



AIMS Service

Asset impact monitoring from space

2023 October



World Food Programme

SAVING
LIVES
CHANGING
LIVES

RAM-C: Climate and Earth Observation

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



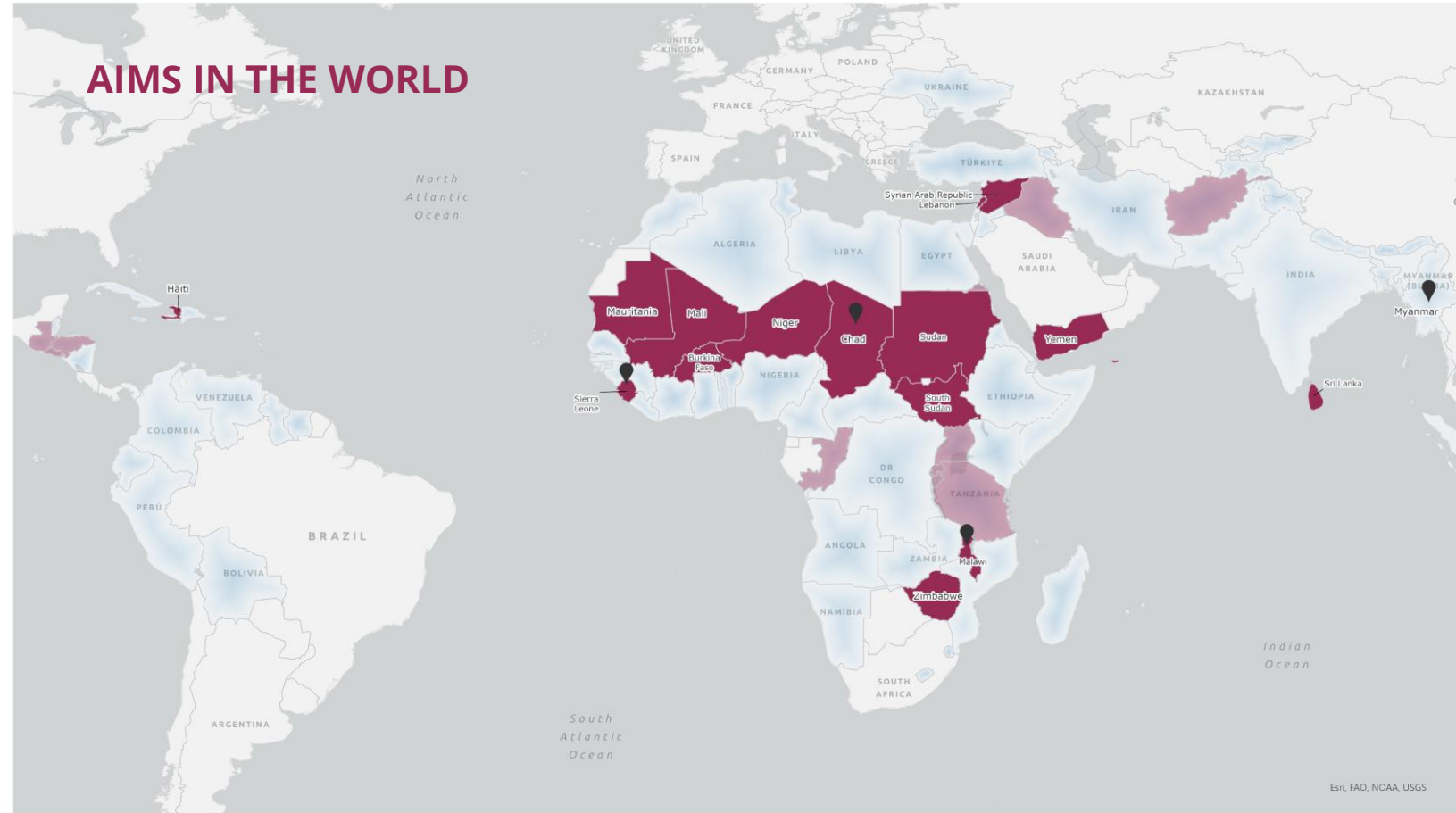
+4,000

Assets monitored



+46,500

Images analyzed



- AIMS Ad Hoc Analysis
- 2023 Subscription
- AIMS Country
- WFP Presence

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



Submission of assets by CO



Selection of satellite imagery



Confirm asset implementation



Review with CO



60
ASSETS
ANALYSED



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

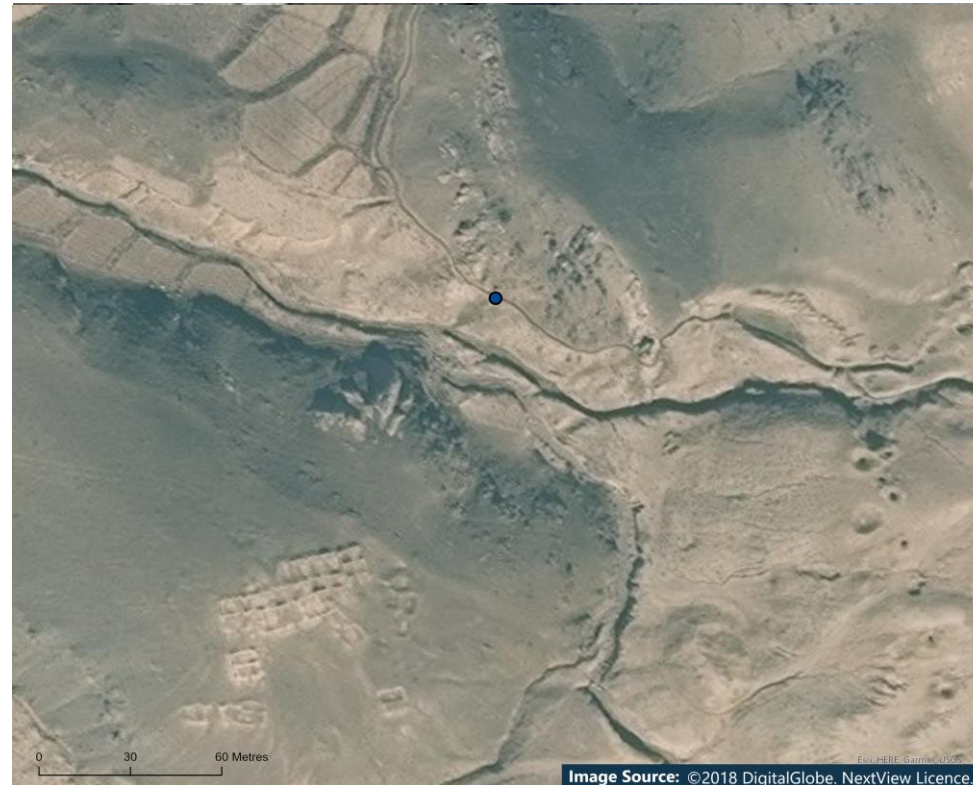


Image Source: ©2018 DigitalGlobe. NextView Licence.

ASSETS VISIBLE/MAINTAINED THROUGH SATELLITE IMAGERY

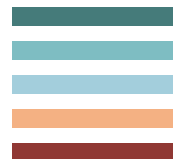
87%

13%

87%

INDICATOR THRESHOLDS

