



## Food Security Analysis

# Vulnerability Analysis and Mapping at a glance

## Overview

Food security analysis is a core function of WFP's work. It is the basis for the design of all operations (emergency operations, protracted relief and recovery operations as well as country programmes). Prior to the design of operations in any country, WFP undertakes an analysis of the food security situation and answers some critical questions:

- **who** is food insecure or vulnerable?
- **how many** are there?
- **where** do they live?
- **why** are they food insecure or vulnerable?
- **how** is the situation likely to evolve and what are the risks threatening them?
- **what** should be done to save their lives and livelihoods?

Food security analysis provides information to:

- identify the **most food-insecure people** to ensure **the most effective targeting**;
- identify the **most appropriate type and scale of intervention**, whether food distributions, school feeding or more innovative interventions such as cash or voucher programmes;
- ensure the **most efficient use of humanitarian resources** by allocating funding according to needs.

## Partnerships

WFP undertakes food security analysis in **close collaboration with partners worldwide** including governments, FEWS NET, UN agencies such as FAO, OCHA, UNHCR, UNICEF, WHO and local and international NGOs. These partnerships ensure a shared understanding of food security problems and common priorities for action.

Strong partnerships have also been established with the World Bank, the Norway Statistics Institute and the International Household Survey Network to share or collect data communally.

More specifically, WFP and the Office for the Coordination of Humanitarian Affairs (OCHA) teamed up to provide access to global data on hunger and food insecurity. The data can be used to understand the type of food available in certain markets and how families cope in the face of food insecurity.

The data is being made available through OCHA's Humanitarian Data Exchange (HDX), an open platform for sharing crisis data.

WFP has been able to make large amounts of its data available dynamically, making it easier to integrate with other systems, including HDX. This is an important aspect of WFP's broader initiative on Open Data and transparency.

## The VAM One Stop Shop: an innovative platform for WFP information on hunger

The VAM One Stop Shop is an innovative platform which allows access to the latest food security data, publications and analytical tools. The VAM publications include baseline studies, household/market monitoring, emergency assessments/market studies and secondary data analysis. The publications are navigable by year, assessment type and field work status, as well as by country through the world map. As seen from the screenshot below, the three main boxes give direct access to the VAM global products, as well as latest country publications and a repository of analytical tools. Country pages include overview information, a list of all assessments and bulletins, as well as detailed information on key indicators such as market prices, baseline and monitoring data.

### The VAM Shop homepage

<http://vam.wfp.org/>

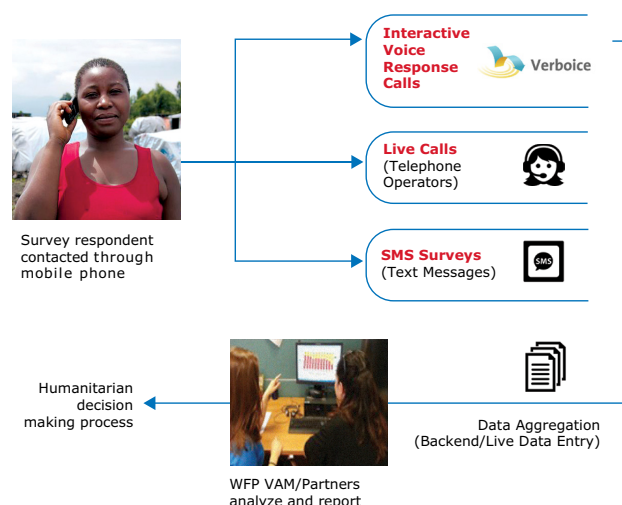
## Mobile Vulnerability Analysis and Mapping (mVAM) Initiative

Since 2013, WFP's mVAM project has been implementing remote mobile phone surveys for household food security monitoring. The system uses live voice calls, SMS and Interactive Voice Response (IVR) calls technology to collect real-time, operationally relevant and gender disaggregated household, nutrition and market-related food security information. WFP added remote mobile data collection to its toolbox because it is a reliable, cheap, quick and a safe way to collect operational data. Analytical bulletins are published in a matter of days, providing near real-time information for strategic decision-making, programme planning and appeals processes, both by WFP and by other humanitarian actors.

The initial pilot has been evaluated by Tulane University and the approach has now been tested in 10 countries, including during high profile emergencies such as the Ebola outbreak (September 2014) and the Iraq crisis (January 2015). The data collected is being used to inform decision-making in the humanitarian community,

well beyond WFP's internal needs. WFP VAM is gearing up for the scale-up of the project to all of WFP's six regions of operation.

