation and Peer Review

MODULE 5: IMPACT ANALYSIS AND WHAT TO DO ABOUT IT

- 5.1 Objective of the Module and What You Will Be Able to Do When You Have Completed It
- 5.2 What You Need
- 5.3 Before You Start...
- 5.4 Step 1: Filling out the Evidence Template Part 2
- 5.5 Step 2: Filling out the Evidence Template Part 3

MODULE 6: DEVELOPING YOUR MAP

- INFORMATION THAT YOU NEED TO GIVE TO YOUR GIS TECHNICIAN

- 6.1 Objective of the Module and What You Will Be Able to Do When You Have Completed It
- 6.2 What You Need
- 6.3 Before You Start...
- 6.4 Step 1: Phase Classifications of the Spatial Analysis (LZ; Admin Zones Etc) Together With the Risk Analysis
- 6.5 Step 2: Develop Call out Boxes for Emergency Phases (3-5) or Other Phases that You Want to Make Particular Reference to [includes population estimates and the stacked bar]
- 6.6 Step 3: Develop a Clear Title for the Map Including the Period of Validity

MODULE 7: HOW DO YOU KNOW YOU GOT IT RIGHT? THE PEER REVIEW PROCESS

- 7.1 Objective of the Module and What You Will Be Able to Do When You Have Completed It
- 7.2. What You Need
- 7.3 General Description
- 7.4 Step 1: Reviewing the Phase Classification for Different Areas/ Livelihood Zones in Your Country (or Part of Your Country)
- 5.5 Step 2: Finalising Any Revisions and Preparing the Final Map and Summary Statements
- 7.6 Step 3: Disseminating the Outputs

MODULE 8: HOW TO ESTABLISH AN IPC IN YOUR COUNTRY

- 8.1 Objective of the Module and What You Will Be Able to Do When You Have Completed It
- 8.2 What You Need
- 8.3 Before You Start
- 8.4 Step 1: Giving Your IPC A Home Institutional Considerations
 - 8.4.1 Finding a home for the IPC: institutional mapping
 - 8.4.2 Getting acceptance and buy-in: awareness raising; importance of national governmental ownership and leadership
 - 8.4.3 Getting the right people around the table
- 8.5 Step 2: Learn From Using the IPC in Your Country with Your Data
 - 8.5.1 Using the IPC as part of ongoing processes of assessment/analysis
 - 8.5.2 Learning from the process
 - 8.5.3 Data issues: mapping and meta-data analysis
 - 8.5.4 Adaptation of the tool without changing the core
- 8.6 Step 3: Building Capacity and Decentralisation
 - 8.6.1 Building a national IPC team
 - 8.6.2 Training of trainers
 - 8.6.3 Decentralisation: maintaining rigour, objectivity, checks and balances, peer review

ANNEX 1: Types and Sources of Data

ANNEX 2: Glossary of Terms: English - French

ANNEX 3: FSAU Method for Calculating Population Estimates for AFLC and HE IPC Phases

LIST OF ACRONYMS AND GLOSSARY

AFLC Acute Food and Livelihood Crisis (IPC Phase 3)
ALRMP Arid Lands Resource Management Project (Kenya)

ASAL Arid and Semi-Arid Lands
CAP Consolidated Appeals Process

CARE International NGO and Global IPC Partner

CFSAM Crop and Food Supply Assessment Mission (FAO/WFP)

CFSVA Comprehensive Food Security and Vulnerability Assessment (WFP)

CMR Crude Mortality Rate

COF Climate Outlook Forum (convened by ICPAC)

CSI Coping Strategies Index

Devr Somali term for the October to December rainy season

DDI Dietary Diversity Index

DFID UK Department for International Development

DHS Demographic and Health Surveys

EC European Commission

FANTA USAID Food and Nutrition Technical Assistance

FAO Food and Agriculture Organization of the United Nations and Global IPC Partner

FEWS NET Famine Early Warning Systems Network and Global IPC Partner

FHC Famine/Humanitarian Catastrophe (IPC Phase 5)

FSAU Food Security Analysis Unit – Somalia

GAM Global Acute Malnutrition

GFS Generally Food Secure (IPC Phase 1)
GIEWS Global Information Early Warning System

GIS Geographic Information Systems

Gu Somali term for the March to July rainy season h/a Height for Age (anthropometric measure of stunting)

HE Humanitarian Emergency (IPC Phase 4)

HEA Household Economy Approach

HFIAS Household Food Insecurity Access Scale HDDS Household Dietary Diversity Score HNTS Health and Nutrition Tracking Service

HPG Humanitarian Policy Group

IASC UN Inter-agency Standing Committee

ICPAC IGAD Climate Prediction and Application Centre
ICRC International Committee of the Red Cross

IDPs Internally Displaced Persons

IPC Integrated Food Security and Phase Classification

Kcal Kilo calories

LEWS Livestock Early Warning System (managed by Texas A&M)

LTM Long Term Mean

LRRD Linking Relief, Recovery and Development

LZ Livelihood Zone

M/BFI Moderate/Borderline Food Insecure (IPC Phase 2)

MoA Ministry of Agriculture
MoH Ministry of Health
MT Metric Tonne

MUAC Mid-Upper Arm Circumference
NAF Needs Analysis Framework
NGO Non-Governmental Organization

OP Office of the President
OPM Office of the Prime Minister

OXFAM (GB) International NGO and Global IPC Partner

LIST OF ACRONYMS AND GLOSSARY

PWA Post War Average (used in Somalia as recent long-term average for crops production ...etc)

SAM Severe Acute Malnutrition

SCUK Save the Children – United Kingdom, and Global IPC Partner

SCN - UN Standing Committee on Nutrition

SENAC Strengthening Emergency Needs Assessment Capacity

Shoats Abbreviation for 'sheep and goats' SLA Sustainable Livelihoods Approach

SMART Standardized Monitoring and Assessment of Relief and Transitions

U5MR Under-5 Mortality Rate

UN United Nations

UN-OCHA United Nations Office for the Coordination of Humanitarian Affairs

UNAIDS The Joint United Nations Programme on HIV/AIDS

UNDP United Nations Development Programme

UNHCR United Nations High Commissioner for Refugees

UNICEF United Nations Children's Fund

USAID United States Agency for International Development VAM The Vulnerability Analysis Mapping office of WFP

w/h Weight for Height (anthropometric measure of acute malnutrition)

WHO World Health Organisation of the United Nations

WFP United Nations World Food Programme and Global IPC Partner

INTRODUCTION

Getting Started:

Purpose of the Guide and Relation to the Technical Manual



Welcome to the Users Guide for the Integrated Food Security Phase Classification (IPC). The purpose of this guide is to provide you with a practical step-by-step explanation of how to actually implement the IPC, a process and set of tools to guide and communicate food security situation analysis. The guide is designed for food security practitioners that are using the IPC in conducting food security assessments and analysis, and can be used either as preparatory reading in headquarters or as a reference guide in the field.

This Users Guide is one of several products that have been developed to support the use of the IPC, the latest versions of which can be found at the IPC website: www.ipcinfo.org. Two other main products include:

- The Integrated Food Security Phase Classification Technical Manual, which provides detailed technical guidance on the use of the IPC for food security analysis. This manual discusses the rationale for developing the IPC, the analytical logic of the IPC, and the details of the various indicators and tools that form the basis of the IPC analysis. The Technical Manual should be considered the primary source of information about the IPC, and will be referenced many times in this User Guide.
- *IPC training courses and presentations*, including distance-learning modules and courses to be delivered in-person by a trainer. These courses not only present the rationale for developing the IPC, its analytical logic, and the details of its various indicators and tools, but also include exercises and questions for the users, as they are designed to educate practitioners about the IPC. These courses serve as preparatory training before practitioners begin to use the IPC.

The IPC User Guide complements these other products, walking you through the step-by-step 'how to' of implementing the IPC in the field. Ideally, users will have already completed an IPC training course, and will have the IPC Technical Manual on hand for reference while using this guide. However, even on its own this IPC Users Guide will be a valuable tool for food security practitioners to simplify the process of conducting an IPC analysis.

The guide is divided into one **introductory section** that includes the Getting Started and Overview of the IPC subsections, and **eight modules** that go through the step-by-step process of how to do an IPC analysis. The introductory overview of the IPC includes subsections on 'Why the IPC?', 'What It Is and Added Value'; 'What It Isn't'; and a basic description of the four main components of the IPC (the Reference Table, Evidence Templates, Cartographic Protocols, and Population Tables). Following the brief overview the modules on how to do an IPC analysis are introduced: *Module 1: building your evidence; Module 2: doing the phase classification; Module 3: risk analysis; Module 4: the number game: estimating populations in each phase; Module 5: impact analysis and what to do about it; Module 6: developing your map- information that you need to give to you GIS technician; Module 7: how do you know you got it right? the peer review process; and Module 8: how to establish an IPC in your country.*

Please note that the fundamental purpose of this guide is to make the use of IPC easier for food security practitioners like you. As such, this guide will be regularly updated based on user feedback. Please feel free to send any comments or suggestions on how the guide could be improved to: **contact@ipcinfo.org**.

A. Why the IPC?

In the food security community, there has been a lack of clarity and common definitions for classifying various food security situations in terms of varying severity and implications for action. This lack of clarity is problematic for several reasons:

- The way a situation is classified determines not only the type of response, but also the source of funding, scale, planning timeframe, and organizational roles of different stakeholders.
- Without commonly accepted standards for classifying the nature and severity of food security situations, the design and targeting of interventions can be open to personal, government, agency, and donor biases.

These problems can lead to imprecise or gross misallocations of scarce resources, and in the worst-case scenario, even loss of lives.

As a result, there have been increasingly strong calls for improved analysis within the cross-cutting field of food security, including:

- greater comparability of results from one place to another
- · increased rigour
- greater transparency of evidence to support findings
- increased relevance to strategic decision making
- stronger linkages between information and action

Improving analysis along these lines would enable food security interventions to be more needs-based, strategic, and timely, and there is an urgent practical and operational need for a food security classification system that is broadly accepted by the wide range of stakeholders. Put simply: "We, the food security community, need a common currency (language and analytical procedures) for describing the nature and severity of food security situations"

B. What It Is and Added Value

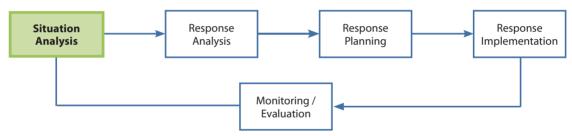
The IPC is designed to fill this critical gap in food security analysis. It provides a common classification system (a 'common currency') that draws from the strengths of existing classification systems and integrates them with supporting tools for analysis and communication.

Specifically, the IPC is a means to classify varying phases of current food security situations based on outcomes on human lives and livelihoods. The IPC includes five levels of food security (called 'phases'): *Generally Food Secure, Moderately/Borderline Food Insecure, Acute Food and Livelihood Crisis, Humanitarian Emergency,* and *Famine/Humanitarian Catastrophe*. Additionally, the IPC considers the risk that conditions will deteriorate (called the 'Risk of Worsening Phase'), including three levels: *Watch, Moderate Risk,* and *High Risk*.

The approach of the IPC is to draw together all available food security information (or 'evidence'), ranging from production figures to livestock prices to civil insecurity to malnutrition rates, to make a Phase Classification and/or Risk of Worsening Phase statement. The IPC relies on, and indeed encourages, multiple data sources and methods. The IPC then provides a 'convergence of evidence' approach and a set of tools to arrive at a 'big picture' analysis, or meta-analysis, of the overall food security situation. The outcomes of the process are several communication tools – specifically a map and population tables – that convey the key messages about the severity and magnitude of food insecurity.

The IPC focuses on **situation analysis** in its analysis and communication. Situation analysis is a distinct yet often overlooked or assumed stage in the analysis, planning, and response process, demonstrated here with the 'Analysis-Response Continuum' (Figure B.1):





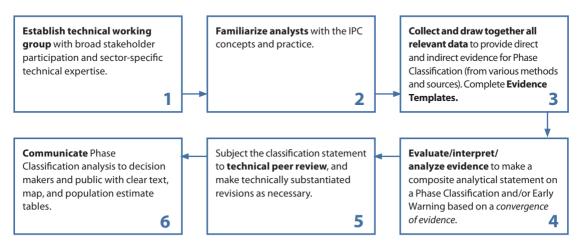
Through its focus on situation analysis, key aspects of the IPC analytical process include:

- Severity of the situation: How severe is the situation with regards to impacts on human lives and livelihoods?
- *Geographic extent*: What is the approximate geographic area in crisis? This can include livelihood zones, administrative boundaries, agro-ecological zones, etc.
- *Magnitude:* What is the estimated number of people experiencing various severity levels of food insecurity?
- *Immediate causes:* What are the direct causes of the crisis?
- *Underlying causes:* What are the underlying or structural causes of the crisis?
- Identification of general needs: What basic human needs and aspects of livelihood systems require support?
- *Distinction of transitory or chronic situations:* Is the underlying nature of an acute crisis generally food secure or chronically food insecure?
- *Criteria for social targeting*: What are the key criteria for targeting interventions?
- *Projected trend:* Are conditions in the area expected to improve, to worsen, or stay the same for the foreseeable future?
- Confidence level of analysis: How confident are the analysts in the outcome of their analysis, based on the estimated reliability of the available evidence?

The IPC does provide strong linkages to response analysis. However, response analysis is kept as a separate analytical stage to ensure greater technical neutrality of the analysis. Discussions about response options can be biased by the agendas of different organizations and groups, and the IPC insulates the situation analysis from such biases to keep it as technically neutral as possible.

In addition to the maps and population tables that are produced to communicate the outcomes of the food security analysis, the actual process of conducting IPC analysis is equally important to applying the technical tools correctly. Figure B.2 illustrates the general process including the six main steps of using the IPC.

Figure B.2: The main steps in IPC analysis



The modules that follow in this Users Guide cover these steps, but are presented in a different order based on the expected needs of most users. *Module 1* which covers Step #3 is likely the starting point for most users of this guide. *Modules 2 - 6* cover the various dimensions of Step #4, and *Module 7* corresponds to Step #5. For countries where the IPC is just beginning, *Module 8* goes through the process of establishing a technical working group and familiarizing analysis with IPC concepts and practice (Step #1 and Step #2).

Steps 6– communicating the outputs to the decision makers and the public – follows the completion of the IPC analytical process, and is not covered by this guide.

These steps are the core of the IPC process. By following them, users are able to benefit from **the added value of the IPC**, which includes:

- *Comparability over space:* The IPC uses commonly adopted criteria, which enables comparison of the severity of situations from one place to another. Decision makers can then direct resources to the people most in need.
- *Comparability over time*: The common IPC criteria also enable comparison over time in terms of how a situation is worsening or improving. Decision makers can then increase, decrease, or change the strategic focus of the response as well as identify exit criteria.
- *Transparency and accountability:* Analysts should be fully transparent in how conclusions are made, and decision makers should demand evidence to support findings. The IPC process takes an evidence-based approach that links specific reference criteria to the phase classification. This provides a transparent justification for the analytical conclusions, and also enforces accountability from the people responsible for the analysis.
- *Clear early warning:* Decision makers need to know the future potential severity, likelihood, and timing of a pending crisis. By providing a common understanding for describing crises, the IPC enables early warning messages to be clear, comparable, and actionable.
- *More strategic response:* Depending on the specific severity level of a given food security or humanitarian situation, there is a need for fundamentally different emphases in strategic response. The specificity, clarity, and comparability provided by the IPC enable decision makers to be strategic in their response to food insecurity.

C. What It Isn't

In addition to explaining what the IPC is, it is also important to highlight what it is not. First and foremost, the IPC is not a panacea for all the existing challenges in food security analysis. There remain numerous challenges, including with data collection, livelihoods analysis, and interpreting early warning signals, among others. The IPC facilitates and supports one aspect of food security analysis – situation analysis – although that aspect is an overarching one. Indeed, in many ways the IPC can serve as a 'window' into addressing the numerous other challenges associated with food security, and will hopefully draw attention to those and lead to more commitment to developing viable solutions.

More specifically, the IPC is not:

- A methodology. The IPC draws from numerous methods and data sources to analyze the situation.
 Methods and data can be quantitative or qualitative, and can come from field assessments, satellite imagery, or other secondary data. Indeed, the IPC encourages multiple methods of gathering and examining information; the more methods and data sources, the greater the ability for triangulation and likelihood of getting the analysis right.
- An information system. The IPC is designed to be adaptable to a wide variety of information systems and analytical approaches. In most countries that experience chronic food insecurity or recurrent humanitarian crises, an information system of some type typically exists. The IPC is designed to build from existing information systems in any given country and help make the most rigorous, consistent, and meaningful use of that data and analysis. As such, the IPC can be equally applicable in 'data rich' and 'data poor' settings.
- Response analysis. The IPC focuses on situation analysis. It also provides linkages to response
 analysis, but does not conduct this stage per se. By limiting itself to situation analysis, the IPC can
 remain technically neutral and avoid biases based on specific government/agency/ donor interests in
 one particular response or another.

The IPC is also not considered a final product. As it has been developed and implemented in new countries, various improvements and clarifications have been made. While the IPC is already useful in its present form, it is expected that further refinements will be made as the IPC is rolled out in new food security and livelihood contexts. Rather than waiting for the perfect tool to improve our analysis, the IPC roll-out approach is to 'learn-by-doing'. As such, as with this Users Guide, any input and feedback from users are welcome.

D. IPC Components

The sections above provided you with an overview of the general purpose, focus, and added value of the IPC. There are also four specific main 'components' of the IPC – the Reference Table, Evidence Templates, Cartographic Protocols, and Population Table. These serve as a suite of tools that are integrated together in the IPC process to enable the analysis and communicate the results. These main components will be referred to numerous times throughout the modules in the rest of this guide, and this section provides an initial overview of the components and how they relate to the overall IPC process.

The **Reference Table** presents the overarching framework for the IPC analysis. As its name suggests, it is purely for reference: it provides users with a quick but complete picture of the different phases of food insecurity and how they relate to the main indicators and strategic response options. Users do not have to fill out the table at all, but it will serve as a key resource throughout the whole IPC process. The Reference Table is first mentioned in this Users Guide at the very beginning of *Module 1: Building your Evidence*.

Specifically, the Reference Table defines the five phases of food security classification (from Generally Food Secure to Famine/Humanitarian Catastrophe) by the thresholds or characteristics of the main indicators (called 'Key Reference Outcomes', as they generally focus on actual outcomes of conditions on lives and livelihoods, such as acute malnutrition or mortality.

Some indicators are more process oriented, and indirectly relate to an eventual outcome, such as coping strategies or water availability and access. This enables analysts to consider how different pieces of evidence relate to each other and to a particular phase classification for a given geographic area. The different phases are also linked to the Strategic Response Framework. The Reference Table provides a similar definition for the different levels of Risk of Worsening Phase, including the different probabilities of the different levels of risk and the indicators that analysts should look for.

The **Evidence Template** is the tool that you will use to actually record your data in a manner that helps with the phase classification. The template is a blank table that includes space for users to write in the evidence/data and then the main outcomes of the analysis. One template will be filled in with data for each geographic area being considered in the analysis.

The templates are divided into three main parts. Part 1 (*explained in Modules 1, 2, and 3*) is the template in which you record your evidence (current and early warning) that enables you to do the actual classification. Parts 2 and 3 help you analyse the impacts of immediate hazards and underlying causes on livelihoods and consider potential strategic response options (*explained in Module 5*).

The next two components of the IPC are communication tools that you can use once the analysis is complete to share the results with others.

¹ N.B.: The IPC's use of 'outcome' indicators allows standardization and the ability compare food security conditions over time and space. However, process indicators are frequently used to support more direct outcome evidence, and when measures of outcome indicators are not available.

Once the Evidence Templates have been filled out and the analysis of different phase classifications has been completed, the key information is presented to a GIS expert. He or she then inputs the information into geographic information software and produces the IPC map, which is a primary way to communicate the IPC analysis. The **Cartographic Protocols** are basically an explanation of the 'official way' to make an IPC map. They explain issues such as what types of information should be included in the map and how to distinguish between different phases and risk levels. *Module 6* provides an overview of the Cartographic Protocols, although additional support may be needed for the more technical GIS issues (the basics of using a particular GIS computer software package, different ways of storing geographic IPC data, etc).

The second communication tool and fourth main component of the IPC is the **Population Table.** The basic purpose of this table is to simply communicate the number of people who fall into each phase classification. This can be done either at the local level (i.e. how many people are Generally Food Secure, Moderately/Borderline Food Insecure, etc in a particular region of the country) or at the national level (by adding up the number of people in the five phases in each local geographic area of the country). *Module 4* presents different ways of gathering and calculating this type of population data and explains how to communicate the information through a standardized table and in the IPC map.

Ready to start...

You now have a full understanding of the basic purpose, focus, and components of the IPC, and are ready to start an actual IPC analysis. If there is already a technical food security working group in place in your country utilizing the IPC and you are ready to start compiling evidence, you should begin with *Module 1*: Building your Evidence. If you are just starting the IPC in your country, *Module 8* will give you an overview of process and institutional considerations to take into account when first rolling out the IPC.

