



Food and Agriculture
Organization of the
United Nations

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FAO DIGITAL SERVICES PORTFOLIO

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Working together for Zero Hunger
through digital innovation

OPEN FORIS AND SEPAL (System for Earth Observation Data Access, Processing and Analysis for Land Monitoring)

Innovative open-source software to help countries measure, monitor and report on forests and land use, offering unparalleled access to granular satellite data and computing power and paving the way for improved climate change mitigation plans and better informed land-use policies.

ISSUE

Accurate information is crucial for governments to manage their natural resources sustainably. Yet, nearly 80 percent of developing countries find it difficult to collect and use basic information about their forest resources. FAO's Open Foris software suite was conceived to meet the urgent need for innovative systems that enable accurate, efficient, and cost-effective measurement, monitoring and reporting.

The tools are used globally by government agencies, research organizations, non-governmental

organizations, companies and academia, and have the potential to serve and empower a broad range of stakeholders.

ACTION

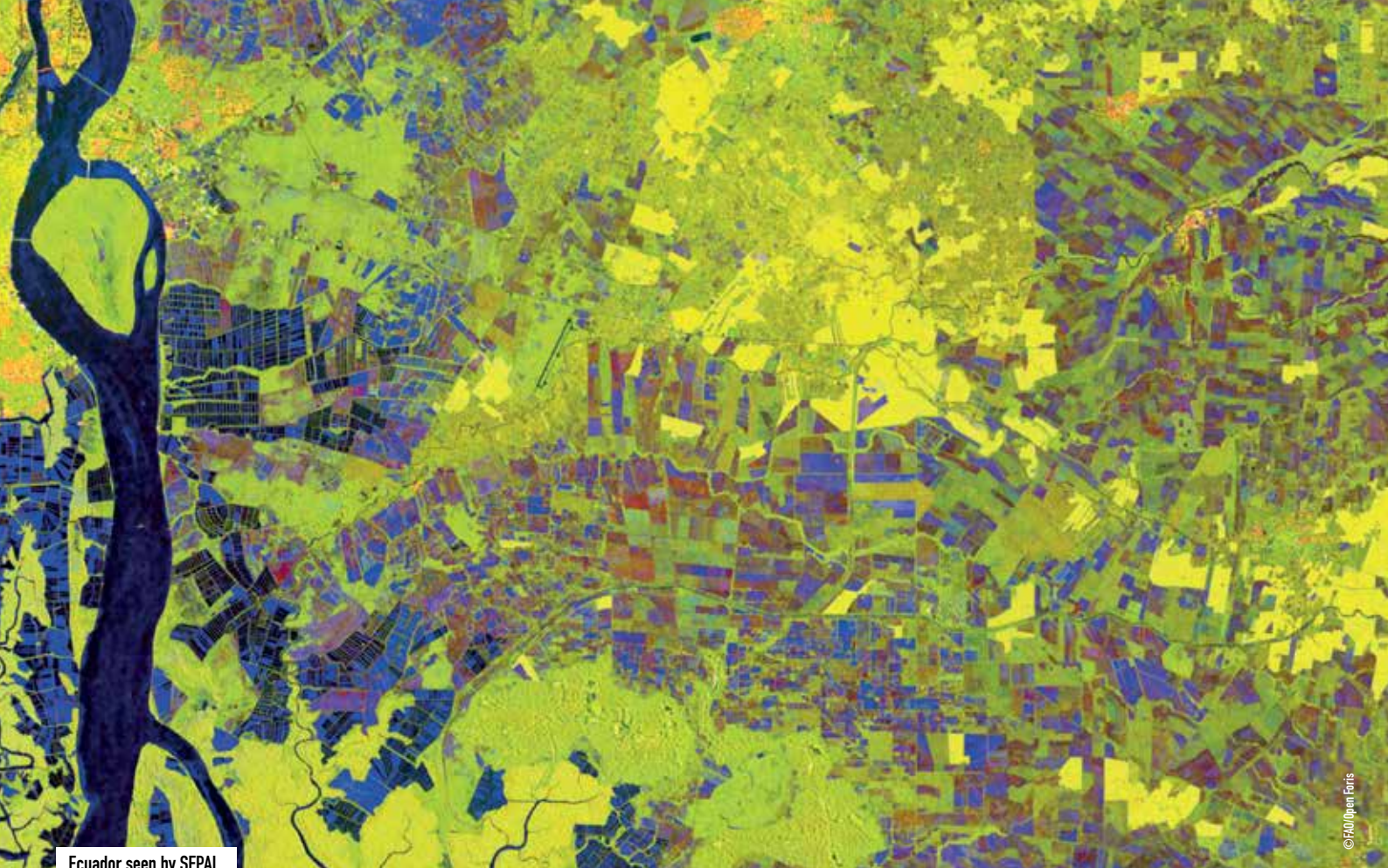
Open Foris consists of a set of free and open-source software tools that facilitate flexible and efficient data collection, analysis and reporting. The software leverages technical partnerships with Google and others to help countries develop robust national forest monitoring systems. One of its newest components is the System for Earth Observation Data Access, Processing and Analysis for Land Monitoring (SEPAL).

OPEN FORIS

- Over 20 000 installations.
- Over 160 training events in over 60 countries.

SEPAL

- As at June 2018, over 1000 registered and active users representing 225 organizations in 85 countries.



Ecuador seen by SEPAL.

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SEPAL provides comprehensive image processing capabilities and enables the detection of small-scale changes in forests, such as those associated with illegal or unsustainable timber harvesting. Users can query and process satellite data quickly and efficiently, tailor their products for local needs, and swiftly produce sophisticated and relevant geospatial analyses. Harnessing cloud-based supercomputers and modern geospatial data infrastructures (such as Google Earth Engine), SEPAL allows users to access and process critical historical satellite data as well as newer data from Landsat and Europe's Copernicus programme. Hosted by FAO's Forestry

MORE INFORMATION

www.openforis.org
www.fao.org/forestry/fma/openforis



Department, the platform is a collaborative effort of numerous public and private institutions.

IMPACT

The software suite is playing a critical role in efforts to combat deforestation. Open Foris has lowered costs, removed barriers, and improved forest monitoring for more than a dozen national governments.

It is contributing to the accuracy and transparency

of reporting to international programmes and processes, such as the United Nations Framework Convention on Climate Change (UNFCCC), the Sustainable Development Goals and FAO's Global Forest Resources Assessments.

This geospatial technology has also helped FAO provide assistance to countries fighting locusts in the Near East and assessing forest cover in the world's drylands.

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Working for  #ZeroHunger

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