### mVAM: The idea



## The Seasonal Monitor: an innovative monitoring product using satellite imagery

WFP VAM is constantly looking for innovative ways to monitor food security in developing countries. The Seasonal Monitor is a new system that uses satellite imagery of rainfall and vegetation as well as seasonal forecast information to track the development of the growing season and assess possible impacts on the lives and livelihoods of vulnerable populations. Real-time satellite

data streams and seasonal forecasts are analysed to identify potential developments of humanitarian concern.

The Seasonal Monitor started in mid-2014, monitoring the growing season in West Africa, Central America and South East Asia. The coverage extended to Southern Africa and Eastern Africa from October 2014 onwards. The Seasonal Monitor will complete coverage of all WFP regions of interest by adding the Central Asia region to its monitoring coverage.



FAO, WFP and IFPRI launched the Food Security Information Network (FSIN) in October 2012, to establish a global initiative to strengthen food security and nutrition analysis and decision-making. FSIN offers a common platform for standards setting and knowledge sharing and links countries' capacity needs with existing initiatives led by institutions, donors and partners at regional and global levels.

### Moving Food and Nutrition Security and Resilience Measurement forward

Given the relatively recent emergence of resilience and the proliferation of food and nutrition indicators, two Technical Working Groups (TWG) were established under the FSIN. The TWGs are composed of world renowned experts in their fields. The primary objective of the TWG on Measuring Food and Nutrition Security

is to recommend the most effective possible dashboard of indicators to help FSIN stakeholders monitor progress towards meeting their food and nutrition security objectives over the coming decades. The TWG on Resilience Measurement developed technical guidelines and a Community of Practice on food and nutrition security resilience measurement in order to share methods, standards and lessons learned among practitioners.

### Capacity Development in South Sudan

The FSIN's Capacity Assessment (CA) methodology was used in ten states in South Sudan. Results from the assessments will assist the government and international partners in preparing a coordinated capacity development plan to enhance food security and nutrition information systems.

The plan: 1) Identifies ways to increase policy makers' use of the information produced; 2) Will help with the design of future projects on information systems and capacity development. The CAs were conducted in partnership with FAO: joint teams conducted the initial assessments which were then validated through participatory multi-stakeholder consultations.

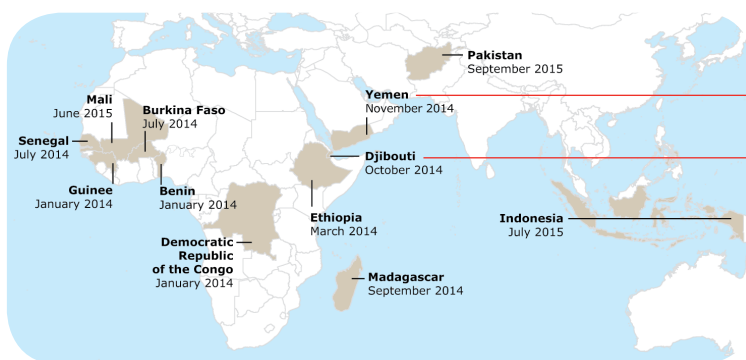
## WFP Assessments and Food Security Analysis

WFP has several assessment tools which it applies during the programme cycles in order to provide appropriate timely information. The assessment tools are closely integrated and inform the WFP Food Security Information Strategy.

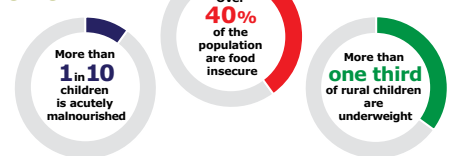
For an overview on food security trends in vulnerable countries, the quarterly **"Global Food Security Update"** product highlights key findings of recent food security assessments from WFP's regional and country-based VAM teams. For further details please visit the VAM Shop Global Products section.

A **Comprehensive Food Security and Vulnerability Analysis (CFSVA)**, also referred to as a baseline survey, provides an in-depth picture of the food security situation during a non-crisis period. A CFSVA contains a breadth of information (food consumption patterns, education, nutrition, markets, livelihoods), including an analysis of risks and vulnerabilities. It usually covers an entire country and is valid for up to five years. A CFSVA provides the critical information on food insecurity to inform the design of the first post-emergency needs assessments. It also serves as an essential benchmark against which to measure change after a crisis, and to inform contingency planning and preparedness. Please see below the key findings of 2 CFSVAs conducted in Yemen and Djibouti.