MODULE 1

BUILDING YOUR EVIDENCE



1.1 Objective of the Module and What You Will Be Able to Do When You Have Completed It

- **Objective**: to guide you in filling out the evidence template part 1, column one
- You will be able to:
 - o Decide the best geographic unit to base your analysis depending upon the kind of hazard and the way your data is aggregated
 - o Present your evidence on the template in a clear and effective way
 - o Distinguish between direct and indirect evidence
 - o Enter and interpret your data with regard to the reference outcomes used by the IPC

1.2 What You Need

- ✓ Your data
- ✓ The reference table, with a focus on the phases and reference outcome indicators (see page 4 of the Technical Manual)

Figure 1.1: An extract of the reference table

		Crude Mortality Rate	< 0.5 / 10,000 / day
		Acute Malnutrition	<3 % (w/h <-2 z-scores)
		Stunting	<20% (h/age <-2 z-scores)
		Food Access/ Availability	usually adequate (> 2,100 kcal ppp day), stable
1	Generally Food Secure	Dietary Diversity	consistent quality and quantity of diversity
		Water Access/Avail.	usually adequate (> 15 litres ppp day), stable
		Hazards	moderate to low probability and vulnerability
		Civil Security	prevailing and structural peace
		Livelihood Assets	generally sustainable utilization (of 6 capitals)
		Crude Mortality Rate	<0.5/10,000/day; U5MR<1/10,000/day
		Acute Malnutrition	>3% but <10 % (w/h <-2 z-score), usual range, stable
		Stunting	>20% (h/age <-2 z-scores)
		Food Access/ Availability	borderline adequate (2,100 kcal ppp day); unstable
		Dietary Diversity	chronic dietary diversity deficit
2	Moderately/ Borderline Food Insecure	Water Access/Avail.	borderline adequate (15 litres ppp day); unstable
	I oou misecure	Hazards	recurrent, with high livelihood vulnerability
		Civil Security	Unstable; disruptive tension
		Coping	'insurance strategies'
		Livelihood Assets	stressed and unsustainable utilization (of 6 capitals)
		Structural	Pronounced underlying hindrances to food security
		l	

[✓] A blank evidence template Part 1, with a focus on columns 1 and 2

Figure 1.2: Columns 1 and 2 of a blank evidence template (Part 1)

	Area of Analysis (Region, District, or Livelihood Zone):						
Reference Outcomes	Direct and Indirect Evidence For Phase in Given Time Period						
(As defined by IPC Reference Table)	 List direct and indirect (e.g., process or proxy indicators) evidence of outcomes (note direct evidence in bold) Note source of evidence Note evidence Reliability Score (1=very reliable, 2=somewhat reliable 3=unconfirmed) Identify indicative Phase for each piece of evidence Note 'Not Applicable' or 'Not Available' if necessary 						
Crude mortality rate	•						
Acute malnutrition	•						
Disease	•						
Food Access/Availability	•						
Dietary diversity	•						
Water access/availability	•						
Destitution/Displacement	•						
Civil Security	•						
Coping	•						
Structural Issues	•						
Hazards	•						
Livelihood Assets (5 capitals)	•						

1.3 Before You...

The evidence templates are simply a tool for enabling you to record your data in a manner that helps with the phase classification. The templates also make it easy for others to see your evidence and thereby why you decided on a particular phase classification. In this way, the templates both serve you as the analyst to store and show your data, and provide the basis for the IPC's transparency and accountability with the wider food security and humanitarian community.

The templates are divided into three main parts. Part 1 (dealt with in this module and in modules 2 and 3) is the template in which you record your evidence (current and early warning) which enables you to do the classification. Part 2 helps you analyse the impact of immediate hazards on livelihoods and leads to developing immediate response options. Part 3 is similar, but focuses on underlying causes, their effects on livelihoods and longer term response opportunities.

1.4 Step 1: Things to Think About Before Entering Your Data

1.4.1 Review your data and hazards, and decide how the analysis should be done

The first step in filling out Part 1 of the template is to decide the area to be analysed and classified (row 1). Generally speaking, it is best to select areas on the basis of livelihood zones because populations tend to be relatively homogeneous and affected in similar ways to a hazard or shock. For example, pastoralists may be affected by a drought in ways that are quite different to sedentary crop agriculturalists: their livelihood base is different (livestock rather than crops) and they are likely to adjust livelihood strategies in different ways (pastoralists are likely to move with their livestock to available pasture; agriculturalists may seek casual labour for example).

Having said this, administrative areas are frequently used as a unit of analysis, usually because data tends to be aggregated by these administrative units by government line ministries (and others) and may not be available for livelihood zones. Some countries have not developed spatial definitions of livelihood zones. In many cases, a mixture of administrative and livelihood zones are used: for example in Kenya several districts are clustered together and then the analysis is done by LZ within each cluster; a similar approach is followed in Southern Sudan with the State, or clusters of 2-3 states being the primary analysis unit and then LZ are analysed within the cluster. When thinking about using LZs or another unit, it is important to consider whether vulnerability varies more *within* the population of a given LZ or more *between* LZs, relative to the hazard that they are exposed to. For example, very poor people may be at equal risk across LZs rather than different wealth categories within a particular LZ – in this case poor people would be a better unit of analysis rather than LZs.

In some cases, the way that the hazard or shock is known to have affected a population will determine the way the analysis is conducted and the number of templates filled out. For example, in the 2008 post-election violence in Kenya, there were two distinctly different populations that were affected in different ways: the Internally Displaced People (IDPs) and the non-displaced farmers who were still on their land, but affected in different ways. In this case, two templates would be filled out. Another example may be the impact of flooding on different groups depending upon their proximity to the flooded areas. Again in this case two templates are likely to be appropriate: one for those directly affected by the flooding and one for those indirectly affected.

However your country decides to operate or is able to disaggregate the data and analysis, a separate template will be filled out for each area accordingly (administrative, livelihood zone or other unit). So for example, in north west Kenya pastoral cluster (Turkana, Marsabit, Moyale and Samburu Districts) the pastoral and agro-pastoral LZs would be analysed by two separate templates, with formal employment being left out completely (see Figure 1.3).

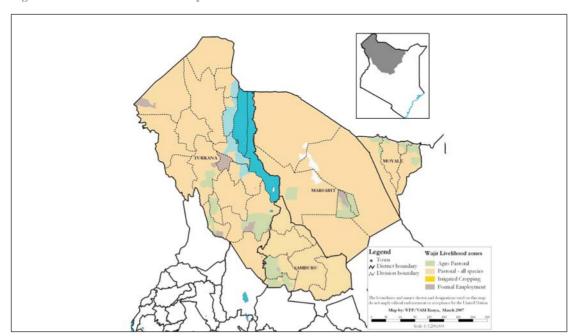


Figure 1.3: Livelihood Zones of Kenya's Northern Pastoral Cluster

1.4.2 General guidelines

Column two of the template is the main area in which you can record your data for further analysis. The easiest way to fill in this part of the template is to go down the list from indicator to indicator and add <u>all</u> the available data you have under each. It is important that you include *all* the data you have in as much detail as possible.

Summary statements on data that is analysed elsewhere, (such as in a report), is not usually considered to be sufficient evidence for making a classification or for accountability purposes. For example, a statement like "maize harvests were below normal" does not tell us very much; but a table showing actual production in an area with a long term average and actual/ percentage differences gives an accurate picture of one aspect of food availability, such as found in the below example from Kenya in Figure 1.4.

Figure 1.4: Use Tables to Present Data in Easily Understood Ways

Food Access/ Availability

Food Access:

o Food sources:

Own Production: District wide production almost met MoA targets for the year for maize and beans. Post election losses from the violence totalled 24% of the maize crop and 9% of the bean crop:

Larger Nakuru district	Maize (bags)	Beans (bags)	Potatoes (tonnes)
Expected output 2007	1,886,307	441,556	108,650
Post election losses	450,000	40,000	15,500
% losses	24	9	14

Non-displaced farmers report good harvests and no exceptional post harvest losses. Stores typically contain three times consumption requirements for the year (30 bags maize; 1.4 bags requirement/ person/year = 9.8 bags per household per year). In addition, some non-displaced farmers may have access to unharvested crops from displaced farmers, boosting potential food stores. Milk sources remain stable as a source of consumption.

Source: MoA and farmer interviews during SRA 08. Reliability = 1.

o Income sources:

Incomes mainly sales of surplus produce. Constraints to market access make sales difficult. Farm gate prices between 16% (maize) and 38% (beans) below wholesale prices.

Where possible and appropriate, add charts to summarise comparisons or timelines to show trends in data such as in this example from Karamoja in Uganda illustrated in figure 1.5.

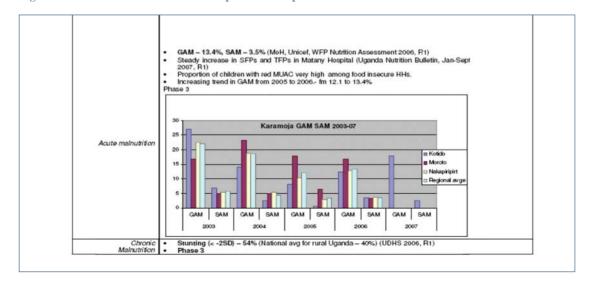


Figure 1.5: Use Charts to Get Across Important Comparisons or Timelines

Timelines are particularly important when season variations are part of the normal behaviour of an indicator, such as the price of staple food commodities which tend to reduce after a harvest and increase as the season progresses. An indicator that is behaving abnormally for the time of year may give cause for concern.

Direct and Indirect Evidence

To help with the analysis and classification process, it is useful to distinguish between direct and indirect evidence. *Direct evidence* is data that directly measures the outcome reference indicator, and can therefore be compared to a given threshold. *Indirect evidence* on the other hand, is evidence that does not directly measure the reference outcome, and cannot be compared to a threshold. For example, a properly conducted weight for height survey would provide *direct* evidence of the reference outcome indicator of acute malnutrition, and can be measured against the threshold for a particular phase.

Taking the example from Karamoja above, a GAM rate of 13.4% would indicate a phase of Acute Food and Livelihood Crisis (10-15%) in Kotido for this indicator, especially as it has increased from 2005 and 2006 (though the evidence provided does not give the month of these surveys and any possible seasonal variation) and is above the regional average. *Indirect* evidence for the same indicator could be data from **health centres** or **supplementary feeding centres** indicating an increase or decrease in observed acute malnutrition or enrolment rates in the centre. Note that even when these sources come with anthropometric data, the evidence is still not direct since it is unlikely to represent the population as a whole (as a properly conducted survey would) and cannot be measured against a threshold.

To distinguish between direct and indirect evidence, it is helpful to **bold** or colour the font of direct evidence.

BOX 1

All evidence is **important** and should be entered in the Evidence Template. Direct evidence is often not available or is of low reliability. Indirect evidence is important in its own right, and not just to support or triangulate direct evidence. Phases can still be assigned in the absence of direct evidence, and on the sole basis of indirect evidence (see Module 2 on doing the phase classification).

Source of Information

For the sake of transparency and also as an indication of reliability, it is important to state the source of the data presented in the evidence templates. The date of the information is also important, especially for some indicators that have a short 'shelf life'.

Reliability

This is currently a rather subjective score from 1 = very reliable; 2 = somewhat reliable; to 3 = unconfirmed. The *two* main things to keep in mind are: a) the quality of the data in terms of source; method of collection; whether it is supported by other data or contradicted by it; and b) the validity of the data especially in terms of how old it is. The latter will depend upon the nature of the indicator. There is as yet no fixed guidance on the temporal validity of any of the indicators. However, it should be obvious that a nutrition survey measuring acute malnutrition (to continue with the previous example) even when properly conducted, is not going to be very useful if it has been done more than 6 months previously, apart from for comparative analysis with updated data. Indeed, in areas where nutritional status changes significantly between seasons even in 'normal' years, the shelf life of the data may be considerably shorter. At the end of the day, it is up to the analysts doing the classification to make a judgement on the reliability of the data.

Availability/Non-Availability of Data

If data is not available for an indicator (either direct or indirect) it is good practice to state that there is 'no available data' rather than just leaving the space blank and therefore ambiguous to others.

Counter Evidence

Where some evidence contradicts other evidence, it is useful to highlight this together with relative reliability. Sometimes counter evidence refers to specific pockets of food insecurity within wider area or livelihood zone in better conditions otherwise (See Figure 1.6).

Figure 1.6: Example of Counter Evidence from FSAU (Somalia)

Food Access/ Availability

FOOD SOURCES

Own Cereal Production – Agro-pastoral

- Deyr'06/7crop production is good (with the exception of parts of Hudur & Tieglow districts) and production estimated to 398% of Deyr PWA and >2000% of Gu'06 production harvesting is to start Late Jan. to early Feb.'07: Source: FSAU Post-Deyr'06/7 Crop Production Survey/Data; R=1
- Agro-pastoralist have had access to early Green Maize/Cowpea; Source: FSAU Post-Deyr'06/7 crop assessment and observation: R=1
- Although there is milk from medium to high kidding of goats/sheep in Deyr '06 (Nov.-Dec.) but no milk from cattle. Some cattle calving is expected in Feb-March '06 while medium to high kidding in May-June '06; (Source: FSAU Post-Deyr '06 Pastoral Assessment R=1)

Counter-Evidence

- Poor crop expectations (for Agro-pastoralists) in pockets of Tieglow and Hudur due to failed and poor (RATOON) crops, severely affected by rains and diseases; FSAU Post-Deyr'06/7 crop assessment and observation; R=1
- Lack of carry-over cereal stocks (poor and middle agro-pastoralists) due to several drought seasons (Poor cereal crop production in Bakool: Gu'05 36%, Deyr'05/6 13% and Gu'06 58% of PWA); Source: FSAU reports of Post-Gu'05, Post-Deyr'05/6 & Post-Gu'06 technical reports; R=1

Summary Statements

In some cases, you will have accumulated a lot of evidence for a particular indicator, and some of which may be contradictory. A common example is under food access and availability: by the time a reader has gone through all the sections under this indicator (food sources, expenditure, incomes etc) it might not be immediately clear what the evidence is saying. It is the job of the analyst to provide easily understood

statements that accurately synthesise the evidence, while leaving the evidence for others to look at in detail. One way of doing this is to add a simple statement before the evidence for the indicator is **presented** as shown in the example below from Somalia (Figure 1.7).

Figure 1.7: The Use of an Overall Statement for Complex Multivariate Indicators

Food Access/Availability

Food Access: Food sources:

Overall Statement: Crop production in this Deyr is 33% of last Deyr 06/07 and 36% of PWA and 34% compared to five years average. Food security situation is deteriorating due to poor seasonal performance, which led to low production from livestock and crop, lack of cereal stock availability, poor income opportunity and steadily increased prices in staple and non-staple food commodities. In addition, there is resource based conflicts and economic burden from the IDPs influx on host families. Although there is slightly increase in livestock price, which may mitigate the deterioration of the food security, it is only benefit for the better off wealth groups.

- o Own Cereal Production: Deyr 07/08 crop production is extremely below normal. The total cereal production of Hiran region is 2,390MT, which is 33% compared to last Deyr 06/07 and 36% compared to PWA 34% compared to five year average.
- Own Cash Crop Production: almost all agro-pastoral households planted different types of cereals, but the
 expected production is extremely low to none due to poor rainfall and diseases, 50-70% of LTM). Almost all agropastoral eco-zones failed except small area of Jalalaqsi district, which contributes few. Source: FSAU and Partner
 post Deyr assessment, R=1
- Own Milk Production: milk production from all livestock species is overall below normal due to mainly poor pasture resulted by the poor seasonal performance in the region. Source: FSAU and Partner post Deyr 07/08 assessment. R=1
- Market Purchase (Staple food: cereals): the prices of cereals increased. The prices of sorghum and maize increased by 22% and 24%, 13% and 12%, 35% and 105% in Dec.07 compared to July Gu 07, Dec.06 and five years average respectively. Source: FSAU market update, Dec.07, R=1
- Cereal Market Availability: availability of cereals (sorghum and maize) in the main markets is well below normal, which led to significant price increase, due to crop failure in this Deyr'07/08 and previous successive poor crop production. However, there is red sorghum distribution in Hiran region by CARE, which decreased prices of sorghum in Nov. and Dec.07. Source: FSAU and Partner post Deyr 07/08 crop survey, R=1
- o Sugar Prices: the price of sugar has slightly increased. In Dec.07, prices increased by 10%, 22%46% compared to July Gu 07. same month of last year and five years average

Sources and types of Data

Any food security analysis tool is reliant upon data that is appropriate of sufficient quantity, is up to date within reason and of acceptable quality. There are no hard rules about quality and quantity of data; however, it is clear that the better the data you have the more confident you will be about your food security analysis and ultimately your phase classification using the IPC. As the IPC, like all other similar tools, is highly dependant upon good data, an example of the kinds of data you would optimally need and possible sources have been included in Annex 1 of this Guide. This is really for reference, and you should not get too hung up on this at this stage.... but it is good to have a look at before you get down to filling in your templates with your own data. While Annex 1 provides some guidance on the optimal level of data, it is important that you understand that no country is going to have all the data available at a given time, and that it is not necessary to have all the data available to do a classification (see also *Module 2* on confidence, Step 1, Part 3). Given data is so important to the analysis, it is also a good idea to do a data mapping exercise to identify the sources and availability of data in your country. This is described in *Module 8*, Step 2, Part b, and again Annex 1 may help you with this process.

1.5 Step 2: Filling out the First Column of Evidence Template 1: An Indicator by Indicator Guide

A. Mortality Rates

Direct Evidence: Crude Mortality Rate (CMR, sometimes referred to as Crude Death Rate, CDR) is simply the number of people in the total population who die over a specified period of time and is usually expressed as deaths/10,000/day. The CMR can also be expressed using other units such as deaths/1,000/month, in which case the time interval is expressed in months and 1,000 is substituted for 10,000 in the formula. For use in the IPC, *all* death rates should be expressed as deaths/10,000/day to avoid confusing non-expert readers who become used to working with one set of units.

BOX 2

The **conversion factor** is 30.4/10 = 3.04 (there are an average of 30.4 days in one month). To convert a result expressed as deaths/10,000/day to deaths/1,000/month, multiply by 3.04. Similarly, to express the result as deaths/1,000/year, the time interval is expressed in years. The conversion factor is 365/10 = 36.5; to convert deaths/10,000/day to deaths/1,000/year, multiply by 36.5. The different ways of expressing the CMR are exactly equivalent: one can be readily converted to another.

Figure 1.8: IPC Reference Outcomes—Crude Mortality Rate

Reference Outcome	PHASE	Generally Food Secure	Generally Food Insecure	Acute Food and Livelihood Crisis	Humanitarian Emergency	Famine/ Humanitarian Catastroph
		1 A and 1B	2	3	4	5
Crude Mortality Rate # deaths per 10,000 people per day		CMR <0.5 U5MR<=1	CMR < 0.5 U5MR<=1	CMR 0.5 - 1 increasing U5MR 1-2	CMR 1-2, increasing, or >2x reference rate U5MR >4	CMR > 2 (example: 6000 deaths/ 1,000,000 people/30 days)

Under-5 Mortality Rate (U5MR) is more confusing since it can refer to two distinct indicators that measure slightly different things. The IPC manual uses the indicator that is commonly used in emergency situations, which is more sensitive to short-term changes and is similar to CMR. This is the number of children between the ages 0-5 who die over a specified period of time, and again is expressed in **deaths/10,000/day**. This indicator is sometimes called the "0-5 year death rate", or "age-specific death rate for children 0-5".

Don't confuse this with the indicator that calculates the probability that a child born in a particular year dies before the age of 5 and is normally expressed deaths per 1,000 live births. This indicator is more often used in longer-term development contexts, and is more often included in Demographic and Health Surveys (DHS) than the first indicator. Under-5 MR is measured using both indicators, but the concepts; calculations and numerical results are quite different.

For the IPC, we generally use the first method as it is more useful when looking at changes that are occurring relatively quickly. This indicator also has internationally recognised thresholds, which is useful for the phase classification. However, *all* evidence is useful, and Under-5 MR using the 'deaths/1,000 live births' is still

useful indirect information. As rule of thumb, the latter measure is approximately five times higher than the equivalent using the deaths/10,000/day measure, though *you cannot calculate one from the other*.

Indirect evidence: information on both CMR and Under 5 MR may come from sources that are not representative of the population as a whole, and cannot therefore be included as direct evidence. Examples would include health information systems with data from health facilities; supplementary or therapeutic feeding centres; or even more anecdotal information coming from key informants. All of these data are useful, but may have different levels of *reliability*.

B. Acute Malnutrition

When people become malnourished over the short term, this is referred to as acute malnutrition, and is characterised by 'thinness' or wasting (i.e. people lose weight but do not change other measurements such as height which has more to do with chronic malnutrition – see stunting below).

Reference Outcome	PHASE	Generally Food Secure	Generally Food Insecure	Acute Food and Livelihood Crisis	Humanitarian Emergency	Famine/ Humanitarian Catastrophe
outcome		1A and 1B	2	3	4	5
	Acute Malnutrition (w/h < -2 z -scores)		>3% but < 10%, usual range, stable	10-15%, > usual, increasing	>15%, > usual, increasing	>30%

Figure 1.9: IPC Reference Outcomes—Acute Malnutrition

Direct evidence: The standard measurement for acute malnutrition is weight for height (w/h), and is expressed as Z-scores, which are standard deviations from the median. Older methods use % of children falling under 80% of median w/h: this is acceptable as an approximation, but generally IPC practitioners are encouraged to use z-scores to promote comparability (note that you can convert to z-scores if you have the raw datasets for the survey). To be used as direct evidence, data must be representative of the population being considered in the sample frame, which normally means that data will be coming from properly conducted nutrition surveys using a standardised methodology. Note that w/h surveys capture the nutritional status of children 6 to 59 months old as they are more sensitive to wasting. The findings are used as a proxy for the rest of the population.

Indirect evidence: A good measure of wasting is Mid-Upper Arm Circumference (MUAC). But it cannot be directly compared to w/h. MUAC is commonly used for screening and sentinel site monitoring. In some cases, MUAC data is available for large areas of a country on a regular basis (as it is much cheaper to do than w/h surveys) and can be a very useful indicator of acute malnutrition with the added value of being able to analyse trends over time. An example of this comes from Kenya, where MUAC is measured from sentinel sites on a monthly basis in all the ASAL districts, which means that changes over time can be monitored and compared with long-term seasonal averages, as is shown in Figure 1.10.

% children at risk

20

15

10

5

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC. Jan-08

Figure 1.10: Trends in Acute Malnutrition (MUAC) in Garissa: 2007 compared to long term average (2001- 2006)

Other indirect evidence may come from facility-based sources, such as hospitals, health posts, supplementary or therapeutic feeding centres etc. These are useful data to help build up a picture of what is happening regarding acute malnutrition, trends, and the possible causes.

C. Stunting

Long-term chronic malnutrition results in stunting whereby individuals experience retarded growth compared to a reference population resulting from inadequate nutrition and/or repeated infections such as diarrhoea.

Reference Outcome	PHASE	Generally Food Secure	Generally Food Insecure	Acute Food and Livelihood Crisis	Humanitarian Emergency	Famine/ Humanitarian Catastrophe
outtoine		1A and 1B	2	3	4	5
Stunting (h/age <-2z scores)		<20%	20-40%	NDC*	NDC	NDC

Figure 1.11: IPC Reference Outcomes—Stunting

NDC - Not a Defining Characteristic

Direct evidence: The standard measurement for stunting is height for age (h/a), and like w/h is expressed in z-scores. This reference indicator is only relevant for the first two phases in the IPC which relate more to long-term malnutrition, being in the non-crisis stage: stunting is not included in the reference outcomes for phases 3-5. Like acute malnutrition, to be used as direct evidence, data must be representative of the population being considered in the sample frame, which normally means that data will be coming from properly conducted nutrition surveys using a standardised methodology.

^{*} Note that although Stunting is not a defining characteristic for crisis phases (3, 4 and 5) — i.e. it does not help you to classify these phases-, evidence of stunting may be an important piece of information in the crisis phases, since it indicates an underlying level of chronic food insecurity which would need to be addressed appropriately.

