

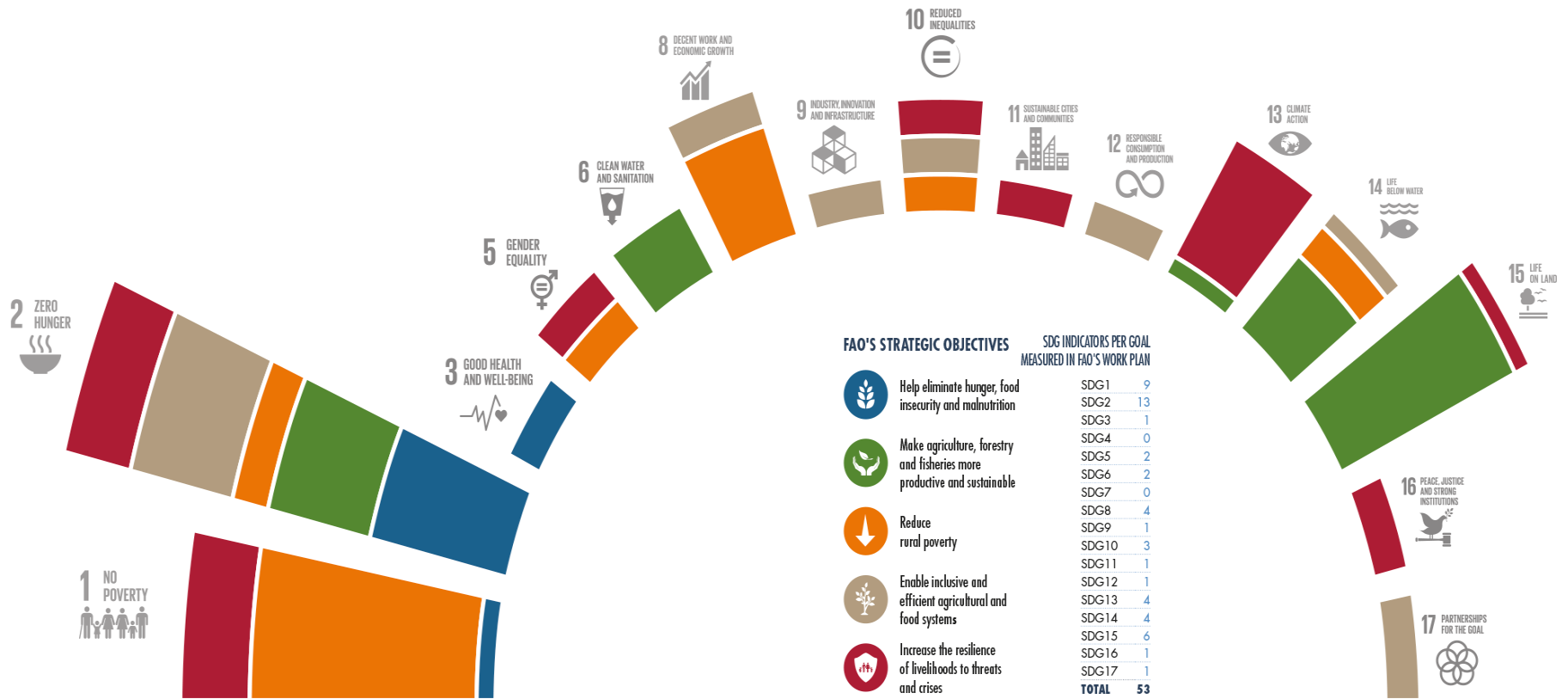


Accelerating the achievement of the Sustainable Development Goals in Europe: ICT4SDG Regional Initiatives

FAO Regional Office for Europe and Central Asia



FAO alignment to the SDGs and revised Strategic Framework



Challenges in Europe and Central Asia and SDGs

Rural livelihoods and rural poverty

- 62% of poor live in rural areas (population is ageing)
- Migration from rural areas

Farm structure

- 97% of farmers in Europe and 70% in Central Asia are smallholders

Sustainability of food production and food systems and climate change

- Land degradation and increase of natural disasters in the region
- Transboundary diseases

Food Security and malnutrition

- Triple burden of malnutrition: undernutrition – obesity – micronutrient deficiencies