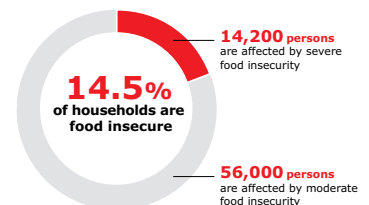
### 12 CFSVAs from January 2014 until November 2015



#### Yemen



#### Djibouti



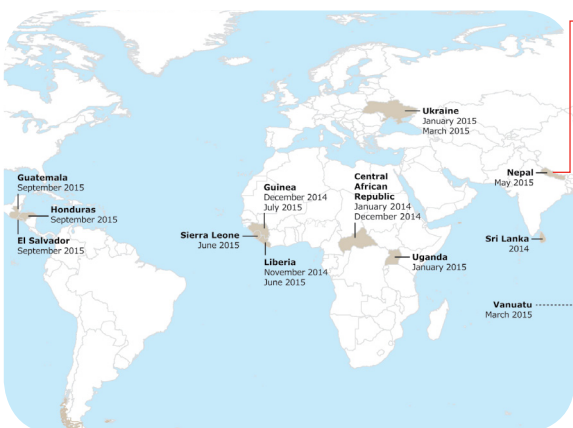
An **Emergency Food Security Assessment (EFSA)** is undertaken following a disaster or a shock. It covers affected geographic areas to determine the impact on households and their livelihoods and to provide response recommendations on food and non-food assistance options. It serves as the basis for the design of relief and recovery operations as it identifies the number of people in need and the appropriate type and duration of assistance. The EFSA can be in the form of an initial, rapid or in-depth assessment.

The VAM Asia team is testing a new approach for post-disaster emergency assessments, focused on speed and usability for immediate programmatic decision-making. The idea is to release an initial assessment - within the

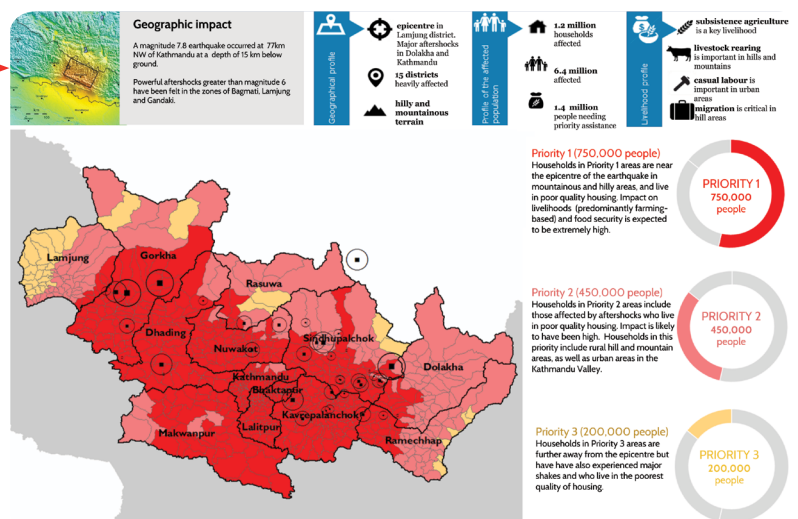
first 72 hours following a disaster - showing what areas and how many people are most affected.

After the earthquake in Nepal, VAM carried out two 72-hour assessments based on secondary data and initial reports from the field. Subsequently, a more comprehensive assessment was undertaken with NeKSAP (the Government of Nepal's district-level food security network), which capitalized on the government's food security network at the district level in order to regularly receive updated information on conditions on the ground. Real-time assessments are regularly updated as new information becomes available, in line with VAM's strategy to continuously produce updated information relevant to programming.

### 16 EFSAs from January 2014 until November 2015



### Nepal earthquake, 72-hour assessment (version 2)







**Market Analysis and Monitoring** is undertaken to provide critical information on food availability and on the functioning of markets that households depend upon to acquire food. It also provides crucial information on transfer modality selection and impact of food assistance on markets. The information collected at the market level or collated from national institutions is channelled towards a quarterly bulletin "**The Market Monitor**" on the trends of staple food prices in vulnerable countries. This bulletin is a monitoring tool for analysing price volatility. For further details please visit the VAM Shop Global Products section.

VAM has developed a light version of the Shock Impact Simulation Model (SISMod), an economic modelling system, which provides early quantitative estimates of food insecurity for the current situation as well as the anticipated scenarios in the near future. SISMod was used to provide preliminary estimates on the impact of Ebola on household food security in Guinea, Sierra Leone and Liberia. Furthermore, SISMod results were also used in Yemen (as illustrated on the right) and in Nepal to estimate the short to midterm impact of the earthquake.

Market assessments were carried out in Lebanon and Jordan to estimate the micro level impact of the current voucher programme on local markets, including traders/shops, food prices and spending patterns. The assessments

will provide recommendations on how to optimize the efficiency and value for money to beneficiaries.

VAM started the harmonization of price data collection methodologies in West African countries. The aim is to provide decision-makers with timely and actionable market/price/weather information to inform the implementation of food security interventions. This will improve price data management/reporting systems and enhance capacity to collect price data.

