IPC

Integrated **F**ood **S**ecurity **P**hase **C**lassification

Evidence and Standards for Better Food Security and Nutrition Decisions

IPC GUIDANCE NOTE
Famine Classification

WHAT DOES THE IPC TECHNICAL MANUAL VERSION 3.1 SAY ABOUT FAMINE?

- Refer to pages 85 - 89 of the manual 3.1

WHAT DOES THIS RESOURCE ADD TO THE MANUAL?

- This document aims at providing more in-depth knowledge about Famine classifications, especially to the analysts and facilitators analysing a possible Famine situation. As a result, the document includes detailed guidance for use of the special additional protocols, and on evidence needed for Famine classifications. The **special additional protocols** applied to all the four IPC functions, and further explained in this document, are required for Famine classifications, in addition to all the regular IPC protocols that also need to be observed.

- This resource is built on the content of the IPC Technical Manual Version 3.1, and while it further explains the protocols as identified in the manual, it does not override any of its contents and should be used in addition to it.

HOW IS THIS RESOURCE ORGANIZED?

- This guidance resource is organized into two parts as follows:

Part 1: Overview of IPC Famine analysis parameters[1]

- Definition
- Types of classifications
- Key challenges and limitations
- Analysis cycle

Part II: Special protocols for Famine classification (tools and procedures organized by the four IPC functions)

- Build concensus
- Classify severity and identify key drivers
- Communicate for action
- Quality assurance

DISCLAIMER

The guidance is based on deliberations of the IPC Global Support Unit, the IPC Food Security and Nutrition Working Groups, IPC Famine Review Committee, the IPC Technical Advisory Group, and the IPC Steering Committee as well as on Famine -related research and experiences and lessons learned by the IPC community on Famine classifications. The guidance is meant solely for the purposes of IPC Famine classifications and cannot be considered as overall guidance for analysis of Famine situations.

For queries or to request support contact the IPC Global Support Unit at **info@ipcinfo.org**.

PART I: Overview of IPC Famine analysis

DEFINITION OF FAMINE

For the IPC, Famine exists in areas where at least one in five households has or is most likely to have an extreme deprivation of food. Starvation, death, destitution and extremely critical levels of acute malnutrition are or will likely be evident. Significant mortality, directly attributable to outright starvation or to the interaction of malnutrition and disease, is occurring or will likely be occurring.

SEVERITY OF THE SITUATION FOR ANY FAMINE CLASSIFICATION

Famines are by definition, situations where the current conditions have already met the agreed Famine thresholds for food consumption and livelihood change, acute malnutrition and mortality or the projected situation is expected to meet these thresholds.

How severe is the situation?
Area has or will most likely have outcomes at or above Famine thresholds:
• ≥ 20 percent households with highly inadequate food consumption.
• ≥ 30 percent of children 6-59 months having Weight for Height Z-score below 2 standard deviations or having oedema.
• Crude death rate is ≥2 deaths per 10,000 people per day.

Famines can be classified in two ways depending on the quality and quantity of evidence available for classification. If evidence is adequate, areas can be classified in **IPC Phase 5 (Famine) with solid evidence** . If evidence is limited, but available evidence meets minimum parameters and the IPC consensus building and quality assurance functions are also completed, areas can be classified as **IPC Phase 5 (Famine) with reasonable evidence**. These two ways to classify a Famine in IPC pertain to both current and projection classifications.

Determining whether an analysis supports a classification of Phase 5 (Famine) with solid evidence or Phase 5 (Famine) with reasonable evidence is solely a question of the quality and quantity of existing evidence. The severity of the situation(s) is expected to be the same. In summary:

- **IPC Phase 5 (Famine) with solid evidence:** This classification can be made for current or future conditions when mortality, acute malnutrition, food deprivation and livelihood collapse are verified by reliable evidence showing that they all exceed or are likely to exceed the Famine thresholds.

- **IPC Phase 5 (Famine) with reasonable evidence:** Famine is likely occurring but cannot be confirmed due to limited evidence. This classification refers to situations when the available evidence exceeds (current period) or is expected to exceed (projected period) the Famine thresholds. However, although some minimally acceptable evidence is available to assess a Famine, the minimum criteria for Phase 5 (Famine) with solid evidence classification is not met.

The rationale for allowing Famine classifications with less-than-optimal evidence derives from the humanitarian imperative coupled with practical constraints of data collection in situations where Famine is suspected. The latest verified and suspected Famines (e.g., Somalia 2011, Nigeria 2016 and South Sudan around 2016-2017) have all taken place in areas where humanitarian access for data collection and for delivery of assistance has been either restricted or non-existent, and as a result, the data available has not met the criteria for the Phase 5 (Famine) with solid evidence classification. Based on these experiences, it has been concluded that Famine situations can be reliably identified and classified through a robust analysis process using also inference of available data – even if some direct evidence is lacking – to inform urgent action.

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1. This resource is built on the content of the IPC Technical Manual Version 3.1, and while it further explains the protocols as identified in the manual, it does not override any of it's contents and should be used in addition to it.

If areas cannot be classified even as Phase 5 (Famine) with reasonable evidence based on the evidence available, areas can be classified in Phase 4 (Emergency) and populations in Phase 5 (Catastrophe) can be identified. Specific parameters for quality and quantity of evidence for Famine classifications are presented as a special additional protocol in part 2 of this note and in the IPC Technical Manual Version 3.1.

DEATHS IN FAMINE

According to the IPC definition, areas are classified to be in IPC Phase 5 (Famine) only when **substantial deaths have occurred due to lack of food consumption on its own or due to the interaction between inadequate food consumption and disease.** Although further deaths can and should be prevented by urgent action, these actions will be a late response as many would have died by this point. By classifying famine as situations where mass deaths have already taken place due to starvation, the IPC Famine area classification is only applied to a situation that is an outcome of a sequential and causal series of events involving severe food deficits, acute malnutrition and the final expression of deaths.

The IPC acknowledges that other definitions of Famine have been discussed elsewhere with different interpretations on what defines a famine. For example, Devereux (Famine in the Twentieth Century - IDS Working Paper 105) has highlighted that mass starvation and deaths are only one possible outcome of the famine process and that other outcomes include fertility decline, economic destitution, community breakdown, distress migration and exposure to new disease vectors. Devereux also highlighted that deaths during Famine are more related to epidemic diseases than starvation and thus famines that are classified depending on deaths will more often than not highlight mainly situations where epidemic diseases are playing a significant role. As such, in accordance with Devereux, Famines could be classified even without widespread deaths, thus allowing situations with extreme food gaps, displacement, and total collapse of livelihoods and high acute malnutrition to constitute a famine. Although the IPC acknowledges these views, the view endorsed by the IPC, whereby widespread deaths are already occurring in a Famine situation, has been adopted to differentiate Phase 4 (Emergency) from Phase 5, and to call attention to the catastrophic situation of Famines, ensuring that the classification of Phase 5 (Famine) carries on being a rare and extreme situation. However, the IPC does recognize the extreme severity of the situations described above and when possible, classifies them up to Phase 5, depending on evidence available.