Agrifood Trade

- Potential for internal market and export promotion
- Capacity Development in WTO
- Growing demand for updating the Sanitary and Phytosanitary measures





FAO Regional Priorities - Regional Initiatives

Priority 1
Smallholders

Regional Initiative 1



Priority 2
Trade and Market Integration

Regional Initiative 2



Priority 3
Sustainable NR Management

Regional Initiative 3



Priority 4
Food Security + Nutrition

Overarching area of work



FAO Regional Initiative 1 and SDGs

Empowering smallholders and family farms for improved livelihood and poverty reduction



24861266 ©FAO/Gent Skhullaku

Innovative practices for sustainable agriculture production



12120v0020

Access to natural resources and rural employment including social protection



1 NO POVERTY



4 QUALITY EDUCATION



2 ZERO HUNGER



5 GENDER EQUALITY



8 DECENT WORK AND ECONOMIC GROWTH



10 REDUCED INEQUALITIES



FAO Regional Initiative 2 and SDGs

Improving agri-food trade and market integration

Implementation of trade agreements to increase access to new markets

Increased capacity to implement international food quality and safety standards

Supportive environment for export diversification and promotion



FAO Regional Initiative 3 and SDGs

Sustainable Natural Resource Management under a changing climate



Sustainable use of natural resources, climate change and DRR

Effective provision/collection of data, tools and services for effective decision making

Capacity development for sustainable resource management and climate change adaption



FAO ICT4SDG: e-learning courses on indicators

elearning.fao.org/course/view.php?id=359



Food and Agriculture Organization
of the United Nations

[About FAO](#) | [In Action](#) | [Countries](#) | [Themes](#) | [Media](#) | [Publications](#) | [Statistics](#) | [Partnerships](#)

E-learning Centre

E-learning to meet the needs of agriculture and food security professionals



Courses

Background

Partners

Help and Support

You are logged in as Sophie Treinen (Log out)



Introduction to Sustainable Development Goal indicators under FAO custodianship

This short course introduces the process of monitoring progress towards the achievement of the Sustainable Development Goals (SDG). It highlights the role of UN agencies in supporting data collection and analysis, and it presents the SDG indicators under FAO custodianship.

