# Quarterly Food Security Monitoring

## Methodology Note

### Afghanistan | March 2025

In addition to the NMF, the QFSM will help to delve deeper into the food security pillar of the NMF, in collaboration with WFP. The motivation behind this is to be able to provide more detailed sectoral information to meet individual cluster needs.

Sudden or unexpected need evolution can trigger a rapid assessment (Rapid Food Security Probing – ToR here). This trigger functionality serves as one of the key objectives of the QFSM, and additionally RFSP has the possibility to ground truth QFSM (and NMF) findings. To this end, RFSP is not only to be developed in emergency contexts but to assess QFSM inclusion and exclusion biases.

## Background

Considering the high levels of needs amidst limited available resources as well as seasonal and geographic variations affecting Afghanistan, REACH proposes to jointly develop an analytical framework with WFP to monitor food insecurity across the country in near-real time. This will be critical to support a targeted response with subnational prioritization and possibly detect pockets at high risk of deteriorating food security to inform anticipatory action.

As a component of this framework and of broader real-time monitoring activities developed within the Afghanistan context, such as the Needs Monitoring Framework and Shocks Monitoring Index, REACH will develop an analytical framework to allow for a quarterly monitoring of food security outcomes. Leveraging existing data sources, this framework will allow for a quarterly overview of needs, by ranging districts by severity of outcomes and enabling to identify districts whose communities are experiencing a worsening of their food security situation, across the three key dimensions of food security. Eventually and as this analytical framework is rolled-out and perfected, its inclusion as a sectoral component of the multisectoral Needs Monitoring Framework will be considered and discussed with relevant stakeholders such as the Food security cluster.

## Key Objective

Develop a framework that will allow for a regular monitoring of food security dimensions leveraging available data sources, to consolidate existing real-time monitoring analysis within WFP and support a more targeted response and area prioritization.

## Methodology Overview

The Quarterly Food Security Monitoring will rely on an analytical framework consisting of a collection of indicators from regular (quarterly or monthly) assessments, with corresponding severity thresholds for each indicator from least concerning (1. None/Minimal) to the highest levels of needs (5. Catastrophic). Although the framework will mainly rely on data from REACH's quarterly Humanitarian Situation Monitoring, other data sources may be considered[1], such as market data from the Joint Market Monitoring Initiative (JMMI). Although the district is the primary geographic analysis unit at which the data analysis will be conducted, it may also be replicated at the province level to provide less granular results.

---

[1] Additional data sources that will be considered include WFP-VAM's Market Bulletin Data, remote-sensing data analyzed by Alcis, as well as community-based early warning signed identified by the Community Driven Development Organization.

Table 1. Overview of the dimensions of food security (*as described by the global Food Security Cluster*)

| Dimension | Description | Drivers |
|---|---|---|
| **Access** | Food access (of households in specific population groups) is the ability of households to regularly acquire adequate amounts of appropriate food for a nutritious diet: physical, financial and social dimensions | - Physical restrictions to access to resources/food.<br><br>- Financial limitations to the purchase of food.<br><br>- Social barriers of groups to access resources/food. |
| **Availability** | Food availability is the food [of appropriate quality] that is physically present in the area of concern and expected to become available for use in that area within the period of concern – from domestic production and imports (including direct food distribution through food aid) | - Agricultural production (crops, livestock, fisheries, aquaculture) and inputs<br><br>- Rainfall patterns<br><br>- Internal and external trade flows |
| **Utilization** | Food utilization (by households in specific population groups) refers to the use that households make of the food to which they have access and individuals' ability to absorb and metabolize the nutrients and the conversion efficiency of the bod | Factors likely to impact nutrients absorption, such as:<br><br>- Availability of items to safely store and prepare food.<br><br>- Consumption of food in sufficient and diverse quantities, breastfeeding<br><br>- Intra-household food distribution dynamics<br><br>- Access to clean water, hygiene and sanitation facilities and services<br><br>- Prevalence of diseases which may limit or prevent the ability to absorb nutritional value<br><br>- Maternal, infant, young child and adolescent feeding practices<br><br>- Gender dynamics |

From a theoretical perspective, the Quarterly Food Security Monitoring will build upon the three accepted dimensions of food security, as documented by the global food security cluster[2]: Access, Availability and Utilization[3]. In addition to this, a fourth dimension will be considered, consisting of Food Consumption and Livelihood change and reflecting the impact of the three former dimensions.

---

[2] Food Security Cluster, April 2022, Food Security Dimensions Documents.

[3] Although a fourth and cross-cutting dimension, Stability, could also be considered, it was decided not to include it as it is more closely related to exogenous shocks having an impact on the three main dimensions of food security, and can already be considered to be covered by the Shocks Monitoring Index that REACH is developing as part of a collaboration grant with WFP-VAM.