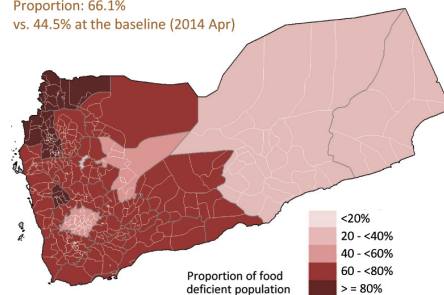
#### Food deficient population in Yemen

**17.1 Million**

food deficient individuals

Proportion: 66.1%

vs. 44.5% at the baseline (2014 Apr)



**66.1%**

food deficient population  
(Daily energy consumption below threshold of 2,100 kcal)

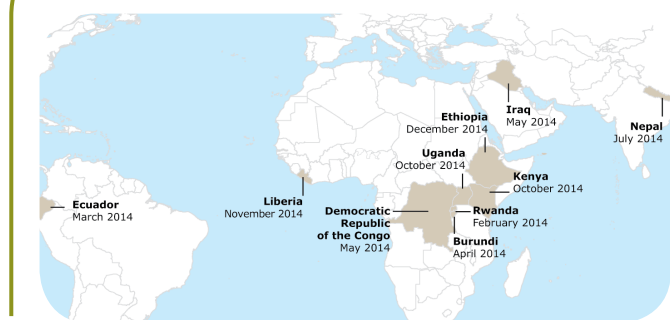


**51,000 MT**

food assistance needed  
(Cereal per month)

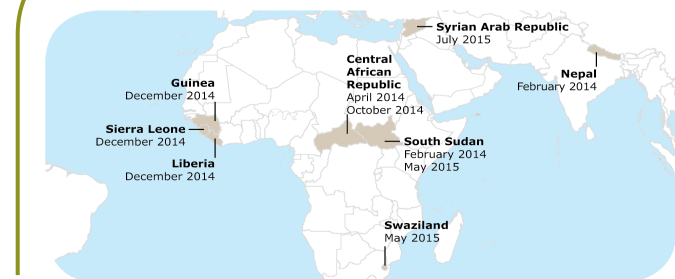
**Joint Assessment Missions (JAM)** are conducted in collaboration with UNHCR to understand the food and nutrition situation, needs, risks, capacities and vulnerabilities of refugees or internally displaced people.

#### 10 JAMs from January 2014 until November 2015



**Crop and Food Security Missions (CFSAM)** are conducted jointly with FAO, usually for emergencies related to agricultural production or overall food availability problems always in response to a government request. The mission analyses the supply and demand for staple foods, estimates any uncovered staple food import requirement for the coming year and analyses households' access to food.

#### 10 CFSAMs from January 2014 until November 2015



All rights reserved. Reproduction and dissemination of material in this information product for educational or other non-commercial uses are authorized without any prior written permission from the copyright holders provided the source is fully acknowledged. Reproduction of material in this information product for resale or other commercial purposes is prohibited without written permission. Applications for such permission should be addressed to [wfp.vaminfo@wfp.org](mailto:wfp.vaminfo@wfp.org).

The designations employed and the presentation of material in the map(s) do not imply the expression of any opinion whatsoever of WFP concerning the legal or constitutional status of any country, territory or sea area, or concerning the delimitation of frontiers.

© WFP 2015

All food security assessment reports are available online: <http://vam.wfp.org>

**Contact:** Arif Husain  
Chief Economist and Deputy Director, Policy and Programme Division – Analysis and Trends Service  
[arif.husain@wfp.org](mailto:arif.husain@wfp.org)

**For further information:** [wfp.vaminfo@wfp.org](mailto:wfp.vaminfo@wfp.org)  
Website: <http://www.wfp.org/food-security>  
Twitter: @wfpvam

**World Food Programme**  
Via Cesare Giulio Viola, 68/70  
00148 Rome, Italy  
[www.wfp.org/food-security](http://www.wfp.org/food-security)

#### Regional Advisers:

**Asia and the Pacific**  
Siemon Hollema  
[siemon.hollema@wfp.org](mailto:siemon.hollema@wfp.org)

**Middle East, North Africa, Eastern Europe and Central Asia**

Mariko Kawabata  
[mariko.kawabata@wfp.org](mailto:mariko.kawabata@wfp.org)

**Western Africa**  
Eric Jean Louis Brancaert  
[eric.branckaert@wfp.org](mailto:eric.branckaert@wfp.org)

**Eastern Africa**  
Elliot Vhurumuku  
[elliott.vhurumuku@wfp.org](mailto:elliott.vhurumuku@wfp.org)

**Southern Africa**  
Andrew Odera  
[andrew.oder@wfp.org](mailto:andrew.oder@wfp.org)

**Latin America and the Caribbean**  
Byron Ponce-Segura  
[byron.poncesegura@wfp.org](mailto:byron.poncesegura@wfp.org)