IPC PHASE 5 (FAMINE) VS. IPC PHASE 4 (EMERGENCY)

Although IPC Phase 5 (Famine) reflects a failed situation where widespread deaths and malnutrition have been observed, it should be noted that IPC Phase 4 (Emergency) is an extremely severe situation where urgent assistance is needed in order to save lives and livelihoods.

Phase 4 situations are typically caused by multifaceted, severe shocks in areas where households have increased vulnerability to food insecurity due to, for example, recurrent shocks and erosion of assets, or overall weak livelihood base and generalized poverty. Households in Phase 4 areas are often characterized by rapid loss of livelihoods and livelihood assets, and very inadequate food consumption. This situation may lead also to increased mortality and high levels of acute malnutrition, but this is not always the case. Households can have highly inadequate food consumption and/or emergency level livelihood coping, without the situation translating at least in the short term into acute malnutrition and mortality. This is also reflected in the description of Phase 4, which states that an area should be classified in Phase 4 in one of the two cases: high food gaps are reflected in high malnutrition and mortality; or households mitigate food gaps but use emergency-level livelihood coping strategies to do so.

Whether all or only some outcomes are manifested depends e.g., on household resilience and social networks, baseline levels of malnutrition and mortality and on potential presence of different mitigating factors, such as functioning health care systems or provision of assistance. Depending on the seriousness of livelihood loss and inadequacy of food consumption, some household groups (adding up to less than 20 percent) may face a Phase 5 situation and are therefore classified in Phase 5 (Catastrophe) even if the overall area is Phase 4. It is not necessary for the households in Phase 5 (Catastrophe) to exhibit high levels of malnutrition or mortality, even if it is likely that at least some of them do.

Phase 4 communication should emphasize the urgency of the situation, and the necessity to act immediately to save depleted livelihoods, and to prevent excess loss of lives. In some cases, households/household groups are estimated to be in Phase 5 but areas are estimated to be in Phase 4. Therefore, there is a need to highlight the existence of households

in Phase 5, and the imperative to reach them with assistance as soon as possible in order to prevent the deterioration of the situation into a Famine.

Areas with Phase 5 classifications exhibit many of the same characteristics as areas in Phase 4 in terms of underlying vulnerability and complex shocks. The difference is that all four outcomes manifest a Phase 5 level of severity, including acute malnutrition and mortality. As discussed above, individual households in Phase 5 may or may not exhibit high levels of acute malnutrition and mortality, but it is imperative that at the area level, malnutrition and mortality levels do meet the Phase 5 thresholds. In addition, Phase 5 situations are typically characterized by large market anomalies (large price increases or collapse of markets), mass migration, breakdown of social networks and widespread destitution – seen (for example) in increased rates of households resorting to begging. Typically, the presence of humanitarian assistance is also either very limited or non-existent.

IPC PHASE 5 (FAMINE) AREA CLASSIFICATION VS. IPC PHASE 5 (CATASTROPHE) HOUSEHOLD CLASSIFICATION

As discussed above, the IPC allows **households to be classified in IPC Phase 5 (Catastrophe) even if areas are not classified as IPC Phase 5 (Famine).** This means that in some cases, areas can be classified in IPC Phase 4 (Emergency), because more than 20 percent of the population is in Phase 4 and 5 and include populations in Phase 5. Households may be in IPC Phase 5 (Catastrophe), but the area may not be classified as IPC Phase 5 (Famine) if widespread deaths and acute malnutrition have not yet been expressed at the area level, either because the population facing Phase 5 (Catastrophe) is smaller than 20 percent of the population, because of a relatively limited geographical coverage of the dire situation, or because of the natural time delay expected between food deprivation and collapse of livelihoods, and the consequential increase in acute malnutrition levels and death rates.

The classification of households into Phase 5 (Catastrophe) is done independently of prevalence of acute malnutrition and death rates and is solely based on analysis of food consumption, livelihood change, and contributing factors to food insecurity. In Phase 5 (Catastrophe), households are expected to have extreme lack of food and/or other basic needs, even with full employment of coping strategies. By highlighting the existence of households in Phase 5 (Catastrophe), the IPC intends to guide the humanitarian community in preventing even more widespread famine by identifying the need for prompt action.

SPECIAL ADDITIONAL PROTOCOLS FOR FAMINE CLASSIFICATIONS

For Famine classifications, including both IPC Phase 5 (Famine) with solid evidence and IPC Phase 5 (Famine) with reasonable evidence, there are additional protocols that need to be followed, in addition to the standard protocols included in IPC Manual 3.1. The next part of this resource provides guidance and best practices for the IPC Famine classification through these additional protocols that apply to all Phase 5 (Famine) classifications

Table 1: Additional protocols for IPC Phase 5 (Famine) classifications

IPC Function	Purpose	Standard Protocols for any IPC classification	Additional Protocols for Phase 5 classifications
I. Build technical consensus	To enable technical consensus among multi-sectoral experts.	1.1 Compose the analysis team with relevant sectors and organizations. 1.2 Conduct the analysis on a consensual basis.	1.3 Ensure presence of additional experts.

II. Classify severity and identify key drivers	To critically analyse complex information, classify areas in severity categories, estimate magnitude, and identify key drivers and characteristics of the condition.	2.1 Use Analytical Frameworks to guide convergence of evidence.
		2.2 Compare evidence against the Reference Tables.
		2.3 Adhere to parameters for analysis.
		2.4 Evaluate evidence reliability.
		2.5 Meet minimum evidence and analysis requirements.
		2.6 Methodically document evidence and analysis and provide them upon request.
			2.7 Adhere to special analysis parameters.
			2.8 Meet minimum evidence parameters for::
			  2.8.1...Famine - solid evidence
			  2.8.2 ..Famine - reasonable evidence
			  2.8.3...Famine in areas with limited humanitarian food assistance

III. Communicate for action	To communicate core aspects of the situation in a consistent, accessible and timely manner.	3.1 Produce the IPC Analysis Report. 3.2 Adhere to mapping standards. 3.3 Strategically share communication products in a timely manner.	3.4 Adhere to special communication procedures and requirements.
IV. Quality assurance	To ensure technical rigour, neutrality and self-learning for future improvements.	4.1 Conduct a self-assessment of the analysis. 4.2 Request and engage in an external quality review if necessary.	4.3 Request and engage in an external Famine review.

