#### Digital transformation based on ICT innovations for the development of the digital economy

Session 2: Approaches of the UN System to support digital transformation

15 December, 13:00-14:30 CET



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With the contribution of:





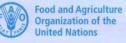




















# Digital Transformation of Agriculture in Europe and Central Asia

## Sophie Treinen

Digital Agriculture Team Leader Regional Office for Europe and Central Asia Food and Agriculture Organization of the United Nations

15 December 2021

## Time line

- Started in 2009 with Virtual Extension Research Communication Networkds
- Since 2015 Regional events
- Since 2017 National digital agriculture strategies
- Since 2020 UN digital transformation group
- As from 2021 smart/digital villages













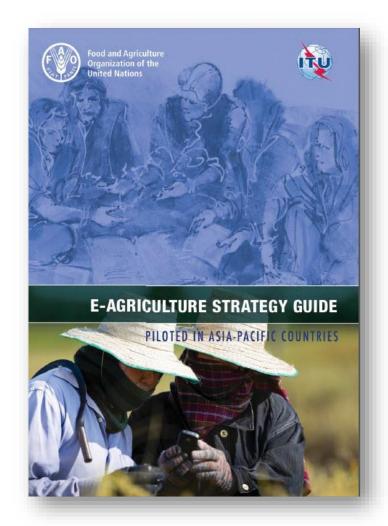








# National digital frameworks



www.fao.org/3/i5564e/i5564e.pdf



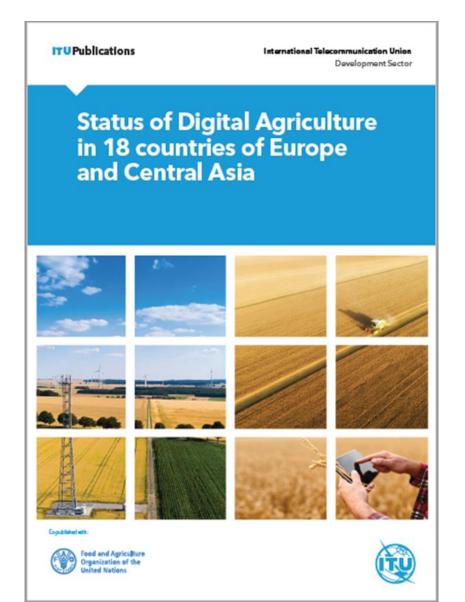
www.fao.org/3/i9515ru/I9515RU.pdf





Albania
Armenia
Bosnia-Herzegovina
Kazakhstan
Kyrgyzstan
Moldova
Turkey
Uzbekistan

