The IPC Famine Review Committee (FRC) acknowledges the notable efforts made by the Yemen IPC Technical Working Group (TWG) to conduct this analysis in an extremely complex environment. Over 100 analysts from about 20 agencies, including the Ministry of Agriculture and Irrigation, Ministry of Planning and Ministry of Environment and decentralized services have taken part to this challenging exercise.

The IPC FRC acknowledges the severity of the situation in the areas analysed and encourages the IPC Yemen TWG to continue monitoring and responding to the precarious situation of most vulnerable households.

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The IPC FRC was activated upon request from the Yemen IPC TWG to the IPC Global Support Unit (GSU) and was coordinated by the IPC GSU with support from IPC Global Partners.

With the support of:
1. The FRC Process

The review by the IPC FRC together with the preparation undertaken by the IPC GSU-led multi-partner team is a neutral and independent process aimed at supporting IPC quality assurance and ensuring 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. This specific review was activated upon request of the country IPC Technical Working Group considering the concerns of the international community around the severity of the situation in Yemen and the potential of a Famine-related classification. A process of review by the FRC is set up according to the IPC Famine Classification Special Additional Protocols in IPC Manual version 3.0 and focused on the areas indicated by the Yemen TWG in the Governorates of Hajjah, Amran and Sa’adah. The FRC would like to highlight that this review has focused on 23 districts out of 333 and does not exclude a similar classification in other areas that were not brought to the FRC attention.

2. Key Conclusions from the FRC on the Yemen IPC analysis

Key highlights

- In the case of ongoing Humanitarian Assistance, a number of districts should be classified as Phase 4!, or, in the case of one district Phase 3! (where the TGW classified as Phase 4), and
- In the hypothetical case of a complete absence of Humanitarian Assistance, a number of districts should be classified as Famine Likely (where the TWG classified as Phase 4).

Scenarios considered for the Famine Review

The FRC review was conducted during the month of November and December 2018 and was particularly complex due to the constantly evolving situation, in which most of the drivers have intensified significantly after much of the data used for the analysis was collected. This complicated the process of establishing the “most likely scenario” in such a volatile context. In particular, the IPC Version 3.0 protocols, applied for this analysis, require that projected classification is conducted assuming the absence of humanitarian assistance, independently of whether it is actually planned, funded, and likely deliverable. Within this framework, the FRC identified three scenarios and assessed the likelihood of the development of each, using the description of macroeconomic, political, and humanitarian drivers identified by the TWG.

The first scenario, in absence of humanitarian assistance, assumes full implementation of the Yemen roadmap, and operationalization of all actions needed to revert the deteriorating situation. This entails a halt to the violence, the full resumption of commercial import flows to all ports and their final destinations and addressing the liquidity crisis that affect traders capacity to obtain the credit need for importing food and fuel. This scenario also entails addressing macroeconomic issues such as the currency depreciation, and reactivation of payments to pensioners and civil servants, as well as full engagement in peace talks. This scenario was considered the best-case scenario.

A second scenario, also in absence of humanitarian assistance, assumes an inability to operationalize the actions identified in the Yemen roadmap. As a consequence of failed peace talks, conflict and violence would continue and intensify, affecting people’s lives and livelihoods as well as damaging social and economic infrastructure. Commercial import flows would be further restricted, especially in the port of Al Hudaydah, reducing or preventing its functionality entirely, and the currency depreciation, liquidity crisis and credit crunch would continue, leading to complete economic collapse. This scenario was considered the worst-case scenario.

A third scenario, in absence of humanitarian assistance, assumes limited progress on the operationalization of the actions needed to revert the current deteriorating situation in Yemen. This scenario foresees slow progress made in the peace talks, localized violence continuing with few stabilization zones established, measures to prevent deterioration of people’s living conditions and livelihoods are implemented but don’t produce significant improvements. Commercial imports continue to be hampered, with Al
Hudaydah port functioning intermittently, and the currency depreciation continuing. In full agreement with the TWG, the FRC identified this as the **most-likely scenario**, although continuation of humanitarian assistance is likely. However additional elements regarding vulnerability, in terms of population susceptibility to hazards and their ability to cope, have been factored in, to project the magnitude of the expected impact of these drivers. This most-likely scenario is largely based on experience in Yemen in the past. However, because the political situation has become much more volatile, predicting these politically related drivers in the coming 6 months is much more difficult than in the past. Therefore, this most likely scenario will require very close monitoring.