Indirect evidence: h/a data is commonly collected as part of growth monitoring systems run by health facilities in rural and urban centres, and as such is relatively available through health information systems in many countries. Being facility-based however, means that it is generally not representative of the population as a whole, and should therefore be considered as useful indirect evidence. Time series analysis could be a useful exercise with this kind of data, rather using it for point-in-time purposes.

D. Disease

Firstly, you will notice that there is no recognised threshold for this reference outcome, as prevalence will depend upon the type of disease. For our purposes, the differentiation between *endemic*, *epidemic* and *pandemic* gives us some guidance, and our knowledge of the impact of various diseases will help to develop the overall picture.

It is important to consider disease implications together with other indicators, especially food access and availability and water access and availability. Disease may be the singular most important reason for high malnutrition rates, which may in turn be caused by poor water quality or poor child care practices (such as in parts of southern Sudan) rather than a factor of poor food access or availability.

Figure 1.12: IPC Reference Outcomes—Disease

Reference Outcome	PHASE	Generally Food Secure	Generally Food Insecure	Acute Food and Livelihood Crisis	Humanitarian Emergency	Famine/ Humanitarian Catastrophe
outcome		1A and 1B	2	3	4	5
Disease		NDC	NDC	Epidemic outbreak; increasing	Pandemic outbreak	Pandemic outbreak

NDC — Not a Defining Characteristic

Direct evidence of disease status will most likely be a part of a properly conducted survey, such as a nutrition survey where disease enquiries are included. This data is likely to be reasonably representative of the population as a whole. Indirect evidence could be sourced at health facilities, or more anecdotal reports.

E. Food Access and Availability

This is an obviously key indicator for food security analysis and phase classification. The standard *direct evidence* for food access is the amount of food consumed by an individual per day, measured in kilocalories (Kcal), with the emergency threshold set at a minimum consumption of 2,100 Kcal per day.

BOX 3

Daily food consumption at or above 2,100 Kcal per person is considered to be Generally Food Secure or Moderately/Borderline Food Insecure, while consumption below 2,100 Kcal per person per day indicates Acute Food and Livelihood Crisis or worse, depending on the Kcal shortfall.

Figure 1.13:	IPC Reference	Outcomes—	-Food A	Access /	Availahility

Reference Outcome	PHASE	Generally Food Secure	Generally Food Insecure	Acute Food and Livelihood Crisis	Humanitarian Emergency	Famine/ Humanitarian Catastrophe
outcome		1A and 1B	2	3	4	5
Food Access/Availability		Usually adequate, stable (2,100 kcal per person per day)	Borderline adequate, unstable (2,100 kcal pppd)	Lack of entitlement (2,100 kcal pppd); meeting minimum needs through asset stripping	Severe entitlement gap, Unable to meet minimum needs	Extreme entitlement gap; much below 2100 kcal pppd

However, in practice it is very rare to have sufficient direct evidence to analyze food access based on Kcal consumed per person. Additionally, some analysts suggest that the specific reference threshold of 2,100 Kcal can be misleading, and should not be generalized across population groups, age, gender, and situations. You should consider the Kcal thresholds in the Reference Table as guidance, and be sure to include *other* supporting evidence in your analysis of food access and availability.

Fortunately, there is usually good *indirect evidence* available that you can use with high confidence to make your analysis. The section for food access/availability in the Evidence Template has in fact been set up to reflect it (Figure 1.14).

The different types of indicators under *food access/availability* reflect the various types of indirect evidence that can be used in the analysis: retail sales volumes in local markets, market prices of staple commodities, local or national crop production levels, current income levels for different livelihoods, domestic imports, or many other such factors that can affect purchasing power, the supply of staple foods, and/or social access.

Figure 1.14: Food Access / Availability Section in Evidence Template

	Area of Analysis (Region, District, or Livelihood Zone):						
Reference Outcomes	Direct and Indirect Evidence For Phase in Given Time Period						
Food Access/Availability	Food Access: Food Sources: Expenditures: Purchasing power: Social Access: Food Availability Production: Supply lines: Cereal balance sheets:						

The key in using such information is to consider what the implications are in terms of actual food consumption **compared to normal** for the particular time of year, and **whether the evidence available indicates abnormal stress**.

For example, market price data in the particular area being analyzed may indicate that the prices of staple cereals are rising. This does not necessarily indicate that food access is poor. It needs further clarification pertaining to:

- How cereal prices normally behave at that particular time of year:
- Whether they usually increase seasonally at that particular time (before a harvest, for example), and if so, whether the current price rises are above or below normal:
- Since prices are not the only factor influencing food access; what the current levels of household income are compared to normal;
- Whether livestock prices are increasing or decreasing for pastoralists, and how those price changes relate to the rise in cereal prices in terms of purchasing power;
- Whether the previous harvest was good enough for agricultural households to make them benefit from increasing prices by selling their stocks.

You will notice that the analysis will tend to focus on a population group, which may include wealth groups, social groups, or livelihood groups, instead of focusing on an individual. This is important given the complex interaction of the multiple variables related to food access and availability.

It is best to consider how the sources of food, sources of income, expenditure patterns, and coping strategies all merge together to affect *food access*, and this often easiest by looking at a particular livelihood system. By taking all of the indirect evidence that is available and asking what it likely implies in terms of food consumption relative to normal conditions for a particular livelihood group, you will be able to make a confident analysis of food access/availability.

You will recall that the IPC is not a methodology for food security analysis, and it in fact welcomes and encourages multiple ways of gathering and examining data. There may be a particular method already in use in your country for monitoring food access and availability that uses the indirect evidence that is available. If so, you should certainly take advantage of that method and incorporate it into the IPC analysis. One such method is the Household Economy Approach (HEA). HEA has worked well to analyze food access and availability in numerous locations (including Somalia where the IPC was initially developed), and is in many ways an ideal way to complete the food access/availability section of the Evidence Template. However, other methodologies can also be used with confidence, and you should consider what approach makes the most sense for your country.

Most livelihoods-based analysis methods (E.g. Household Economy, Household Basket approaches ...etc) are founded on the idea that a household's risk of becoming food insecure is based on two things: the occurrence of some event or shock (such as a drought, a conflict or a sudden rise in fuel prices), and the household's vulnerability to such a shock (which is based on its particular livelihood strategies, such as its sources of income and food and coping strategies, and on its assets). Ideally, an analysis starts with significant baseline data about the livelihood assets and strategies in a particular livelihood zone. The potential impact of a particular shock and its severity on the livelihood of households in the zone can then be analysed, and usually includes an elasticity function to incorporate how they are likely to cope in terms of changing consumption or expenditure patterns. Where good data and baselines exist, an estimated deficit can then be calculated in relation to the households' normal consumption, either in terms of food (Kcal) or another unit such as cash, which is the exact piece of indirect evidence that enables the phase classification in the IPC analysis.

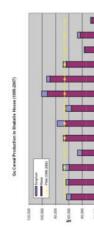
For example, a 20 percent increase in cereal prices might cause a poor pastoralist household to sell an extra animal to increase its income (thereby reducing its assets), decrease its consumption of cereals relative to normal, and increase the collection of firewood for sale (moving household members away from livestock and the main source of milk). HEA would estimate the specific decrease in food access that would result, which would then enable a phase classification based on food access/availability for that livelihood group. An example of how HEA can be used to complete this section of the Evidence Template from Somalia follows (Figure 1.15).

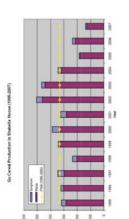
Figure 1.15: Example of HEA Used to Complete Food Access / Availability Section in Evidence Template for Riverine Livelihood Zone, Somalia

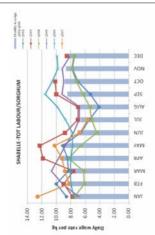
Projected Nrea, & Ney Applicable IPC Key Reference Outcome s indicated by evidence, i.e. GFS CFL AFLC, HE, FF		4	Part 1: Area Affected, Phase Classification, and Evidence in S	Affected, Phase Classification, and Evidence in Support of Phase Classification and Early Warning Levels	
Food Access PC Phase: HE & AFLC Own P Own P	Po.	Key Reference Outcomes		Direct & Indirect Evidence Indirect Evidence in support of IPC Phase Classification Source of Evidence Evidence Reliability Score (1=very reliable, 2=somewhat reliable 3=unconfirmed)	Overall IPC Phase Classification & Early Warning Level Tick Appropriate Box
trend and 9% above the 5 year average for July. Prices however are projected to increase turner of July Prices however are projected to increase turner of July Prices however are projected to increase turner of July Production is low. Therefore, the cereal access through purchase will be difficult as the cereal prices is anticipated to increase. • Cereal prices: While maize prices have increased over the last 6 months they are only 9% higher than July 5 year average. However, there is anticipation of upward trend for the coming 6 months (July – December 2007). • Cereal Market Availability: Cereal availability in the market is low due to the poor production of the current Gu 70 and limited supply from sorghum belt. Moreover, poor riverine do not have cereal stock at all and available cereal are no easily accessible due to sharp increase of cereal price. (Source: FSAU post-Cu 707 Assessment; R=2)	kegion: Aalkey Regions: ,Marka Adorniole, Afgoye, K/ ey and Sablaale AZone: Time Period: 2007 2007	Food Access	SHABELE 4MATE prices blocks are as an	Overall Statement: Maize production (main stable food of riverine) in this Gu 07 is significantly below normal and no cereal stock for poor wealth groups due to less land cultivated and the limited income of agriculture labor from the poor seasonal performance and high influx of IDPs, therefore, poor wealth group are unable to meet minimum food required over coming six months; [July-December '07]. Own production: Gu '07 total cereal production for the Shabelle Riverine is estimated at 35,270Mt of which 27,295Mt is from Lower Shabelle (41% of Gu PWA, 58%Gu06) and 7,975Mt from M/Shabelle (43% of PWA 1995-2006, 46 Gu 06). This production is the lowest for the period 1995-2006. Source: FANI post-Gu '07 Crop Assessment and FSANI crop data; R=1). • Prospects for the Deyr '07/08 crop production is also uncertain, given the deteriorating irrigation infrastructure, open river embankments and the high cost of farm inputs. • Cereal stocks: While overall production is less than normal the total tonnage from the Gu season in the Lower Shabelle Riverine is equivalent to 6 months of cereal per person for that population mainly wealthier groups (middle and better off). (Source: Gu Season Crop Survey, July/August 2007, R=1). Market Purchase - Staple: Overall Statement: Cereal prices have been increasing since January following usual trend and 9% above the 5 year average for July. Prices however are projected to increase. • Cereal prices: While maize prices have increased over the last 6 months they are not) 9% higher than July 5 year average. However, there is anticipation of upward trend for the coming 6 months (July –December 2007). • Cereal Market Availability: Cereal availability in the market is low due to the poor production of the current Gu '07 and limited supply from sorghum belt. Moreover, poor riverine do not have cereal stock at all and available cereal are not easily accessible due to sharp increase of cereal prices. EAU post-Gu '07 Assessment; R=2)	Generally Food Secure Chronically Food Insecure Chronically Food Insecure A Acute Food & Livelihood Crisis Humanitarian Emergency Famine Farry Warning Level: Moderate Risk O ACFL O HE(X) O Famine/HC

Figure 1.15 (continued)

Food Access









wages is 23% lower than the 5 year average in July 07 was 4.14 Kg compared Purchasing Power (Terms of Trade): Terms of trade for cereal (maize) to labor reduced need for labor as well as the increased supply of labor as a result of to 7.73 in July 06. This can be attributed to the poor crop performances and the IDP influx. (Source: FSAU Market Data Update July 2007; R=1).

Market Purchases (Non-Staple Food)

Overall Statement: Significant stressed market access of non-staple food items, due to hyper-inflation in short period of time of key imported non-staple food items as result of devaluation of Somali Shilling and reduced volume of commercial imports.

for this is due to supply shortages, depreciation of the SoSh, high taxation and nighest level, 13% higher than the previous peak in June '04. The main reason are 32% and 58% higher than the 5 year average. Fuel prices also reached its oil prices gone up by 16% and 44% respectively from January07-June07 and Commercially imported food prices are increasing. Sugar and cooking nsecurity in Bakaara market. (Source: Market Data Update, July '07).

Other Food Sources (wild food & gifts)

Overall Statement: Wild food availability and social support have declined, due to overall stress across all livelihood groups following hyper-inflation, lack of economic abor activities, and poor crop production.

- Wild food consumption: pockets of Poor Riverine have access to wild foods (water lily, wild vegetables and fishes) in previous flooded areas. However, consumption of mango fruits has prevailed throughout the riverine areas. (Source: FSAU Post Gu 2007 Assessment, July/August 2007).
- Social support/gifts of food: social support from crop zaka decreased, due to poor Gu07 production. Similarly, the neighboring agro-pastoral livelihood nas experienced crop failure. (Source: FSAU Post Gu '07 Assessment, R=1).

Income Sources:

Overall Statement: Overall income from crop sales has declined, because of the poor Own Production Sales

- Shabelle Valley. There are however variations between the districts of the Cereal crop sales are lower due to cereal production 50% of Gu PWA in 5u07 production. In addition Hagai sesame which is the main cash crop failed. region.
- Cash income from Hagai sesame is almost nil due to the failure of Hagai showers and the poor irrigation infrastructure (silting of canals and open breakages etc).
 - There is *limited access to income from fodder sales* (grass, crop stalks etc), due to increased demand for livestock feed. (Source: FSAU post-Gu '07 Assessment; R=1)

F. Dietary Diversity

Different methods of collection and analysis are currently being used, and none have been sufficiently tested for standardisation. For example, WFP use a 12 food group method, with a 7 day recall period, and include a food consumption score as part of the analysis. FAO on the other hand have adopted the FANTA method which has 16 food groups collected on the basis of a 24 hour recall, which are then collapsed into 12 food groups for calculating a Household Dietary Diversity Score (HDDS). Internationally recognised thresholds for either (or other) methods are yet to be agreed.

In the IPC spirit of inclusivity, the analysis can be done using either (or other) methods: given time and testing it may be possible in the future to suggest one standard. Interpretation of dietary diversity methods has also yet to be standardised. In addition to point-in-time data, Dietary Diversity Indexes (DDI) can usefully be used to monitor trends in diversity, which is especially useful to understand seasonal norms and anomalies for different livelihood groups. Detailed analysis of food groups can also be instrumental in locating specific areas of dietary deficiency, such as vitamin A rich foods, and thereby identifying potential entry points for interventions. This would be appropriate where dietary diversity is very low and has a major impact on overall food security and/or nutritional status. Figure 1.17 shows an example of evidence for the Dietary Diversity reference outcome.

Figure 1.16: IPC Reference Outcomes—Dietary Diversity

Reference Outcome	PHASE	Generally Food Secure	Generally Food Insecure	Acute Food and Livelihood Crisis	Humanitarian Emergency	Famine/ Humanitarian Catastrophe
		1A and 1B	2	3	4	5
Dietary Diversity		Consistent quality and quantity of diversity	Chronic deficit in dietary diversity	Acute dietary deficit	Regularly 3 or fewer main food groups consumed	NDC

NDC – Not a Defining Characteristic

Figure 1.17: Example of Dietary Diversity, Somalia

Dietary Diversity	Overall Statement: Dietary diversity is acceptable (significant source constitutes food aid) but problem with child feeding frequency and care practices.			
	 Nutrition Assessment: Oct-Nov 2007 reports 96.1% of assessed households to be consuming >3 food groups, source of food mainly cereal, and pulse, from food aid and increased fruits and vegetables and milk. (Source: FSAU Nutrition Assessment, Oct-Nov 2007, R=1). 			
Chronic dietary diversity deficit.	Child feeding practices: area of concern with 98.8% introduced to complimentary food before the recommended age of 6months (Source: FSAU/Partner Nutrition A <i>Dietary diversity is acceptable (though the source constitutes food aid) but problem with child feeding frequency and care practices.</i>			
	 Nutrition Assessment Oct-Nov 2007 reports 96.1% of assessed households to be consuming >3 food groups, source of food mainly cereal, and pulse, from food aid and increased fruits and vegetables and milk. (Source: FSAU Nutrition Assessment, Oct-Nov 2007, R=1). 			
	• Child feeding practices are of concern with 98.8% were introduced to complimentary food before the recommended age of 6months (Source: FSAU/Partner Nutrition Assessment, Oct-Nov 2007, R=1).			

G. Water Access and Availability

This is another indicator whose reference outcome (quantity of water consumed) is difficult to come by in most countries, with the possible exception of specific populations living in camps (IDPs or refugees). A number of indirect methods have evolved including distance (or time) that households have to travel to the nearest water point for domestic use; and the distance between pasture and water especially in pastoral and agro-pastoral areas, all of which are valid.

ROY A

Water Access and Availability vs. Quality

A common mistake in filling out the templates is to include water quality in this section. While this is an important factor, it is more closely related as a process indicator to health outcomes, and should be included as indirect evidence under the disease section.

Figure 1.18: IPC Reference Outcomes—Water Access / Availability

Reference Outcome	PHASE	Generally Food Secure	Moderate/ Borderline Food Insecure	Acute Food and Livelihood Crisis	Humanitarian Emergency	Famine/ Humanitarian Catastrophe
		1A and 1B	2	3	4	5
Water Access/ Availability		Usually adequate, Stable (>15 litres per person per day)	Borderline adequate, unstable (>15 litres pppd)	7.5 — 15 litres pppd; meeting minimum needs through asset stripping	<7.5 litres pppd (human usage only)	< 4 litres pppd

H. Destitution/Displacement

Destitution is considered to be a state of extreme poverty, where an individual, household or group of people have exhausted their livelihood assets and have become dependant upon others to meet their basic needs. Needless to say, destitution is directly or indirectly associated with severe food insecurity (both cause and effect), with a lack of access or availability to food causing the household to sell their assets; and/or separation from assets causing food insecurity. Displacement is when individuals or groups are forced or obliged to move away from their habitual residence, usually as a result of some kind of shock such as conflict, flooding, drought etc. If they have to move without their assets and are separated from their normal livelihoods, they are particularly vulnerable and can be classed along with destitute people. It is important to distinguish displacement from normal or even abnormal migration, which is either done with assets (such as migrating pastoralists with their livestock) or as part of normal coping strategies which may take place on a regular seasonal basis, such as seeking paid labour.

It is also important to understand whether people are really destitute: for example a group of women and children may appear 'destitute' but in reality are separated from male family members who may be working, or herding animals elsewhere and sending remittances as a completely normal way of living. While these two aspects are put together in the IPC, it should be obvious that they can be considered separately or together depending on the circumstances: so a displaced person may or not be destitute, and similarly a destitute person may or not be displaced².

² There is some debate as to whether destitution and displacement should be put together as one indicator in the IPC or if they should be separated and be considered as two. This is one of the issues that may be refined in future versions of the IPC, but for now should be considered as one indicator.

In terms of the templates, it is rather difficult to quantify destitution or displacement, since there are many factors and degrees associated with both conditions. Direct evidence would generally be valid where specific groups of people have been included in some kind of assessment, and where the extent of the displacement/destitution is known (e.g. good estimates of the number of affected people), the cause of the displacement or destitution and how bad it is (depth). Indirect evidence would be more anecdotal in nature.

For classification, this IPC reference outcome is only considered in the crisis phases (3-5) for obvious reasons, and distinguishes between the extent of the problem (emerging/diffuse – phase 3; concentrated/increasing – phase 4; and large scale concentrated – phase 5 (Figure 1.19). Also, see P. 28 of the technical manual). This differentiation also infers the chronology of the problem, with emerging/diffuse being at the start of a situation which may get worse.

Figure 1.19: IPC Reference Outcomes—Destitution / Displacement

Reference Outcome	PHASE	Generally Food Secure	Moderate/ Borderline Food Insecure	Acute Food and Livelihood Crisis	Humanitarian Emergency	Famine/ Humanitarian Catastrophe
		1A and 1B	2	3	4	5
Destitution / Displacement		NDC	NDC	Emerging/ diffuse	Concentrated/ increasing	Large scale, concentrated

NDC — Not a Defining Characteristic

The guidelines in the technical manual have to be combined with local knowledge of the livelihoods and behaviours of the people concerned. It is also useful to include some information on the depth of the destitution/displacement (how bad is it at the household or individual level) and identifying immediate and underlying causes is always important.

I. Civil Security

Like destitution/displacement, civil insecurity is strongly associated with food insecurity, and can be both a cause and an effect of it. It is tempting to focus on visible conflict when considering this reference outcome, but it is equally important to include less obvious non-violent conflict that may be excluding some people from key livelihood activities or assets. Like the previous indicator, civil insecurity is not easy to quantify, and may be highly context-specific on its impact on food and livelihood security. The IPC phases distinguish on the basis of severity or intensity of conflict (violent or non-violent) – see figure 1.20 below and P.28 of the technical manual. For an example, see Figure 1.21.

BOX 5

High tension between conflicting groups may disrupt market function or access

[for example, this was common after the violence in Kenya following the contested presidential elections in 2007/8 – see figure 1.20 below]

or prevent a pastoralist group to cross or access remote rangelands.

Figure 1.20: IPC Reference Outcomes—Civil Security

Reference Outcome	PHASE	Generally Food Secure	Moderate/ Borderline Food Insecure	Acute Food and Livelihood Crisis	Humanitarian Emergency	Famine/ Humanitarian Catastrophe
outcome		1A and 1B	2	3	4	5
Civil Security		Prevailing and structural peace	Unstable, disruptive tension	Limited spread, low intensity conflict	Widespread, high intensity conflict	Widespread, high intensity conflict

Figure 1.21: Example of Civil Insecurity in Northern Bahr el Ghazal, Southern Sudan

Civil Security	 The situation extremely tense in the northern part of NBeG. Incidences of cattle rustling between Tonj East and Rumbek North causing insecurity [R=2] The regular trade route Meram - Aweil town not accessible due to insecurity, currently traders use Abyei – Gok - Machar route.
----------------	--

Direct evidence would normally be considered observed insecurity with confirmed quantitative data such as fatalities and/or wounded. At less extreme stages, observed behaviours such as excluding one group from normal livelihood activities would be relevant. Indirect evidence would be more anecdotal in nature, with unconfirmed quantitative data.

J. Coping

Coping strategies are important behaviours that enable people to absorb the impact of a shock to a greater or lesser extent, depending on how resilient the livelihood or individual/household is. Actual coping strategies vary from place to place and livelihood to livelihood, but they can generally be categorised into a) insurance strategies; b) crisis strategies and c) distress strategies (*see P.29 of the technical manual for more detail*). These have to be predefined in a particular country or area, preferably by livelihood zone.