PART II: Special protocols for Famine classification

SPECIAL PROTOCOLS FOR FUNCTION 1

1.3 Ensure presence of additional experts

When a Famine classification is being considered, it is essential to make sure that the analysis team includes the following members:

- **Analysts with experience in classifying a Famine using the IPC protocols:** Ideally, the analysis team should be supported by analysts who have been directly involved in Famine classifications or supported such analyses.

- **Food security experts and nutritionists;** and ideally, communication experts and analysts with advanced knowledge in analysing mortality data. Additionally, given the high profile of the classification, it is strongly advised that global and regional experts are invited to support the analysis.

It is essential that the in-country IPC Technical Working Group (TWG) has real-time advice from experts professionally trained in the analysis of mortality data during any IPC activity that assesses the likelihood of a Famine to ensure methodological rigour of analysis and interpretation of the Crude Death Rate (CDR) and the Under-5 Death rate (U5DR). Although best practice would be to include mortality experts, e.g., analysts who have experience in analysing mortality data, in the country TWG, whenever this is not possible, the country team should seek external support from mortality experts through the IPC Global Support Unit and/or the IPC Global Partnership.

SPECIAL PROTOCOLS FOR FUNCTION 2

2.7. Adhere to special analysis parameters

a. **Minimum population size for classification:** Any population sub-groups or areas with at least 10,000 people can be classified in IPC Phase 5 (Famine) for current or projected time periods if the minimum evidence parameters are met for the specific population sub-groups or areas. Examples of sub-groups or areas include Internally Displaced Persons (IDPs), IDP camps and affected areas. The classification of sub-groups or sub-areas may be especially important if populations are thought to be in IPC Phase 5 (Catastrophe).

b. **Evidence availability deciphers whether an area can be classified as IPC Phase 5 (Famine) with solid evidence or IPC Phase 5 (Famine) with reasonable evidence:** IPC evidence level criteria for Famine classifications identify minimum requirements for two distinct levels: Phase 5 (Famine) with solid evidence and Phase 5 (Famine) with reasonable evidence. Independent of the existence and quality of evidence to be used in the classification – the existing evidence, including the inference of evidence through critical review – needs to indicate that the severity thresholds assigned for Famine situations have been met or are likely to be met.

c. **Crude Death Rate (CDR)** needs to be directly attributable to outright starvation or to the interaction of food consumption deficits and disease.

- **Deaths due to trauma should not be included** in the calculation of Crude Death Rates (CDR) or in Under 5 Death Rates (U5DR) when this evidence will be used to support a classification of Famine. All other causes of death should be included in the calculation of CDR and U5DR.

- **A mathematical subtraction of deaths caused by trauma from total deaths** should be done whenever information on number of deaths caused by trauma is available.

- **If information on number of deaths caused by trauma is not available, analysts should carefully review the mortality data to determine to what extent the CDR and U5DR are likely to have been impacted by traumatic causes.** One helpful analysis may be a comparison between the ratio of U5DR and CDR to see whether or not the deaths among children under five are disproportionately higher, which can indicate that the potential causes are non-trauma related. This analysis is based on the widely agreed assumption that in normal circumstances, U5DR is expected to be roughly twice that of CDR. When comparing U5DR and CDR based on general assumptions under normal circumstances, analysts should exert caution as the actual ratio may depend on the severity and the stage of the Famine as well as the disease epidemiology, social factors and micronutrient deficiencies. Furthermore, contributing factors, such as extent of conflict and natural disasters, should also be taken into account when assessing the impact of traumatic deaths in total CDR and U5DR.

d. **Current classification** refers to the classification of the ongoing situation in either Phase 5 (Famine) with solid evidence or Phase 5 (Famine) with reasonable evidence depending on the evidence available. Minimum evidence requirements for current classifications of Phase 5 (Famine) are included in Tables 4 and 5 below. Typically, Famine situations are quite volatile, and the peak of Famine lasts only for a few months. As such it may be advisable to keep the validity period of the analysis relatively short.

e. **Projection classification** can be conducted both for Phase 5 (Famine) with solid evidence or Phase 5 (Famine) with reasonable evidence. This classification can take place in two situations:

- The current classification is Phase 5 (Famine) with solid evidence or Phase 5 (Famine) with reasonable evidence , and the analysts conclude that the severity of the situation is most likely going to remain the same during the projection period, or

- The current classification is e.g., Phase 3 (Crisis) or Phase 4 (Emergency), and the analysts conclude that the situation is most likely going to deteriorate to Phase 5 in the projection period. When projecting Phase 5, the analysts have to show through critical analysis that malnutrition and mortality are likely to be above the Phase 5 cut-offs in the projection period, and that the situation is likely to be characterized by widespread food deprivation and destitution.

Tables 4 and 5 provide the minimum requirements for the projected classification of Phase 5. Alternatively, if analysts are not confident that the area will be in Famine, either with solid or reasonable evidence in the projection period, they can

also allocate <20 percent of households in Phase 5 (Catastrophe) to draw attention to the extremely serious food security and nutrition situation, even if the area itself does not receive a Phase 5 classification.

f. **Retrospective classification:** as noted elsewhere in this document, data collection in famine situations is often difficult due to access limitations, increased mobility of households, and focus on assistance delivery rather than on data collection. As a result, the true severity of the situation may become apparent only after the peak of the famine has already passed, and all the available data is compiled and reviewed. In these cases, retrospective analysis and classification of the food security situation may be conducted, as it may provide lessons learned and useful information for decision-making in order to prevent similar situations from occurring in the future.

2.8. Meet minimum evidence parameters for:

The availability of evidence deciphers if a classification is Phase 5 (Famine) with solid evidence or Phase 5 (Famine) with reasonable evidence as follows:

2.8.1 IPC Phase 5 (Famine) with solid evidence

For the classification of IPC Phase 5 (Famine) with solid evidence at least three pieces of direct and reliable[2] evidence are needed – one piece each for acute malnutrition, mortality and for food consumption or livelihood change, with all of them at or above famine threshold levels either currently or likely to be at or above the levels in the projected period. However, if reliable direct evidence is only available for mortality and acute malnutrition, but not for food consumption or livelihood change (FC or LC) outcomes, a classification of IPC Phase 5 (Famine) with solid evidence can still be made, provided that analysts document the analytical process of inference for FC or LC from at least four pieces of somewhat reliable direct or indirect evidence on outcomes and/or contributing factors, indicating that at least 20 percent of households are in IPC AFI Household Phase 5 (Catastrophe). In these cases, it is especially crucial to ensure that the analysis team includes experts with an excellent understanding of the local food security context, and highly capable experts in analysis of food consumption and livelihood change. IPC Phase 5 (Famine) with solid evidence can be projected even if current evidence is below the famine thresholds for any or all outcomes, if it is justified that the current levels will exceed famine thresholds for all outcomes during the projection period in the most likely scenario. To inform a projection of IPC Phase 5 (Famine) with solid evidence , it is crucial to ensure that indicators that provide warning signals, such as those that show extreme gaps in food consumption, livelihood collapse, child malnutrition and deaths among children, are well analysed to support an assessment of the likely levels of GAM, CDR and FC and LC in the future period, thus ensuring that a potential famine projection is not missed. Table 2 details the minimum evidence requirement for IPC Phase 5 (Famine) with solid evidence.