**Analytical Reasoning**

The FRC is in general agreement with the description of key drivers provided by the TWG, which was considered valid and contributed to the FRC’s deeper understanding of the factors contributing to the current catastrophic food security conditions. The TWG’s hypotheses were critical in the FRC’s consideration of the most likely scenario. The TWG has clearly identified a number of assumptions in the most-likely scenario that will lead to significant deterioration of food security and livelihoods and potentially result in a notable deterioration of the nutrition and mortality situation. These include both macroeconomic drivers (e.g. currency devaluation and disruption of imports) as well as local drivers (e.g., increase in market prices, reduction in labour opportunities, and decrease in wages, market disruption, limited agricultural production, and others). These assumptions are laid out in the context of extreme vulnerability for people - in particular given extreme reliance on external food imports, stresses on purchasing power, and the very high dependence on credit/borrowing, in addition to the cumulative effects of successive years of instability.

The analysis of the hazards and the vulnerability suggests that the situation is deteriorating rapidly: there are multiple conflict, political, macro-economic and household level hazards, all of which are pushing in a negative direction and becoming more volatile. Broad swathes of the population of Yemen are susceptible to these. The population is doing their absolute best to cope with or manage these difficult circumstances, mostly through informal community support mechanisms and the tradition of sharing, but the signs are that the mechanisms of coping and support are reaching their limits.

The TWG seems to assume a linear deterioration of food consumption, livelihood coping, and nutrition and mortality prevalence caused by the deterioration of each contributing factor which led to the absence of areas in IPC Phase 5 (Famine) over the projected period. However, these drivers do not work in isolation of each other. Their interlinked nature risks downward cascading effects and a complete collapse of the economic/food systems. The FRC considers that the simultaneous materialisation of the assumptions identified by the TWG will have a more severe and exponential impact on an already extremely vulnerable population and will result in the classification of Famine Likely in most of the districts under review. The main concerns identified by the FRC are:

- The removal of currently high levels of food assistance would not only significantly reduce household food consumption, but would contribute to the collapse of the informal community support mechanisms that significantly rely on this humanitarian assistance, in addition to endogenous resources to support household and community resilience;
- The TWG scenario seems to rely excessively on the mitigation role that informal community support mechanisms– so far crucial to preventing an even worse crisis– could continue to play in the face of continued and potentially cascading deterioration in the light of the macroeconomic and conflict drivers; and
- Previous experience has shown that undernutrition prevalence and mortality incidence prevalence can rapidly collapse as a result of the cascading effects and eventual collapse discussed above.

In many districts under review, food consumption indicators already show a very severe situation, with a percentage of households experiencing famine conditions that, in certain areas, even in the current analysis, could surpass 20% of the population, thereby qualifying these areas for famine classification for food security outcomes. In most of these districts, over 30%, and in some cases, over 60%, of the population currently receives humanitarian food assistance equivalent to 80% of their kilocalorie requirements. A removal of this assistance could create a caloric deficit of about 60% for those populations. Although the TWG referred to several elements affecting the effectiveness of the aid, mostly linked to sharing practices, there is no doubt that, without humanitarian food assistance, the food security situation would be at catastrophic level (IPC Phase 5) in most of the areas currently in IPC Phase 4 (Emergency). Indeed, in the areas where food security indicators show a more severe situation, the households receiving food assistance are better off than those who don’t. Although the FRC has focused on the districts indicated by the TWG, it would be

