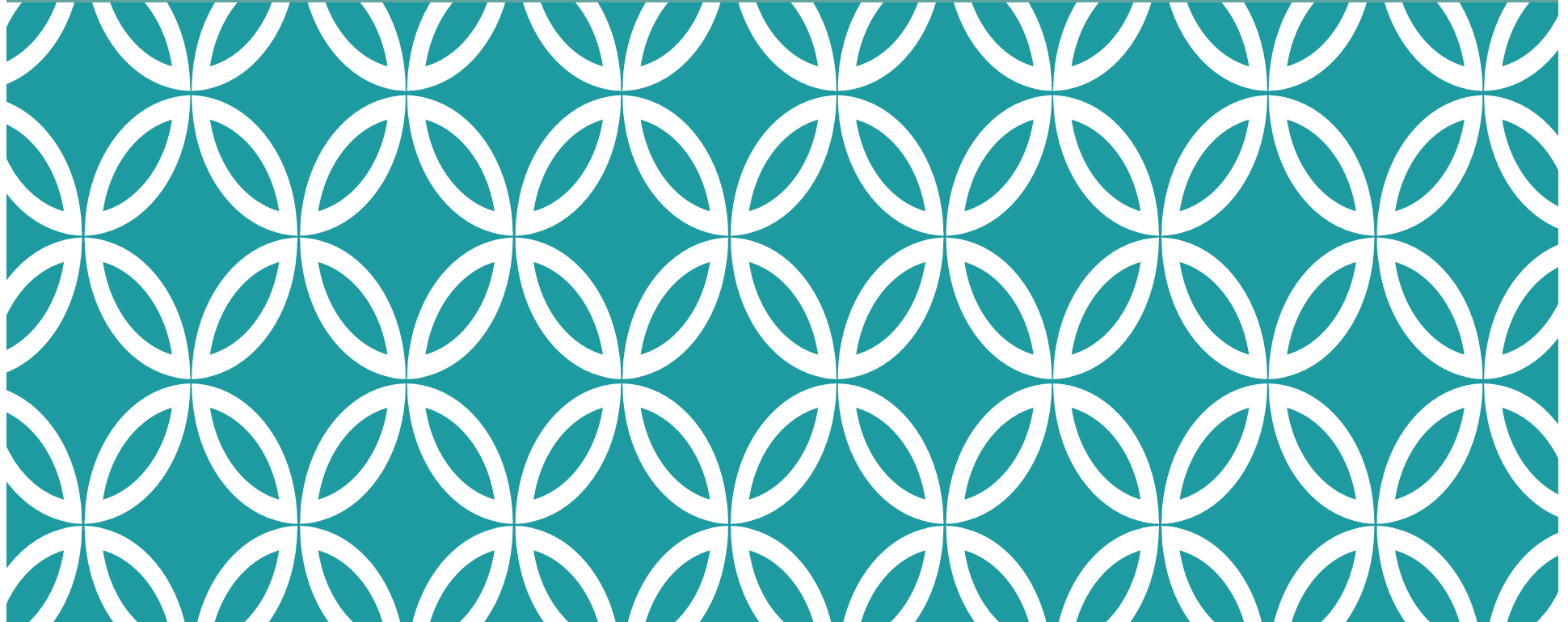




Food and Agriculture  
Organization of the  
United Nations

The 'BigData' logo, with 'Big' in green and 'Data' in black, followed by 'UN Global Working Group' in blue. The 'BigData' text is set against a background of colorful dots.