Table 2: Minimum evidence requirements for IPC Phase 5 (Famine) with solid evidence

Classification	Current	Projection
	Documented analysis with the following minimum evidence:	
IPC Phase 5 (Famine) with solid evidence	1) The three outcomes with R2 direct evidence + 2) Four other pieces of R1 (+ or -) evidence, with at least two of those from the season of analysis *Note: In exceptional cases where reliable evidence is available on acute malnutrition (GAM based on WHZ) and mortality, but no reliable direct evidence is available on food consumption or livelihood change, Famine with solid evidence may still be classified if food consumption or livelihood change outcomes are inferred to be at the level of IPC Phase 5 (Catastrophe) – based on somewhat reliable or reliable evidence on contributing factors.*	1) IPC current adhering to evidence level for IPC Phase 5 (Famine) with solid evidence[3] + 2) Evidence used for current classification can be at most 12 months old at the end of projection period + 3) Four pieces of R1 evidence presented with clear assumptions on forecasted trends

2. Evidence Reliability Assessment is discussed in detail in Section II of IPC Resources.

3. PC Phase 5 (Famine) with solid evidence or IPC Phase 5 (Famine) with reasonable evidence can be projected even if no Phase 5 classification is reached for the current analysis period. In these cases, the amount and reliability of evidence used to classify the current situation needs to correspond to the criteria included in evidence levels of IPC Phase 5 (Famine) with solid evidence or IPC Phase 5 (Famine) with reasonable evidence.

Direct reliable evidence refers to indicators included in the respective IPC Reference Table and are detailed in Table 3. Note that for acute malnutrition, MUAC is not considered a direct evidence for a Famine classification.

Table 3: Direct evidence allowed for IPC Phase 5 (Famine) with solid evidence

Outcome 1: Food consumption and livelihood change	Outcome 2: Nutritional status	Outcome 3: Mortality[4]

Food consumption and livelihood change indicators included in the IPC Acute Food Security Reference Table:
• Ideally, direct evidence should exist on indicators that have a cut-off for Phase 5, such as HHS and HEA.
• Direct reliable evidence should be collected from at least 25 clusters in the analysis area within the season of analysis.
• In case direct reliable evidence is available on nutritional status and mortality, it is also possible to use inference of indirect evidence to conclude on the food consumption and livelihood change situation. Parameter 2.9 below provides further details on the use of inference.
	GAM based on WHZ:
	• Evidence on WHZ must come from
	  - Cluster surveys with ≥25 clusters and ≥225 observations
	  - Simple or systematic surveys with ≥150 observations.
	• Evidence must come from the same season of analysis, when there is seasonality, and from the previous 12 months if there is no seasonality or significant shocks.
		CDR or U5DR:
		• Evidence on CDR and/or U5DR must come from
		  - Cluster surveys with ≥25 clusters and 645 households[5]
		  - Simple or systematic surveys with ≥430 observations.
		• The recommended recall period for mortality evidence is around 90 days.

Evidence must be reviewed and accepted by the Famine Review Committee.[6]		

2.8.2 IPC Phase 5 (Famine) with reasonable evidence

If evidence requirements for IPC Phase 5 (Famine) with solid evidence cannot be met, IPC Phase 5 (Famine) with reasonable evidence can be classified if at least two pieces of somewhat reliable, direct or other evidence for two of the three outcomes is available. In order to classify Phase 5 (Famine) with reasonable evidence for a current situation, all available evidence needs to be above Famine thresholds. As for Phase 5 (Famine) with solid evidence, Phase 5 (Famine) with reasonable evidence conditions can be projected even if the current evidence is below the Famine thresholds for any or all the outcomes, as long as it is justified that the current levels will exceed Famine thresholds during the projection period in the most likely scenario.

More details on the guidance on evidence for Phase 5 (Famine) with reasonable evidence classifications are available in Table 4 below:

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4. The IPC acknowledges the ongoing efforts to validate rapid assessments using key informant and household data to estimate mortality rates. The IPC is committed to reviewing this guidance note in light of the validation results once they become available.

5. The sample size is based on the CDR of 2/10,000/day, precision of 0.6, recall period of 93 days, and design effect of 1.5. The same parameters (except design effect) were also used to calculate the minimum sample size of simple and systematic surveys.

6. Standardized plausibility checks should be conducted for nutrition and mortality evidence. Plausibility checks (with penalty scores) are included in ENA for SMART software for data on WHZ, and guidance for verifying the plausibility of mortality data is also included (without any penalty scores) in the software.

Table 4: Minimum evidence requirements for IPC Phase 5 (Famine) with reasonable evidence classifications

Classification	Current	Projection
	Documented analysis with the following minimum evidence:	
IPC Phase 5 (Famine) with reasonable evidence	At least two outcomes with R1 (+ or -) direct evidence or other evidence allowed for IPC Phase 5 (Famine) with reasonable evidence + Four other pieces of R1 (+ or -) evidence, with at least two of those from the season of analysis	1) IPC Current adhering to evidence level for IPC Phase 5 (Famine) with reasonable evidence[7] + 2) Evidence used for current classification can be at most 12 months old at the end of projection period + 3) Four pieces of R1 evidence presented with clear assumptions on forecasted trends

Further to the direct evidence that should be used for any Famine analyses, other evidence is also allowed for Famine with reasonable evidence. These are detailed in Table 5. Furthermore, direct evidence that scores less than R1 can and should be used to support both Phase 5 (Famine) with reasonable evidence and Phase 5 (Famine) with solid evidence. However, other evidence allowed can only be used if it meets the minimum requirements as stated in Table 5. It should also be noted that any other evidence, including somewhat reliable direct evidence used in the analysis, cannot override reliable direct evidence available on the situation.