Each indicator added in the framework will be indexed to one of those food security dimensions, and the aggregation of indicator-specific data will assign a single severity for each dimension – allowing for a better overview of key drivers of food security needs in each assessed district.

### *Aggregation methodology*

Throughout the aggregation process, each district will receive a severity from 1. None/Minimal to 5. Catastrophic for each of the four dimensions. An overall food security severity will then be derived from those dimension-specific severities. The overall severity and four dimension-specific severities will be consolidated into a single dataset to allow for comparisons and identification of drivers of food insecurity, and each of them will be mapped individually.

The aggregation methodology draws inspiration from the methodology used in the Joint Intersectoral Analysis Framework (JIAF), as well as the Intergrated Phase Classification (IPC) – acknowledging that adjustments to the original methodology may have to be made depending on the type of data used in the RTM framework (for instance settlement-level data rather than household data) and on the necessity to build indices or severities using data stemming from various assessments.

#### *1. Data preparation*

Prior to aggregation, every data point (corresponding to a single interview) will receive a severity for each of the indicators it informs, based on the thresholds outlined in the Analytical framework.

For HSM data, where KIs report on settlements with varying sizes, each interview will be weighted according to its population's relative size compared to the population of all assessed settlements within the district it lies in. For instance, for a settlement with a population of 10 households located in a district where 6 settlements where assessed and the sum of the assessed settlements' population is 50 households will receive a weight of *(10/50)/(1/6) = 1.2* - irrespective of the district's overall population.

#### *2. Indicator-level aggregation*

Once all data points have received a severity for every relevant indicator, area-level severities for each indicator will be determined based on the 20% of settlements with the most severe needs,[4] inspired by IPC guidelines.[5] For instance, a district with 0% of settlements assessed (corresponding to single KI interviews) in severity 4 or 5, 15% in severity 3 and 8% in severity 2 will be receive a severity of 2 for that indicator.

#### *3. Dimension-specific aggregation*

Once every area has received a severity for each indicator, severities will be aggregated at the food security dimension level, based on the average severity of all indicators within each dimension.

For the Food Consumption dimension, in the specific case where a settlement combines a severity of 4 for indicators 17, 18 and 19 (indicative of severe hunger, practice of emergency level coping strategies and third-level negative behaviours to cope with lack of food) will receive a severity of 5 for the dimension.

#### *4. Quarterly food security severity*

The overall food security severity will consist of the average of all individual indicator severities, weighted so that each dimension has the same weight (0.25) in the overall severity.

---

[4] If the indicator is informed by HSM data, weights will be applied to each interview during that stage.
[5] Include but not limited to protection, ES-NFI and Education.

# Data Analysis Plan

| # | Sector | Indicator name | Assessment name | Granularity | 1. None/ Minimal | 2. Stress | 3. Severe | 4. Extreme | 5. Catastrophic |
|---|--------|----------------|-----------------|-------------|------------------|-----------|-----------|------------|-----------------|
| 1 | Food Access | % of settlements where KIs reporting household incomes decreased | HSM | District | Household incomes remained the same or increased | No criteria | Household incomes decreased a little | Household incomes decreased a lot | No criteria |
| 2 | Food Access | % settlements where KIs reporting on food insufficiency in the settlement in the past 30 days | HSM | District | Nobody or almost nobody (around 0%) | A few (around 1 in 4 people or 25%) | About half (around 2 in 4 people or 50%) | Most (around 3 in 4 people or 75%) | Everyone or almost everyone (around 100%) |
| 3 | Food Access | % of settlements where KIs reporting women lack | HSM | District | Yes | No criteria | No | No criteria | No criteria |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | access to income-generating activities | | | | | | | |
| 4 | Food Access | % settlements where KIs reporting the average time for accessing the nearest food market | HSM | District | 30 minutes to 1 hour | 1 to 2 hours | More than 2 hours | No access to market | No criteria |
| 5 | Food Access | % of settlements where KIs reporting the three most common challenges for women regarding access to markets | HSM | District | No significant barriers; access is largely unconstrained | Minor or manageable barriers that slightly hinder access | moderate barriers that significantly limit access for many women | Major barriers that prevent access for msot women in affected settlement | Near-total inability to access to market due to pervasive, critical challenges |

| 6 | Food Access | % settlements where KIs reporting on the problem with food accessibility | HSM | District | No problem | Moderate problem | serious problem | very serious problem | Extremely serious problem |
|---|---|---|---|---|---|---|---|---|---|
| 7 | Food Access | % settlements where KIs reporting on the ability to purchase essential food items in the past 30 days | HSM | District | Always able to purchase essential food items | Sometimes able to purchase essential food items | Rarely able to purchase essential food items | Unable to purchase essential food items | No criteria |
| 8 | Food Access | % settlements where KIs reporting the sudden change in food item prices in the past 30 days | HSM | District | No change | small increase in prices | big increase in prices | No criteria | No criteria |