Direct evidence will normally be available from an assessment, survey or surveillance system where specific questions are asked and related to the three degrees of coping (above). In the best cases, the country concerned will have developed a coping strategies index (CSI), which allows the indicator to be expressed numerically.

Indirect evidence will be less rigorous and probably more anecdotal ('people are skipping meals' etc) without reference to the degrees of coping or the longer term impact of such behaviours. It is never-the-less important information to be included in the templates.

In term of the classification, coping and CSIs are context specific and it is difficult to establish thresholds even locally. The distinguishing features of *insurance*, *crisis* and *distress* coping strategies provide the basis for phase classification (see Figure 1.22 below). For an example, see Figure 1.23.

BOX 6

The coping indicator is not relevant for phase 1, where coping is not required or for phase 5 where coping strategies have by definition collapsed

Figure 1.22: IPC Reference Outcomes—Coping Strategies

Reference Outcome	PHASE	Generally Food Secure	Moderate/ Borderline Food Insecure	Acute Food and Livelihood Crisis	Humanitarian Emergency	Famine/ Humanitarian Catastrophe
		1A and 1B	2	3	4	5
Coping Strategi	es	NDC	Insurance strategies	Crisis Strategies; CSI > reference increasing	Distress strategies; CSI significantly > reference	NDC

NDC — Not a Defining Characteristic

Figure 1.23: Example of Coping Strategies in Northern Bahr el Ghazal, Southern Sudan

Coping	No distress coping mechanism observed; coping mechanisms are standard Planting of tobacco as cash crop has increased. Wild food collection is widespread as well as firewood collection and charcoal burning. Collection of thatching grass for sale by women Sale of small livestock and/or barter of livestock against grains [FARM Africa observation, Jan — March, 08 - R=1] NBEG Petty trade main source of income. Selling of thatching grass and poles.
	 Tobacco growing and its sales. Wild fruit gathering Lakes Fishing Tobacco growing and its sales. Wild fruit gathering [lulu, pump nuts] Fire wood and thatching grass sells. Petty trade

K. Hazards

A hazard is a threatening event which has to be considered alongside vulnerability in order to understand the potential impact or risk of food insecurity resulting. For example, poor rainfall would have a high risk of resulting in food insecurity for a poor (vulnerable) rain-fed farmer, but little risk for an irrigation farmer. It is therefore important to look at the *hazard* itself, and the *probability* of it actually happening, together with the *vulnerability* of the people to that specific hazard in order to understand the potential impact on food and livelihood security (*this is also dealt with under the next column of the template that covers risk analysis*). The other issue with hazards are the frequency that they occur, with greater risk being associated with hazards that are recurrent.

Figure 1.24: IPC Reference Outcomes—Hazards

Reference Characteristic/ Outcome	PHASE	Generally Food Secure	Moderate/ Borderline Food Insecure	Acute Food and Livelihood Crisis	Humanitarian Emergency	Famine/ Humanitarian Catastrophe
outcome		1A and 1B	2	3	4	5
Hazards		Moderate to low probability of, and/ or vulnerability	Recurrent , with high vulnerability	NDC	NDC	NDC

NDC — Not a Defining Characteristic

L. Structural

In terms of the IPC, we are interested here in issues that affect food security that require long-term strategies in things like governance structures, infrastructure, trade policies and environmental degradation, as well as more social issues like inequality. These issues are often overlooked when dealing with more humanitarian areas of food insecurity, as they fall squarely into the domain of long-term development policies and structures. However, it is important to take structural issues into account in the IPC in order to develop a comprehensive analysis, and identify underlying as well as immediate causes. Structural conditions are only considered to be a key reference characteristic to distinguish between phase 1 and 2, although they will frequently be present as underlying causes in more serious phases. As such, it is important to include structural issues in part 3 of the template which deals with underlying issues and potential responses. Structural issues are difficult to 'measure' and will vary from place to place: it is not a very objective indicator as such, and care needs to be taken on its importance when doing the phase classification.

Table 1.25: IPC Reference Outcomes—Structural

Reference Outcome	PHASE	Generally Food Secure	Moderate/ Borderline Food Insecure	Acute Food and Livelihood Crisis	Humanitarian Emergency	Famine/ Humanitarian Catastrophe
		1A and 1B	2	3	4	5
Structural		NDC	Pronounced underlying hindrances	NDC	NDC	NDC

NDC - Not a Defining Characteristic

M. Livelihood Assets (5 capitals)

Livelihoods is an implicit concept within the IPC framework: the phase classification is based upon a livelihoods approach (e.g. Acute Food and Livelihood Crisis) and the overall emphasis is placed on saving livelihoods as well as lives: '...it is widely accepted that saving lives is an important but limited strategic objective for food security and humanitarian interventions. It's also simultaneously important to support livelihoods so as to increase resilience and improve the overall wellbeing of populations thus addressing food security in a holistic, sustainable manner and reducing the probability of aid dependency. Hence, saving livelihoods is a strategic objective unto itself:' (IPC Technical Manual Version 1.1, P. 31).

According to the Sustainable Livelihood Approach (SLA):

'A livelihood comprises the **capabilities**, **assets** (including both material and social resources) and **activities** required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base.'

To help envisage what this means, and to illustrate the various components of this concept, a livelihoods framework has been developed below (Figure 1.26).

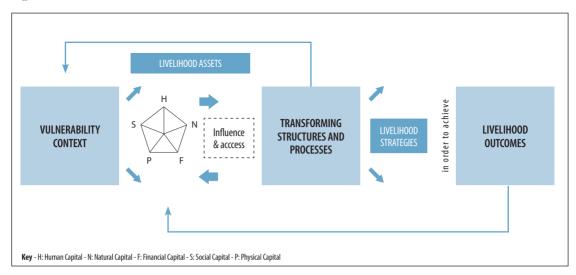


Figure 1.26: Sustainable Livelihoods Framework

Source: DFID, Sustainable Livelihoods Guidance Sheet 1, 1999 (www.livelihoods.org)

To be able to support livelihoods, it follows that we need to develop a good understanding of the livelihoods we deal with. Within the IPC framework, the livelihoods component focuses on livelihood assets, or five interrelated capitals as shown in Figure 1.27.

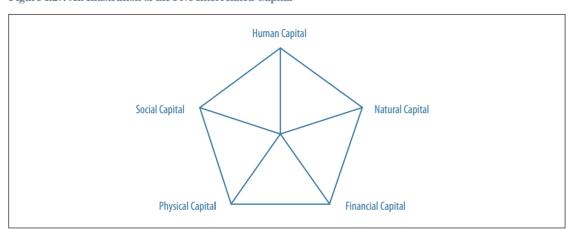


Figure 1.27: An Illustration of the Five Interrelated Capital

Human Capital represents the skills, knowledge (including education), ability to labour and good health that together enable people to pursue different livelihood strategies and achieve their livelihood objectives.

Social Capital is the social resources upon which people draw in pursuit of their livelihood objectives. In general terms these are developed through networks and connectedness, membership of more formalised groups, and relationships of trust, reciprocity and exchanges (informal safety nets). This capital also includes political inclusion and voice.

Natural Capital represents the natural resource stocks from which people derive their livelihood resources. Examples include rangelands, soil fertility, trees, fishing grounds etc.

Physical Capital comprises the basic infrastructure and producer goods needed to support livelihoods, such as bridges, roads, markets and telecommunications.

Financial Capital denotes the financial resources that people use to achieve their livelihood objectives. This can include flows as well as stocks and can contribute to both consumption and production. Commonly, this would comprise earned income, remittances and gifts, savings and access to credit.

It should be obvious that the five capitals are to some extent interchangeable: for example financial capital can be converted into human capital through paying school fees. In SLA analysis, consideration is given to the interaction between the five capitals, and through institutions to result in overall livelihood outcomes.

This is an important distinction because analysts using the IPC for the first time often fill this part of the template with a SLA-type analysis, rather than focusing on the impact of the hazard or shock on livelihoods, and consequent depletion of assets. For example, in an SLA analysis we would be interested in livestock holdings of pastoralists as a key livelihood asset (physical capital) and the interrelation of this asset with the other capitals. However in the IPC, we would be more interested in how this asset has been affected by a particular shock such as a drought or disease (Figure 1.28). So in the templates, we would expect to see any evidence of livelihood asset depletion, such as '40% cattle losses as a result of rinderpest outbreak'. An example from Somalia is shown in Figure 1.29.

BOX 7

In the IPC, the five capitals are used in a more simplistic manner that emphasises actual *access, rate of depletion,* their *risk of complete collapse* and their consequent sustainability. Account is also taken of the relative importance of that asset for the overall livelihood of a population group. This can be a narrative statement with the references to the evidence mentioned.

Figure 1.28: IPC Reference Outcomes—Livelihood Assets

Reference Outcome	PHASE	Generally Food Secure	Moderate/ Borderline Food Insecure	Acute Food and Livelihood Crisis	Humanitarian Emergency	Famine/ Humanitarian Catastrophe
		1A and 1B	2	3	4	5
Livelihood Asse (5 capitals: hum social, financial, na physical)	an,	Generally sustained utilization	Stressed unsustainable utilization	Accelerated and critical depletion or loss of access	Near complete and irreversible depletion or loss of access	Effectively complete loss; collapse

Figure 1.29: An Example of Livelihood Analysis for Hiran, Somalia

Livelihood Assets (5 capitals)

- **Natural capital:** Deyr rainfall started on early in Hiran region. The rainfall amounts received is extremely below normal, 50 70% of the LTM confirmed by ground truth. Due to this, pasture and browsing is in poor condition with less production from livestock. Source: (FSAU/Partner assessment and FEWS NET satellite imagery, Dec.07), R=1.
- Physical Capital: Roads and infrastructure networks are in poor condition with numerous spot holes and
 deteriorating trend year after year due to lack of maintenance and rehabilitation for more than a decade. This poor
 public infrastructure is further adding more to transportation costs. Many primary canals remained silted. Culverts,
 bridges and fragile river embankments are also in worst condition in most parts of the region due to damage from
 previous successive floods in near river areas. Source: FSAU/partner post Devr'07/08 assessment. R = 1)
- Social Capital: social support among the agro-pastoral community is substantially weakened in this season due to
 poor seasonal performance, which led to limited gifts and Zakat payments. Source: (FSAU/partner post Deyr'07/08
 assessment, R = 1)
- Human Capital: Limited or no access to formal education (schools), but Quranic schools is available in most
 areas. However, school attendance and educational level in certain districts including *Beletweyn* and *Buloburte*has improved. Most parents are unskilled and they strongly depend on agricultural employments and other self
 employments including collection and sale of Bush products.

Limited or no health facilities in most rural areas, with the exception of main villages and urban areas. (FSAU/partner post Deyr 07/08 Assessment, R=1)

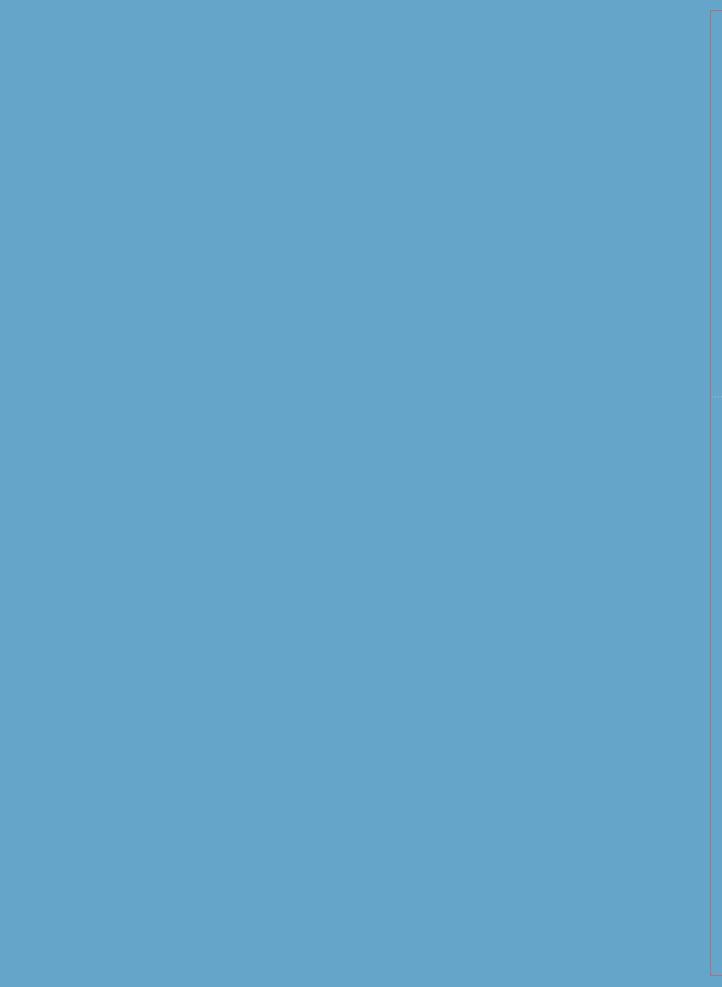
Financial Capital: according to FSAU and partner post Deyr 07/08 Survey in Hiran region, there is slight growth
for all livestock species. From April 07 to Dec.07, camel growth is 6%, shoats is 16% while cattle increased by 23%.
Though the performance of this season is poor, the growth is related to previous effect. Indebtedness for the agropastoral will continue to rise since their income is limited and the prices of the staple and non-staple requirement
remained high with increasing trend. Source: (FSAU/partner post Deyr 07/08 assessment. R = 1)

Last comments on this Module...

Well done! You have just completed most of the work required to do an IPC analysis, and once you have completed *column* 2 for all your geographic / livelihood areas, you are ready to do the classification in the next module. But before you go on, it is worth taking a moment to ask:

- Have you included all your relevant data, either **direct** or indirect?
- Is it represented in the best, most succinct way?
- Have you identified the source of each piece of evidence?
- Have you given each piece of evidence a balanced reliability score?

You will no doubt have gaps in your evidence, either because of lack of data, or poor reliability; you will also have patchy direct evidence. But you will still be able to do a classification; obviously the more evidence you have the more confident you will be in making your judgement.



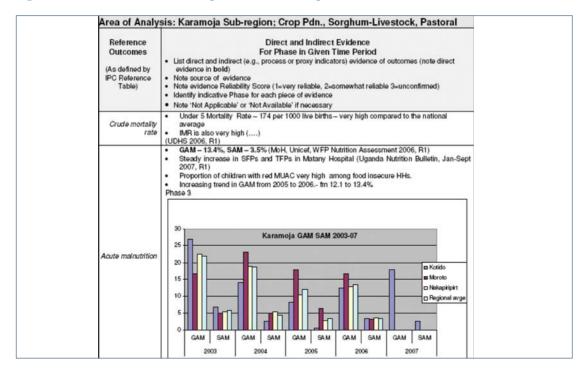
2.1 Objective of the Module and What You Will Be Able to Do When You Have Completed It

- **Objective:** to guide you in making your judgement on phase classification based upon a sound analysis of your data
- You will be able to:
 - o Analyse your direct and indirect evidence and assign phases indicator by indicator
 - o Put all your evidence together an analyse the convergence of evidence
 - o Make a final phase classification and assign a confidence score

2.2 What You Need

- ✓ The right people around the table: it is important to get technical consensus while doing a classification (see also *Module 8*: How to Establish the IPC in Your Country)
- ✓ Completed evidence template part 1 column 2

Figure 2.1: Columns 1 and 2 of a Completed Evidence Template (Part 1)



- ✓ Section 4.2 of the Technical Manual, Key Reference Outcomes (P.20-32)
- ✓ The reference table, with a focus on the phases and reference outcome indicators (see page 4 of the Technical Manual)

Figure 2.2: IPC Reference Table

	Phase Classification	Current or imminent outcomes or than absolute	Key Reference Outcomes n lives and livelihoods. Based on convergence of direct and indirect evidence rather thresholds. Not all indicators must be present for classification
1	Generally Food Secure	Crude Mortality Rate Acute Malnutrition Stunting Food Access/ Availability Dietary Diversity Water Access/Avail. Hazards Civil Security Livelihood Assets	< 0.5 / 10,000 / day <3 % (w/h <-2 z-scores) <20% (h/age <-2 z-scores) usually adequate (> 2,100 kcal ppp day), stable consistent quality and quantity of diversity usually adequate (> 15 litres ppp day), stable moderate to low probability and vulnerability prevailing and structural peace generally sustainable utilization (of 6 capitals)
2	Moderately/ Borderline Food Insecure	Crude Mortality Rate Acute Malnutrition Stunting Food Access/ Availability Dietary Diversity Water Access/Avail. Hazards Civil Security Coping Livelihood Assets	<0.5/10,000/day; U5MR<1/10,000/day >3% but <10 % (w/h <-2 z-score), usual range, stable >20% (h/age <-2 z-scores) borderline adequate (2,100 kcal ppp day); unstable chronic dietary diversity deficit borderline adequate (15 litres ppp day); unstable recurrent, with high livelihood vulnerability Unstable; disruptive tension 'insurance strategies' stressed and unsustainable utilization (of 6 capitals) Pronounced underlying hindrances to food security
3	Acute Food and Livelihood Crisis	Crude Mortality Rate Acute Malnutrition Disease Food Access/ Availability Dietary Diversity Water Access/Avail. Destitution/Displacement Civil Security Coping Livelihood Assets	0.5-1 /10,000/day, U5MR 1-2/10,000/dy 10-15 % (w/h <-2 z-score), > than usual, increasing epidemic; increasing lack of entitlement; 2,100 kcal ppp day via asset stripping acute dietary diversity deficit 7.5-15 litres ppp day, accessed via asset stripping emerging; diffuse limited spread, low intensity conflict 'crisis strategies'; CSI > than reference; increasing accelerated and critical depletion or loss of access
4	Humanitarian Emergency	Crude Mortality Rate Acute Malnutrition Disease Food Access/ Availability Dietary Diversity Water Access/Avail. Destitution/Displacement Civil Security Coping Livelihood Assets	1-2 / 10,000 / day, >2x reference rate, increasing; U5MR > 2/10,000/day >15 % (w/h <-2 z-score), > than usual, increasing Pandemic severe entitlement gap; unable to meet 2,100 kcal ppp day Regularly 3 or fewer main food groups consumed < 7.5 litres ppp day (human usage only) concentrated; increasing widespread, high intensity conflict 'distress strategies'; CSI significantly > than reference near complete & irreversible depletion or loss of access
5	Famine / Humanitarian Catastrophe	Crude Mortality Rate Acute Malnutrition Disease Food Access/ Availability Water Access/Avail. Destitution/Displacement Civil Security Livelihood Assets	> 2/10,000 /day (example: 6,000 /1,000,000 /30 days) > 30 % (w/h <-2 z-score) Pandemic extreme entitlement gap; much below 2,100 kcal ppp day < 4 litres ppp day (human usage only) large scale, concentrated widespread, high intensity conflict effectively complete loss; collapse

3.3 Before You Start...

Once you have entered all of your data and evidence into column 2 of the Part 1 template, you are ready to do the **phase classification.** The key to this is the concept of 'convergence of evidence' whereby the classification is done on the basis of all the available evidence, using the reference outcomes as a guide, and not considering any one indicator or piece of evidence as more important than an other. This is really important, because you are dealing with a situation that is highly complex with a bewildering number of variables, which means that your local knowledge is also very important.

"Essentially what we are doing here is making a best judgement of the situation based upon the available data in combination with our understanding of the context."

This sounds difficult, but in practice is rarely problematic because generally speaking our evidence tends to point in the same direction and leads us to make conclusions that are self-evident. One thing that can happen is that one particular indicator will be out of synch with the others leading us to question either the reliability of the data, or the possible reasons why that piece of information seems to be telling a different story to the rest.

A good example of this comes from Southern Sudan, where persistent high levels of acute malnutrition (w/h) are recorded in areas where other food security indicators suggest that the situation is reasonable good (usually phase 2). Debate on this quickly unearths that the cause of the high malnutrition is not directly related to food access or availability, but rather is an outcome of poor water quality combined with poor child care practices.

The point here is that the one reference outcome (acute malnutrition in this case) should not be the sole evidence that is used to classify the area, even if it is reliable and above an emergency threshold. In this particular case, our southern Sudanese colleagues classified the area as phase 2 as all the other evidence supported this phase, but flagged the issue of high malnutrition and its causes in the text statements describing the situation analysis. Note also here that this is a good example of the kind of debate that the IPC process encourages.

Another key issue to explain before you go on with your classification is known as 'masking'. This is where humanitarian aid is having a positive impact on the outcome indictors, and in a sense, obscuring the underlying situation. The effect of humanitarian assistance is most easily measured in a controlled situation such as a camp, where accurate data is available on relief items such as food aid, water, health facilities etc and the camp population have little or no access to other resource. This becomes increasingly difficult to measure in large populations who are not displaced, and particularly when relief assistance becomes less significant, making it impossible to project the underlying IPC phase.

A good example of this comes from Darfur, where people displaced from conflict are almost entirely dependant upon relief supplies. Even in cases like this, your classification should be done on what evidence is available; otherwise the whole essence of the IPC will be undermined. This is a bit controversial, because if you classify a situation in a non-crisis phase it might send the message to humanitarian decision makers that the relief is no longer needed, when we know that the situation is very likely to become a crisis if that happened. So, while it is important to base the classification on the evidence, it is also essential to send the right message to decision makers: in this example, "the relief effort has been successful in improving most outcome indicators to non-crisis levels, however, the IDPs are wholly dependant upon relief supplies, which must continue if the affected population are not to slide into either IPC phase 3, 4 or 5." In addition, the presence of relief assistance should be recorded and accounted for in your evidence template; for example, food aid would be documented under food access and availability. Keep in mind that assistance can be an important part of the overall food security picture. At the moment, masking is not adequately covered with the mapping protocols, making written statements very important. However, this issue has been recognised and there are efforts being made at regional and global levels to develop a new mapping symbol to illustrate where masking is having an effect.

2.4 Step 1: Classifying Each Indicator in Turn

There is no one way of doing the classification, but it is first best to classify the phases of each individual reference outcome/evidence in order to be able to see any convergence of evidence clearly. It is important here to refer to Section 4.2 Key Reference Outcomes in the Technical Manual to classify each outcome – there is a lot of information and guidance for assigning phases here, and it is not the purpose of this user guide to replicate. When doing the classification of each indicator there are a few things to remember which may help the process:

1. Phases should be *current or imminent, and have a period of validity*. This is important, because we generally want to provide 'decision makers' with a situation analysis that is dynamic and forward looking, rather than be static and stuck in time. As mentioned in the previous module, the IPC outcome should have a clearly defined period of validity. So, while you are classifying each indicator, you need to be thinking about it in the present 'what is going on now', as well as what is foreseeable within the validity period of the analysis 'what I am sure is going to happen'.