Table 5: Other evidence allowed for IPC Phase 5 (Famine) with reasonable evidence

Outcome 1: Food consumption and livelihood change	Outcome 2: Nutritional status	Outcome 3: Mortality
Inference of outcomes (see Annex 1 for more detail): Any **relevant evidence** on outcomes or contributing factors: • A combined analytical approach using **calibration** of local evidence which do not have global cut-offs included in the Reference Table; **extrapolation** across time and space; and **causal pathways/ interpretation** of contributing factors (at least two out of three methods). • Include reference to at least four pieces of somewhat reliable (R1) indirect evidence collected during the same season of analysis, or during a period of six months prior to the analysis. • Methodical and well documented analysis demonstrating the use of the methods for inference. • A list of potential indicators with indicative thresholds not provided as indirect evidence by definition lack international thresholds and need contextualization.	**GAM based on MUAC from representative surveys of good method:** **Disaggregated surveys** representative at a higher administrative unit: • Evidence must add to at least 5 sites and 100 observations from the same season of analysis. **Surveys of similar areas** • Evidence must come from the same season of analysis. **Recent surveys** • Inferred estimates of evidence collected within the last 6 months but not from the same season of analysis (12 months for areas with no seasonality). **Historical evidence** • Evidence must have been collected during the same season of analysis from at least two similar years in the last five years.	**CDR or U5DR from representative surveys of good method:** **Surveys of similar areas** • Evidence must come from the same season of analysis. **Recent surveys** • Inferred estimates of evidence collected within the last six months but not from the same season of analysis (12 months for areas with no seasonality). **Historical evidence** • Evidence must have been collected during the same season of analysis from at least two similar years in the last five years. **CDR or U5DR from functioning monitoring systems including:** • Hospital records, community-based surveillance systems and vital registration records.
Evidence must be reviewed and accepted by the Famine Review Committee·		

There may also be situations where the analysts have partial evidence of a Famine situation, but not enough to classify the area in Phase 5 (Famine) with reasonable evidence. In these cases, the analysts can refer their analysis and the available evidence to the IPC Famine Review Committee. The Committee will provide their own expert opinion on the situation and conclude whether the situation merits a Phase 5 (Famine) with reasonable evidence classification.

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7. The IPC acknowledges the ongoing efforts to validate rapid assessments using key informant and household data to estimate mortality rates. The IPC Is committed to reviewing this guidance note in light of the validation results once they become available.

2.8.3 Famine in areas with limited or no humanitarian access to collect evidence

For areas where humanitarian access is either limited or non-existent, the evidence requirements for Phase 5 (Famine) classifications are somewhat different regarding evidence reliability and the number of pieces of evidence required for classification. The minimum evidence requirements for Famine classifications in areas with limited or no access are included in the table below. Specific guidance for data collection has been developed for areas with limited or no access (please refer to the corresponding section in the IPC Resources for this guidance).

Table 6. Minimum evidence requirements for IPC Famine classifications in areas with no or limited access

Classification	Current	Projection
	Documented analysis with the following minimum evidence:	
IPC Phase 5 (Famine) with solid evidence	1) The three outcomes, each with one piece of direct R0 evidence + 2) Two other pieces of R1 evidence on contributing factors or outcome elements	1) IPC Current adhering to evidence level with limited humanitarian access + 2) Evidence used for current classification at most 12 months old at the end of the projection period + 3) Four pieces of R1 evidence presented with clear assumptions on forecasted trends
IPC Phase 5 (Famine) with reasonable evidence	1) Two outcomes, each with one piece of direct R0 evidence + 2) Two other pieces of R1 evidence on contributing factors or outcome elements	1) IPC Current adhering to evidence level with limited humanitarian access + 2) Evidence used for current classification at most 12 months old at the end of the projection period + 3) Four pieces of R1 evidence presented with clear assumptions on forecasted trends

In in exceptional circumstances where there is limited or no humanitarian access,[8] less than somewhat reliable evidence (R0) is accepted for both IPC Phase 5 (Famine) with solid evidence and IPC Phase 5 (Famine) with reasonable evidence classifications, given they follow the IPC Parameters stipulated in IPC Manual 3.1. To exceptionally classify areas with limited or no humanitarian access to collect reliable evidence, analysts need to converge less than somewhat reliable available evidence for mortality, acute malnutrition and food consumption and livelihood change.

Areas where IPC analyses don't meet the minimum parameters specified in this section cannot be classified in IPC Phase 5 (Famine) with solid evidence or IPC Phase 5 (Famine) with reasonable evidence . Nevertheless, populations of households can still be classified as IPC Household Phase 5 (Catastrophe) following existing guidance on IPC evidence levels.

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8. Exceptional **circumstances of limited or no humanitarian access** refers to the persistent lack of humanitarian access that has been verified by the RTQR team based on justification provided by the country IPC TWG. Typically, in these situations, humanitarian actors have no consistent presence in the area, and humanitarian access is limited to only some parts of a larger area. Famines often occur in areas where there is little or no humanitarian access. Lack of humanitarian access does not only mean that Famine is more likely to happen, as populations do not receive aid, but also that it is not possible to collect systematically data on the food security and nutrition situation in the affected area. In some situations, lack of access may mean that there is access to distribute aid, but no access to collect (reliable) data. Examples of situations with no or limited humanitarian access: South Sudan counties Leer and Koch in 2016-2017 with no humanitarian presence, population scattered on islands that were difficult to reach, with humanitarian missions limited to a few hours at a time; Borno state in Northern Nigeria in 2016-2017 where part of the area was accessible to humanitarian actors whereas some areas were totally inaccessible due to insecurity and humanitarian presence was limited to some accessible areas; and Southern Somalia in 2011 where many districts were inaccessible to humanitarian actors due to a decision and action taken by armed groups to prevent access and aid to drought-affected areas.

In many contexts, Famines are typically caused by complex emergencies, where conflict is a key factor. Due to conflict, access to areas potentially affected by a Famine may be limited, and there may be large obstacles to data collection that would allow confirming Famine beyond reasonable doubt.

Furthermore, Famines are typically accompanied by large-scale migration. This together with conflict makes it difficult to collect necessary data in general, but in particular, reliable data on mortality: households may not know what has happened to their family members, and even if they are aware of deaths, they may be unable to say when the deaths occurred or what was the approximate cause of death (trauma or non-trauma related). Additionally, deaths may have happened during migration and it may be difficult to associate these deaths to a specific area for area classification purposes. Increased mobility of households is also likely to hamper any efforts to estimate the number of people experiencing IPC Phase 5 conditions in the analysis area.

SPECIAL PROTOCOLS FOR FUNCTION 3

For the purpose of communication, the two classifications of IPC Phase 5 (Famine) fall within two main statements consisting of specific communication messages and mapping requirements.

1 **IPC Phase 5 (Famine) with solid evidence** is used when specific criteria on starvation, malnutrition and mortality are met. An area is classified in Phase 5 (Famine) with Solid Evidence based on the following criteria and provided there is compelling evidence including:

- 1 in 5 households facing an extreme food shortage.

- Roughly 1 in 3 children acutely malnourished.

- At least 2 in every 10,000 people dying daily (or at least 4 in every 10,000 children under five years old dying daily) because of outright starvation or the interaction of malnutrition and disease.

Communication should focus on the actual and/or projected Famine conditions for these area(s) and people within the area(s), and related implications. The area(s) should be colored using the colour for Phase 5 (Famine).