- > 90% **EXCEPTIONAL**
- >75 to 90% **VERY GOOD**
- >50 to 75% **GOOD**
- >25 to 50% **ACCEPTABLE**
- ≤ 25% **POOR**



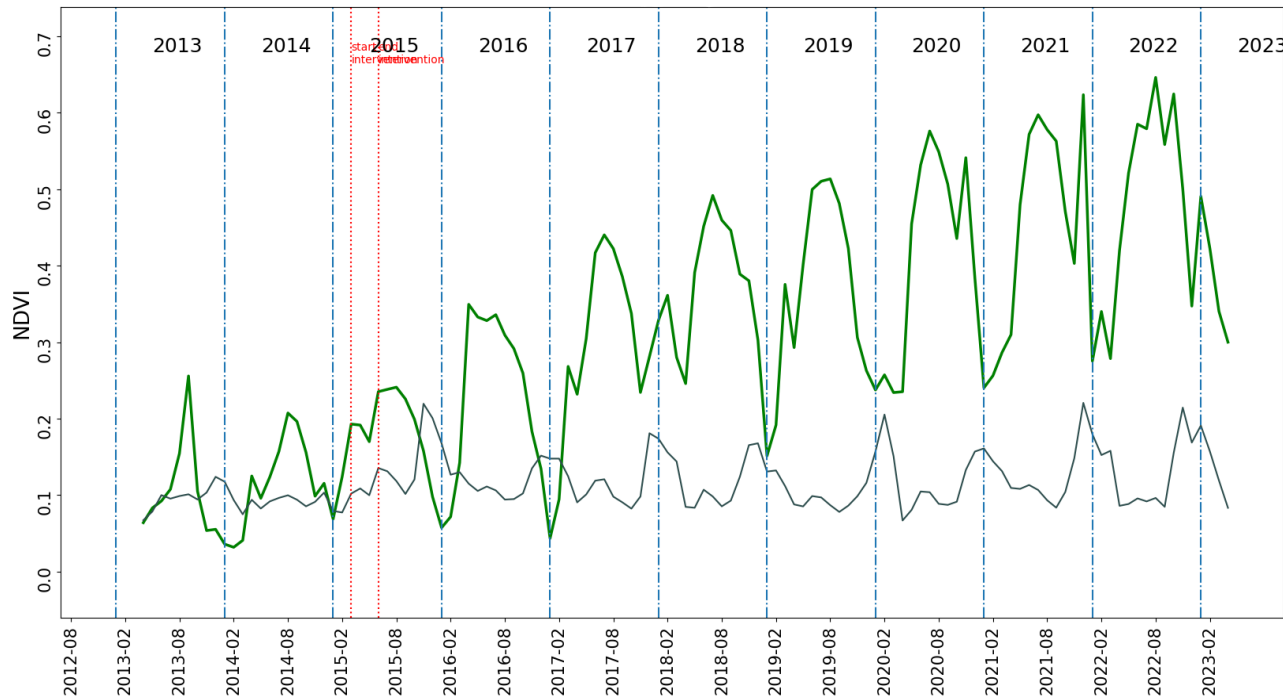
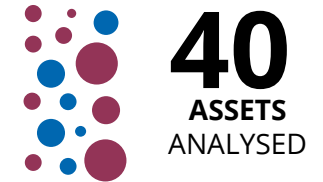
2. Landscape impact assessment



CONFIRM ASSET
CONDITION
MAINTAINED,
IMPROVED,
DETERIORATED

IN DEPTH
LANDSCAPE
ANALYSIS

LCI Score
& LIA
Analysis



Vegetation growth
within impact site

Vegetation growth
within control site

ASSETS IMPROVED



60%

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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?



More info



AIMS Brochure

Check out AIMS Interactive storymaps!

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



Haiti **Resbano Project**



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Programme

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LIVES

