

# Quarterly Food Security Monitoring

## Methodology Note

### Afghanistan | May 2024

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<sup>1</sup>, 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.

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<sup>1</sup> 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
<b>Access</b>	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	<ul style="list-style-type: none"> <li>- Physical restrictions to access to resources/food.</li> <li>- Financial limitations to the purchase of food.</li> <li>- Social barriers of groups to access resources/food.</li> </ul>
<b>Availability</b>	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)	<ul style="list-style-type: none"> <li>- Agricultural production (crops, livestock, fisheries, aquaculture) and inputs</li> <li>- Rainfall patterns</li> <li>- Internal and external trade flows</li> </ul>
<b>Utilization</b>	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	<p>Factors likely to impact nutrients absorption, such as:</p> <ul style="list-style-type: none"> <li>- Availability of items to safely store and prepare food.</li> <li>- Consumption of food in sufficient and diverse quantities, breastfeeding</li> <li>- Intra-household food distribution dynamics</li> <li>- Access to clean water, hygiene and sanitation facilities and services</li> <li>- Prevalence of diseases which may limit or prevent the ability to absorb nutritional value</li> <li>- Maternal, infant, young child and adolescent feeding practices</li> <li>- Gender dynamics</li> </ul>

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<sup>2</sup>: Access, Availability and Utilization<sup>3</sup>. 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.

<sup>2</sup> Food Security Cluster, April 2022, [Food Security Dimensions Documents](#).

<sup>3</sup> 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 were 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,<sup>4</sup> inspired by IPC guidelines.<sup>5</sup> 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 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.

## 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 with access to a functioning market	HSM	District	≥70%	40-69%	20-39%	10-19%	<10%
2	Food Access	% of settlements where most households experienced an increase in the share of income spent on food and where food purchases is the most common reason for taking on debt	HSM	District	The share of income spent on food remained stable or decreased	No criteria	The share of income spent on food increased AND Food purchases was NOT the main reason for households taking on debt	The share of income spent on food increased AND Food purchases was the main reason for households taking on debt	No criteria
3	Food Access	% of settlements where household	HSM	District	Household incomes remained the	No criteria	Household incomes decreased a little	Household incomes decreased a lot	Typical income sources aren't

		incomes decreased			same or increased				available anymore
4	Food Access	% of settlements by proportion of households able to access enough food to meet their needs	HSM	District	Almost all / all households (76 - 100%)	Many households (51 - 75%)	Some households (26 - 50%)	Few households (1 - 25%)	No households (0%)
5	Food Access	% of settlements where humanitarian aid was reported as a primary or secondary source of income, and which experienced a decreased in provision of humanitarian aid	HSM	District	Humanitarian aid is not a source of income	Humanitarian aid is a source of income and has not changed or increased	Humanitarian aid is a source of income and has decreased a little	Humanitarian aid is a source of income and has decreased a lot	Humanitarian aid is a source of income and has completely stopped

6	Food Access	% of settlements where women lack access to income-generating activities	HSM	District	Yes	No criteria	No	No criteria	No criteria
7	Food Access	% of settlements where women have a limited or unsafe access to markets	HSM	District	Alone	When accompanied with either a male relative, female relative, or female friend	When accompanied with either a male relative, female relative, or female friend AND Avoid markets due to safety concerns	Only when accompanied with a male relative	Women not allowed access
8	Food Access	% of settlements where KIs report an increase in staple food prices	HSM	District	No change or decreased	Increased a little	Increased a lot	No criteria	No criteria