2 **IPC Phase 5 (Famine) with reasonable evidence** is used for communicating the classification of area(s) in Phase 5 (Famine), when all IPC regular and special protocols are met, except for the existence of reliable evidence for all the three outcomes listed above.

Communication should focus on the high likelihood that Famine is either happening or will happen within the specified timeframe. Areas in IPC Phase 5 (Famine) with reasonable evidence should be coloured as indicated in Table 4 below.

The table below shows how the IPC Phase 5 (Famine) classifications should be communicated and mapped.

Table 7. IPC Famine communication and mapping protocols

IPC Famine Classification	IPC Famine Communication			IPC Famine Mapping Protocols	
	Statement	Key Message		Map	Legend
IPC Phase 5 (Famine) with solid evidence current or projected	A Famine has been declared[9]	**Current** A Famine has been declared in XXX Region of XXX Republic, where around XXX people are experiencing catastrophic levels of food insecurity. This classification is characterized by widespread death and starvation due to severe drought and the effects of the long-running conflict. Emergency response is needed to prevent further deaths, starvation and Famine from spreading to other regions. An additional XXX people, classified in IPC Phase 4 (Emergency), also need urgent assistance to save lives and livelihoods. **Projected** Experts warn that about XXX people in XXX Region of XXX Republic will likely experience IPC Phase 5 (Famine), between June and July 20XX. This classification is characterised by deaths, starvation, a total collapse of livelihoods and extremely critical levels of acute malnutrition. Urgent action is needed now to avert likely widespread deaths and starvation.			**Famine: IPC Phase 5 (Famine) with solid evidence** Projected: IPC Phase 5 (Famine) with solid evidence
IPC Phase 5 Famine)[10] with reasonable evidence current or projected	XXX Region of XXX Republic is experiencing IPC Phase 5 (Famine). Due to limited data on the situation, experts have classified the region in IPC Phase 5 (Famine) with reasonable evidence.	**Current** XXX Region of XXX Republic is experiencing IPC Phase 5 (Famine), which is characterised by starvation, collapse of livelihoods, extremely critical levels of acute malnutrition and widespread deaths, experts warn. Due to limited data on the situation, experts have classified the region in IPC Phase 5 (Famine) with reasonable evidence. Partners call for unimpeded humanitarian access to assess the region and respond to the extreme hunger levels. **Projected** Projections show that there is reasonable evidence that XXX Region of XXX Republic will likely be in Famine between June and July 20XX, if conflict intensifies and urgently needed assistance is not delivered. Humanitarian agencies call for immediate and unimpeded access to avert likely widespread starvation and death and for more data to confirm the classification, scope, and extent of these conditions.			**Famine: IPC Phase 5 (Famine) with reasonable evidence** Projected: IPC Phase 5 (Famine) with reasonable evidence

9. IPC Phase 5 (Famine) with solid evidence refers to the area level classification, where at least 20 percent of the population is experiencing extreme food deprivation and livelihood collapse, more than 30 percent acute malnutrition rate (GAM by WHZ) and a mortality rate that surpasses 2 persons per day per 10,000 people.

10. IPC Phase 5 (Famine) with reasonable evidence refers to situations where there is evidence pointing to Famine conditions, but the amount of evidence on different outcomes is not sufficient, or the reliability of the evidence is not high enough for a IPC Phase 5 (Famine) with solid evidence classification.

3.4 Adhere to Special Communication Procedures and Requirements

- In addition to the IPC standard communication brief describing the overall situation in a country/region, the **development of an ad-hoc product, namely the IPC Famine Alert is required to highlight the situation in areas classified in IPC Phase 5 (Famine) with solid evidence or IPC Phase 5 (Famine) with reasonable evidence**. This provides a clear and concise explanation of the situation for the area(s) in question, considering the essential information indicated in point 3 below:

- To this purpose, in addition to the national/regional map included in the IPC standard communication brief, the **development of separate map(s) only for the area(s) in Phase 5 (Famine) with solid evidence or Phase 5 (Famine) with reasonable evidence** is required. The maps should include the Famine-specific legend that should be used in both the IPC country/regional communication brief and special alert. Furthermore, if the area classified has limited or no humanitarian access, a specific mapping protocol to indicate the lack of access should be used.

- In case of a classification of Phase 5 (Famine) with solid evidence or Phase 5 (Famine) with reasonable evidence, it is essential to provide **specific information/key messages** indicated below in both the IPC standard communication brief and alert:

  ~ With regards to the Phase 5 (Famine) with solid evidence, it is necessary to 1) clearly indicate the areas where Famine is occurring; 2) indicate the evidence showing the Famine occurrence such as level of acute malnutrition, mortality, extremely poor or no food consumption or complete livelihood disruption; 3) clearly indicate the main data and sources used to get to that conclusion; and 4) include clearly the time-frame of the Famine occurrence. With regard to Phase 5 (Famine) with reasonable evidence classifications, it is essential to 1) state why the area is classified as Phase 5 (Famine) with reasonable evidence and not Phase 5 (Famine) with solid evidence (e.g.,.because of limited evidence) 2) highlight the evidence supporting warning signals, such as those indicating extreme gaps in food consumption, livelihood collapse, child malnutrition and deaths 3) specify that the classification is based on limited evidence, but that all available evidence shows that a Famine is likely happening or will likely happen 4) clearly indicate main data and sources used to get to that conclusion 5) indicate the related time-frame.

  ~ The quality and reliability of evidence used – highlighting the issues with data quality and availability. In areas where there is limited or no humanitarian access, it should be clearly highlighted in the text that the classification was done with limited evidence, due to lack of access to collect reliable evidence, and thus the classification needs to be confirmed as soon as there is access to collect better evidence;

  ~ Date/time for the next analysis as well as any monitoring plan in order to indicate when an update on the situation may be available.

> **Communication of IPC Phase 5 Famine vs. Catastrophe**
>
> The existence of households in IPC Phase 5 Catastrophe especially when areas have not been classified as IPC Phase 5 Famine should be highlighted as immediate response is crucial. By highlighting the existence of households in Catastrophe, the humanitarian community may be able to prevent an increased risk of Famine if prompt action is taken. Communication should highlight that these households have an extreme lack of food and/or other basic needs even after full employment of coping strategies. Furthermore, areas classified in IPC Phase
>
> 4 Emergency should be highlighted as areas with critical need for humanitarian action to save lives and livelihoods.

- The IPC national/regional map including area(s) classified IPC Phase 5 (Famine) with solid evidence or Phase 5 (Famine) with reasonable evidence should always be labelled, and the title should indicate clearly the time period the map is referring to (current and projected).

- All areas affected by a Famine should be highlighted in the communication brief with high-quality, zoomed-in maps as necessary.