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1 In most of the districts of concern, over 30% of the population receives HFA equivalent to 80% of their kilocalorie requirements, which according to IPC protocols would justify a classification in IPC Phase 4! (Famine has likely been averted by humanitarian food assistance). In spite of this, the FRC concurs with the TWG on the classification of these areas in IPC Phase 4 (Emergency) with no exclamation mark. This is because, by definition, the use of the exclamation mark associated with IPC Phase 4 (Emergency) would mean that, in absence of humanitarian assistance, the nutrition and mortality indicators would cross Famine levels. Yet, the FRC considers that the current levels of acute malnutrition and mortality would not have been at or above IPC Phase 5 (Famine) thresholds in absence of humanitarian assistance. Therefore, the FRC conclusion not to use the “!” is not based on the same rationale as the one stated by the TWG, which assumes a limited impact of humanitarian food assistance.
reasonable to assume that, in other districts where the level of humanitarian food assistance has been significant, the situation would also be worse in its absence. This is particularly worrisome where populations are already in IPC Phase 4 (Emergency).

The FRC also considers that the TWG’s explanation on the strength and availability of community support mechanisms, although extremely relevant and a significant source of resilience for communities that have been facing significant shocks since the onset of the conflict 2015, does not sufficiently takes into account the effects that the withdrawal of humanitarian assistance combined with continued macro-economic, conflict, political, and household level hazards would have on the continued ability of social networks to support the most vulnerable. In fact it seems that ‘gift’ (from community support mechanisms) has been identified as the main source of food for about 15% of the surveyed households. However, according to the FRC, it is likely that the source of this ‘gift’ is humanitarian assistance shared among neighbours, which should also be excluded from the projected scenario.

As noted by members of the FRC during the 2011-12 Somalia Famine, where similar informal community support mechanisms existed, these support networks were crucial in staving off the worst of the crisis, but were eventually exhausted by confluence of shocks with the groups with the lowest social capital experiencing this collapse first. Considering the current high levels of food insecurity and limited progress expected under the most-likely scenario, the FRC expects these community support mechanisms to be limited in their capacity to support households during the projected period if the main source of the sharing comes from humanitarian food assistance. In addition, evidence suggests the presence of common coping strategies protecting young children from more severe nutrition vulnerability, as maternal buffering appears a widespread practice in some of the district of concerns. However, maternal buffering happens in detriment to adult consumption and can only take place when resources are still available at household level, i.e. if humanitarian food assistance is maintained in the scenario.

It is worth noting that nutrition and mortality evidence portray a better situation that those depicted by the food security outcomes, in fact the evidence suggests that nutrition status and mortality incidence has remained resilient to the effects of the conflict. Considering the non-linear nature of the descent into Famine that the FRC have witnessed in other cases, Famine levels of mortality do not appear to always come at the end of a gradual, linear increase in severity of vulnerability measured by food security, nutrition and health indicators. **Famine levels of mortality become a greater risk as vulnerability increases, and there is a tipping point or collapse that is not predictable on a probabilistic scale.** In these extreme situations, this tipping point is not a sequential one where one of the vulnerability outcomes causes the next (e.g. food insecurity causes undernutrition which increases morbidity resulting in rapidly increasing mortality): it is possible to have famine level of deaths with any combination of severity of the three outcomes. Public health and epidemic evidence suggests that morbidity is already high.

The extreme vulnerability of the population in the districts of concern potentiate this collapse but might not be useful to probabilistically predict it. The FRC notes that although it would be impossible to establish the speed at which nutrition and mortality could degenerate up to Famine levels, there is clinical evidence that indicate that in extreme energy deficiency conditions, depending on starting nutritional status, the nutrition status of adults can reach famine levels in four to six months, while for children the window might decrease to six to eight weeks. Learning from other Famine situations suggests that nutrition and mortality indicators, while not indicating Famine conditions now, could indeed deteriorate into Famine levels within the six months of the projection period.

**FRC Conclusions on Classifications (The conclusions of the Famine Review reflect the view of the majority of the FRC members and not an unanimous view).**

**Current period (October – November 2018):**

- For the districts of Ghamr, Haydan, Saqayn, Sahar, As Safra, Al Hashwah, Sa’adah (Sa’ada), the FRC concurs with the TWG that classification in IPC Phase 3 I (Crisis – would be at least one phase worse in absence of Humanitarian Food Assistance) is plausible.