Duration: 20 minutes Publication Date: January 2018

Your progress

START COURSE



Access Online

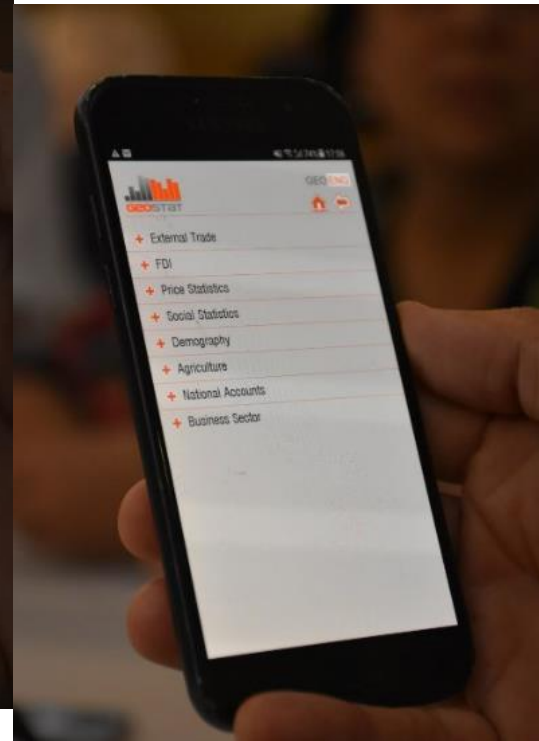
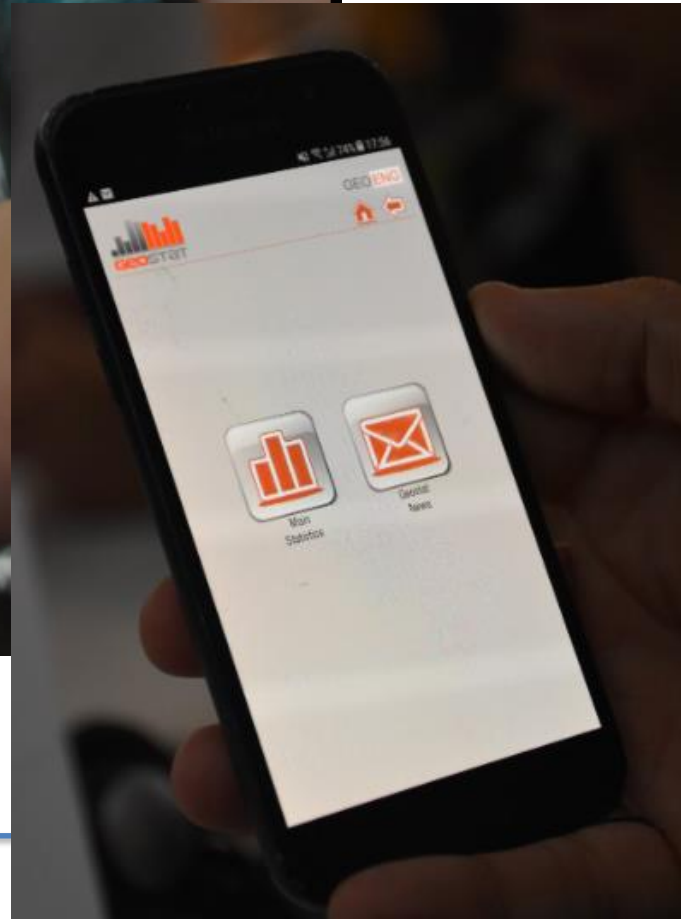
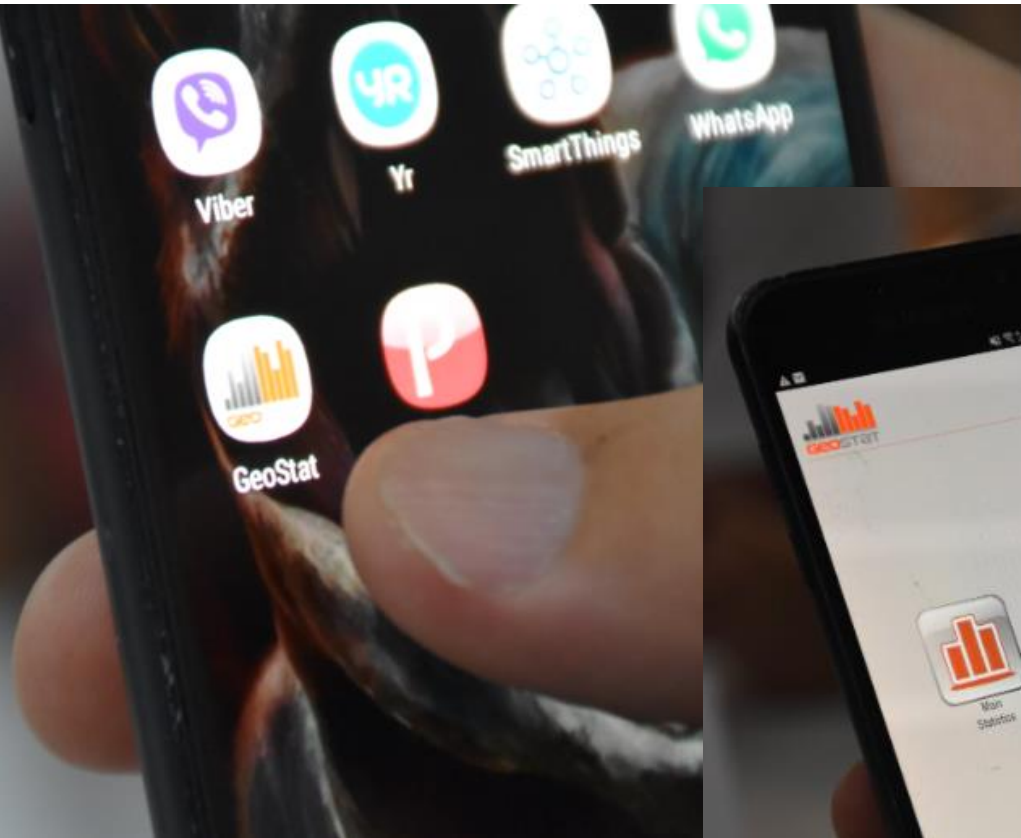
Course will open in a popup window. If your browser stops popups, please allow it when requested.



