



World Food  
Programme

# Emergency Food Security Assessment -72 Hours

Vertical and horizontal integration across WFP teams to reduce  
the time required for an EFSA-72 report

Case study: 2017 experience with Hurricane Irma in the  
Caribbean (reporting estimates before the shock strikes)

Regional Bureau for Latin America and the Caribbean

June 2018

SAVING  
LIVES  
CHANGING  
LIVES

# HURRICANE IRMA EFSA 72 H



## Overview

How WFP prepared the Emergency Food Security Assessment (EFSA) 72 hours to response hurricane Irma alert in Haiti.

### Irma trajectory - Haiti

From September 4 to the 7, the trajectory of the hurricane showed the possibility of making landfall on Haiti and Dominican Republic.

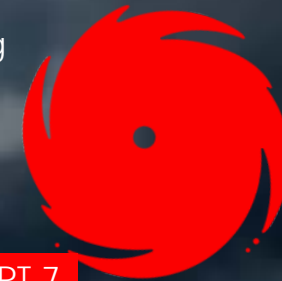


SEPT 8



On September 7, Irma changed its trajectory only few hours before touching Haiti on the following day.

SEPT 7



Irma change trajectory  
24 H before landfall

Irma peak intensity  
48 H before landfall

SEPT 6



On September 6, While maintaining its intensity, Irma made successive landfalls on Saint Maarten and Virgin Gorda, while at peak intensity. Now is considered the second-costliest Caribbean hurricane on record.

SEPT 5



Category 5  
72 H before landfall

On September 5, Irma underwent a second robust and rapid intensification becoming Category 5. The extremely powerful hurricane peaked 180 mph the same day.

On September 4, Irma experienced its first rapid intensification becoming Category 4 after three days.

SEPT 4



Hurricane Irma first alert  
96 H before landfall

## WFP Response

In the same dates, the Regional Bureau implemented a new approach to the EFSA 72H exercise. The experience is presented as follows...

# HURRICANE IRMA



After SEP 7, hurricane Irma deviated its path barely touching the north of Haiti.

## Step III: First scenario

24 H before landfall  
**SEPT 7**



The first scenario was finalized 12 H before landfall and based completely on available evidence from pre-crisis secondary data and weather forecast.

## Step II: Preparedness Analysis

48 H before landfall  
**SEPT 6**



Thematic maps

### Analytical inputs

ICA category and land degradation by department. Wind speed map, precipitation and cyclone track forecast. Departments with high prevalence of food insecurity and natural hazards.

✓ **Result: Output map 1 and 2**  
High prevalence of food insecurity, exposure to natural hazards, forecasted rainfall and wind speed by department.

✓ **Result: Output map 3 and 4**  
Three priority areas based on chronic food insecure population and their likely level of exposure to natural hazards, forecasted rainfall and wind speed.

## First scenario 12 H

Analysis of the likely impact of hurricane Irma on food insecure priority areas exposed to natural hazards.

Preliminary estimates of people at risk that would require food assistance.



Key questions to solve

Available information

- BEFORE MIDST
- SLP A.D.A.M
- Seasonal Livelihood programming Automatic Disaster Analysis Mapping
- ICA Wind Speed
- Integrated context analysis Buffer categories of Km/h
- Population data Precipitation forecast
- National statistics Maps of three days forecast
- IPC Hurricane track
- Food insecurity by municipality Visual hurricane and cyclone tracks

Analysis of ICA and SLP information resulted in quality analytical inputs

## Step I: Preparation

72 H before landfall



**SEPT 5**

### RBP/VAM

Liaise with country, HQ and other experts the development of food security scenarios.

### HQ/OSD

Provided mapping analytical support for the EFSA exercise.

### Haiti CO

Validated draft scenarios with knowledge of local context.

### Honduras/Guatemala

Collected secondary data inputs for the Preparedness analysis.

The EFSA 72H exercise was completed by a multidisciplinary team of VAM-GIS experts.

EFSA Team conformation

**SEPT 4**

Hurricane Irma first alert

96 H before landfall



World Food  
Programme

SAVING  
LIVES  
CHANGING  
LIVES

**Please send any feedback to:**

**Byron Ponce-Segura, Regional Advisor Food Security Analysis, RBP ([Byron.poncesegura@wfp.org](mailto:Byron.poncesegura@wfp.org))**

**Lara Prades, Head of Geospatial Analysis Unit, Emergency Division ([Lara.prades@wfp.org](mailto:Lara.prades@wfp.org))**

**Credits to: Luis Penutt, Food Security Analyst, El Salvador Country Office.**