The period of validity will vary from country to country as it is usually tied in with agro-climatic seasons and the associated agricultural calendar. Typically an IPC analysis will take place at or near the end of a rainy season, and its validity will extend to a similar stage in the next rainy season. In some cases it may be appropriate to do a mid-season outlook, which may not be a 'full' IPC analysis, but has value in providing decision makers with an early warning of the season's performance (more on this in Step 2).

2. Direct and Indirect Evidence: As mentioned in the previous module, you will have a mixture of direct and indirect evidence, and in most cases due to scarceness of data, you will most likely have much more indirect than direct evidence. This is not a problem, but you have to think about the way you interpret each kind of data. The simplest kinds of data to classify in the IPC are reliable quantitative data that directly relate to an outcome indicator that has a recognised threshold. Indicators like acute malnutrition and mortality would fall into this group. Other direct evidence may not be quantitative or do not have a threshold, and are classified on the basis of a description that is as specific as possible. Examples of these kinds of evidence would include civil security, disease, destitution/displacement and livelihood assets. While these may be imprecise to a greater or lesser extent, the evidence still describes the situation directly.

Indirect evidence describes a given reference outcome through proxy or process indicators that are, by definition, indirect. Because of this, **it** is **for you to make the appropriate association between your indirect evidence and a particular reference outcome**, taking into account the livelihood context and relationships with other factors. Therefore, it is really important to interpret each piece of indirect evidence with a good understanding of how it relates to the outcome for specific livelihoods/communities.

BOX 1

When looking at access to food, cereal and livestock prices are often used as indirect evidence. But these will affect different people in different ways: rapidly increasing cereal prices together with declining livestock prices can be interpreted to be eroding the terms of trade for pastoralists for example, but may be seen as advantageous to crop producers who may see more income from selling their surplus cereal.

3. Confidence: When people – especially food security analysts - first see the IPC tool, they often get worried that they will not have enough data to do a classification. It does look a bit scary.... but in practice it is possible to do a classification on the basis of scanty data. It should be obvious that the confidence you have of a classification will not be as high as it would if the data was more complete or of higher quality, but it is still possible to do. If you are worried about this, then think about the fact that decisions will be made on food security issues on the available evidence (or on no evidence at all) – it is surely better to inform decision makers through the systematic analysis of the data that does exist.

It is important to tell the end users of the IPC output about how confident you are in the final classification.

As you classify each reference outcome, you need to develop a relative scale that you can use to tell people about your confidence.

This is a product of three things:

- a) The reliability of evidence (you should already have scored each piece of evidence in terms of reliability as you entered the data into the template):
- b) The amount of evidence and how consistent it is clearly one piece of evidence is less convincing than two or three pieces from different sources which corroborate themselves;
- c) The strength of the evidence in indicating a reference outcome.

Once you have classified all the reference outcomes, you can go to the next step

2.5 Step 2: Convergence of Evidence and Overall Classification

As mentioned in section 2.3, the important concept here is **convergence of evidence**, or in other words, what collective story your indicators are telling you.

Using an example from Southern Sudan, the following table (Figure 2.3) is a useful tool for summarising the phase classification of each reference outcome, allowing the convergence of evidence to be seen clearly. Note that here the acute malnutrition outcome was in phase 3 (as previously discussed), but the overall phase assigned was phase 2.

This table just gives you a summary or global view of the detailed template with all your evidence, and as such should be seen as a guide to help you with the phase classification. It is useful to work out the mode – or the most popular phase – to help with your judgement, but this is only a guide and not mathematical process.

Figure 2.3: IPC Classification Summary Table – with Data from the Western Flood Plans Livelihood Zone of Southern Sudan

Key Reference Outcome	Confidence (1, 2 or 3)	Classification* (1-5)
CMR	2	1
Acute Malnutrition	2	3
Stunting	-	-
Disease	2	2
Food access/ availability	2	2
Dietary Diversity	1	2
Water access/ availability	2	2
Hazards	2	2
Civil security	2	2
Coping	1	2
Livelihood Assets	2	2
Structural	2	2
SYNTHESIS	2	2

^{*}GFS=1; M/BFI=2; AFLC=3; HE=4; FHC=5

Generally, your classification will be made on the basis of the *most vulnerable* in the area or LZ³. We know that not all people will be affected by the hazard in the same way: in most cases, asset poor people are most affected, and some people may even benefit. What you want to communicate is also important. For example if a relatively small proportion of the population is in a serious crisis and need urgent help, it is important to classify the whole area on the basis of that vulnerable population. In *Module 4*, we discuss how to present the different estimated populations that may be in different phases within an overall phase classification to communicate the nature of the food insecurity.

Indicators are not weighted in the IPC, and so in theory at least, each indicator is equally important as another. However, in practice we generally do introduce a degree of weighting on the basis of our local knowledge. If we know for example that a particular issue is central to a food security problem, such as access to food as a result of hyperinflation, you would be justified in giving that indicator more weight than one that you know is not so important. At the end of the day, it is for you to make the best judgement that you can base upon the evidence that is available and your own knowledge.

In a similar way to Step 1, your classification should incorporate what is current and emerging – the 'now' and the 'foreseeable' during the specified validity of the analysis. As mentioned before, typically an IPC analysis will take place at or near the end of a rainy season, and its validity will extend to a similar stage in the next rainy season. In some cases it may be appropriate to do a mid-season outlook, which may not be a 'full' IPC analysis, but has value in providing decision makers with an early warning of the performance of the season.

An analysis may have to be done in a more ad hoc reactive way, if for instance a sudden hazard occurs such as an earthquake or conflict. Note that the early warning component of the IPC deals with the probability of a phase deteriorating to a worse phase during the period of validity. This is different from the emerging where we are communicating the situation that is imminent and certain to develop (*see Module 3: Risk Analysis*). Note that the current / emergent phase that you decide on will communicate both the situation and inform decision makers on the kind of responses that may be appropriate, so this is a really important aspect of the analysis.

Once you have come up with a phase, it can be helpful to check it against the General Phase Description table on P. 19 of the Technical Manual (see Figure 2.5) to see how your judgment fits with the general description, though these descriptions may not be appropriate in all cases.

Figure 2.4: IPC General Phase Description Table

	Phase	General Description
1	Generally Food Secure	Usually adequate and stable food access with moderate to low risk of sliding into Phase 3, 4, or 5.
2	Moderately/ Borderline Food Insecure	Borderline adequate food access with recurrent high risk (due to probable hazard events and high vulnerability) of sliding into Phase 3, 4, or 5.
3	Acute Food and Livelihood Crisis	Highly stressed and critical lack of food access with high and above usual malnutrition and accelerated depletion of livelihood assets that, if continued, will slide the population into Phase 4 or 5 and/or likely result in chronic poverty.
4	Humanitarian Emergency	Severe lack of food access with excess mortality, very high and increasing malnutrition, and irreversible livelihood asset stripping
5	Famine / Humanitarian Catastrophe	Extreme social upheaval with complete lack of food access and/or other basic needs where mass starvation, death, and displacement are evident

This area is being discussed at national, regional and global levels in the interests of refining the IPC and providing more detailed guidelines for application.

Coming up with a confidence score follows the same process as in Step 1, only you need to ascribe a score for your overall classification. The summary table (Figure 2.3) will help with this process, but again, the purpose is to give an overview of your confidence ratings for each reference outcome rather than a mathematical process. As in the previous step, the **main** considerations are the *reliability of the data*, the *comprehensiveness of the evidence* and the *strength of the evidence* in indicating a phase. There is no one way of doing this, but keep in mind that you want to transparently communicate to decision makers how confident you (and your colleagues) are about the phase you have assigned.

Right at the beginning of this module, under section 1.2 'what you will need' the first bullet says 'get the right people around the table'. This is really important because the convergence of evidence approach has the underlying assumption that two analysts with the same information and comparable local knowledge will make the same phase classification judgement.

Having the 'right' people around the table will really help to get lots of input from different perspectives, and build consensus over the judgment of the phase. So who are the 'right' people'? This is dealt with in *Module 8*, but in summary the group of people who do the analysis would normally be from a technical level with a cross section of skills in the food security spectrum (including health, water, nutrition... etc); from key stakeholders, including government, UN, NGOs and international organisations such as the Red Cross Movement and technical projects like FEWSNET; have a mixture of nationally based and field based people to ensure that local knowledge is built into the equation.

Typically, an analysis event will be split into groups of 5 or 6 people who fill in a number of templates covering distinct groups (as defined at the beginning of module 1). Each group will therefore make at least one phase classification, which should be seen as provisional at this stage. When the phases from all the areas/livelihood zones in the country have been put together, a peer review process should be done to build a wider consensus on your classification, and make changes as required (see Module 7: How Do You Know You Got It Right? The Peer Review Process).

Once you have followed the two step process described here and have come up with phase classification judgements for all the templates you are analysing, you can go to the next module on *Risk Analysis*.

MODULE 3

RISK ANALYSIS



3.1 Objective of the Module and What You Will Be Able to Do When You Have Completed It

- **Objective:** to guide you in developing a risk analysis and filling in the remaining columns of Part one of the Evidence Template
- What you will be able to do:
 - o Distinguish between process indicators and outcomes
 - o Develop a risk analysis using process indicators and complete part 1 of the evidence template
 - o Combine risk analysis with local expertise to make a judgement on the probability of a phase deteriorating into a more serious situation (usually an emergency phase: 3, 4 or 5).

3.2 What You Need

- ✓ A completed evidence template part 1, column 2 (evidence) and column 3 (phase classification)
- ✓ Your data, typically process indicators from an early warning system
- ✓ Risk Analysis table from the Phase Classification Reference Table (P.5 of the Technical Manual)

Figure 3.1: IPC Risk Analysis Reference Table

Risk of Worsening Phase	Probability / Likelihood (of Worsening Phase)	Severity (of potential Phase decline)	General Description and Changes in Process Indicators	Implications for Action
Watch	As yet unclear	Not applicable	Occurrence of, or predicted Hazard event stressing livelihoods; with low or uncertain Vulnerability and Capacity	Close monitoring and analysis
			Process Indicators: small negative changes	Review current Phase interventions
Moderate Risk	Elevated probability / likelihood	Specified by predicted Phase Class, and indicated by colour	Occurrence of, or predicted Hazard event stressing livelihoods;	Close monitoring and analysis
		of diagonal lines on map.	With moderate Vulnerability and Capacity	Contingency planning
		он шар.	Process Indicators: large negative changes	Step-up current Phase interventions
High Risk	High probability; 'more likely than not'		Occurrence of, or strongly predicted major Hazard event stressing livelihoods; with high Vulnerability and low Capacity	Preventative interventionswith increased urgency for
			Process Indicators: large and compounding negative changes	High Risk populations Advocacy

3.3 Before You Start...

The phase classification provides us with a situation analysis that is current and emerging, with a defined 'shelf-life' or period of validity – usually until the next major agro-climatic season. Thus while an element of **outlook** is present, the analysis gives us what we are confident is going to happen during the validity period. Early warning, however, is more to do with <u>gauging the probability of a situation developing</u>. In the IPC, we look at the relative *risk* of an area or community slipping from one phase to a more severe phase. Thus, we are **not** classifying the likeliness of the risk worsening within the same phase.

Risk is a function of two principle elements: exposure to a hazard (by which we mean a threatening event), and the vulnerability of the community or individual to that particular hazard (note that different communities will be vulnerable to different hazards: a cattle pastoralist may be vulnerable to rinderpest outbreaks while a camel pastoralist will not be).

Vulnerability brings in the element of *resilience*, which has two aspects: the ability of a system (community, household... etc) to absorb the effects of a hazard and remain within a given state *[resistance]*; and the ability of a system to 'bounce back' to a pre-existing (or new) condition. Within both of these 'types' of resilience, the concept of coping and flexibility is integral: those with more ability to cope, or adapt quickly to new circumstances (either temporarily or permanently) are generally more resilient than those with less coping capacity and flexibility. Another way at looking at resilience is that change is often an opportunity for a resilient community/household/system; whereas for an un-resilient system, change can often be a disaster.

In the IPC, there is currently no specified way of recording early warning evidence, however, it is useful to list and describe firstly the relevant hazards that communities could be exposed to and the probability of the hazard occurring, and secondly the vulnerability of the community concerned to the hazard if it occurs. As this analysis is predictive in nature, outcomes data is not directly relevant. Process indicators, typically from national or sub-national early warning systems, will be used.

BOX 1

What are Process Indicators?

These are factors that contribute to an eventual output, often as a chain of interrelated cause and effect chains. For example, a much reduced seasonal rainfall would be expected to result in lower agricultural production, which in turn will lead to lower availability of food (at the local level at least), and a consequent increase in prices, affecting access to food, and reduced consumption. This sequence of events, if they occur, could be expected to impact negatively on poor people's food security, and manifest in increased acute malnutrition. The process indicators in this example are: rainfall; agricultural production; food availability; market prices; terms of trade (access to food in the market) dietary diversity and coping strategies (such as skipping meals). The outcome is acute malnutrition (a reference outcome in the IPC), and the direct evidence of this outcome will be an anthropometric measure of acute malnutrition such as w/h.

3.4 Step 1: Developing a Risk Analysis Matrix

To help organise your process data and to bring in the key hazard and vulnerability information, it is helpful to fill in the risk analysis matrix as shown in Figure 3.2.

Figure 3.2: IPC Risk Analysis Matri

Hazard	Probability of event happening	Vulnerability to the Hazard	Probable impact and magnitude
1.			
2.			
3.			

The hazard refers to any threat that is reasonably likely to happen (it is probably not worth your time to list every conceivable hazard) and that could have a significant impact upon livelihoods. The *probability* of the event happening is usually fairly subjective, but as much as possible, you should include as much evidence that you can, such as climate outlook reports, trends of key commodity prices, or reports of rising tensions between conflicting groups to name a few. The *vulnerability* to the hazard should include information on why the community you are considering is particularly vulnerable to each hazard. Finally, the likely impact and magnitude would include how the hazard may impact on livelihoods or how this hazard has affected people in the past - historical evidence is helpful here –, what people are likely to do to absorb the impact, and the likely numbers of people who are at risk. Your risk analysis matrix can be pasted into your template if you like, or you can just use is as an analytical tool.

BOX 2

For example, a community living near a river basin may be considered particularly vulnerable to floods; destitute pastoralists may be vulnerable to rising food prices with high dependence on the market and low and unstable incomes; rain-fed agriculturalists living in marginal areas maybe vulnerable to poorly distributed rainfall because of their means of production, levels of poverty and poor access to alternative income sources.

3.5 Step 2: Making the Prediction on Risk

Let us remind you that the judgement we are talking about here is the relative risk of a community (whatever analytical unit that you area dealing with) of going from one phase to a worse phase during the period of validity for the analysis. This has usually concentrated on going from a non-crisis (phases 1 and 2) to a crisis phase (3, 4 or 5) or from one crisis phase to a worst crisis phase. It is possible for phases to be jumped, so you should also think about the possible impact of the hazard. For example, a community in phase 1 may leap straight to phase 5 if a rapid onset disaster such as an earthquake struck resulting in destruction of assets and displacement away from their livelihood means.

So the first thing to think about is the relative probability of the hazard actually taking place during the period of analysis. For hazards relating to climatic variation (drought and floods), national and regional climate outlooks can be an early guide to an upcoming season, although they are often inaccurate. Other early indicators would include the start date of the season compared with normal and early performance. Keep in mind that for a flood hazard, the cause may be rainfall falling far way or even in another country, such as flooding in southern Somalia from heavy rain falling in neighbouring Ethiopia.

The likely impact is a function of vulnerability to the hazard, and here the elements of resilience are important: the ability to absorb the shock through coping and/or adapting alternative livelihood strategies. Magnitude is also important in terms of numbers or proportion of the community who would be affected by the hazard. The combination of these factors should give a picture of whether or not a hazard, if it occurred, would tip the community into a more serious phase given their vulnerability to the hazard and ability to cope/adapt, together with the potential extent of the deterioration in food security.

If the picture does suggest that the shock could be serious, the final risk phase is based on the relative probability of the event taking place (high, moderate or severe). See Figure 3.3 for an example.

Figure 3.3: Evidence of Risk for Worsening Phase or Magnitude and Risk Level Classification

	Time	Period of Anal	lysis: February	2008				
Projected Phase for Time Period (Circle or Bold appropriate Phase)	Evidence of Risk for Worsening Phase of (list hazard and process indicate) List evidence in support of ri Source of Evidence Reliability Score (1=very rel	ors) isk statement	at reliable 3=uno	confirmed)		Risk Level (Circle or Bold appropriate Risk Level and expected Severity, if warranted)		
Acute Food and Livelihood Crisis	Hazards: Resumption of violent confligovernment. Continued inter-ethnic tensions.				lition	Moderate Risk o HE		
		Maize	Wheat	Beans	Potatoes			
	Cultivated land 2007 75,778 16,182 17,173 8,431							
	Cultivatable land likely to be out of production, 2008	24,101	1,430	5,589	2,303			
	Net cultivatable land 2008 44,069 11,337 9,584 4,046							
	% land likely out of production 2008 31.8 8.8 32.5 27.3							
	If return to farms possible, p inputs including tractor hire Relief assistance reduces of: Vulnerability: Sustained displacement, cor food prevented; no income swith host families. If return to farms: late plant income; livestock not return further violence and displace. High dependence on relief a stoppage of relief.	e, fertilizers, stock stops due to trans implete lack of acco sources; continued ing and high costs led and income fro ement if underlyin	feeds. port interruption ess to land and pr d dependence on s of production re om milk limited oi ng land issues not	s or lack of resou oductive assets. relief assistance duce potential har r lacking. [long to r resolved)	Production of in camps or arvest and erm risk of			

MODULE 4

THE NUMBERS GAME — ESTIMATING POPULATIONS IN EACH PHASE



4.1 Objective of the Module and What You Will Be Able to Do When You Have Completed It

• Objective: to guide you in estimating populations affected by different severity levels of food insecurity

• You will be able to:

- o Develop a population table and ascribe estimated populations in each classification phase
- o Justify your judgements on the magnitude of a food security problem
- o Distinguish between estimates of populations facing food insecurity and estimations of beneficiary numbers, typically calculated for specific interventions such as food aid

4.2 What You Need

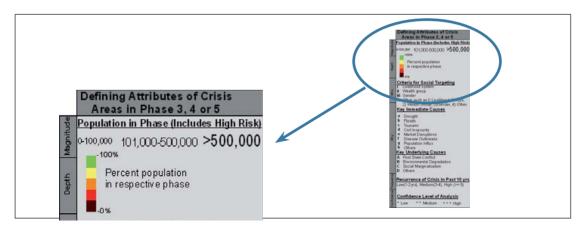
- ✓ The right people around the table: it is important to get technical consensus while estimating population tables. Care should be taken to avoid participant seeing this exercise as a direct means to come up with beneficiary numbers, though this may be done as an important aspect of response analysis and planning;
- ✓ Data from your country to an appropriate level of disaggregation on population, and wealth ranking or similar means to estimate vulnerability on the basis of assets or poverty; other data depending upon the hazard (for example, population living in flood-prone areas).
- ✓ Section 5.3 of the Technical Guide 'Standardised Population Tables' (See Figure 4.1);

Figure 4.1: Table of Estimated Population by Region in Humanitarian Emergency and Acute Food and Livelihood Crisis

		Assessed and	Contingency Population i	n AFLC and HE
Affected Regions	Estimated Population of Affected Regions ¹	Acute Food and Livelihood Crisis (AFLC) ²	Humanitarian Emergency (HE) ²	Total in AFLC or HE as % of Region Population
North				
Bari	235.975	45.000	0	19
Nugal	99.635	20.000	0	20
Sanag	190.455	55.000	0	29
Sool	194.660	50.000	0	26
Togdheer	302.155	40.000	0	13
Coastal (fishing)		20.000		
SUB-TOTAL	1.022.880	230.000	0	22
Central				
Galgadud	319.735	40.000	0	13
Mudug	199.895	20.000	0	10
SUB-TOTAL	519.630	60.000	0	12
South				
Bakol	225.450	45.000	105.000	67
Bay	655.686	135.000	395.000	81
Gedo	375.280	80.000	180.000	69
Hiran	280.880	55.000	0	20
Lower Juba	329.240	60.000	115.000	53
Middle Juba	244.275	50.000	120.000	70
SUB-TOTAL	2.110.811	425.000	915.000	63
TOTAL	3.653.321	715.000	915.000	45

✓ Defining Attributes legend (new amended version) from the mapping protocols (Figure 4.2).

Figure 4.2: Defining Attributes Legend



4.3 Before You Start...

In any situation analysis it is important to include the severity of the situation (phase classification), the geographic spread and scale in terms of numbers of people, in addition to other things like causes. We have dealt with the first two of these in the first 3 modules as part of the phase classification process. It is really important to estimate the scale of the situation (especially in the crisis phases) in order to convey to decision makers the seriousness of the situation and the scale of a response that would have to be put into action.

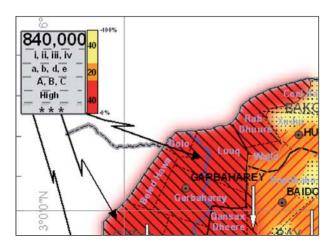
This part of the IPC process can sometimes be quite difficult to do, both technically and, more importantly, as a result of possible influence from elements who may want to see a situation seem better or worse than it is. Part of the reason for this is due to assessments conventionally combining situation analysis with response planning, and particularly with estimating populations in need of something (typically food aid, seeds and tools or other types of relief). The response planning process is nearly always a more political one than situation analysis, since the allocation of resources is central. So it is vitally important to get some things very clear to be able to do a population estimate free from these kind of influences and to maintain the objective quality of our situation analysis.

BOX 2

Estimating what population and for what purpose? A clarification

The IPC tool is used to develop a situation analysis that should be as objective and transparent as possible. When estimating population numbers we are interested in the number of people that are estimated to be in each IPC crisis phase (3, 4 or 5). This means that when an area has been attributed with a crisis phase, we estimate the number of people living in that geographical area that are in different phases, because we know that not all the people in the area will be affected by the hazard in the same way: some will be in a less severe phase, while others may even benefit from the situation. By doing this we are providing our decision makers with a picture, not only of the overall phase of an area or LZ, but also of the depth and severity of the problem in terms of food security. This estimation is done without any judgement regarding the possible needs or response options at this stage. Not getting into a response analysis or planning helps to maintain the objectivity of the situation analysis. The population estimates are presented in two ways on the map: firstly the estimated number of people in the area in crisis that are in the most severe (classified) phase is indicated at the top of the call-out box; and secondly the estimated population in each phase as a percentage indicated by the stacked bar next to the call-out box. See the example in Figure 4.3.

