Food Security, Agricultural and Crop Monitoring Tools.

This table lists publicly available satellite-based agricultural monitoring systems. It is provided as a service by Syngenta Foundation East Africa (see contact below). SFEA is not responsible for the sites, services or data. The appearance or non-appearance of a particular tool on this list should not be construed as either a recommendation or a criticism.

Scope	Product	Brief Description*	Source (link)
America, Africa Asia	Agroclimatology, Nutrition	Early warning and evidence-based analysis on food insecurity.	FEWS NET
Global	Weather forecast products	Maps for different types of weather monitoring, including temperature, precipitation and hazards.	<u>Climate Prediction</u> Center
Global	Satellite Imagery	Access to geo-spatial and satellite-derived data products. This includes <u>Agricultural Stress Index (ASI)</u> .	USGS FEWS NET Data Portal
Global, regional & national	Crops outlook	Increase market transparency and improve food security by producing and disseminating relevant, timely, and actionable information on agricultural conditions.	<u>Group on Earth</u> <u>Observations Global</u> <u>Agricultural Monitoring</u> <u>Initiative (GEOGLAM)</u>
Global	Crop monitoring exploring tool	Major producing and trading countries for wheat, maize (corn), rice, and soybean.	Crop Monitor for the Agricultural Monitoring Information System (AMIS)
Global, continental	Crop conditions in support of market transparency	Monitoring of countries at risk of food production shortfalls and where food security is extremely vulnerable.	Crop Monitor for Early Warning (CM4EW)
East Africa	Drought and rainfall risk with crop conditions	Climate forecasting, disaster risk management, capacity development.	IGAD Climate Prediction & Applications Centre (ICPAC)
Africa	Country early warning assessment	Provides timely information about possible crop production hotspot anomalies. Supports multi- agency early warning initiatives, NDVI** & rainfall estimates, crop or rangeland views, satellite-derived phenology, high-resolution data and media monitor.	Anomaly Hot Spots of Agricultural Production (ASAP)
Continental	Vegetation index, crop condition, land cover and water	Powerful visualization tool based on an ArcGIS platform that enables international analysts and other users to rapidly assess real-time crop conditions	Global Agricultural and Disaster Assessment System (GADAS)
Global	Crop Commodity Explorer. Production statistics estimates	Remote sensing-based information used by agricultural economist and researchers.	The International Production Assessment Division (IPAD) of the USDA's Foreign Agricultural Service (FAS)
Global	Yearly crop calendar Desert locust watch	Food & agriculture data and locust watch dashboard,	FAO (UN Food and Agriculture Organization)
Global	Hydrometry and remote sensing. Satellite precipitation	<u>PERSIANN-CCS</u> (Precipitation Estimation from Remotely Sensed Information using the Artificial Neural Networks).	iRain web tool
Global, country	IRain, Rainsphere	Users can visualize and query spatiotemporal statistics of global daily satellite precipitation for the past three decades.	CHRS RainSphere
Global		Brings together a wide range climate, humanitarian and development stakeholders	<u>Risk-Informed Early</u> <u>Action Partnership</u> (REAP)

Global	Rainfall and vegetation satellite imagery	Examines <u>satellite imagery</u> of rainfall and vegetation to assess development of the growing season and how conditions might impact local lives and. Real-time satellite data streams and seasonal forecasts help highlight potential developments of humanitarian concern.	<u>WFP Seasonal Monitor</u>
Global/Continental	Agronomic statistics: Actual/forecast yield, water productivity, nutrient requirement, cropping systems and climate zones.	Agronomic data covering up to 13 major food crops across 70 countries on six continents. The data support research, decision-making and actions to improve yield and resource-use efficiency by the public and private sectors.	<u>Global Yield Gap Atlas</u>

*The descriptions are adapted from those provided by the sites' owners

**Normalized Difference Vegetation Index, charting 'greenness'

Have you got suggestions, comments or questions about this list?

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