| 9 | Food Availability | % settlements where KIs reporting agriculture as a primary income source reporting a decrease in agricultural production in the last 3 months of at least 50% per proportion of households | HSM | District | Nobody or almost noboby | a few (around 1 in 4 people or 25%) | About half (around 2 in 4 people or 50%) | Most (around 3 in 4 people or 75%) | All or almost all (around 4 in 4 people or 100%) |
|---|---|---|---|---|---|---|---|---|---|
| 10 | Food Availability | % settlements where KIs reporting a sudden drop in the number of livestock in | HSM | District | Not applicable - people do not currently raise animals in this | No criteria | Number of livestock is about half of what's normal for this time of year | Number of livestock reduced by more than half | No criteria |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | the past 30 days | | | community, Number of livestock is normal or almost normal for this time of the year | | | | |
| 11 | Food Availability | % traders reporting unavailable food basket items in markets Food basket items include: Wheat flour (local or imported), vegetable oil, pulses (beans, lentils or split peas) and salt | JMMI | Province | All food basket items are widely available | One or two food basket items have limited availability | One food basket component is completely unavailable OR Three to four food basket items have limited availability | Two food basket items are completely unavailable | Three or four food basket items are completely unavailable |

| 12 | Food Utilization | % of settlements where the majority of KIs reported their settlements do not have access to suffcient quantity of water for drinking, cooking, bathing, washing or other domestic use | HSM | District | Yes, water has been sufficient | Rarely (1-2 days) | Sometimes (3-10 days) | Often (11-20 days) | Always (more than 20 days) |
|----|----|----|----|----|----|----|----|----|----|
| 13 | Food Utilization | % of settlements where Kis report the majority of households have access to a | HSM | District | Everyone or almost everyone (around 100%) | Most (around 3 in 4 people or 75%) | About half (around 2 in 4 people or 50%) | A few (around 1 in 4 people or 25%) | Nobody or almost nobody (around 0%) |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | functional and improved sanitation facility | | | | | | | |
| 14 | Food Utilization | % settlements where KIs reporting if the households have access to adequate healthcare, they need | HSM | District | ≥85% | 60–84% | 30–59% | 10–29% | <10% |
| 15 | Food Utilization | % of settlement where KIs reporting on main source of drinking water for most people | HSM | District | Water comes from an improved source (Protected from outside contamination (improved water source), for | No criteria | Water comes from an unimproved source (Not-protected from outside contamination ( for example: unprotected | No criteria | Surface water, for example: river, dam, lake, pond, stream, canal, irrigation system, etc. |

| # | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | example: piped water/tap, covered dug well, pumped well/borehol e, tanker truck/carts with tank/store, bottled water, water bags, protected rainwater, etc.) | | well, traditional dug well, unprotected natural spring, etc) | |
| 16 | Food Consumption | % of settlements where KIs reporting on the perceived level of hunger among the households | HSM | District | No hunger or almost no hunger - the majority of households had access to food everyday over the last 30 days | Hunger is minor - most households have only RARELY no access to food (during the last 30 days, most | Hunger is moderate - most households have SOMETIMES no access to food (during the last 30 days, most | Hunger is severe - most households have OFTEN no access to food (during the last 30 days, most households | No Criteria |

| | | | | | | households had no access to food during a maximum of 2 days in total) | households had no access to food during 3 to 10 days in total) | had no access to food during more than 10 days in total) | |
|---|---|---|---|---|---|---|---|---|---|
| 17 | Food Consumption | % settlements where KIs reporting doing unusual things to obtain food in the past 30 days | HSM | District | Nobody or almost noboby | a few (around 1 in 4 people or 25%) | About half (around 2 in 4 people or 50%) | Most (around 3 in 4 people or 75%) | All or almost all (around 4 in 4 people or 100%) |
| 18 | Food Consumption | % settlements where KIs reporting on coping strategies adopted by HHs due to lack of food | HSM | District | No food-related coping strategies use: None of the above | Engaging in first-level actions due to lack of food or money to buy food: - Sharing of food | Engaging in second-level actions due to lack of food or money to buy food: - Children working to | Engaging in third-level actions due to lack of food or money to buy food: - Eating seeds meant | No criteria |

| | | | | | | between relatives - Asking neighbors for food or money | support families - Begging for food or money | for next planting season - Eating wild food that is not eaten during normal times when there is enough food | |
|---|---|---|---|---|---|---|---|---|---|
| 19 | Food Consumption | % of settlements with households involutarily moving due to lack of food | HSM | District | Nobody or almost noboby | a few (around 1 in 4 people or 25%) | About half (around 2 in 4 people or 50%) | Most (around 3 in 4 people or 75%) | All or almost all (around 4 in 4 people or 100%) |