- With regards to the national map, in case analysts do a second projection focusing on a less likely worst-case scenario, analysts should not produce a second map; instead, they should highlight this analysis in text. The fact that this is a less likely scenario, the specific assumptions used, and risks identified should also be included. For example, the main message could be *"Famine may occur in the next three months if conflict escalates and humanitarian access is curtailed".*

- In case of Phase 5 (Famine) with solid evidence or Phase 5 (Famine) with reasonable evidence, the following note must be included in the IPC communication products: "According to the IPC, Famine is classified when an area has at least 20 percent of households facing an extreme lack of food, 30 percent of the children are suffering from acute malnutrition and at least 2 in every 10,000 people dying daily (or at least 4 in every 10,000 children under five years old dying daily)

- The IPC global quality review process – Real Time Quality Review (RTQR) and the IPC Famine Review Committee (FRC) review should be mentioned in both the IPC standard communication brief and IPC Famine alert.

SPECIAL PROTOCOLS FOR FUNCTION 4

As a best practice, the national IPC Technical Working Group that foresees the possibility that its upcoming or ongoing IPC analysis might result in classification of Famine with solid or reasonable evidence is strongly encouraged to consult the IPC Global Support Unit to clarify the way forward in terms of support and the review process.

4.3 Request and Engage in an External Famine Review

IPC FAMINE CLASSIFICATION PROCESS

The review by the IPC Famine Review Committee (FRC) together with the preparation work undertaken by the IPC GSU-led multi-partner team is a neutral and independent process aiming at supporting IPC quality assurance and helping to ensure technical rigor and neutrality of the analysis. The activation of the IPC FRC provides an additional validation step before the release of Country IPC results. The FRC Review is a specific procedure activated in order to confirm or disprove Famine classifications when IPC AFI country analyses show a potential or already identified situation of Famine.

The IPC FRC consists of a four-six-member team of leading international food security and nutrition experts, who are neutral to the IPC outcome and who have the relevant technical knowledge and experience in the specific crisis context. This committee reviews and debates the IPC evidence and results and then provides guidance and recommendations to the country IPC TWG based on the review.

Famine Reviews are triggered when at least one of the following conditions is met:

(i) The country IPC TWG reaches the conclusion that at least one area is classified in Phase 5 (Famine) with solid evidence or Phase 5 (Famine) with reasonable evidence.

(ii) in case of a breakdown in technical consensus within the country IPC TWG regarding possible Phase 5 (Famine) with solid evidence or Phase 5 (Famine) with reasonable evidence classifications.

(iii) in case the IPC GSU, acknowledging the presence of evidence above Phase 5 (Famine) thresholds, decides to activate the Famine review.

(iv) in case, for similar reasons, an IPC global partner officially requests the IPC GSU to activate it.

Famine reviews also apply to IPC compatible analyses conducted by IPC partners, which classify at least one area in Phase 5 (Famine) with solid evidence or Phase 5 (Famine) with reasonable evidence.

A process of review by the FRC is set up according to the IPC Famine Classification Special Additional Protocols in Manual IPC V3.1 (Part 2A, pages 85 – 89). The process is composed of two steps: Phase 1 - Preparation of the FRC review by the multi-partner team and Phase 2 - FRC review.

Step 1 - The purpose of the Famine review preparation by the IPC GSU-led multi-partner team is to support IPC quality assurance and help ensure technical rigor and neutrality of the analysis. It is conducted by IPC GSU and global IPC partners represented by experts who have not been directly involved in the analysis. This review consists of a preliminary screening of the classifications performed by the TWG in order to verify adherence to IPC protocols and existence of Famine conditions. This exercise is done prior to the FRC review and provides technical inputs, structuring the information needed by the FRC to assess the validity of the analysis results in relation to Famine classifications and identifies the key issues to be raised to the IPC FRC.

This review constitutes a first verification step that existing evidence point towards a level of severity that requires a FRC review (i.e. Phase 2). Should the Famine review preparation team reach a consensus and conclude that the analysis in question does not qualify for a FRC review (e.g., possible Famine classification not plausible), this is communicated to the FRC, which is in turn deactivated. In case of breakdown of consensus within the Famine Review preparation team, the FRC review is maintained.

Step 2 - The **IPC FRC review** is an important mechanism of the global, regional and national partnership and governance structures. The committee is formed as needed and on demand and its activation represents an additional validation step before IPC results are released to clear the IPC Phase 5 (Famine) classification (e.g., Phase 5 (Famine) with solid evidence or Phase 5 (Famine) with reasonable evidence) The committee is to be convened by the request of the IPC Global Support Unit (IPC GSU). The scope of work of the FRC review includes (i) reviewing available evidence for the areas under review; and (ii) assessing the plausibility of Famine classification for these areas.

The **selection of areas to be included in the FRC review** is an important part of the process. The Famine Review Committee maintains the discretion to expand/alter the technical working group selected areas if necessary. The process includes the following steps:

a) The Technical Working Group provides their list of areas that has/have been or may potentially be classified in Phase 5 (Famine) with solid evidence or Phase 5 (Famine) with reasonable evidence.

b) The Famine Review preparation team reviews the TWG analysis and provides additional suggestions if required.

c) The Famine Review Committee decides based on the evidence which areas to review from both lists.

The **release of the Famine Review Committee findings/reports** is done through a series of steps:

a) Upon completion of their review, the FRC presents their findings to the TWG. This exchange is not for the FRC to review/comment on TWG conclusions, but to explain the rationale for their conclusions.

b) The FRC also presents the conclusions of their report to the IPC Global Steering Committee.

c) The FRC report is made public on the IPC web page alongside the TWG report.

The Famine Review Committee can produce technical recommendations to improve data collection in the FRC report, however, follow up actions on how future data collection is organized/improved is not the responsibility of the FRC, but of individual agencies.

ANNEX 1: Guidance for inference of evidence when nowcasting or projecting food consumption and livelihood change

Analysing:

- Indirect evidence on outcomes and direct evidence of a reliability lower than R1, for example, evidence on HHS collected from a small sample, or anecdotal evidence on extreme coping measures employed from key informants.

- Evidence on contributing factors, indirect evidence and direct evidence of R0 should not be used on its own to conclude on food consumption and livelihood change, but rather through inference, considering the three ways endorsed by the partnership, e.g., calibration, extrapolation and interpretation/causal pathway. Use of two (preferably all three) of these with available evidence is required.

- Inference of available evidence for nowcasting or projecting the situation constitute one piece of indirect evidence for food consumption and livelihood outcomes allowed for Phase 5 (Famine) with solid evidence or Phase 5 (Famine) with reasonable evidence classifications.

- Use of inference is recommended for all analyses and required when reliable (IPC Phase 5 (Famine) with solid evidence) or somewhat reliable (Phase 5 (Famine) with reasonable evidence) direct evidence is not available for food consumption and livelihood change.

