



# mobile Vulnerability Analysis and Mapping (mVAM)

## What is mVAM?

The World Food Programme's **mobile Vulnerability Analysis and Mapping (mVAM)** project collects food security data through short mobile phone surveys, using SMS, live telephone interviews and an Interactive Voice Response (IVR) system.

The project also includes an automated two-way communication system which gives people access to real-time information at no cost.

## Objectives of the project

The mVAM project aims to:

- Provide high frequency data to track food security trends in real-time and support decision-making processes
- Develop and share a sound methodology to run mobile surveys.

## The mVAM story

The mVAM project started in 2013 at WFP offices in Goma, the Democratic Republic of Congo (DRC) and Galkayo, Somalia, with a grant from the Humanitarian Innovation Fund. WFP's first country-wide SMS and IVR-based food security monitoring system was launched in September 2014, when mVAM was deployed in Guinea, Liberia and Sierra Leone to support the Ebola emergency response. The system has provided WFP with operational

information in emergencies, overcoming obstacles related to restricted access and staff safety. In 2015, WFP deployed the mVAM approach to monitor the food security situation in Iraq and Yemen, and in 2016 it has expanded to the emergencies in Syria and Nigeria.

## Why remote data collection?

Collecting primary data on households' food security can be challenging, time consuming and costly – particularly in areas with limited humanitarian access. Remote data collection is a more flexible and efficient way to collect food security information. Also, it allows for frequent food security monitoring in unstable areas without putting the enumerators at risk.

### mVAM pilots confirmed the advantages of remote surveys:



**NO RISKS**

**No 'boots on ground'**  
[Data collection in hard-to-access areas]



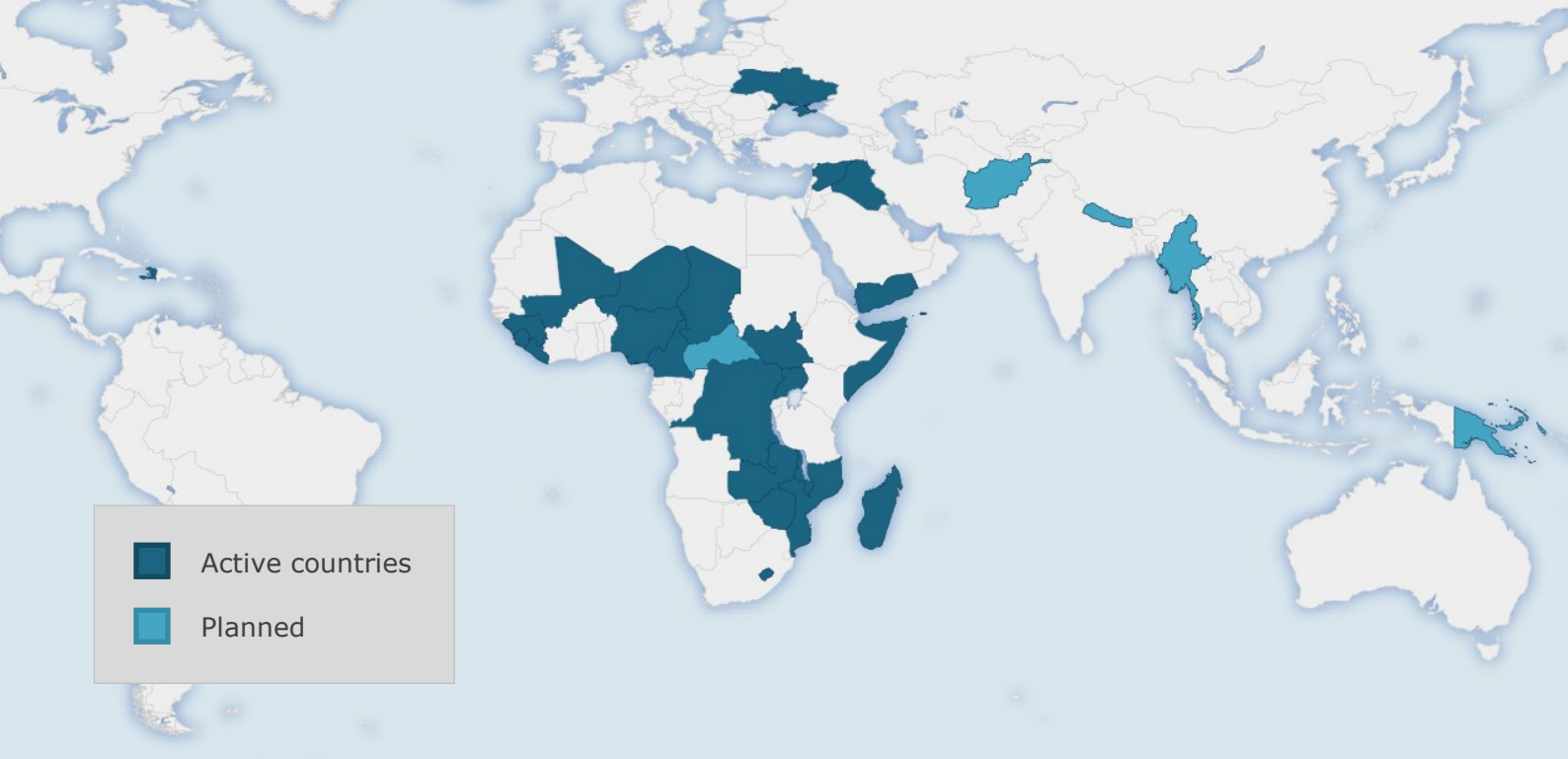
**FAST**

**1 – 2 week turnaround**  
[6 weeks for face-to-face surveys]



**LOW COST**

**US\$3 - US\$9 / Questionnaire**  
[US\$20 - US\$40 for face-to-face surveys]



## mVAM in numbers

mVAM has proven to be a scalable tool. In 2015, more than 100,000 questionnaires were collected using mVAM, a seven-fold increase on the previous year. The technology is active in 23 countries, including the emergencies in Iraq, Nigeria, South Sudan, Syria and Yemen.

## Two-way communication

The technologies that WFP has used for mVAM surveys – including live interviews, text messaging and Interactive Voice Response – make it possible for WFP to listen in and deliver critical information about food security to people everywhere. WFP has experimented with these tools to deliver and receive information from the communities it works with in the Democratic Republic of Congo and Somalia.

Each week, WFP puts information on food prices on a voice server that people can call for free using their mobile phones. When people call in, they navigate updated local-language audio recordings about food prices and information on WFP's assistance. People can also leave messages for WFP, so that staff at the office can listen in and respond appropriately to people's concerns. In this way, people receive valuable information about food that can make life easier, and are also able to provide their feedback.

## Open data

For years, WFP has had food security statistics on its website on an open access basis. mVAM

endeavours to make the data collected by the project 'open' and accessible to people everywhere, including through an Application Programming Interface (API). Additionally, through the two-way communication system, even people without internet are able to access data collected by WFP. What this new approach means is that even those in remote and vulnerable communities can access information that matters to them, on demand, and at no cost.

## Future of mVAM

Lessons learned from the mVAM project to date inform the project's development as it consolidates and expands to new countries. mVAM continues to explore the use of emerging technologies to reach more vulnerable people and to refine its surveys. Currently, the project is in the process of:

- Collecting new indicators through mVAM, including nutrition indicators;
- Testing online surveys as a new way of reaching people;
- Prototyping a chatbot that can be used to conduct surveys and disseminate information;
- Experimenting with Free Basics, a free service offered by Facebook. Using Free Basics, people will be able to visit a website and obtain updated data, straight to their smartphone, at no cost.