Download Course
(27.3Mb)



ICT4SDG: Data and statistics





User friendly tools and apps

- Review of existing systems
- Develop upgrade existing smart application (for local decision making)
- Data integration: global, national and local (farmer inputs)
- Guidance packages and reporting back.



MACHINE LEARNING AND AI FOR DISEASE DETECTION

- Exploring the potential of **Machine Learning to improve animal or plant diseases recognition**
- The **FishID progressive-based app** is the first proof of concept for image recognition of six fish species based on machine learning, which provides the baseline technology to monitor fish transition as a data management system.
- Developed in partnership with the Pennsylvania State University, **Nuru app** uses cutting-edge technologies involving machine learning and artificial intelligence to help farmers recognize Fall Armyworm infestation and take immediate measures to stop it.
- It complements the **FAO Fall Armyworm Monitoring and Early Warning (FAMEWS)**, which builds a global web-based platform that tracks where the pest spreads.



GEOSPATIAL FOR EARLY WARNING

- Satellite imagery is revolutionizing the way countries can monitor global weather, natural resources and plant and animal diseases
- The Google Earth Engine (GEE) uses satellite imagery and geospatial datasets to provide planetary-scale analysis
- **FAO and Google have partnered** to make remote sensing more efficient and accessible to improve control and management of:
 - **Plant and animal pests and diseases**
 - **FAO Desert Locust Information Service** improved early warning, forecasts and control of the Desert Locust outbreaks
 - Natural resources, land-use and forest cover
 - **WaPOR**: open-access portal to track water productivity
 - **FAO Collect Earth**: carbon monitoring tool

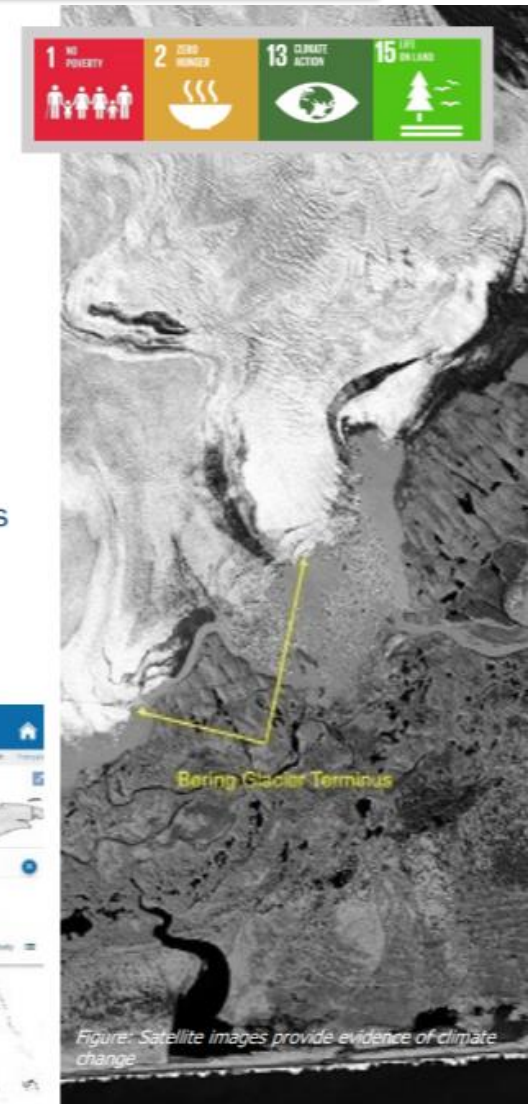
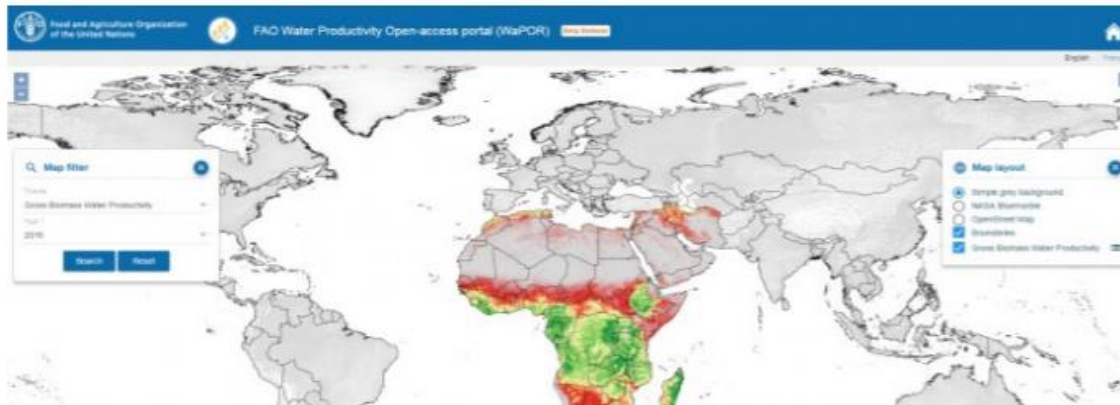