Figure 4.3: Population Estimates as Presented on the Map



There is no set way to do the population estimates and it is necessary for countries to develop their own methods that follow the same general principles. Note that it is important to develop a method that allows you to estimate populations in the same way over time (i.e. over future analysis cycles) and space. This means that you will be making the estimates in the same way each time, and can communicate to your users about how you do it in a transparent way

General Principles for estimating populations:

- Populations are estimated without any judgement concerning any types of assistance that people may or may not need.
- 2. Populations are estimated in terms of the degree or severity of food insecurity they are experiencing.
- 3. Within a crisis phase, there will be people who are more or less seriously affected, and therefore not all the population living within a crisis phase will be facing the same degree of food insecurity. It follows that some people may be experiencing a 'Humanitarian Crisis' level of food insecurity in an area classified as phase 4, but that others may be facing less severe phases this allow us to develop the staked bar in the call-out boxes (e.g. above).
- 4. In order to differentiate between these groups and to estimate proportions in the population as a whole, information about peoples' known vulnerability in the area is needed. This may be a proxy such as wealth ranking or poverty level (on the assumption that poor people are generally more vulnerable to hazards).
- 5. Differentiation between groups within the phase will be a factor of several elements including the degree of homogeneity (sameness) within the area or LZ, and the effect of the hazard: in some cases such as an earthquake, the entire population in the epicentre may be affected.
- 6. Population estimates are estimates <u>not</u> exact figures. They provide an indication of the magnitude of the food insecurity problem for decision makers, but are usually not sufficiently accurate to base or target responses, which may require more detailed assessments.⁴

BOX 2

It is worth emphasising that it is important to develop a good analysis of the shock and vulnerability within your analysis area/LZ, rather than mechanically estimate populations based solely on your wealth ranking groups or poverty levels. It is also really important to explain your methodology so that others understand the basis of your estimates, which is essential to maintain the credibility of your overall situation analysis. Remember that although you are estimating population in each phase, some people will be thinking in terms of beneficiary numbers, so it is important to explain fully how you estimated your population figures.

⁴ Note that while these principles reflect the current thinking on estimating populations. This area of the IPC is being considered a priority for regional and global steering groups to review and possibly revise.

4.4 Step 1: Estimating Populations in Each Phase

The first thing to do is to organise your population data in the most appropriate way that you can given your analysis framework. This is generally reasonably straight forward if you are doing your analysis on the basis of administrative zones as most population figures follow these. If you are dealing with a livelihood zone, however, you may need to calculate or estimate the population of that livelihood zone. Similarly, you will need to estimate populations that are specifically at risk of a hazard such as a flood on the basis of where they live and their proximity to flood-prone areas.

The next stage is to look at your baseline wealth ranking or poverty data that relates as much as possible to your population figures and the unit of analysis. Your knowledge of the area, livelihood dynamics and vulnerability will be essential here to then make a judgement on the numbers of people that fall into each phase. Generally speaking, if an area/LZ has been classified as a humanitarian emergency, you would expect your 'poor' (and 'very poor') wealth groups to be included in phase 4. If you don't have wealth ranking data available, most countries have poverty data which may also help: people considered to be 'hard core' poor will usually be equivalent to the poor or very poor in wealth ranking approaches; middle wealth groups, or 'relative poverty' populations (from poverty surveys) might fall into phase 3 depending upon a good analysis of the hazard and possible impact on these groups; and the 'wealthy' or 'non-poor' may fall into phase 1 or 2. This kind of analysis will allow you to estimate proportions of the overall population in a given area that will fall into different phases within an overall phase, which can then be related to actual estimated numbers of people:

D1 * X1 * X2 = total number of people affected by phase in overall phase area, where:

D1 = District (or equivalent administrative area);

 $X1 = percentage \ of \ population \ in \ particular \ livelihood \ zone \ or \ other \ analytical \ unit$

(e.g. low lying areas in floods);

X2 = Percentage of poor group (wealth group or from poverty survey) living within the LZ or other analytical unit.

A further refinement would be a judgement on whether all or a portion of a particular wealth group or poverty group fall into the same phase. For example, in a drought hazard, if the rainfall has been good in one area, the estimated population in a crisis phase may exclude this good rainfall area.

This would add another 'X' to the formula:

D1*X1*X2*X3 = total number of people affected by phase in overall phase area,

X3 = is the percent of poor wealth group in a crisis phase (i.e. that would exclude the percent of the poor wealth group that are not considered to be in crisis from the analysis: such as because of rainfall distribution)

If you have more than one livelihood zone within the district, you just have to repeat the process for the other livelihood zones and add up the final figures. An example of how FSAU estimate their populations is included in Annex 3.

4.5 Step 2: Validation and Peer Review

As this is an important and potentially contentious part of the analysis, it is important that you have the right people around the table to discuss and gain consensus on the population estimates. It is suggested that you fill in the population estimates in an easily understood manner (using the population tables in the Technical Manual) and present to your wider group.

During the peer review process (*see Module 7*) when the entire analysis is reviewed by the wider team (and if possible a panel of 'outside experts'), particular attention needs to be placed on the population estimates in each phase.

The last thing to do when consensus is attained, is to develop the stacked bar proportions and input the estimates into the mapping protocols.



5.1 Objective of the Module and What You Will Be Able to Do When You Have Completed It

- **Objective:** to guide you in analysing the impact of a given hazard on the livelihoods of people, identifying the key immediate and underlying causes and describing some possible response options
- You will be able to:
 - o Fill in Evidence Template part 2, including analysing the impact and immediate causes of a hazard and potential response options that should address immediate needs;
 - o Fill in Evidence Template part 3, including analysing the impact and underlying causes of a hazard and potential response options that will address some underlying issues.

5.2 What You Need

✓ Blank Evidence Templates 2 and 3 (see Figures 5.1. and 5.2)

Figure 5.1: IPC Analysis Template 2

rea of Analysis (Reg	ion, District, or I	Livelihood Zone):			Time Peri	od of Analysis:	
		A	NALYSIS				ACTION
Current or Imminent Phase Circle or Bold Phase from Part 1)	Immediate Hazards (Driving Forces)	Direct Food Security Problem (Access, Availability, and/or Utilization)	Effect on Livelihood Strategies (Summary Statement)	Population Affected (Characteristics, percent, and total	Projected Trend (Improving, No change,	Risk Factors to Monitor	Opportunities for Response (to Immediately improve food access)
Generally Food				estimate)	Worsening, Mixed Signals)		

Figure 5.2: IPC Analysis Template 3

ea of Analysis (Regio	on, District, or Livelihood Zone):		Time Per	iod of Analysis:
		ANALYSIS		ACTION
Current or Imminent Phase (Circle or Bold Phase from Part 1)	Underlying Causes (Environmental Degradation, Social, Poor Governance, Marginalization, etc.)	Effect on Livelihood Assets (Summary Statements)	Projected Trend (Improving, No change, Worsening, Mixed Signals)	Opportunities to support livelihoods and address underlying causes (Policy, Programmes and/or Advocacy)
Generally Food		Physical Capital:		
Secure 1A		Social Capital:		
Generally Food Secure 1B		Financial Capital:		

- ✓ Your data and completed evidence template 1
- ✓ Livelihood baselines and local knowledge of livelihood systems and strategies

5.3 Before You Start...

The evidence templates parts 2 and 3 completes the situation analysis by looking in detail at the possible impacts and causes of the food security situation and taking the first steps into response analysis by looking a potential appropriate responses.

It should be noted here that there is a distinction between **response analysis** and **response planning**: the former is an analysis of potential responses based upon the situation analysis, without consideration of resources, capacity on the ground or any political aspects – in this regard it is 'blue sky thinking' and should be done by food security analysts, with some inputs from operational people. In contrast, response planning is the process whereby responses are developed as an operational plan, and therefore issues around resources and capacity are as important as appropriateness of the response; it is also an inherently political process since it involves resource allocation (For the 'Analysis-Response Continuum' see Figure A in the *Introduction* section of this Users Guide).

It is for this last reason that the IPC stops at impact analysis, since the process of response planning has more potential to influence the situation analysis – to make the situation look worse or better than it actually is; or to lead decision makers towards a particular type of intervention that might suit a particular agency mandate or political imperative. As much as possible we need to insulate our situation analysis from these kinds of pressures in order to provide decision makers with a balanced, objective and transparent analysis, and to maintain credibility.

Having said this, it is obviously very important to make the link between the situation analysis and the response that is put in place, and that is what we do with parts 2 and 3 of the template. It is also worth noting that this part of the process is often missed or done rather badly. Assessments may produce good situation analyses and the government and agencies use the information to develop responses based upon 'what they've always done' or their comparative advantage/ capacity, rather than based on an analysis of the needs. This part of the IPC analysis is your opportunity to identify the causes and needs (both immediate and underlying) and make recommendations on what should be done, rather than what habitually gets done.

5.4 Step 1: Filling out the Evidence Template Part 2

Part 2 is divided into two overall sections: analysis and action. It goes without saying that the analysis part should be filled in first with the action section being done on the basis of the analysis.

The Analysis Section:

Parts of the analysis components of this template can be taken directly from Part 1, including the first column which is merely to record the Phase Classification. The second column lists the direct hazards, which you should have available from your risk analysis while filling out Part 1 (see also Module 3). The next column looks at the effect of the hazard on livelihood strategies in the area of analysis, with a focus on loss of or loss of access to key livelihood assets such as production, income, access to land or pasture, access to health facilities and so on. Note that this relates to the effect of the hazard on livelihoods rather than general statements on livelihood capitals, and it should also include what people are doing about it.

BOX 1

Remember to focus on loss of or loss of access to key livelihood assets!

For example, if production is very low, people may adjust their livelihood strategies (at least temporarily) such as by seeking off-farm labour, or engaging in petty trade. Information about peoples' coping strategies is helpful here.

Estimated populations affected by the hazard or each hazard if there are more than one should be included in the next column. Work done on estimating populations affected by a given crisis phase will be helpful here, but more analysis may need to be done to look at each hazard in a multiple hazard scenario. Finally the projected trend for each hazard completes this section of the template (improving, no change, worsening, or mixed signals). It is helpful here to indicate rate of change as well as the direction, for example, 'rapidly worsening' provides a sense of urgency that would be missing if you just state that the situation is worsening. Mixed messages refer to situations where the signals are not clear or are contradictory.

The Action Section:

The first column directs actions in terms of monitoring key risk factors. These would be things that, if happened, would lead to a worsening of the situation. For example, return of IDPs after the planting season; or critical water levels in a river threatening to flood; or road blocks established that would restrict access to markets; or rainfall at a critical stage of crop development... etc. The following column requires a good level of analysis of the situation in order to identify appropriate responses that might improve *immediate* access to food. The analysis should take into consideration things like:

- o **The immediate causes and needs**: this is your first consideration to develop possible response options that address immediate needs and causes.
- o Market function: As a general principle, it is best to avoid distorting or undermining markets, though stabilisation may be an option involving direct engagement with markets, especially to maintain the terms of trade of vulnerable people. If markets are functioning well and food is available, it is usually better to recommend a cash-based response over a food-based one to avoid distorting and undermining markets and producers; if food availability is the problem, a cash-based response can cause local inflation, again distorting markets;
- o **The characteristics of the predominant livelihood:** what would be the appropriate response(s) that would help to protect or rebuild livelihood assets?
- o **The stage in a crisis cycle**: different responses may be required at the beginning, middle or end of a crisis, such as livestock de-stocking as an early response, and restocking as a recovery intervention.
- o Existing responses: avoid duplication, but rather identify gaps in geographical coverage and sectors
- o **Local Priorities:** What are the priorities of households and communities and of the local agencies (especially government)?

The actions here should be discussed with the wider group doing the analysis during the peer review process, and as much as possible, developed into a comprehensive response framework at the national level. To reiterate: this is a response analysis which identifies the most appropriate responses, based upon the situation analysis. It does not represent a response plan in which resources, capacity, logistics and other elements would be considered.

The following example from Kenya (Figure 5.3) gives some guidance on how Part 2 of the template looks into a Humanitarian Emergency among IDPs displaced by post-election violence in early 2008.

Figure 5.3: An Example of Evidence Template 2 Analysis for IDP Nakuru, Kenya

Part 2: Analysis of Immediate Hazards, Effects on Livelihood Strategies, and Implications for Immediate Response Area of Analysis

(Region, District, or Liveli	(Region, District, or Livelihood Zone): IPDs Nakuru						Time Period of Analysis: Feb - June 2008
			ANALYSIS				ACTION
Current or Imminent Phase (Circle or Bold Phase from Part 1)	Immediate Hazards (Driving Forces)	Direct Food Security Problem (Access, Availability, and /or Utilization)	Effect on Livelihood Strategies (Summary Statement)	Population Affected (Characteristics, percent, and total estimate)	Projected Trend (Improving, No change, Worsening, Mixed Signals)	Risk Factors to Monitor	Opportunities for Response (to Immediately improve food access)
Fmergency	Resumption of violent conflict Continued interethnic tensions If return to farms possible, planting is later than optimal. Relief assistance reduces or stops	Prevention of return to productive livelihood sources (farm and livestock). No Food production reduces food availability. Access to food limited to relief supplies. Interruption of relief would limit access. Late planting would lower yields and availability to food.	If the IDPs can not return to their farms, or be resettled elsewhere, they will necessarily remain in IDP camps, or be hosted by relatives. In both cases, they will be heavily dependant upon relief for their basic needs. Intensified conflict would present the risk of interrupted relief supplies and a humanitarian catastrophe if this is sustained. Additional risks to wellbeing are associated with deterioration of camp conditions during the rainy season (March to July). If the political situation continues to improve at the national and local levels, IDPs may be able to return to their farms if security is guaranteed. In this case, land preparation and planting is likely to be later than optimal, and production adversely affected. The loss of livestock, particularly dairy cows, will erode incomes unless restocking is carried out.	residing in camps and with host communities. Note the number of IDPs residing with hosts are not verified, and hence the total number of IDPs may be an underestimate	Mixed Signals	Political power- sharing effective at national level; peace building and reconciliation; addressing underlying causes and perceptions at the local level. Government policy and action concerning return of IDPs to their farms and/or resettlement elsewhere. Timing of return (or not) in terms of the agricultural calendar. Return later than March will result in very late planting and low production.	1. Continue to meet the basic needs of IDPs in camps and with host families through relief interventions: food; health services, adequate water and sanitation; shelter; education. 2. Psycho-social support for those directly affected by violence and trauma 3. Support to peace-building and reconciliation efforts to rebuild frust between the conflicting communities. This is a prerequisite to allow IDPs to return in security and peace. 4. Provide farm inputs to returning farmers (or to those being resettled on farmland elsewhere). Priorities would be subsidies on tractor hire, seeds and fertilizers. Farm implements on a case by case basis. 5. Assistance in terms of shelter/housing for IDPs who had their houses destroyed during the violence. 6. Redistribution of livestock to IDPs who lost their livestock. Dairy cattle would be a priority. 7. Support to the resolution of underlying issues, particularly associated with land ownership.

5.5 Step 2: Filling out the Evidence Template Part 3

Part 3 of the template is similar to Part 2 that you have just completed, but it focuses on the underlying causes of food insecurity. It has the same two sections for 'Analysis' and 'Action'.

The Analysis Section:

As for step 1, the first column is just to record the phase that your analysis area/LZ is in. The second column looks at the **underlying** cause(s) of food insecurity such as climatic variability; long-standing political exclusion; economic marginalisation; environmental degradation etc. The third column is for you to write summary statements on the impact of the underlying causes on each of the livelihood capitals. You will see that the template has six capitals rather than the more conventional five, with 'Local Political Capital' as an additional one. Depending on the context in your country, political capital can be looked at individually (if it is particularly important) or integrated with Social Capital. The forth column is to indicate the direction of change as in part 2.

The Action Section:

This is similar to part 2, but you should identify actions and interventions that address the underlying causes that you have already included in the analysis section. In many instances, you will have the same subject or sector in both parts 2 and 3, but the response options will probably be different. For example, an acute water shortage may have immediate and underlying causes. The immediate cause may be a critical shortage of water caused by a breakdown in the nearby borehole. The immediate response may be to fix the borehole pump (if that is easily done) or truck in emergency water supplies. The underlying cause maybe poor borehole maintenance, or not enough boreholes in the area, in which case the recommended action may be to establish water management committees, or drill more boreholes in the area.

BOX 2

Avoid 'shopping' lists of recommendations!

Note that it is not a requirement to make recommendations for all of the causes – there may be no obvious actions to take, or so general that they may not be useful. It is generally best to avoid 'shopping' lists of recommendations, and instead look for priority actions that have a good chance on being acted on.

This is a simple example, and you are most likely to be faced with much more complex immediate and long term causes. For example in Southern Sudan very high malnutrition rates appear to be caused by a complex set of factors including hygiene, poor water quality, poor access to health facilities and poor care practices. The immediate action may be to provide supplementary feeding to malnourished children to save lives, but this will clearly not solve the underlying problem that will need a much longer term and multi-sectoral approach.

Let's stay with the example from Kenya used above and show you how Part 3 was completed.

Figure 5.4: An Example of Evidence Template 3 Analysis for IDP Nakuru, Kenya

Part 3: Analysis of Underlying Structures, Effects on Livelihood Assets, and Opportunities in the Medium and Long Term

Time Period of Analysis: Feb - June 2008	ACTION	Opportunities to support livelihoods and address underlying causes (Policy, Programmes and/or Advocacy)	Peace building and conflict resolution Resolution of long standing land ownership issues Peaceful return of IDPs to farms; and/or resettlement in productive land elsewhere Shelter (in camps or return)	Advocacy to reduce ethnic tensions and build trust between communities	Provision of farm inputs to help IDPs resume their livelihoods.		the Ensure that health and education services are maintained in sustained camp situation	
		Projected Trend (Improving, No change, Worsening, Mixed Signals)	Mixed signals	No Change	Worsening	No change	No change; may worsen with the next rainy season	No change
velihood Zone): IDPs Nakuru	ANALYSIS	Effect on Livelihood Assets (Summary Statements)	Physical Capital: Access to land and other productive assets is currently problematic due to continued insecurity and ethnic tensions. Loss of livestock (both actual and genetic material) is a particular source of livelihood erosion that will require time and resources to rebuild.	Social Capital: Inter-ethnic tensions have excluded IDPs from political dialogue is some cases;	Financial Capital: Income sources from agricultural production labour and trade are seriously curtailed; access to credit has been disrupted and loans are pending and may result in default.	Natural Capital: displacement has denied most IDPs of their natural capitals they enjoyed when on their farms (land, water etc).	Human Capital: access to education is varied depending upon location of camp and stability of stay. Access to health care is adequate in established camps, but not in remote, small and more temporary camps.	Local Political Capital: Polarization and ethnicitization of local and national political representation disenfranchises some IDP populations from effective political capital depending on whether the local MP comes from their ethnic group or an apposing community.
		Underlying Causes (Environmental Degradation, Social, Poor Governance, Marginalization, etc.)	Conflict as a consequence of: Political disputes at local and national levels; particularly triggered by disputed presidential elections Historical and contemporary land ownership issues. Inequitable distribution of resources by political elites Population growth and pressure on land resources, with low alternative livelihood opportunities.					
Area of Analysis (Region, District, or Livelihood Zone): IDPs Nakur		Current or Imminent Phase (Circle or Bold Phase from Part 1)	Humanitarian Emergency					

MODULE 6

DEVELOPING YOUR MAP — INFORMATION
THAT YOU NEED TO GIVE TO YOUR GIS TECHNICIAN



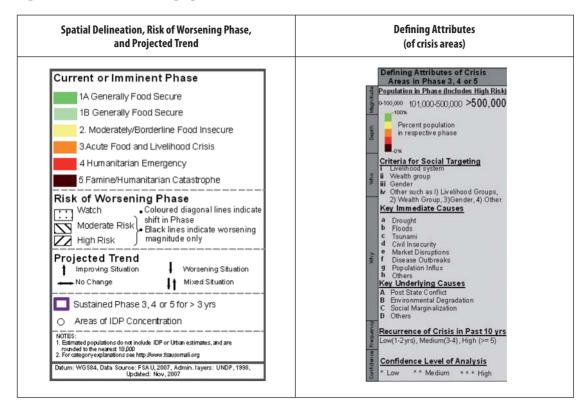
6.1 Objective of the Module and What You Will Be Able to Do When You Have Completed It

- **Objective:** to guide you in knowing what information to give your GIS technician in order for him/her to develop a standard IPC map.
- You will be able to:
 - o Put together all the information for an IPC map:
 - o Fill in call out boxes for areas in crisis (and not in crisis if you want).

6.2 What You Need

- ✓ Completed Evidence Template Parts 1, 2 and 3
- ✓ The cartographic protocols (revised) from the Technical Manual (Section 5.2 p.39)

Figure 6.1: IPC Revised Cartographic Protocols



- ✓ Shape files of your areas/LZs of analysis
- ✓ A GIS technician

6.3 Before You Start...

The IPC map is an important part of tool as it the thing that everybody sees first. It is designed very carefully to get across complex information in a clear form to a variety of audiences. For decision makers with little time to read, the map is effective at showing the spatial distribution of the different phases and the risk of a

phase falling into a more serious situation. They may look a little further and notice population estimates, the projected trend and possibly the immediate and underlying causes. For more technical people, such as operational project managers and planners, a more detailed scrutiny would be expected, and the call-out boxes will probably be analysed together with the phases and risk. The media, the non-technical public, will generally be confused or not interested in the detail, and it is worth considering for them a simplified map without the call-out boxes, and possibly without the risk analysis.

While the map has been proved to be very effective as a way to get across the main messages from an IPC analysis, it does have inherent limitations. Firstly, it is very difficult to represent mobile populations on a static map, so where there are significant population movements occurring there is no way to point this out on the IPC map. It is also difficult to represent small pockets of a particular phase, for example IDPs in a humanitarian emergency who are spread around an area that is otherwise generally food secure (they may be living with host families). One way to represent this is to apply with red (or another phase colour) dots on top of the other phase, but this can get confused on first view with the alert/watch level of risk (black dots).

Clearly the map on its own is good at getting across the main messages, but needs to be combined with a narrative description of the different phases that gives more explanation. The statements can also bring 'hidden' things to the attention of decision makers that might not be clear from the map. For example, if malnutrition rates are high (say phase 4), but all the other outcome indicators are showing a good situation (say phase 2), then the overall convergence of evidence will lead you to classify the area as phase 2. However, unacceptably high malnutrition rates should be flagged as an issue to be dealt with in the statement, and you may have evidence to explain why the rates are high and what should be done in the immediate and longer term.