9	Food Availability	% of settlements by proportion of households having experienced a decrease in harvesting of HALF or More than half of their production in the last harvest period (among settlement reporting agriculture as a primary or secondary income source) AND % of settlement reporting a decrease in agricultural production	HSM	District	No households (0%)	Few households (1 - 25%)	Some households (26 - 50%)	Many households (51 - 75%)	Almost all / all households (76 - 100%)
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		by half or more in the last harvest.							
10	Food Availability	% of settlements by proportion of households having experienced a large decrease in the number of livestock owned in the past 3 months (among settlement reporting livestock as a primary or secondary income source)	HSM	District	No households (0%)	Few households (1 - 25%)	Some households (26 - 50%)	Many households (51 - 75%)	Almost all / all households (76 - 100%)



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 households do not have access to a sufficient quality and quantity of water for drinking, cooking, bathing, washing or	HSM	District	Water comes from an improved source of acceptable Sphere standards quality AND most households have enough water for all uses	No criteria	Water comes from an improved source of acceptable Sphere standards quality AND most households do NOT have enough water for all uses	Water comes from an unimproved water source	Water comes directly from rivers, lakes, ponds

		other domestic use AND % of settlements by main source of drinking water used by most households							
13	Food Utilization	% of settlements by proportion of households with access to functioning hand-washing facilities with water and soap	HSM	District	Almost all / all households (75 - 100%)	Many households (51 - 75%)	Some households (26 - 50%)	Few households (1 - 25%)	No households (0%)
14	Food Utilization	% of settlements where the majority of households lack access to a functional and improved	HSM	District	The majority of households use an improved sanitation facility	No criteria	The majority of households DO NOT use an improved sanitation facility and settlement IS	The majority of households DO NOT use an improved sanitation facility and settlement IS	The majority of households practice open defecation

		sanitation facility AND % of settlements where most households have official permission to build and/or settle (formal settlement).					NOT an informal settlement	an informal settlement	
15	Food Utilization	% of settlements where most households lack access to a kitchen set and water storage devices	HSM	District	Most households have access to both a kitchen set and water storage containers	No criteria	Most households have access to either a kitchen set or water storage containers	Most households lack access to both a kitchen set and water storage containers	No criteria
16	Access to healthcare	% of settlements where most households lack access to functional health facilities	HSM	District	Most households have access to a health center with no or limited systemic issues	No criteria	Most households have access to a health center with significant systemic issues	Most households do not have access to a health center	No criteria

17	Food Consumption	% of settlements by reported hunger levels for most 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 households had no access to food during a maximum of 2 days in total)	Hunger is moderate - most households have SOMETIMES no access to food (during the last 30 days, most households had no access to food during 3 to 10 days in total)	Hunger is severe - most households have OFTEN no access to food (during the last 30 days, most households had no access to food during more than 10 days in total)	No Criteria
18	Food Consumption	% of settlements by type of Livelihood coping strategies used by households	HSM	District	No negative coping strategies adopted	Stress coping strategies: sold household assets, spent savings, borrowed food or money to buy food or sold more animals than usual or earlier than usual	Crisis coping strategies: sold income generating equipment, assets or means of transport, decreased expenditures on health, education etc. or withdrew	Emergency coping strategies: begging or relying on charity, entire hh migration or sold last female animals	No criteria

							children from school		
19	Food Consumption	% of settlements with households engaging in negative behaviors due to a lack of food	HSM	District	Not engaging in negative behaviors	Engaging in first-level negative behaviors: - Rely on less preferred and less expensive foods, and/or - Limit portion size at mealtimes, and/or - Reduce number of meals eaten in a day	Engaging in second-level negative behaviors: - Restrict consumption by adults in order for small children to eat	Engaging in third-level negative behaviors: - Skip entire days without eating	No Criteria
20	Coping	% of settlements with households involuntarily	HSM	District	No household involuntarily moved from	Few households (1-25%) involuntarily moved from	Some households (26-50%) or many households	Some households (26-50%) or many households	Almost all / all households (76 - 100%) involuntarily

		moving due to lack of food			the settlement	the settlement	(51 - 75%) involuntarily moved from the settlement for not related to lack of food	(51 - 75%) involuntarily moved from the settlement due to lack of food	moved from the settlement
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