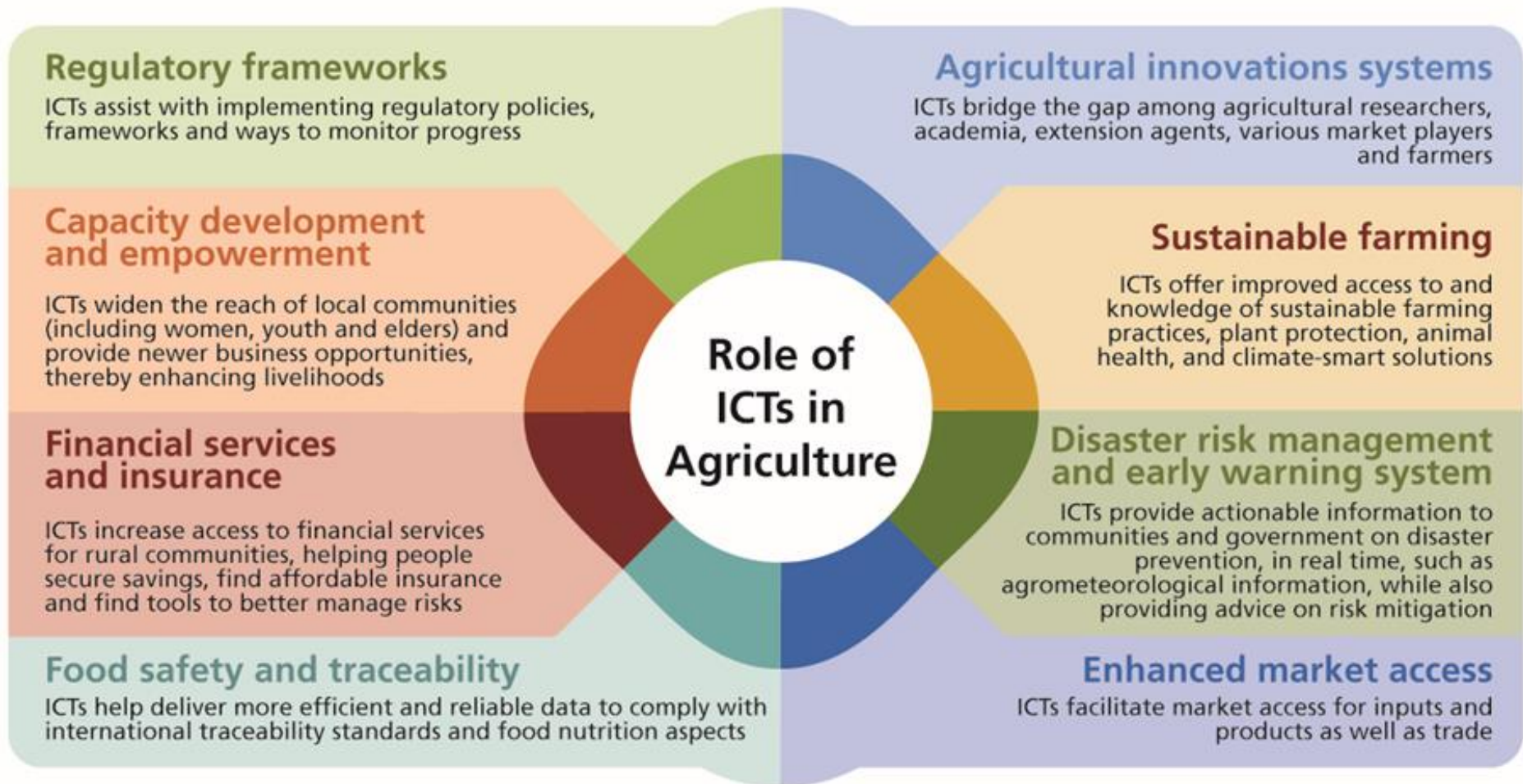
Figure: Satellite images provide evidence of climate change