# EOSTAT SENEGAL AND UGANDA BREAKING DOWN THE BARRIERS TO THE OPERATIONAL USE OF EO DATA FOR AGRICULTURAL STATISTICS IN AFRICA

Lorenzo De Simone,  
Senior EO Expert  
SDG Sub- Programme coordinator  
Office of the Chief Statistician,  
FAO



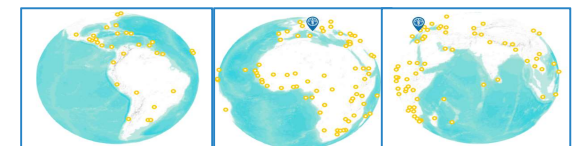
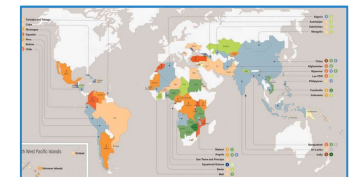
# INDEX

- FAO comparative advantage in the use of Earth Observations for generation of crop statistics
- FAO EO STAT project in a nutshell
- FAO and the UN Global Platform, synergies to break technological barriers
- Work plan
- Next steps

# FAO'S STRENGTHS IN THE USE OF EARTH OBSERVATIONS DATA FOR CROP MONITORING AND CALCULATION OF AGRICULTURAL STATISTICS AND



- Extensive experience in land cover mapping and crop monitoring in many countries in the world, delivered national, regional and global products
- Key partner of the 50 x 2030 initiative, a coordinated approach to large in situ data collection, which will yield essential ground truth data for EO classification/regression algorithms
- Global and national projects on natural resources monitoring and agricultural development
- FAO Offices present worldwide
- Collaborations with academia and Space Agencies to develop new EO algorithms and products



# FAO PORTFOLIO OF KEY ONGOING EO - BASED ACTIVITIES

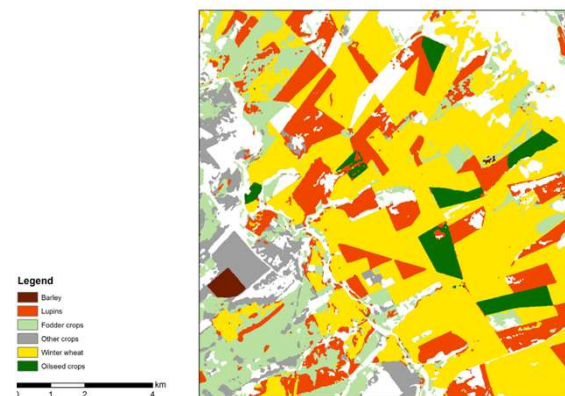
## EO-STAT

**Scope:** Delivery of operational capacity in countries for the generation of dynamic crop maps and extraction of crop statistics (area, yield)