6.4 Step 1: Phase Classification of the Spatial Analysis (LZ; Admin Zones...etc) Together with the Risk Analysis

The first step is simply to provide the phase classifications and risk analysis to your GIS person. However, in order to represent your phases spatially, your GIS person needs to have the shape files available for your geographical area or livelihood zone (LZ). If you are doing the analysis by administrative area, this is usually not a problem as most countries will have digitised files of sub-national administrative units to a localised level. If you are doing your classification by LZ or other geographic areas (such as low lying riverine areas in the case of floods), this may pose more of a problem when you come to mapping, unless the shape files are available for these units. One common compromise is to link your area of analysis to the lowest administrative level. So for example, a particular livelihood that is predominant in the lowest administrative unit can be considered as wholly that livelihood zone, and can be linked with other administrative units that also have the same LZ to give you larger livelihood zones that cut across larger/higher administrative units when combined. This might take quite a bit of work to build up, and if possible should be done in advance of the IPC analysis event.

In addition to the phases and risk, you need to provide information on the projected trend (improving, worsening, no change or mixed signals) that you should be able to take from Parts 2 and 3 of the evidence templates; and whether the area has been in a sustained crisis phase for over 3 years (this will be indicated by a purple border on the map). Locations of IDP concentrations should also be provided and their phase so that the map will include a circle with the colour of the phase inside in the location of the IDP camp (s). Other local issues may also need to be explained such as when you have IDP populations scattered among a host community.

6.5 Step 2: Develop Call out Boxes for Emergency Phases (3-5) Or Other Phases That You Want to Make Particular Reference to

[Includes population estimates and the stacked bar]

The call-out boxes follow the defining attributes legend (see Figure 6.1 above) and have conventionally been used to provide more detail for areas that are in a crisis phase (phase 3, 4 or 5). However, there is no reason why you should not develop call-out boxes for non-crisis phases especially if you want to call the attention of decision makers to particular areas or issues.

The call-out boxes include information on **population estimates** in the phase that you can get from your population tables exercise. This is represented as a number (small font if 0-100,000 people affected; medium font if 101,000-500,000 people and large font if over 500,000 people.); and a stacked bar giving the proportion of population in each phase within the overall phase (See *Module 4* for more details).

Criteria for social targeting are coded using I, II, III... etc to refer to the unit of targeting recommended. The 'default setting' for this is I=livelihood system; II=wealth group; and III= gender: these can be changed depending upon your particular context and analysis of the food security problem⁵. The point here is to get across to decision makers the best way of targeting resources in accordance with the most affected population group to ensure that limited resources have greatest impact. You will need to tell your GIS person what your criteria are so that he can change the defining attributes box as required.

The key immediate and underlying causes should be available from your evidence templates parts 2 and 3. These are coded alphabetically and again can be adjusted to fit your context: you need to tell your GIS technician which codes you want to use for each cause so that he can change the attributes box.

Recurrence of the crisis in the last 10 years is useful to indicate the frequency of crisis in the analysis area which gives an indication of the exposure of the area to risk and the likely state of the livelihoods: generally speaking, you would expect a livelihood with frequent exposure to hazards to be in poorer shape. The frequency of crisis in the past 10 years can be low (1-2 years of crisis), moderate (3-4 years) or high (over 5 years). With time, you can use the definition of 'crisis' in the IPC sense of being in phases 3, 4 or 5. As you are introducing the IPC to your country now, you will have to use previous descriptions of the area from assessments in the past that roughly conform to the IPC crisis phases.

The confidence level of the analysis, the judgement on the overall confidence in the analysis should have been completed as part of the phase classification exercise. Refer to the summary matrix which you developed in *Module 2* (Figure 2.3) to help you do the classification.

6.6 Step 3: Develop a Clear Title for the Map Including the Period of Validity

The period of validity is usually the period between the analysis and the next major agricultural season; however it could be a shorter period depending on the nature of the hazard. For example, a flood hazard may only impact on livelihoods for a short period, as with a livestock disease if action is taken. In conflict situations, it may be necessary to update IPC products more frequently, in which case the validity of the analysis may be quite short. The rule of thumb is to decide on the period of validity before you start doing the analysis on the basis of how confident you are that your analysis will still be valid after a certain period of time. The title of the map is a matter for communicating what you are trying to get across: it might be a general food security situation analysis of a country, or focusing on a particular hazard, or perhaps a mid-season outlook with an emphasis on risk.

⁵ Criteria for social targeting provide broad guidelines for decision makers. Note that additional assessments may need to be conducted to gain a more detailed profile of different for groups and to define targeting criteria, especially in a multi-response scenario.

MODULE 7

HOW DO YOU KNOW YOU GOT IT RIGHT? THE PEER REVIEW PROCESS



7.1 Objective of the Module and What You Will Be Able to Do When You Have Completed It

- **Objective:** To provide some guidance on the peer review process and its importance in maintaining analytical rigour, objectivity and credibility.
- You will able to:
 - o Organise a peer review process
 - o Finalise your IPC analysis with confidence

7.2 What You Need

- ✓ Completed evidence templates parts 1, 2 and 3
- ✓ A provisional IPC map including risk analysis
- ✓ The right people around the table
- ✓ An independent panel if possible

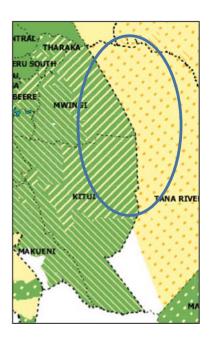
7.3 General Description

The IPC approach actively encourages debate over food security analyses and classification, and requires a consensus to be build among key stakeholders before the final output is released. This process increases the strength of the final analysis (since everyone agrees), adds to the level of transparency (since people are encouraged to review the evidence) and generally increases the credibility of the whole exercise. The general format for a peer review is to have each analysis unit (usually put together by a small group) to present their findings to the wider group.

A peer review process is a bit like being in a court room: analysis is presented to the 'court' and is open to examination and constructive criticism. The 'defendant' who presented the analysis has to defend his or her position through the evidence on the templates. If the court decides that the evidence doesn't stand up to critical examination, then the group who developed the analysis will be asked to review their evidence and possibly make changes to their phase classification or other part of the analysis. If changes are made in this way, it is important that it is reviewed a second time and there is final consensus.

It is important to have put together a provisional map for this process since it will be possible to pick out obvious discrepancies between analyses done by different groups. Often this can be seen along an administrative boundary where you would expect a phase to be the same on both sides. Sometimes, what looks like an aberration is correct and can be explained. For example, the map in Figure 7.1 illustrates two different phases being assigned either side of an administrative boundary in Kenya, which on first sight looks unlikely. When the peer review process picked this up and challenged the two analysis groups, it emerged that the administrative boundary follows a river that separated two distinct LZs – pastoral and marginal mixed agriculture – , and that the prevailing conditions were affecting these differently. So, in this case, the peer review picked up a possible anomaly and challenged it, the defendants successfully explained their position, and ultimately no changes were made.

The importance of having the right people around the table to do the peer review should be obvious by now. If the analysis is being carried out at national level, it would be normal to have the group that developed the analysis (probably your core technical team) do



the peer review. If you have a more decentralised system, it is a good idea to conduct a series of peer reviews: at the sub-national level in which a particular classification refers to; at a higher sub-national level handling more than one analysis; and then at the national level when the whole country is being reviewed. No matter how many stages of peer review you have, it is worth considering setting up an 'independent panel review' made up of food security experts – preferably with IPC experience – who have not been part of the analysis process. This is not always possible and is not a requirement - just 'icing on the cake' and a way of increasing the credibility of the exercise.

7.4 Step 1: Reviewing the Phase Classification for Different Areas/ Livelihood Zones in Your Country (Or Part of Your Country)

As already mentioned, this is normally accomplished by having a series of group presentations carried out by the analysts to the wider group, interspersed with critical analysis. If a review of evidence and changes are required, they should be reviewed a second time (probably all the changes together at the end of the review) and consensus developed.

7.5 Step 2: Finalising Any Revisions and Preparing the Final Map and Summary Statements

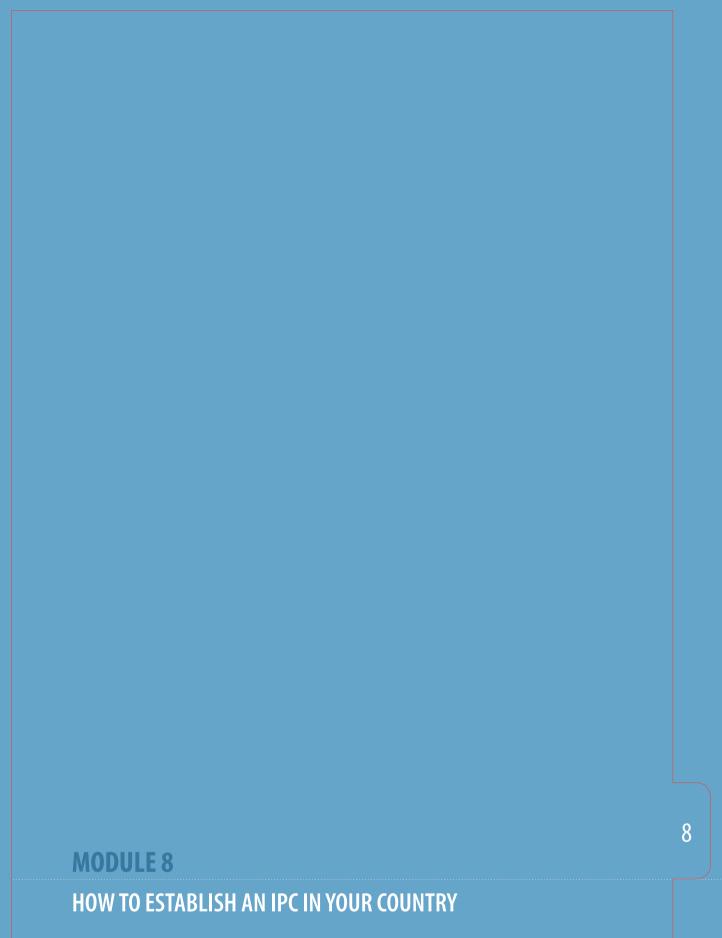
Once the review has agreed on the analysis and changes required the final revised version of the map should be shown to the group for finalisation. At this point the smaller cluster groups can also finalise call-out boxes (see *Module 6*) and draft descriptive statements for each phase.

7.6 Step 3: Disseminating the Outputs

Having completed the peer review process you are now ready to combine your maps and statements into a report or bulletin and present this to the wider food security community. Keep in mind that in the interests of transparency, you should make your Evidence Templates available to the wider community. This may be done by posting them on a website, or distributing by email or on CDs.

A couple of things to remember:

- Establish a ground rule that criticism should be constructive and should not degenerate into negative arguments or personal attacks things can get hot, but should always be professional.
- Make sure everyone has access to the evidence that is being presented to save paper and money you can project templates onto a wall from a laptop.
- Ensure that you have got consensus on the final outputs and have the group's go-ahead to publish the findings to the wider community and in the public domain.





8.1 Objective of the Module and What You Will Be Able to Do When You Have Completed It

- **Objective:** Provide some guidance and experience from other countries that will help you to establish and roll out an IPC in your country in a sustainable way.
- You will be able to:
 - o Identify the most appropriate institutional home for your IPC and related food security information requirements
 - o Develop a process and work plan that will help you to run your first round of IPC analysis, and set the targets for future cycles
 - o Develop plans to build capacity at the national and sub-national levels, and for decentralisation as needed.

8.2 What You Need

✓ Operating Principles: A set of principles were put together by the global IPC partnership (FAO, FEWS NET, WFP, CARE, SCUK and OXFAM (GB)), which aim to give some guidance about what an IPC system would look and function like in any given country. Of course, these are not rules but rather a useful set of things to think about and put in place when you establish an IPC in your country. The principles are listed in Box 1.

ROY

Draft Working Principles for Operating within a Country in the Framework of a Common Interagency Approach (For a Full IPC System)

- 1. IPC should be a consensus process facilitated by a broad interagency working group, including government and key constituencies.
- 2. All efforts made to engage and build capacity of government and promote ownership and strengthen the institutional process.
- 3. Timing of analysis linked to events/critical seasons that affect food security situation. The entry point might be a multi agency planning event.
- 4. Commitment by members of interagency working group to multi year process.
- 5. Demand driven by government to initiate an IPC process.
- 6. IPC can be started regardless of data availability. The initial situation analysis will be useful and improved as the process proceeds.
- 7. Any data used should contain confidence ranking.
- 8. IPC process should comprise a mechanism to build an institutional commitment from government
- 9. Transparency of results made available to the public in a timely manner.
- 10. IPC analysis would be done with technical neutrality through having a broad membership of the interagency group and through a transparent process of consensus building and ensuring group members participate in their technical capacity.
- 11. IPC are subject to an external peer review process to check quality and maintain standards of IPC.
- 12. The process should be used for lesson learning to improve the IPC tool.
 - ✓ Mapping of Institution: Generally speaking, the IPC should be established within existing food security institutions or coordination mechanisms. It is very useful to have analysed and mapped the various institutions relevant to food security and their relationships in information flows before deciding where your IPC system should be placed.

8.3 Before You Start...

It is really important to set off on the right foot when starting the IPC (as with other projects) because it can take a lot of time and effort to correct early mistakes later on. While there is no one 'correct' way to start an IPC process, selected experience from other countries which might help have been included in this module. As a general principle, the IPC should be seen as an add-on to existing food security analysis and coordination systems, not as something that is going to replace anything that is currently working, or that requires additional committees.

8.4 Step 1: Giving your IPC a Home – Institutional Considerations

8.4.1 Finding a home for the IPC: institutional mapping

Just like finding a home for yourself, it is important to look around before deciding where to place the IPC institutionally. Mapping is a useful way of doing this: listing all the institutions that are in some way engaged in food security, within and outside of government, and understanding the relationships with each other is the first step. An analysis of the food security coordination mechanisms in your country is just as important, as these tend to be multi-agency in nature. As well as the interrelationships between institutions it is also useful to map the information flows: this is important to understand the way food security information is made available to and used by decision makers so that the IPC can be placed in a good position for action to be taken. As a general principle, it is better to place the IPC in an existing functioning coordination mechanism rather than start new groups, although sometimes a working group that reports to an existing group or cluster is required to get things moving. For example in Uganda, the IPC is established first in the Office of the Prime Minister which coordinates the "Food Security and Agricultural Livelihood Cluster" co-chaired by FAO and WFP, but it was felt necessary to form a smaller and more specialised IPC Technical Working Group within the cluster to help establish the IPC.

8.4.2 Getting acceptance and buy-in: awareness raising; importance of national governmental ownership and leadership

Once you have worked out where the IPC should be established, you will need to do a lot of work to raise awareness with the right people inside and outside of government so that people understand what the IPC is all about. First though, it is usually necessary to have the relevant parts of government endorse the use of the IPC in your country. This would normally be required from the chair of the food security coordination mechanism, often within the Office of the President/Prime Minister (OP/OPM), as the organ of government that usually coordinates humanitarian/food security in the country. An alternative might be the Ministry of Agriculture. It is helpful if this level of government has already been exposed to the IPC in another country or as part of a regional training event. Alternatively it may be a good idea to bring an expert from another country that is using the IPC to start the awareness raising process. Keep in mind that although the IPC will be applied by technical level personnel in government and other agencies, it is their supervisors who normally make the decisions. It is essential that senior management also understand the IPC so that they can support their technical level staff involved in its application and also be in a better position to take informed decisions based on IPC products.

8.4.3 Getting the right people around the table

When doing food security analysis and developing an IPC phase classification, it is important that you have the right people around the table. Again there is no rule about who, but experience in other countries suggests that strong engagement form line ministries together with UN and key NGOs in a multi-agency

environment where every one can express themselves. From a technical perspective, you will want to have a good cross section of expertise including nutrition, health, water, agriculture, livestock, and education as well as more general food security people. In terms of government institutions, it would be normal to have technical officers from the line ministries responsible for the above sectors, together with the coordinating authority (OP, OPM). Keep in mind that ministries are typically divided into divisions and that it may be important to include officers from each: for example, the nutrition division as well as a more general health division from the MoH; Livestock production as well as Veterinary Services from the Ministry of Livestock/Agriculture. UN agencies would normally include WFP (VAM office if you have one), FAO, UNICEF, WHO and possibly UNDP. It is important to ensure that key NGOs are also involved, especially those with good knowledge of the areas of concern, and/or particular expertise in a sector such as nutrition. Examples would include Oxfam, Save the Children, MSF family, VSF family, CARE ... etc. The Red Cross/Crescent movement as well as technical projects such as FEWS NET would also be important. Remember that together with data and information that agencies bring to the analysis, and their own technical contribution, it is also vital to have a good cross-section of stakeholders to get consensus on the outputs. This helps to build the IPC's credibility, especially in the early analysis cycles.

8.5 Step 2: Learn From Using the IPC in Your Country with Your Data

8.5.1 Using the IPC as part of ongoing processes of assessment/analysis

As mentioned earlier, it is important to make sure that everyone concerned understands that the IPC is an add-on to existing food security data gathering and analysis systems that are already in place in your country. Usually, some kind of data collection/assessment and analysis takes place at the national level after each main agricultural season in the year, to which the IPC can be a useful addition. It may be necessary to include other sources of data than are normally used before the IPC was applied (the IPC seeks to integrate different information in the analysis), but these are normally available without having to collect data specifically for the IPC.

8.5.2 Learning from the process

The best way to learn how to do an IPC analysis is to go through the process with data from your own country sources and with your colleagues. It is advisable to have an IPC practitioner to take your country team through the whole process the first time at least, and it is suggested that you hold a lessons learned workshop after the event to review the process and start planning the next cycle.

8.5.3 Data issues: mapping and meta-data analysis

A common concern that people have when starting an IPC system is 'lack of data'. It is possible to do a classification on the basis of sub-optimal data availability, but obviously the better your data (either in terms of quantity or quality) the greater your confidence will be with the outcome. As mentioned above, the IPC tries to integrate different sources of data into an overall food security analysis, and this often means looking for data and information that are not part of the normal assessment and analysis process. If, for example, your assessment tends to be based upon crop production, you will now be looking to include price data, nutrition, health, water and so on into your analysis. This can be a bit scary, but a process of data mapping will often result in revealing data that you didn't know existed. Data mapping is the process of listing the data needs against sources of data, and expanding this to take account of access, reliability, format and so on. The following matrix shown in Figure 8.1 is an example from a data mapping exercise in Kenya.

Figure 8.1: Example of the Data Mapping Exercise Matrix from Kenya

MECHANISM/ SOURCE	TYPE OF DATA	FREQUENCY OF COLLECTION	CONSTRAINTS	LEVEL OF INQUIRY	GEOGRAPHIC COVERAGES	FORMAT
FEWSNET	Rainfall i.e. no of rainy days Vegetation Start of season Region land conditions Flood extent and number of people affected by gender	DECAD	Quality good except high cloud cover Good availability	National to point	National	Database and graphic format
ALRMP/EWS	MUAC Prices Income Production Conflict Terms of trade Water availabity and access CSI Range and crop condition	MONTHLY	Timeliness Lots of data not analysed Data available on request but takes time Aggregated so can MUAC	Community and households	27 ASAL Districts	REWAS Data base at disctrict level not national

Having identified sources of data, it should be possible to plan data collection in advance of a food security assessment and IPC event, and therefore reduce the amount of data that needs to be collected from field work. Doing a 'meta-data analysis' – meaning a review of data sources and identifying important gaps – well before a field exercise can help to focus data collection to key gaps and verifying some existing data.

8.6 Step 3: Building Capacity and Decentralisation

8.6.1 Building a national IPC team

Even if your vision is to have a decentralised food security analysis and IPC system, it makes sense to start by building a strong IPC team at the national level. This may take two or three cycles of assessment, analysis and IPC classification before your national team is fully familiar with the tool and are confident in handling data and making classifications. In a country that has two seasons (and two opportunities for completing an IPC), we are talking about $1\frac{1}{2} - 2$ years for this capacity building at the national level to be complete. This may seem a long time, but this period will also give the food security community in your country time to get used to the IPC map and appreciate its added value through direct experience.

In terms of who to train, you will have different groups of people who require different types of capacity building depending upon their roles. As mentioned before, your primary group for full hands-on training will be technical level people in government line ministries and participating international partners. These practitioners will normally be part of your technical working group, or similar task group. But remember that all these technical level people have bosses who are making the decisions and need to know about the IPC at a more superficial 'awareness raising' level. For your primary technical group, it is helpful to do a light *capacity assessment and training needs exercise*, which gives information on the differential levels of your group in technical competence, and will suggest what training needs there might be to bring every one up to the same level in general food security terms. Of course your group will have specialists in particular areas, such as nutrition or livelihoods, and will be very useful resource people for the group as a whole.

Experience in other countries suggests that your technical group may not have the same understanding or perceptions of the basic concepts of food security, livelihoods, nutrition, risk, vulnerability and resilience, and particularly the interlinkages between the different concepts. For example, a health specialist may see nutrition from a disease point of view (you get sick and become malnourished); while an agricultural expert would tend to view nutrition from a food availability perspective (you have not produced enough food, so you go hungry and become malnourished); and an economist may see it from a food access angle (you don't have enough money to buy your food, so you go hungry and become malnourished). All of these perspectives are of course completely reasonable and valid, but what we are trying to do is integrate the different perspectives into a holistic understanding of food security. Certainly, it is worth considering doing a basic or foundation course on food security, nutrition and livelihoods for your technical group, before getting into detailed IPC training.

8.6.2 IPC Capacity Building: Training of Trainers approach

The best way to learn about the IPC is to do it with some guidance from an experienced practitioner. Using your own country data from your usual assessment and analysis process is the obvious way, but there may be other ways such as using secondary data may be available through line ministries and other partners. Generally speaking, you will want your core technical group to be able both to do the IPC analysis and then to be able to teach others, perhaps at decentralised levels. So it is important that your technical groups goes through the whole process of entering data into the templates, doing the phase classification, estimating populations in each phase, the risk analysis, response analysis, drafting statements and call-out boxes, preparing information for the mapping, and finally the peer review process. Only by going through the entire exercise 2-3 times can you really expect people to be able to train others.

8.6.3 Decentralisation issues

There is a general move to decentralise food security assessment and analysis (and IPC) to sub-national administrative levels in the interests of capacity building, local knowledge and cost-effectiveness. There is no reason why decentralisation should not take place with regard to the IPC, but there are a number of issues that need to be considered.

