Food security monitoring framework:
Using the framework and analyzing the dashboards
Things to remember when using the framework

• The definition of food security used here is that of the FAO. It has 4 pillars: availability, access, utilization, stability. It includes a nutrition dimension and can also be referred to as food security and nutrition (FSN).

  ➔ In general, availability is expressed at state level, access at household level, utilization at individual level and stability cuts across all levels

• Each pillar is constructed from a large number of determinants, determinants can be quantified by measuring specific indicators.

• It is unavailing to attempt to identify and list all possible determinants of food security. It is more effective to identify and measure those determinants that are relevant to the specific case under study, and that can account for most of the variation in FSN.
Things to remember when using the framework

The object of the framework is to allow countries to monitor FSN over time.

1. One purpose is to aid in the evaluation of FSN policy and program impacts.

2. Another purpose is to guide the targeting and prioritization of policies and programs that lead to improved FSN.

Developing a country score is **NOT** why the monitoring framework was developed. The individual scores attributed to the indicators represent the normalized real values.

The purpose of normalization is to fit all the indicators into a single graphical representation, the *sunburst* (or donut) chart.
Things to remember when using the framework

**The core indicators**: direct or indirect SDG indicators. They can be used to chart the evolution of the country towards meeting specific SDGs and to assess the national FSN achievements.

**Pillars indicators**: show what is happening “under the hood”. Monitoring these indicators is similar to using a scanner in a car in order to identify where there may be a malfunction.

*Data for core indicators will be available for all countries within months as soon as SOFI 2019 is published.*

*Data for pillars indicators may not always be available, or in some cases may not be relevant across the board, such as wheat yield gap in most GCC countries. These indicators were nonetheless selected because of their relevance and availability for more than 50% of the Arab countries and for more than 50% of the Arab population.*

Important note: the monitoring framework is **NOT** designed for comparisons among countries.
How to use the framework

1. Gather core indicators data
2. Gather pillar indicators data
3. Normalization and inversion
4. Build the Sunburst Donut chart
5. Food security at a glance: Core indicators analysis
6. Pillars indicators analysis

This step includes cross checking with other sources of data, disaggregation of data for gender, youth and marginalized communities (refugees and others).
Reading the scores

All scores are normalized on a scale of 0-10, with 10 being the indicator’s quantitative value for the best performing country in the world in 2010 (baseline country).

A score of 0 indicates the poorest performance. A score of 10 indicates the best performance. Progress on the achievements of a determinant is indicated by an incremental change in the normalized value of the relevant indicator over time.

A score of 0 can also indicate the absence of data. This is clarified in the chart’s legend where missing data is listed.

Keep in mind:

1. 2010 data are in plain color while data for latest year on record have grids and empty cells are in light colors

2. When 2010 data is lower than or equal to data of latest year then it does not show: e.g., Algeria CO3 or AV3 or AC5
**Core indicators:**

**CO1, Undernourishment:** The score in 2010 was 9, and the score for 2016 is 10. This means that Algeria is on par with the best performing country in the world in terms, and has among the lowest undernourishment scores in the world.

**CO3, % obesity in adult population:** The score for 2010 was 6, and that of 2016 is similar as the raw data table shows. However the trend shows a decline in performance as obesity levels have increased from 2010 to 2016.
Example: Algeria case study

**Pillar indicators:**

**AV4, ADESA:** The score 7 $\rightarrow$ 8 between 2010 and 2016 indicating an improvement in the performance and an increase in the availability of food.

**AV5, Import dependency:** The score is 1, indicating poor performance, with no improvement between 2010 and 2012.

**AC1, Poverty headcount:** only recent data available, can’t have a trend

**ST2, Food price anomalies:** No data
What does this tell us about food security in Algeria?

➢ The framework show that Algeria is typical of countries in transition that have access to sufficient finances to ensure the purchase of sufficient amounts of food.

➢ This is evidenced by the core indicators: the country is doing well in terms of undernourishment and food insecurity but not on obesity, specifically women’s obesity.

➢ The country is attempting to reduce its chronic dependency on food imports and to buffer systemic food prices shocks by enhancing local wheat production. However this needs to be matched with and commensurate investment in agriculture.
What does this tell us about food security in Algeria?

➢ Unemployment is rising which may further curtail access to food if the social safety nets are dismantled. With low oil prices we have seen inflation and consumer price index increasing, and the current political turbulences may bring more changes, especially in remote regions where physical access is curtails (low logistics score).

➢ The status of women in the workforce, as well as their vulnerability to anaemia and the decline in their nutritional status is a pressing issue that needs urgent action.
What does this tell us about food security in Algeria?

Another area of improvement that must be addressed in order to improve the monitoring of the determinants of food security is data availability. Data is lacking for wheat yield and wheat yield gap, share of food consumption in total expenditure, share of water resources used in agriculture, agriculture orientation index for government expenditures and food price anomalies. This is crucial knowledge needed to strengthen the sustainability of Algeria’s food system and its food security and nutrition.