



SAVING  
LIVES  
CHANGING  
LIVES

# Vulnerability Analysis and Mapping

Food security analysis, also known as Vulnerability Analysis and Mapping (VAM), is one of WFP's core workstreams, providing the basis for operational design and policy development. WFP undertakes research; geospatial and economic analysis; post-shock and other assessments; and market and thematic analysis. The information allows WFP, the Government, and the larger humanitarian and development community to design evidence-based programming by determining the most appropriate type and scale of intervention. WFP also monitors monsoon floods, cyclones and impacts from crises like the conflict in Ukraine to provide early warning analysis.

WFP supports performance and knowledge management by (a.) establishing robust links between monitoring and evaluation, and vulnerability analysis; (b.) strengthening WFP evidence-generating efforts to improve its interventions; and (c.) conducting advocacy among Government and partners. WFP has a long-standing partnership with the Bangladesh Bureau of Statistics (BBS), working together for joint exercises and capacity

strengthening. WFP commissions policy research from BBS and other research organizations to generate high-quality, evidence-based advocacy products for expanding government programmes and beneficiary targeting.

## FOOD SECURITY ASSESSMENT & ANALYSIS

### REACHING THE FURTHEST BEHIND

WFP and its partners are committed to making optimal use of available resources by providing timely assistance to the right people, starting with communities with the greatest needs. To identify the needs of the most vulnerable groups and to guide vulnerability-based prioritization in the event of resource gaps, the VAM team provides the analysis required to improve beneficiary targeting for programme implementation.

### mVAM – NATIONWIDE FOOD SECURITY AND VULNERABILITY ANALYSIS

In response to the global food crisis, WFP launched a nationwide, near real-time, remote food security monitoring system (mVAM) in July 2022, which provides WFP and partners with monthly updates on food security and nutrition. Remote data collection is quick and cost

effective, and can be carried out without putting enumerators in risk reaching remote locations. While conventional on-the-ground food security surveys and monitoring only collect information periodically, this system provides a more flexible and efficient way to gather data as on a regular basis. It also serves as an early warning mechanism and emergency assessment tool to understand the impact of shocks. Findings are presented through data visualisation on an online interactive dashboard and provided to the Government, development and humanitarian partners, and the general public in [monthly reports](#).

## POVERTY AND UNDERNUTRITION ESTIMATION

To meet the rising need for up-to-date data for government decision-making, WFP used the small area estimation methodology to generate a poverty and undernutrition map for Bangladesh at sub-district level. Under the PROVATI project (funded by the International Fund for Agricultural Development), BBS, in collaboration with WFP, started a rigorous food security assessment and analysis exercise completed in March 2022.

## EMERGENCY FOOD SECURITY AND ESSENTIAL NEEDS ASSESSMENT

Each year, WFP and the Food Security Sector in Cox's Bazar conduct the Refugee influx Emergency Vulnerability Assessment (REVA) exercise to understand the needs of the Rohingya refugees and the Bangladeshi community around the camps. REVA assesses how many people are food insecure and socio-economically vulnerable and what actions are required to improve their lives and livelihoods. In 2022, WFP conducted rapid food security and essential needs assessments on the Rohingya population residing on Bhasan Char, and began a joint Resilience Impact Measurement Analysis (RIMA) assessment with FAO. In 2023, WFP plans to conduct economic analysis to update the Minimum Expenditure Basket (MEB) in Cox's Bazar and establish a new one for Bhasan Char.

## NATIONWIDE MARKET MONITORING

From July 2022, WFP expanded its monthly market price monitoring reports, previously focused on Cox's Bazar, to cover the entire country. National-level prices are obtained from the Bangladesh Department of Agricultural Marketing (DAM), while WFP has a specific price data collection mechanism for market surveys in Cox's Bazar. The main purpose of the survey is to monitor the impact of domestic and global crises on consumer-level market prices for major food commodities, and to establish a food basket price to support decision-making. Price data helps WFP (a.) understand how global crises are impacting vulnerable communities, (b.) design the most appropriate responses to food insecurity including cash and voucher activities in the

Rohingya response, and (c.) provide an alert system for market shocks and volatility. The WFP Bangladesh [Market Monitor](#) is a monthly publication.

## TECHNICAL SUPPORT WITH GEOSPATIAL ANALYSIS

WFP conducts geospatial analysis using remote sensing and geographic information systems (GIS) to identify disaster-prone areas, and support early warning, geographic targeting and risk assessments. WFP continues to leverage its expertise in geographical targeting at a granular level and ensure assistance—which can reach millions of vulnerable people—is provided at the right time during natural and socioeconomic crises. WFP is investigating new inclusive approaches for collaborations with government bodies working in this area.

## WFP PLANS

### Long-term strategic partnership with BBS

WFP's partnership with BBS will leverage the latter's respective strengths to increase the availability of timely, authentic data on food security and vulnerability during emergencies, as well as in hard-to-reach areas. This data will be disaggregated by gender, demography, geographic location and other dimensions.

### Collaborative evidence generation with other key partners

WFP has established partnerships with UN agencies such as UNHCR and FAO, the World Bank and academic institutions, which support collaborative evidence generation and cutting-edge analysis. In 2021, for instance, UNHCR and WFP conducted their biennial Joint Assessment Mission (JAM) and Joint Plan of Action to inform programme improvements for the UN response in the Rohingya camps and surrounding Bangladeshi communities.

**Photo (WFP/Sayed Asif Mahmud):** WFP beneficiary, Shuborno Rani, collects emergency rations from a joint UN distribution point in northeastern Bangladesh after severe June 2022 floods swept away her home.