TRANSFORMATION OF NATIONAL E-AGRICULTURE STRATEGIES

- Comprehensive framework and toolkit utilized since 2010 to assist countries in Asia Pacific to develop or revitalize their **national e-agriculture strategy** to mainstream ICTs in agriculture and develop an ecosystem to foster innovation in a systematic way
- Currently under revision to go beyond and develop an **“e-Agriculture Business Model for Innovation”**. Modern approaches to digital innovation, such as **open innovation, public-private partnerships, competitions and supporting start-ups and young entrepreneurs** will be central to the revised Strategy Guide, shifting the focus from Government action to farmers and extension workers.

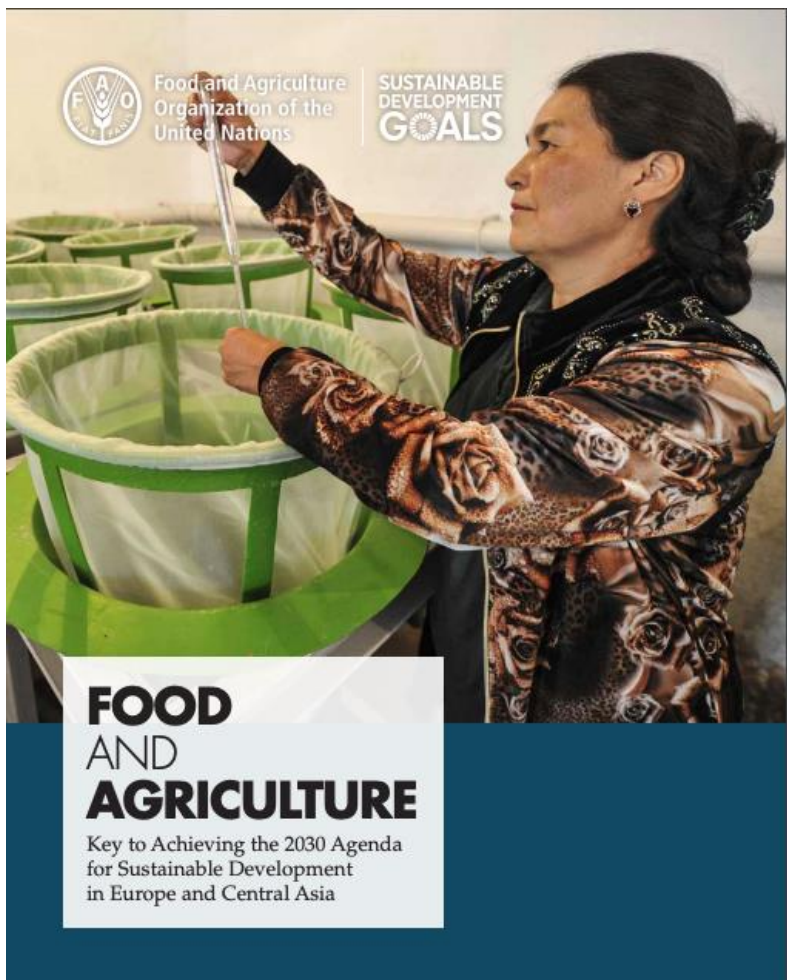




Source: FAO - ITU

FAO Regional Office of Europe and Central Asia

Resources : www.fao.org/europe/resources/en/



www.fao.org/3/ca4495en/CA4495EN.pdf

www.fao.org/europe/resources/e-agriculture/en/

Thank you

Nabil Gangi

Deputy Regional Representative

FAO Regional Office for Europe and Central Asia

Budapest, Hungary

www.fao.org/europe/en/

Email: Nabil.Gangi@fao.org