- For the districts of Bakil Al Mir, Bani Qais, Wasshah, Qarah (Hajjah), Al Qaflah, Suwayr, Mashwar, Al Ashah (Amran), Baqim, Shada’a, Al Dhaher, Kitaf wa Al Boqe’e, Sa’adah (Sa’ada), the FRC concurs with the TWG that classification in IPC Phase 4 (Emergency) is plausible. However, the FRC recommends that the TWG align population figures with the prevalence shown by the food security outcome indicators, thereby ensuring adequate representation of the percentage of households in IPC Phase 5 (Catastrophe), which in all cases surpass 5%.

**Projected period between December 2018 and May 2019**

In absence of humanitarian assistance:

- For the districts of Bani Qais (Hajjah), Haydan, Sahar, As Safra, Al Hashwah, Kitaf wa Al Boqe’e (Sa’ada), the FRC concurs with the TWG that the projected classification is IPC Phase 4 (Emergency). However, the FRC recommends that the TWG align population figures with the prevalence shown by the food security outcome indicators, thereby ensuring adequate
representation of the percentage of households in IPC Phase 5 (Catastrophe), which in all cases surpass 5%.

- For the districts of Bakil Al Mir, Wasshah, Qarah (Hajjah), Al Qaflah, Suwayr, Mashwar, Al Ashah (Amran), Baqim, Qatabir, Monabbih, Ghamr, Razih, Shada’a, Al Dhaher, Saqayn, Majz, Sa’adah (Sa’ada) the FRC concludes that the classification should be revised as “Famine Likely” (IPC Phase 5) and the population estimates be revised to ensure that at least 20% of the households are in IPC Phase 5 (Catastrophe), in accordance with the 20% rule.

**In presence of humanitarian assistance:**

- For the district of Bani Qais (Hajjah), the FRC concludes that the classification should be revised in IPC Phase 3 ! (Crisis – would be at least one phase worse in absence of Humanitarian Food Assistance).
- For the districts of Haydan, Sahar, As Safra, Al Hashwah, Kitaf wa Al Boqe’e (Sa’ada), the FRC concurs with the TWG that the projected classification is IPC Phase 4 (Emergency).
- For the districts of Bakil Al Mir, Wasshah, Qarah (Hajjah), Al Qaflah, Suwayr, Mashwar, Al Ashah (Amran), Baqim, Qatabir, Monabbih, Ghamr, Razih, Shada’a, Al Daher, Saqayn, Majz, Sa’adah (Sa’ada), the FRC concludes that the classification should be revised in IPC Phase 4 ! (Famine will likely be averted by humanitarian assistance).

The FRC would like to highlight that this review has focused on 23 districts out of 333 and does not exclude a similar classification in other areas that were not brought to the FRC attention. Considering that the drivers described by the TWG are pan-territorial in nature and the level of vulnerability of households in areas classified in IPC Phase 4 (Emergency), other districts might be in a similar situation compared to those reviewed by the FRC. This type of review at the country level can also help establish the priorities for regular monitoring during the coming six months.

### 3. Recommendations from the FRC

**Recommendations to Decision Makers:** In order to prevent a further deterioration, the FRC recommends to decision makers that they ensure **full operationalization of all actions described in the recently developed United Nations roadmap for Yemen**. This entails a halt to the violence, the re-establishment of humanitarian and commercial imports flows into all ports and onwards to their final destinations, facilitating delivery of assistance, addressing the macroeconomic crisis such as the currency depreciation and the liquidity crisis in the Yemeni economy, as well as the reactivation of payments of pensioners and civil servants and the full engagement into the peace talks.

**Recommendations to humanitarian actors:**

Humanitarian assistance: The FRC recommends to humanitarian actors a scale up of the assistance, including food, nutrition, WASH and health programmes, to address the alarming conditions detected by the IPC analysis in the areas of concerns. Humanitarian food assistance should target populations in IPC Phase 3 (Crisis) and above, not just those in IPC Phase 4 (Emergency). The integrated approach to reducing famine risk has been initiated in Yemen and this approach should continue to guide priorities. Humanitarian actors should also take additional measures to verify inclusion and exclusion errors in beneficiary registration and work to minimize or eliminate influence from external actors in the process. It is important to emphasize that those most likely to experience famine conditions first are those who are most affected by the drivers but who are also most excluded from the mitigation factors linked to humanitarian food assistance and community support mechanisms.

