Geospatial data platform launches to help build stronger food, agriculture sectors

The Food and Agriculture Organisation of the United Nations (FAO) has launched the Hand-in-Hand geospatial platform which comprises a set of data on food, agriculture, socioeconomics, and natural resources to help strengthen evidence-based decision-making in the food and agriculture sectors.

Image source: Gallo/Getty

The platform is a tool developed to help build back better and create more resilient food systems post Covid-19.

It boosts over one million geospatial layers and thousands of statistics series with over 4,000 metadata records, bringing together geographic information and statistical data on over ten domains linked to food and agriculture - from food security, crops, soil, land, water, climate, fisheries, livestock to forestry. It also includes information on Covid-19's impact on food and agriculture.

The data has been sourced from FAO and other leading public data providers across the UN and NGOs, academia, private sector and space agencies. It also incorporates FAOSTAT data on food and agriculture for over 245 countries and territories from 1961 to the most recent year available.

"Geospatial technologies and agricultural data represent an opportunity to find new ways of reducing hunger and poverty through more accessible and integrated data-driven solutions," said QU Dongyu, FAO director-general.

"The geospatial platform serves as a digital public good to create interactive data maps, analyze trends and identify real-time gaps and opportunities," added Dongyu.

The platform can be used by anyone and its application will in turn help data-driven and evidence-based decision-making in food and agriculture.

Amongst its many uses, the platform provides vital information to:

• Monitor agricultural water productivity, including agricultural systems at risk due to human pressure on land and water;

• Compare human population density to distribution of cattle or compare density between two livestock species around the world;

• Ascertain aquatic species distribution;

• Analyse precipitation trends;

• Analyse information from national forest monitoring systems that show distribution of forest resources with other geospatial data such as the road network. This allows the separation of undisturbed forest areas that have high conservation value from accessible areas that are more suitable for restoration or production.

"The geospatial platform will allow us to design more targeted agricultural interventions and investment plans through a territorial approach - an approach that fosters equality, inclusion and sustainable food and nutrition security," said FAO's Chief Economist Maximo Torero.

FAO will add new datasets and country- and domain-specific case studies to the platform to improve targeting and tailoring of policy interventions, innovation, finance and investment, and institutional reform in food and agriculture.

The platform is part of FAO's Hand-in-Hand initiative - an evidence-based, country-led and country-owned initiative aimed at accelerating agricultural transformation and sustainable rural development to eradicate poverty (SDG1) and end hunger and all forms of malnutrition (SDG2), including through the use of the most sophisticated tools available such as advanced geo-spatial modeling and analytics.