

# **Research, Assessment & Monitoring**

Generating evidence for impact

SAVING LIVES CHANGING LIVES

### **OUR VISION & MISSION**

We believe in the **power of evidence** to help end hunger and malnutrition.

Our mission is to provide credible, relevant and timely evidence for strategic and operational decision-making, resource mobilization and accountability to beneficiaries, and consolidate evidence generation and analysis throughout the program lifecycle: from upstream assessments for program design and targeting to downstream monitoring of program implementation and outcomes.

# **HOW WE WORK**

Research, Assessment and Monitoring at WFP is comprised of two main functions: Vulnerability, Analysis and Mapping (VAM) and Monitoring:

#### **VAM**

Providing food security and vulnerability analysis to help you design your programmes, prioritize your resources, choose the optimal transfer modalities, and target those most in need.



#### **MONITORING**

Providing information on programme performance and results to detect issues and irregularities, improve efficiency and effectiveness, measure outcomes and ensure accountability to donors and affected populations.

# Questions we must answer

#### VAM

- 1 Who is food insecure or vulnerable?
- 2 Why are they food insecure or vulnerable?
- 3 How many are they?
- 4 Where do they live?
- **5** What should be done to save their lives and livelihoods?
- **6** How is the situation likely to evolve and what are the risks threatening them?

# MONITORING

- **1** Who did we reach, with what, when and where?
- **2** Were we efficient and in compliance with corporate standards?
- **3** Have we made a difference in people's lives?
- **4** What happened to people we could not reach?

#### **OUR SERVICES**

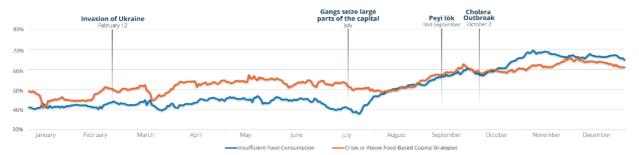
**NEEDS ASSESSMENT AND TARGETING:** We draw on 30 years of expertise in food security analysis to generate evidence on **who needs assistance most** in order to **maximize the impact of WFP assistance.** 

We've developed a range of methodologies, lead thematic research and share our expertise for inter-agency coordination. Our needs assessments and targeting informs WFP decision-making and sets the standards for quality needs assessments and targeting processes across WFP.

In 2022 alone, we conducted over 140 assessments, provided tailored support to nearly 20 countries, served as a major data provider for the IPC and HNOs and advanced methodological approaches – leading to the creation of a Joint Analytical Framework between UNHCR and WFP.



**REMOTE, REAL-TIME MONITORING:** We harness **mobile technology, artificial intelligence and data analytics** to provide remote, real-time monitoring and deliver **streaming analytics on food security** and its key drivers - all in real-time and in one place.



Real-time, daily data: Ukraine 2022

Our approach supports targeted, effective, efficient and timely operations, proven to provide upwards of 10 weeks of early warning in cases of food security crises. Our real-time data is available as a global public good while informing broader processes and products including the IPC/CH, European Commission, the World Bank and more.

This data continuously flows through our HungerMap<sup>LIVE</sup> ecosystem, which in 2022 alone had **over 100,000 users** from **over 200 countries**. The ecosystem monitors **over 80 countries** and generates a suite of actionable data products including **over 30 daily reports and analyses at global, regional and national levels**.















**CLIMATE & EARTH OBSERVATION:** We mobilize a wide variety of satellite data and long climate records, using advanced cloud computing **techniques** to detect, map and analyze the impact of climate hazards and tendencies, conflict and displacement on livelihood resources and food security.

Our systems enable us to provide extensive tailored support to COs and RBs on areas as diverse as hazard mapping and assessment, evidence for accessing climate financing, high-resolution mapping of croplands.

Our advanced analytical capacities allowed us to develop and provide specialized technical support to WFP's programmes, including resilience assets monitoring, index insurance and seasonal forecasting for implementation of anticipatory action programmes.

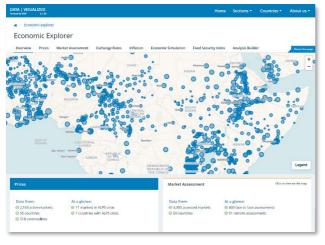
In 2023, our **Asset Impact Monitoring from Space (AIMS) service** monitored 987 WFP assets over 21 COs. Informed by our data, WFP's Anticipatory Action (AA) program in Zimbabwe triggered **a drought-oriented AA intervention for the first time.** Ethiopia's livestock insurance scheme, made a payout to over 2500 pastoralist households, based on our satellite vegetation data.

**ECONOMIC AND MARKET ANALYSIS:** We monitor and analyze **global economic events** that could have implications for WFP and the people we serve, conduct **state-of-the-art economic research** with partners such as UC Davis, and provide guidance to Country Offices, supporting the analysis of markets, essential needs, prices and more.