**Selected Countries:** Senegal, Uganda

**Technology:** Sen2 Agri – to be migrated to Sen4Stat in the future

**Cloud provider:** AWS through the UN Global Platform



**Slide 4**

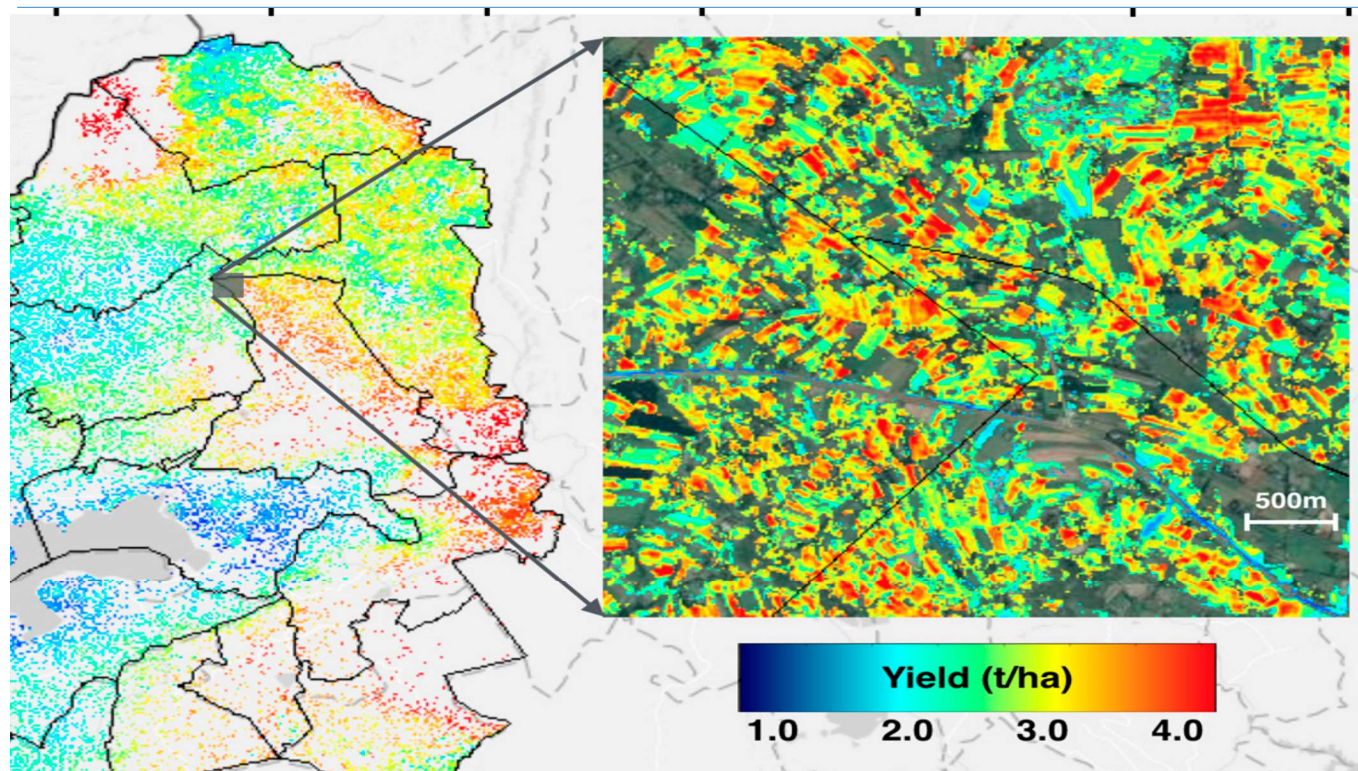
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**LDS1**

Lorenzo De Simone, 2/17/2020

# EO-STAT DELIVERABLES

- Seasonal **maps** of main **crops** (10m resolution)
- **Crop area indicator** (1km resolution)
- Estimation of **crop yield**
- Facilitation of the **Sen4Stat** project through sharing of in situ data and provision of intermediate products (e.g. crop masks) .  
Facilitation through engagement with country counterparts



# EO-STAT – SENEGAL

## Actors



DIRECTION DE L'ANALYSE, DE LA  
PRÉVISION ET DES STATISTIQUES AGRICOLES



Institut  
Sénégalais de  
Recherches  
Agricoles



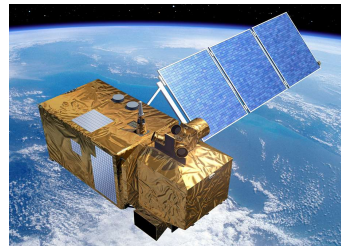
Centre de Suivi Ecologique



Agence Nationale  
de la Statistique  
et de la Démographie

ANSD

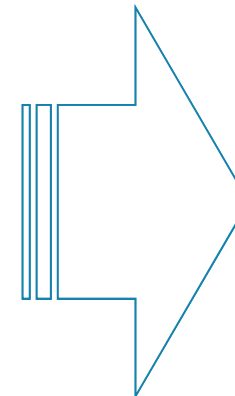
## Sentinel 2



## AGRIS Surveys & in-situ data



Sen2 Agri toolbox  
Algorithms &  
Analytics



National  
Agricultural  
Statistics




Implementing partners



European Space Agency



  
open source

 BigDataUN Global Working Group  
Marketplace Alpha

# FAO & UN GLOBAL PLATFORM COLLABORATION: STRENGTHS AND OPPORTUNITIES FOR SYNERGY



- Sharing of trusted data, methods and algorithms
- Incubator/accelerator for innovations
- Cloud platform: Storage and Computing
- Dissemination/Visibility





**THANK YOU**

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