- Inference analysis must be documented, and the individual pieces of evidence on contributing factors used for inference can also be taken into consideration as data on contributing factors to reach the minimum evidence level.

- Evidence gathered through qualitative methods, such as focus group discussions or key informants can be considered somewhat reliable (R1) if collected with standard methodology but does not constitute direct evidence on its own.

- As much as possible and whenever baselines are available, analysts should attempt to use the HEA approach as an input to IPC analysis already prior to the workshop, in order to share analysis results for classification purposes. Assumptions used regarding expected changes and forecasts concerning e.g., seasonality, prices and humanitarian assistance need to be documented, as well as all the other evidence used in the analysis and the conclusions reached.

- General principles of inference include contextualisation of evidence and analysis, identification of most suitable indicators for example through reference to other Famine situations or review of locally specific indicators.

> - **Calibration** of indicators not in the Reference Table
> - **Extrapolation** over time and space
> - **Interpretation** of contributing factors within their context

Calibration is conducted by approximating indicators not included in the IPC Acute Reference Table to the Phases of the Reference Table. The indicators that can typically be calibrated inform on food consumption or livelihood change of households and as a result, their results can be compared against the Phase descriptions or potentially even against the cut-offs of direct evidence. A list of potential indicators to use for assessing whether the situation meets Phase 5 criteria is included below. The list is non-exhaustive and other e.g., locally specific indicators can also be used.

Potential indicators to use for calibration/correlation include:

- Number of meals (0-1 meals per day for adults and for children)

- Intra-household food distribution (certain household members sacrificing their food consumption for the benefit of other members).

- Food items consumed (e.g. consumption limited to wild foods only)

- Consumption of locally specified 'Famine' foods (with adverse effects on food assimilation/nutrition)

- Engagement in dangerous or detrimental coping strategies to access food (e.g. passing through dangerous areas in order to access food, at risk of being physically harmed or even killed)

- Large-scale displacement caused by lack of access to food and livelihood collapse

- Lack of displacement in case of populations that are unable to move due to conflict or natural disaster

- Large-scale dependence on aid, social networks and handouts for food

Examples of calibration/correlation:

- Large-scale displacement: during the Somalia 2011 Famine, over 200,000 people migrated to Dadaab refugee camp in Kenya and to Dollo Ado camp in Ethiopia from the affected areas. Large-scale distress migration is indicative of exhaustion of other coping mechanisms and a sign of a potential Phase 5 situation.

- Food items consumed: in Northern Nigeria, in 2016, extreme lack of food forced households to boil dry goat skins for food.

- Extreme consumption of wild foods: the Famine around 1995 in North Korea forced households to eat all possible wild foods. For example, birds and other animals were hunted to extinction, and people reportedly consumed also grass and tree bark.

- Destitution and dependency on food handouts: during the Ethiopia Famine in the 1970s, roadside destitution became commonplace. In early 1973, sick and hungry people were lining parts of the north-south highway in Wollo (epicenter of the Famine), stopping vehicles to beg for food.

Extrapolation refers to inference of direct or indirect evidence over space or time. This requires assessing historical trends of evidence, comparing current/projected situation to past situations and estimating whether the current/projected situation is likely to meet the Phase 5 criteria. Extrapolation over space focuses on assessing the situation e.g., in neighbouring areas, or in other areas in similar situations, and seeing how this can help to strengthen the analysis for the area in question, in order to confirm or deny the existence of a Phase 5 (Famine) situation.

Example of extrapolation:

- Famine in Northern Ethiopia (especially northern Wollo and Tigray) in the 1980s was a consequence of different factors, one of which was a series of failed rainfall seasons. Affected households experienced one crop failure after another, leading to erosion of assets, coping capacity and food access and culminating in a Famine, especially between 1983 and 1985. Analysis of historical trend data helps in assessing the seriousness of the deteriorating trend in key indicators, such as precipitation and market prices.

	E. Tigray	N. Wollo	N. Begemder
November/December 1981	100	50	40
November/December 1982	165	65	55
November/December 1983	225	90	45
November/December 1984	300	160	70
June/July 1985	380	235	165

Average grain prices in Northern Ethiopia (birr per quintal, 100 kg) (Alex de Waal, 2002)
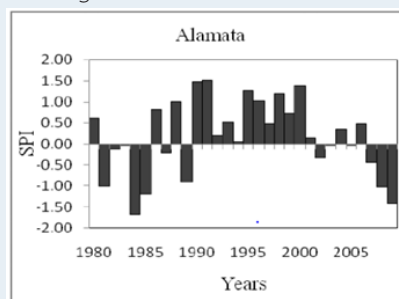
Standardized time series plot of annual rainfall totals in Alamata, Tigray over the period from 1980 to 2009 (Hagdu, 2013)

Interpretation/causal pathway should be based on the IPC Analytical Framework (or other suitable approach) that can support systematic and logical analysis of food security evidence. Interpretation/causal pathway is used to take individual pieces of evidence on contributing factors and to carefully analyse them to deduce the likely severity of the food security outcomes, in this case that of food consumption and livelihood change. For example, the following typical drivers of a Famine situation should be considered: conflict, precipitation, macroeconomic situation, crop and livestock production, terms of trade, market prices, large-scale loss of livestock, loss of typical income and food sources, etc. Other questions worth examining are existence (or possible collapse) of social networks and levels of humanitarian food assistance (especially sudden interruptions in situations where humanitarian food assistance is a significant food source).

Examples of interpretation/causal pathway:

- Drastic negative changes in terms of trade (ToT) were observed between June 2010 and June 2011 in Southern Somalia: e.g. ToT between labour and sorghum decreased by 75 percent and that of goat and sorghum by 83 percent in Baidoa. As it was also known that households typically relied on casual labour and livestock sales for their income, and that prices of staple food items had increased substantially, it was possible to conclude that a large share of households was not able to procure enough food at the markets to meet their food needs, leading to large food gaps.

- Exceedingly high prices of rice, the main staple food item, and subsequent large-scale flooding decimating new rice crops and leading to further price increases contributed heavily to the Bangladesh Famine in 1974. Government policies restricting movement of food stocks between districts, speculative hoarding of rice by traders and better-off households, corruption, and withholding of expected food aid by the US (for political reasons) led to extremely high rice prices and severely restricted access to food, especially for those who were market dependent, e.g., daily labourers and landless households. This led to severe food deficits at household level that were further exacerbated by the failure of the next rice harvest due to large-scale flooding.

- In Bor (which at the time was still Sudan), subsequent shocks of flooding, animal disease epidemics and tribal fighting including cattle raiding led to the total loss of cattle between 1991 and 1993. Since livestock was the main source of livelihood to households, lack of access to cattle meant widespread lack of access to food and income, leading by early 1993 to extreme food gaps and Famine.