# From policies to ...



Albania

Armenia

Azerbaijan

Belarus

Bosnia & Herzegovina

Georgia

Kazakhstan

Kyrgyzstan

Moldova

Montenegro

North Macedonia

**Russian Federation** 

Serbia

**Tajikistan** 

Turkey

Turkmenistan

Ukraine

Uzbekistan

# From policies to ... to good practices

**Albania** 

**Armenia** 

Azerbaijan

**Belarus** 

**Bosnia & Herzegovina** 

Georgia

Kazakhstan

Kyrgyzstan

Moldova

Montenegro

**North Macedonia** 

**Russian Federation** 

Serbia

Tajikistan

Turkey

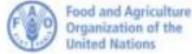
**Turkmenistan** 

Ukraine

Uzbekistan

Digital Excellence in Agriculture in Europe and Central Asia - Regional Contest



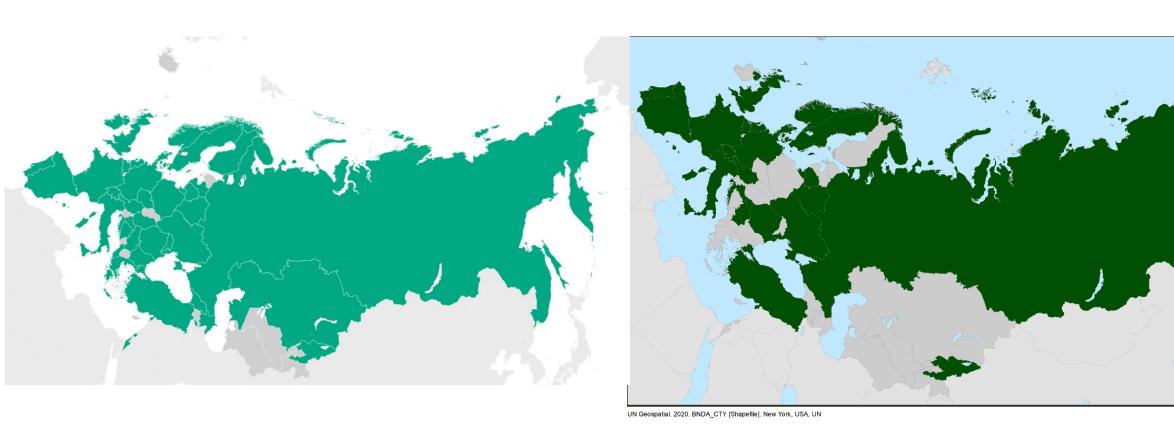




# From Europe and Central Asia

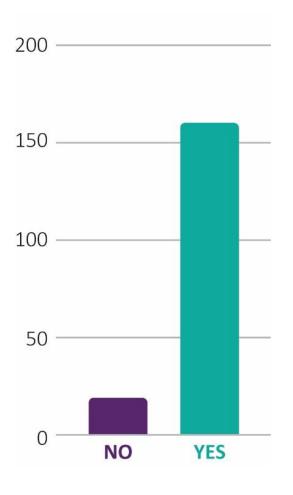
## **171** eligible practices

## 28 finalists

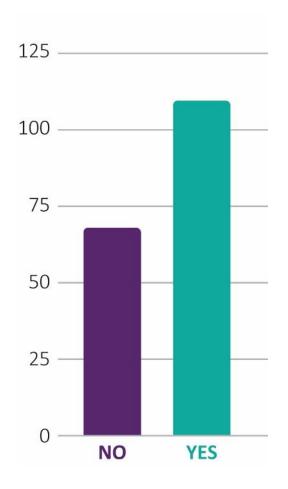


# **Special attention**

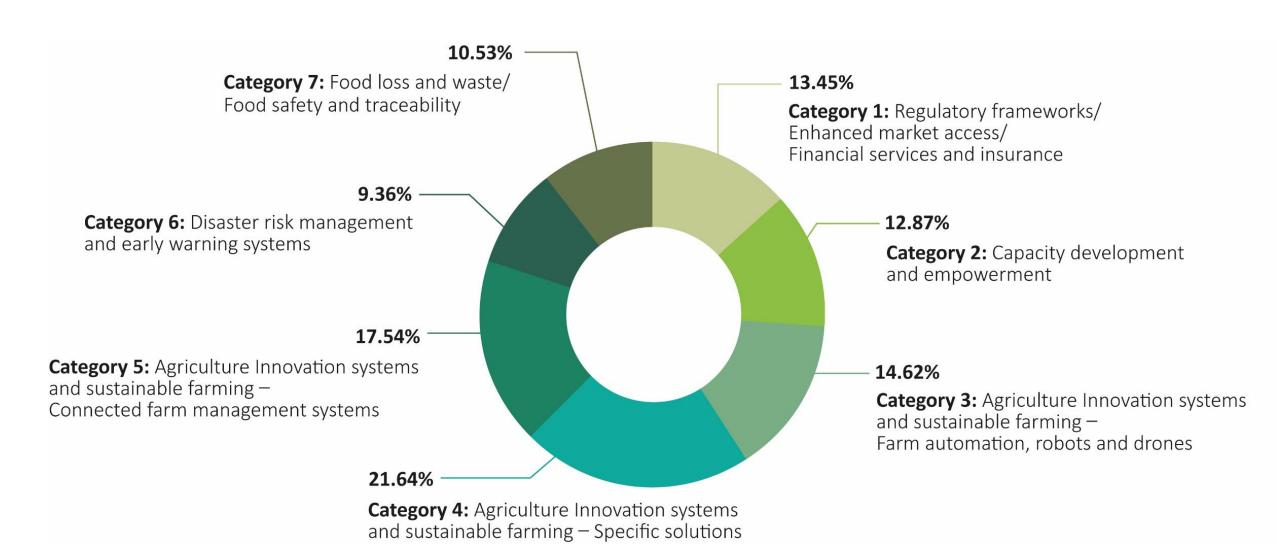
## **Smallholders target**

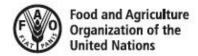


## **Partnerships**



# Repartition per category of practice







# DIGITAL EXCELLENCE IN AGRICULTURE REPORT

FAO-ITU Regional contest on good practices advancing digital agriculture in Europe and Central Asia



