AIMS Service
Asset impact monitoring from space

2023 October
A team of 20 scientists and analysts leveraging satellite and climate data to inform WFP operations and programmes. Using all types of satellite data from global-scale long-term records to localized very high-resolution data, processed at in-house cloud systems, covering all areas of WFP operation.

Main areas of work:
- Early Warning and Seasonal Monitoring
- Climate Analysis
- Resilience Intervention Monitoring (AIMS)
- Anticipatory Action and Insurance interventions
- PRISM and Climate oriented Government Technical Assistance
- Hazard mapping and impact assessment,
- Platforms and Open Data
What is AIMS?

- Resilience Intervention Monitoring
- Pilot project to fully fledge operational service
- Innovative approach for evidence generation
- Leverages satellite image analysis & landscape monitoring techniques to assess asset creation projects
- Jointly run between WFP’s Research, assessment & monitoring division and Programme
AIMS: KEY USES of AIMS

- PROGRAMMING
- MONITORING
- EVALUATION
- ADVOCACY
- REPORTING
AIMS activities from 2018 to 2023

- **6** Regional Bureaus
- **26** Countries supported
- **+4,000** Assets monitored
- **+46,500** Images analyzed
AIMS ADVANTAGES

- Systematic and rapid checks of asset presence
- Objective, quantifiable information over large areas with reduced financial resources
- Monitoring over highly insecure areas off-limits to staff
- Detecting biophysical variables invisible to the human eye
- Scalable Service
1. Asset detection

**ASSET DETECTION CLASSES**

- **VISIBLE**
  - asset is visible for the first time

- **NOT VISIBLE**
  - asset cannot be detected

- **MAINTAINED**
  - asset has been maintained through time

- **NO IMAGERY**
  - there is no satellite imagery over the asset

**ASSETS VISIBLE/MAINTAINED THROUGH SATELLITE IMAGERY**

87% / 13%

**INDICATOR THRESHOLDS**

- > 90% **EXCEPTIONAL**
- > 75 to 90% **VERY GOOD**
- > 50 to 75% **GOOD**
- > 25 to 50% **ACCEPTABLE**
- ≤ 25% **POOR**
2. Landscape impact assessment

- **ASSETS POLYGONS SUBMITTED**
- **CONFIRM ASSET CONDITION MAINTAINED, IMPROVED, DETERIORATED**
- **IN DEPTH LANDSCAPE ANALYSIS**
- **LCI Score & LIA Analysis**

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Vegetation growth within impact site

Vegetation growth within control site

**Image Source**: © 2014 Maxar

**Image Source**: © 2021 Maxar

60% ASSETS IMPROVED

60% ASSETS ANALYSED

40% ASSETS ANALYSED
Latest Developments

- DataBridges
- Automation of workflows
- Integration of additional high-resolution datasets
- Introduction of new datasets including temperature and soil indicators
- Soil indicators for Improved Livelihood and Programming (SoILPRO)
Questions?
Check out AIMS Interactive storymaps!

Niger
Half-Moons & Satellites: A Match Made in Space

Haiti
Resbano Project

AIMS Brochure
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