Data collection: The absence of nutrition data from Sa’adah and Al Hudaydah since 2016 is unacceptable considering the exceptionally severe food insecurity in Sa’adah and high volatility and historical prevalence in Al Hudaydah. The FRC recommends immediate data collection in these two governorates as well an immediate scale-up of data collection efforts in the nutrition sector, with corresponding improvements in frequency, reliability, and quality. Nutrition surveys should ensure suspected pockets of high prevalence of global acute malnutrition are included in the sampling or rapid surveys are run expressly in these areas. Given the severity of food security conditions, there is a strong concern that a sharp deterioration of nutrition status could occur during the seasonal peaks in May and June. Although a monitoring system of nutrition programmes is present, this system monitors both supply and demand and as such increases in demand can be obscured. Efforts to consolidate and triangulate this information must also be made to allow early identification of programming gaps. In addition, urgent efforts are required to develop a local level monitoring or a rapid survey system that can trigger or act on signals from other sources to scale up action and monitoring to avoid the rapid collapse that can result in famine.

The FRC acknowledges the efforts made by partners engaged in the FRM system to regularly collect data in an insecure and volatile environment with representativeness at district level. This represents a significant improvement compared to Governorate level.
The methodology design is accurate and ensures acceptable levels of reliability. While the FRC recognizes the extremely complex environment, it recommends that all possible means be deployed by agencies to ensure respect for the methodology and that data collection is conducted in randomly selected clusters. Access to all areas should be granted by controlling forces. The ability to accurately monitor food insecurity is imperative to detect and address these conditions in a timely manner. Technical soundness of the questionnaire could be improved to allow better exploitation of all data collected and the FRC provided separately specific guidance to the Yemen TWG.

The FRC recommend to the Yemen TWG to strengthen and systematically enforce quality assurance and review processes for food security evidence. The identification of a certain number of outliers in Sa’adah’s October 2018 data, which put into question the validity of the data collection process, has led to challenges during the classification. Data cleaning processes should be transparent to ensure that all members of the TWG are equally aware of the data limitations and jointly make decisions over their reliability and use. However, it is important to note that additional data quality checks conducted by the GSU and the FRC members have highlighted the generally acceptable quality of data collected through the FRM.

The FRC considers data and evidence being a public good and therefore requests that all partners involved in evidence collection and analysis ensure that raw data as well as data cleaning processes are available to others for potential further analysis and scrutiny.

Recommendations to the Yemen technical Working Group:

The absence of recent data on nutrition and mortality has hampered the convergence of evidence process to estimate current and projected severity. The FRC is aware that considerable progress has been made in the coordinated planning and financing of nutrition and mortality surveys. However, the FRC notes that more attention should now be given to prioritising nutrition and mortality evidence collection in areas at most risk of famine and with a timing that allows consideration of FS and Nutrition and Mortality data together with a minimum of assumptions about changes over time. Historical data on Acute Malnutrition prevalence and seasonal trends should be better documented and exploited by the TWG, along with any inference from current contributing factors. This would allow a better estimation of whether nutrition status is likely to improve or deteriorate over the projected period. If in the future the Acute Malnutrition and Mortality data continue to diverge from the food security indicators, the TWG should provide and document the explanation on this lack of convergence. Detailing how deteriorating food security factors would or would not impact Acute Malnutrition rates would enrich the projection analysis. It could be beneficial to introduce the IPC Acute Malnutrition scale which will ensure a greater understanding of Acute Malnutrition contributing factors in Yemen.

The TWG has compiled a comprehensive list of drivers for the scenario development in the projected period. However, from the first submission of the worksheets, the likelihood of each driver occurring and the magnitude of the impact if all these drivers occurred simultaneously were unclear. The potential reaching of a tipping point has not been taken into consideration in the projected analysis. In addition, for the future it is recommended that beyond the nation-wide scenario, the TWG develop and document specific scenarios for the areas of highest concern, as national level drivers can have varying impact depending on area specific drivers and vulnerability.