#### CATEGORY 1: Regulatory frameworks/Enhanced market access/

#### Financial services and insurance

WINNER: Straight from the Farm - Fresh.Land - Denmark

HONOURABLE MENTION: Local Food Nodes - Local Food Nodes Röstånga ek Förening - Sweden

HONOURABLE MENTION: Mobile application "NMA agro" - National Paying Agency under the Ministry of

Agriculture of the Republic of Lithuania

CHAMPION: Integrated One Stop Shop for farmers to access finance, markets, inputs, and knowledge -

Agrianalytica LLC – Ukraine

#### CATEGORY 2: Capacity development and empowerment

WINNER: Organic Farm Knowledge – Online platform to promote knowledge exchange among organic farmers and advisors – Belgium

HONOURABLE MENTION: Genpro – Ruralbit Lda – Portugal

HONOURABLE MENTION: Electronic agricultural maps - Agro InformAsia - Kyrgyzstan

CHAMPION: FarmForesight - FarmForesight - Ukraine

#### CATEGORY 3: Agriculture innovations systems and sustainable farming – Farm automation, robots, drones

WINNER: High-Precision Weed Control in Organic Farming – West Coast University of Applied Science –

HONOURABLE MENTION: Intelligent watering taking advantage of the existing irrigation installation —

BRIOAGRO TECH. - Spain

HONOURABLE MENTION: Bakus, full electric and autonomous vineyards robot – VitiBot – France CHAMPION: Biological protection of plants by entomophages using unmanned aerial vehicles – LLC "Fly and See Agro" – Russia

#### CATEGORY 4: Agriculture innovations systems and sustainable farming – Specific solutions

WINNER: FiNedap CowControl - Nedap Livestock Management - Netherlands

HONOURABLE MENTION: Apiary Book - Apiary Book Ltd. - Romania

HONOURABLE MENTION: Hive-Tech - 3Bee Srl. - Italy

CHAMPION: i-bee - IT INNOVATIONS - Ukraine

#### **CATEGORY 5:** Agriculture innovations systems and sustainable farming – Connected farm management systems

WINNER: AGRIVI Farm Management Software – AGRIVI d.o.o. – Croatia

HONOURABLE MENTION: Agricolus platform – Agricolus s.r.l. – Italy

HONOURABLE MENTION: xFarm – xFarm – Italy

CHAMPION: OneSoil - OneSoil - Belarus/Switzerland

#### CATEGORY 6: Disaster risk management and early warning systems

WINNER: Disease and Pest Forecast with Artificial Intelligence - Pessl Instruments GmbH. - Austria

HONOURABLE MENTION: VIPS - NIBIO - Norway

HONOURABLE MENTION: Sencrop: Precision ag-weather solutions - Sencrop - France

CHAMPION: agroNET - digital platform for sustainable farming - DunavNET - Serbia

#### CATEGORY 7: Food loss and waste/Food safety and traceability

WINNER: OLIO - OLIO Exchange Limited - United Kingdom

HONOURABLE MENTION: Real-time digital food supply chain auditing, powered by blockchain -

Connecting Food - France

HONOURABLE MENTION: Farmer Expert - Farmer Expert - Turkey

CHAMPION: BIOsens Myco - BIOsens - Ukraine

# Embedding good practice at village level



**Digital Skills Capacity Development Administrative platform Extension and advisory services** Soil mapping Land cadaster Value chain **Market access Rural development Agritourism Financial services** 





## Thank you!

Contact email: REU-Digital-Agriculture@fao.org

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