We maintain the **world's largest price database**, which currently covers approximately **2,100 markets in 57 countries**. The price data is used across WFP operations for food security analysis, early warning or programme design.

We assess the functioning of markets to inform food security analysis and programming. Our **Market Functionality Index** brings together actionable information from market assessments conducted in 4,400 marketplaces across 70 countries, thanks to its innovative end-to-end data pipeline that provides results with 24 hours from data collection.

Together, our data, research and analyses are used by a variety of partners, including the World Bank, USAID, Gates Foundation, Deloitte, UN OCHA, Google and more. All of which are made available as global public goods through our **Economic Explorer**, which brings together tools, analyses and economic indicators.















PROGRAMME MONITORING: We provide WFP with the monitoring evidence needed for strategic and operational decision-making, accountability and reporting. Our evidence facilitates improved efficiency and effectiveness across WFP programmes while enabling WFP to demonstrate performance and results.

Specifically, we provide support in three areas: **measurement frameworks and methodologies**, **guidance and tools**, and **capacity building**.

In 2022, we **successfully developed WFP's Corporate Results Framework** (2022-2025), allowing WFP to measure progress against the 2022-2025 Strategic Plan.

# THE FOOD SECURITY INFORMATION NETWORK (FSIN) AND RAM

Hosted by RAM, FSIN's work spans the effort of 16 global and regional partners committed to improving availability and quality of food security and nutrition analysis for better decision-making. FSIN provides a platform for knowledge sharing between all partners while supporting the coordinated development of food and nutrition security systems. Each year, the FSIN publishes global reports such as the Global Report on Food Crises.















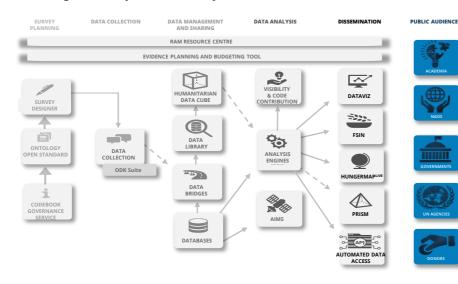
# **OUR STRATEGIC ADVANTAGE**

In leading WFP's Research, Assessment and Monitoring function, we possess in-house expertise, scalable solutions, and extensive connections with academia, donors, governments, over 80 WFP offices, and humanitarian stakeholders.

Our strategic advantage stems from decades of expertise in food security analysis and monitoring. With established network of RAM colleagues alongside partnerships globally and with collaborations а range of stakeholders, we play a pivotal role in generating evidence that informs and monitors the effectiveness of WFP's response.

# **BUILDING A ROBUST, AUTOMATED DATA ECOSYSTEM FOR EVIDENCE GENERATION**

We're creating a powerful data ecosystem to make high-quality evidence easily accessible to everyone. This ecosystem features tools with built-in interoperability, allowing seamless connection and communication. Through automation, analytics, and other innovations, we're able to deliver rapid processing and analysis while standardizing the data RAM's network collects worldwide, ensuring efficiency and reliability.



With this comprehensive system, we aim to provide continuous access to a growing wealth of data, supporting our journey towards a Zero Hunger world. Ultimately, this ecosystem ensures evidence is available as global public good, empowering us broader humanitarian actors to make informed decisions for impact.

#### **OUR NEXT FRONTIERS**

In the face of increasing global food assistance needs and ongoing crises, RAM relentlessly pursue innovation, partnerships, and novel approaches to advance evidence generation in WFP. We seek to push the boundaries, integrating new perspectives or approaches and unlocking critical insights to inform and enhance WFP's response. Our next frontiers include:



# Refining artificial intelligence models to forecast food security

Estimating food security situations 30, 60 and 90 days ahead for countries where WFP real-time monitoring operates



# Delivering collaborative, cutting-edge research

Exploring the intersection between the fear of hunger and migration, declarations of famine, calculating the cost of humanitarian assistance, and more



#### Calculating the cost of inaction

Quantifying the impact of inaction to provide evidence of what happens to those we were not able to reach



#### Leveraging natural language processing to increase efficiency, improve data quality and analytical capability

Continuous exploration of automation options for data analysis

WFP/Falume Bachir

# **ADDITIONAL RESOURCES**

Access our data: Data | Visualized

Real-time food security monitoring and analysis: **HungerMapLIVE** 

Run your own shock simulations: **SHAPES** 

Climate risk monitoring: **PRISM** 

Learn our approaches and methodologies: **Resource Centre** 

### **COLLABORATE WITH US**

If you have any questions, wish to learn more about the work we do or collaborate, contact us by email at Global.ResearchAssessmentMonitoring@wfp.org.

#### **RESEARCH, ASSESSMENT & MONITORING**

# **World Food Programme**

Via Cesare Giulio Viola 68/70, 00148 Rome, Italy - T +39 06 65131 wfp.org