The TWG rightly conducted a projected scenario in absence of HFA in line with IPC protocols Version 3.0. This scenario was accompanied by a list of hypotheses indicating a deterioration in the projected period. Nonetheless, the projection in presence of humanitarian assistance did not differ from the current analysis in any area, despite the extremely critical scenario described. This implies that the main variable entailing a deterioration would be the humanitarian assistance, which has been, nonetheless, considered by the TWG as not sufficient to generate a shift in phase.

The TWG has conducted an estimation of population using the IPC guidance based on the table of convergence. However, in the first submission of population estimates, 32 out of 47 districts in Hajjah and Amran demonstrate a ‘right-skewed but truncated’ distribution in the projections, with between 30% and 50% of the population expected in IPC Phase 4 (Emergency), and 0% in IPC Phase 5 (Catastrophe). While a “normal” distribution is not to be expected, the most likely explanation of a truncated classification could be only attributed to extremely well targeted assistance. However, the TWG has expressly highlighted concerns in the targeting process due to sharing, rotation and to a less extent, diversion, which hampers aid effectiveness. The FRC strongly suggested that the TWG identify areas where a “truncated” classification was determined and further explore the reasons behind the absence of population in IPC Phase 5 (Catastrophe). The FRC has been informed that the TWG had revised population estimates accordingly, in line with the convergence of evidence.

The FRC has remarked that Household Hunger Scale (HHS) was underused to estimate the populations in IPC Phase 5 (Catastrophe). Given that HHS is the only indicator with IPC Phase 5 (Famine) cut-offs, this should be used consistently to estimate population in these phases. In some particularly affected areas, HHS data was initially discarded based on enumerator’s visual observation of dairy and fresh vegetables in the house. This was reviewed by the TWG, who subsequently better exploited the
value of HHS, employing it in the convergence with a Poor Food Consumption Score, HDDS and rCSI. In addition, the FRC would like to suggest more caution in relying on “ad hoc” observation. The use of observation to validate some of the extreme values for HHS is relevant, but it has to be conducted following instructions, it has to be systematic, organized and documented.

Besides improving the use of the HHS to estimate population in IPC Phase 5 (Catastrophe), the FRC suggested further disaggregation of other indicators that don’t have IPC Phase 5 (Famine) thresholds in an exploratory manner. For instance, the rCSI cut-off of 42 can be used to inform the prevalence of households in IPC Phase 3 (Crisis) and IPC Phase 4-5, while a Food Consumption Score of 13 can be used to inform the prevalence of households in IPC Phase 4 (Emergency) and IPC Phase 5 (Famine). However, since these cut-offs are not part of official IPC protocols, they cannot be directly used to estimate populations in each phase.

The TWG mentions extensive sharing of HFA, concerns about a beneficiary rotation system, reduction of portions to compensate for elevated transport costs, and, to a lesser extent, diversion of food aid in active fighting areas. This would suggest that the Humanitarian Food Assistance had a less than expected impact in mitigating food insecurity. However, in most governorates there is a clear increase in prevalence of Poor Food Consumption Scores among households who declared they hadn’t received HFA. In the areas under review, the percentage of households with a Food Consumption Score of Poor among households who received HFA is about 30% inferior then among those who did not receive it – indicating that Humanitarian Food Assistance is playing a crucial role in preventing a further deterioration. Given the controversial role of Humanitarian Food Assistance and disagreements over its capacity to prevent famine or not, it’s recommended that the TWG systematically document the difference in food security conditions among households who declared having received food assistance and those who did not, by disaggregating food consumption and livelihood change indicators based on this element. This analysis is also useful to inform projections in absence of Humanitarian Food Assistance, since, all other factors being equal, the severity of indicators in the projection scenario should at least be similar to those of non-beneficiaries in the current situation – given the households that are currently not receiving HFA are supposed to be less vulnerable.