- ◆ Capacity Building: decentralisation means a great deal of work over at least 2 years to build the capacity of sub-national level people to the required level in order to do food security and IPC analysis confidently. In turn this means that your core technical team is fully trained and have the time to dedicate to training sub-national practitioners.
- Resources: in the long-term, decentralised systems will tend to be cheaper to run than if they are centralised, especially if field assessments remain an important part of your data collection. However, the investment of time and funds to build the required capacity is considerable, and needs to be assured before any decentralised process is started.
- ♦ Rigour, objectivity and credibility: Maintaining analytical and technical rigour and objectivity in the situation analysis is perhaps the most challenging issue when thinking about decentralisation, and is critical for the credibility of the overall system. It is reasonable to expect that pressures to distort the situation analysis will be greater the closer you get to potential beneficiaries of aid. And despite all the explaining you might do, people will still see the phase classification and population estimates as directly affecting their access to aid resources. In some countries, this plays into established practices of political patronage, and so the potential for interference has both economic and political interests and can get very messy indeed. The transparency of the evidence templates is an important aspect

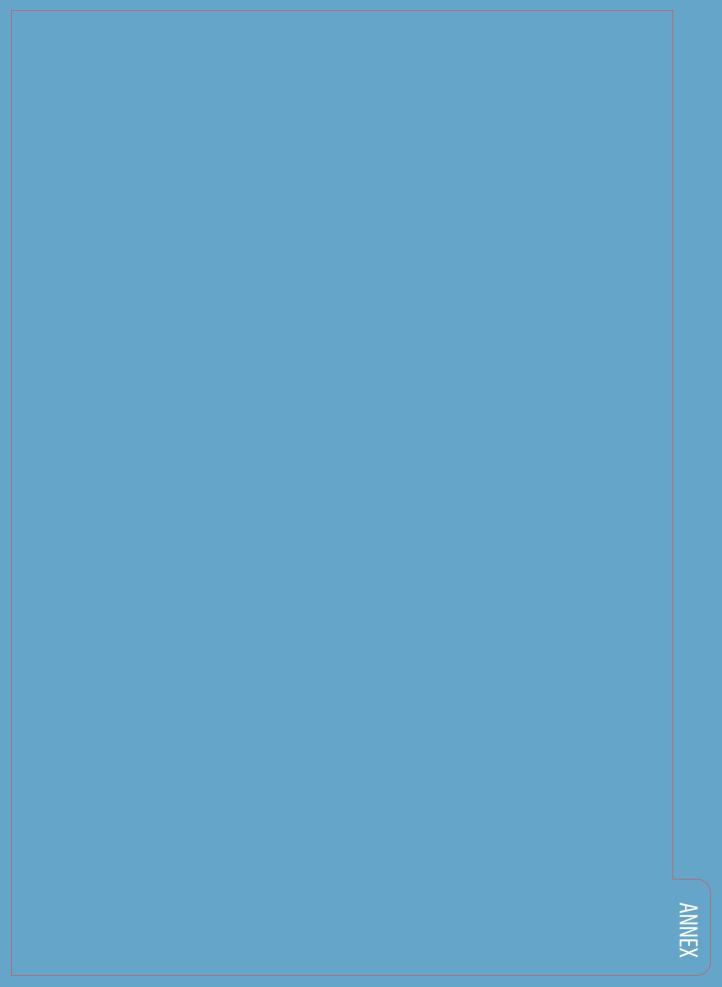
of keeping the objectivity of the phase classification, both from the point of view of your technical people being able to defend their position, and to make the data available to the wider food security and humanitarian community. However, templates be altered, and perhaps the best way to maintain objectivity and credibility is through well established peer review processes that take place a subnational and national levels (See *Module 7: How do you know you got it right: the peer review process*). Remember that reputations are slow to build and quick to destroy: your entire IPC analysis in your country can lose its credibility very quickly if objectivity is lost to political or economic influences.

Useful Websites for IPC Training Materials

www.ipcinfo.org – a general website for all your IPC needs, including some training materials and links to country IPC/food security sites.

www.foodsecinfoaction.org - the website of the EC/FAO Food Security Information for Action project, which contains useful online e-learning courses on food security information systems and networks www.fsausomali.org - FSAU's website with useful information on methodological issues around food

security and nutrition and the IPC.





ANNEX 1: Types and Sources of Data

Table 1: Example of Relevant Types and Sources of Data for IPC Analysis Template Part 1: Analysis of Current or Imminent Phase

Reference Outcomes	Direct and Indirect Evidence For Phase in Given Time Period	Reference Outcomes	Direct and Indirect Evidence For Phase in Given Time Period
Crude mortality rate	Direct evidence: crude mortality data, or the number of deaths per 10,000 people per day for the whole population of the area of analysis. Source: Ministry of Health; recent DHS survey. Indirect evidence: indicative information on crude mortality or the under-five mortality rate from health information systems; health facilities; or supplementary/therapeutic feeding centers. Direct evidence: actual levels of acute	Food Access/ Availability	Direct evidence: amount of food consumed per person per day, measured in kilocalories (such as daily consumption of 2,100 Kcal per person). Indirect evidence: such as market prices of staple commodities, retail sales volumes in local markets, local or national crop production, current income levels for different livelihoods, etc. Examples and sources include: • Food Access • Food Sources, specifically changes in sources of food from the norm (are there any shocks to
	malnutrition, or wasting, measured in weight-for-height and expressed as z-scores from the median. For example, Global Acute Malnutrition (GAM) rate of 12%, or Severe Acute Malnutrition (SAM) rate of 2%. Source: proper malnutrition surveys conducted recently by Ministry of Health; UNICEF; NGOs operating locally. Indirect evidence: mid-upper arm circumference data (MUAC) or other indicative data from sentinel health posts, hospitals, or feeding centers.		the normal food sources?) Income sources, specifically changes in the level of income generated from the sources (are there any shocks to the normal sources of income?) Expenditures (how much of household expenditures are devoted to food? Is the proportion of expenditures on food increasing? Decreasing? Stable?) Purchasing power (do households have enough income to buy food?) Social Access (are their social/cultural/political barriers limiting household access to their sources of food?) Household livelihood data, such as from
Chronic Malnutrition	Direct evidence: actual levels of chronic malnutrition, or stunting, measured in height-forage and expressed as z-scores from the median. Source: proper malnutrition surveys conducted recently by Ministry of Health; UNICEF; NGOs operating locally. Indirect evidence: height-for-age data collected locally or unofficially by health facilities.		Household Economy Analysis, other livelihood-based information, Household Budget/ Consumption Surveys, etc. Recent food security assessments considering changes in food and income sources, expenditure patterns, and coping mechanisms. Current food and livestock prices compared to average and terms of trade, from FEWS NET, LEWS, WFP, Ministry of Agriculture, Livestock, or Statistics, NGOs operating locally Food security assessments from WFP (CFSVAs or EFSAs), FAO, NGOs, government organizations considering vulnerability, marginalized groups, etc. Food Availability Production, specifically changes in local or national production from normal Supply lines (have there been any shocks to food trade or markets?) Cereal balance sheets

1

Table 1 (continued)

Reference Outcomes	Direct and Indirect Evidence For Phase in Given Time Period	Reference Outcomes	Direct and Indirect Evidence For Phase in Given Time Period
Disease	Direct evidence: information about endemic, epidemic, or pandemic outbreaks of diseases such as malaria, acute watery diarrhea, meningitis, etc. Source: proper health surveys through health surveillance systems; Ministry of Health; UNICEF; WHO; DHS survey. Indirect evidence: anecdotal information about the extent of disease spread from health facilities, clinic data, etc.	Food Access/ Availability	Recent harvest assessments conducted by FAO (CFSAM), Ministry of Agriculture Rainfall performance, vegetation/pasture information, and other remote sensing from FAO GIEWS, FEWS NET, JRC, etc. Livestock body conditions and animal disease prevalence from livestock monitoring systems, Ministry of Livestock, etc. Local stock availability from traders Trade flows compared to normal from crossborder monitoring systems such as WFP, FEWS NET, local NGOs, or traders FAO and Ministry of Agriculture cereal balance sheets Evidence: use of insurance strategies, crisis
Dietary diversity	Direct evidence: number of food groups consumed over a given time period, such as the 12 food group method with a 7 day recall period or the 16 food group method with a 24 hour recall used to calculate a Household Dietary Diversity Score. Source: detailed surveys conducted by WFP, UNICEF, FAO, NGOs. Indirect evidence: anecdotal information about changes in number of food groups consumed compared to normal, or information collected informally by health centers.	Coping	strategies, or coping strategies, such as through a Coping Strategies Index (CSI). Source: rapid household survey of CSI as developed by CARE and WFP; local anecdotal information from district officials or NGOs about changes in coping strategies. Evidence: underlying causes of food insecurity such as quality of governance structures and infrastructure; trade policies; regulations; environmental degradation; population trends; gender/ethnic-based inequalities. Sources: problem-tree analyses from humanitarian/development organizations, Human
Water access / availability	Direct evidence: amount of water consumed per person per day, such as 10 liters per person per day. Source: local surveys from NGOs, government, or UN agencies Indirect evidence: anecdotal information about changes in access to water compared to the norm, distances travelled to access water, etc.	Structural Issues	Development Index, etc. Evidence: recurrence of or vulnerability to hazards such as drought, floods, hurricanes, earthquakes, price shocks, policy shifts, conflict, etc. Sources: Historic analysis of frequency and effect
Destitution/ Displacement	Evidence: information on whether destitution/displacement is not significant; emerging/diffuse; concentrated/increasing; or large-scale and concentrated. Source: household surveys, camp registrars, displacement monitoring systems, or local anecdotal information.	Hazards	

Table 1 (end)

Reference	Direct and Indirect Evidence	Reference	Direct and Indirect Evidence
Outcomes	For Phase in Given Time Period	Outcomes	For Phase in Given Time Period
Civil Security	Evidence: level of extent and intensity of conflict (limited spread, low intensity or widespread, high intensity); deaths per year related to conflict; disruption of livelihood activities due to insecurity (such as extent of market disruption or reduced access to agricultural/grazing land). Source: conflict monitoring systems; mortality surveys; key informant descriptions.	Livelihood Assets (5 capitals)	Evidence: use of or depletion of human assets (education, health), financial assets (savings, access to remittances), social assets (cooperation, gender empowerment), physical (infrastructure, telecommunications), political assets (representation, good governance), and natural assets (rangelands, soil fertility, fishing grounds). Sources: household surveys or national socioeconomic surveys using methodologies such as the Sustainable Livelihoods Approach (SLA). Local anecdotal information about the loss of assets from district officials, local NGOs, key informants, etc.

Table 2: Example of Relevant Types and Sources of Data for IPC Analysis Template Part 1: Analysis of Risk for Worsening Phase or Magnitude

Evidence of Risk for Worsening Phase or Magnitude

(list hazard and process indicators)

Evidence: any information about expected hazards, trends, or upcoming conditions expected to affect food security in the coming six months. This could include issues such as:

- Drought or floods expected during an upcoming rainy season
- Seasonal trends; is the main hunger season approaching, or is a main harvest approaching?
- Hurricanes likely during the normal season
- · Price trends; are prices expected to increase during the coming months due to other factors (poor harvest expected, increasing transport costs, etc)
- Conflict; are current levels of conflict in an area likely to be maintained or escalate?
- Disease spread; are current animal or crop diseases expected to increase due to a lack of control?

Sources: food security monitoring reports, weather forecasts, market analyses, etc, such as:

- Weather forecasts (ICPAC, National Meteorological Service, FEWS NET, GIEWS)
- FEWS NET food security updates and alerts
- FAO GIEWS early warning information
- National food security monitoring mechanism reports and market bulletins
- Updates on humanitarian trends such as the spread of conflict through sources presented in ReliefWeb

ANNEX 2: Glossary of Terms

ENGLISH	FRANCAIS
Access	Accès
Accountability of analysis and response	Responsabilité de l'analyse et de l'intervention
Acute Food and Livelihood Crisis	Crise alimentaire et des moyens d'existence aiguë
Acute Food Crisis	Crise alimentaire aiguë
Acute Malnutrition	Malnutrition Aiguë
Adaptability	Adaptabilité
Analysis Templates	Grilles d'analyse
Anthropometric thresholds	Seuils anthropométriques
Asset base	Avoirs
Availability	Disponibilité
Basic survival levels	Niveaux de survie de base
Capacity	Capacité
Cartographic Protocols	Protocoles cartographiques
Chronic Food Insecurity	Insécurité alimentaire chronique
Civil security	Securité civile
Concentrated and increasing	Concentré et en hausse
Confidence levels	Niveaux de confiance
Convergence of evidence	Convergence de preuves
Coping strategies	Stratégies d'adaptation
Coping Strategies Index (CSI)	Indice des stratégies d'adaptation
Crisis Strategies	Stratégies de crise
Crude Mortality Rate	Taux brut de mortalité
Current or Imminent Outcomes	Effets immédiats ou imminents
Destitution/Displacement	Dénuement/déplacements
Dietary Diversity	Diversité alimentaire
Direct and Indirect Evidence	Preuves directes et indirectes
Disease	Maladie
Displacement levels	Ampleur de déplacement
Distress strategies	Stratégies de détresse
Donors	Bailleurs de fonds
Emergency	Urgence
Emerging and diffuse	Emergent et diffus
Entitlement theory	Théorie des droits
Expenditure gaps	Ecarts dans les dépenses
Expenditure patterns	Profils de Dépenses
Extreme Famine Conditions	Conditions de famine extrême
Famine	Famine
Famine Magnitude Scale	Echelle de l'ampleur des famines
Famine/Humanitarian catastrophe	Famine/Catastrophe humanitaire

ENGLISH	FRANCAIS
Fatality rates	Taux de létalité
Food Access/ Availability	Accès aux aliments/disponibilités alimentaires
Food Crisis Conditions	Conditions de crise alimentaire
Food gaps	Périodes de déficits alimentaires
Food insecure	En insécurité alimentaire
Food Insecurity Classification	Classification de l'insécurité alimentaire
Food Insecurity Conditions	Conditions d'insécurité alimentaire
Food Security Conditions	Conditions de sécurité alimentaire
Food security pillars	Piliers de la sécurité alimentaire
Generally food secure	Généralement en sécurité alimentaire
Hazards	Dangers
High Intensity Conflict	Conflit de haute intensité
High Risk	Risque élevé
Hotspot	Zone sensible
Household dietary diversity	Diversité alimentaire des ménages
Household food access and availability	Accès et disponibilité alimentaire des ménages
Household food consumption levels	Niveaux de consommation alimentaire des ménages
Household Food Insecurity Access Scale (HFIAS)	Echelle d'insécurité alimentaire des ménages
Household food shortage	Pénurie alimentaire du ménage
Humanitarian Emergency	Urgence humanitaire
Implications for Action	Implications pour l'action
Insurance strategies	Stratégies d'assurance
Inter-agency Response Analysis	Analyse interinstitutionnelle des interventions
IPC Reference Thresholds	Seuils de référence de l'IPC
IPC statement	Analyse finale IPC
Key reference outcomes	Effets de référence clés
Large scale and concentrated	A large échelle et concentré
Livelihood assets	Avoirs relatifs aux moyens d'existence
Livelihood capitals	Capital relatif aux moyens d'existence
Livelihood shocks	Chocs relatifs aux moyens d'existence
Livelihoods	Moyens d'existence
Long-term Food Crisis	Crise alimentaire de longue durée
Low Intensity Conflict	Conflit de faible intensité
Low probability of hazards with low vulnerability	Faible probabilité d'évènements adverses et une faible vulnérabilité
Magnitude	Magnitude
Mid-Upper Arm Circumference (MUAC) measurement	Mesure du périmètre brachial (MUAC)
Mixed Signals of Indicators	Indicateurs divergents
Moderate Risk	Risque modéré
Moderately/borderline food insecure	Insécurité alimentaire modérée/limite
Multi-agency group	Groupe interinstitutionnel

ENGLISH	FRANCAIS
Needs Analysis Framework	Cadre d'analyse des besoins
No Alert	Pas d'alerte
No coping	Pas de strategies d'adaptation
No more coping mechanisms	Epuisement des strategies d'adaptation
Normal/typical kcal intake	Apport énergétique normal/typique d'un groupe
Opportunities for triangulation	Possibilités de triangulation
Peer-review	Revue par les pairs
Phase Classes	Les différentes phases de la classification
Phase Classification	Classification des Phases
Population Tables	Tableaux démographiques
Poverty lines	Niveaux/lignes de pauvreté
Preserving productive assets	Préservation des avoirs productifs
Prevalence thresholds	Seuils de prévalence
Probability	Probabilité
Projected trend	Tendance prévue
Recurrent hazards with high vulnerability	Evénement adverses récurrents associés à une forte vulnérabilité
Reduced food intake	Diminution des apports alimentaires
Reference Hazards and vulnerabilities	Dangers et vulnérabilités de référence
Reference Outcomes	Indicateurs d'impact de référence
Reference Table	Tableau de référence
Referenced Threshold	Seuil de référence
Response analysis	Analyse de l'intervention
Reversible coping	Stratégies d'adaptation réversibles
Risk of Worsening Phase	Risques d'aggravation
Sale of productive assets	Vente des avoirs productifs
Severe Famine Conditions	Conditions de famine grave
Severity	Sévérité
Situation Analysis	Analyse situationnelle
Staple foods	Aliments de base
Starvation and death	Inanition et mort
Strategic Response Framework	Cadre stratégique d'intervention
Structural Conditions	Conditions structurelles
Stunting	Retard de croissance
Sustainable Livelihoods Approach	Approche des Moyens d'Existence Durables (AMED)
Technical Consensus	Consensus technique
Threatening future livelihood	Menace sur les moyens d'existence futurs
Warning	Alerte
Wasting	Emaciation
Watch	Surveillance
Water access/availability	Accès à/Approvisionnement en eau

ANNEX 3: FSAU's Method for Calculating Population Estimates for AFLC and HE IPC Phases

Calculating the estimated population in AFLC and HE is the final stage in the IPC analysis process for FSAU. As FSAU follows a livelihood approach to food and nutrition security analysis, IPC phases are determined by livelihood and wealth group, e.g. the poor wealth group in livelihood group A are determined to be in AFLC or in HE. The identification of AFLC and HE IPC phase by livelihood and wealth group follows the IPC process of compilation and analysis of all direct and indirect evidence related to the IPC reference outcomes, and a convergence of evidence to arrive at a determination of a phase. Note, FSAU's baseline livelihoods analysis on household income and food access, expenditure, and coping, combined with livelihood based nutrition analysis is what allows FSAU to determine the livelihood and wealth group in a specific crisis phase, i.e. AFLC or HE.

FSAU only calculates estimates for populations in the two crisis phases of AFLC and HE.

There are two steps in calculating the estimated population in the two phases, the determination of the percentage of a wealth group in AFLC and HE, and the calculation formula to aggregate up to district level estimates for total population estimated in AFLC and HE. These are briefly outlined below.

1. First Step: Determination of the Percentage of Population in the Wealth Group in the specific phase, e.g. is it all of the poor or only part of the poor who are classified in AFLC?

FSAU differentiates the rural livelihood wealth groups into four percentage shares for each of the three wealth groups (poor, middle and better-off). FSAU's has extensive information on rural livelihood baselines (i.e. poor household asset levels, income, food access, coping, etc); therefore each wealth group is divided into four percentages, i.e. 25/50/75/100 percent. FSAU has less information and analysis on urban populations, therefore less differentiation is allowed and only two percentages are applied, i.e. 50/100 percent of wealth group

The decision of whether it is the entire wealth group in a particular phase or only part of the wealth group in the particular phase depends on four main factors:

- a) the degree of homogeneity within the wealth group: or the degree of differentiation within a single wealth group in terms of access to income, food, and coping. Are all the households in the poor wealth group all at the same level of poverty in terms of access to food and income, or is there a wider variation from the better of the poor and the poorest of the poor. The more homogenous the wealth group the more likely the shock will affect all people within the wealth group.
- b) the severity and magnitude of the shock, and the number of shocks e.g. complete crop failure (15% of PWA) or partial crop failure (80% of PWA). Crop failure, combined with hyperinflation of food prices, and loss of job opportunities due to conflict.
- c) the phase and the % of the wealth group in a particular phase in the previous period (s). The choice of the percentage takes into consideration the previous analysis, confirmation and continuity of in the previous time period. For example, if in the previous six month period, 50% of the poor were identified in AFLC, and this was confirmed to be accurate, then the decision to the impact of the current shock, takes into consideration where the starting point is from the previous period, i.e. 50% of poor in AFLC.

- d) Rules of logic applied there are also certain rules or logic that are followed in the process, some obvious and some not so obvious.
 - There are some rules that relate to the demographics and wealth. For instance you can't have people in HE before AFLC. The poor are usually the first affected and the better off are last affected, unless it is a natural disaster (e.g. hurricane) which is not dependent on household wealth and ability to cope. For example, it does not make sense if you have 50% of the middle in AFLC and no poor in AFLC or HE.
 - Other rules relate to chronology: the analyst must relate the percent affected to previous analysis
 and that it is questionable to have a lower percentage affected if the situation has worsened over the
 two periods.

The decision as to the percentage of the wealth group in AFLC or HE, is therefore arrived at by the analyst after a review and analysis of the degree of homogeneity of the wealth group, and the severity and magnitude of the shock(s) and effects on reference outcomes, and the percentage confirmed for the previous period. Finally, basic rules of logic are reviewed to ensure logically continuity and consistency.

2. Second Step: The next stage of the process is bringing all the pieces above together into a mathematical calculation.

An simplified example of the calculation of the number of people in AFLC in a given district, where there are two livelihood zones in the district (LZ1 and LZ2) and one wealth group (poor).

(D1 * X1 *X2 *X3) + (D1 * Y1 *Y2 *Y3) = total number of people in AFLC in District

Where:

D1 = is the district population (from UNDP)

X1 = is the percent of Population in that LZ1 in that district (established by FSAU)

X2 = is the percent of the poor wealth group in that LZ1 (from baselines)

X3 = is the percent of poor wealth group in AFLC in LZ1 (from the analysis)

Y1 = is the percent of Population in that LZ2 in that district (established by FSAU)

Y2 = is the percent of the poor wealth group in that LZ2 (from baselines)

Y3 = is the percent of poor wealth group in AFLC in LZ2 (from the analysis)

Prepared by: the IPC in the Central and Eastern Africa Region Project, managed by FAO

Funding Agencies:







IPC Global Partners:

















The Food and Agriculture Organization of the United Nations. Rome. June 2009