

Peer learning sessions of the 2021 Regional Forum on Sustainable Development for the UNECE Region

Presentation of policy practices as a basis for the peer learning discussion

Session 4.2. Digital Transformation for SDG implementation

<p><b>Title of intervention, country and name of presenter</b></p>	<p><b>Highlighting the emerging role of information and communication technologies (ICTs) as an engine for agriculture development in Europe and Central Asia</b>          Ms. Sophie Treinen, Head of Digital Agriculture Team, FAO Regional Office for Europe and Central Asia, Hungary          Ms. Eszter Varga, Researcher Institute of Agricultural Economics, Hungary</p>
<p><b>Brief description</b></p>	<p>Due to the pandemic, the digitalization process has accelerated significantly. There are challenges and opportunities of applying digital agriculture in Europe and Central Asia. Based on the Status of Digital Agriculture in 18 Countries of Europe and Central Asia, co-published by FAO and ITU, the two organizations are running a Digital Excellence in Agriculture Contest to identify the Good practices in the region. The first results will be shared at the meeting.</p> <p>With the 'Digital Decade', the European Union <b>aims at exploiting the opportunities from the digital age within safe and ethical boundaries</b>. Pre-accession countries should be prepared and align themselves with the requirements of the EU in all areas, including agriculture. The second presentation will discuss opportunities and expectations the Common Agricultural Policy (CAP) new legislative proposals conveys for pre-accession countries from the perspective of digitalisation and the role of ICTs.</p>
<p><b>Policy goal(s) or challenge(s) to be addressed</b></p>	<p>Closing the rural digital divide requires investments in supply-side and demand-side factors, in order to increase technology adoption rates. On the Supply-side, rural network, coverage and availability of digital applications are needed. On the demand-side, digital skills and literacy, especially for smallholders are fundamental.</p>

<p><b>Instruments and proposals</b></p>	<ul style="list-style-type: none"> <li>• Addressing the rural digital divide necessitates a range of public policy interventions, and most importantly a regulatory environment that attracts private sector investment. Participation of Governments in investments, through public-private partnerships, can ensure that gaps in infrastructure and access are bridged also in rural areas. Public-private partnerships will be important to provide incentives for private investments.</li> <li>• Designing a regulatory framework that is both conducive to innovation and takes into account the specificities and risks digitalization entails</li> <li>• Expanding and improving infrastructure – both for ICTs and not only</li> <li>• Raising awareness among stakeholders on the importance of digitalisation and on the benefits, showing evidence on the return over investment</li> <li>• Establishing and implementing a good regulatory framework that ensures safe and standardised data exchange, respects data ownership and privacy while supporting business development.</li> <li>• Developing digital skills</li> <li>• Developing user-friendly software interface for farmers in local languages adapted to local context</li> <li>• Addressing energy-related issues (battery life of sensor, solar panels)</li> <li>• Adapting the legislation to the digitalization</li> <li>• FAO geospatial platform</li> <li>• 1000 digital villages initiative</li> <li>• International Platform for Digital Food and Agriculture</li> </ul>
<p><b>Constraints and difficulties</b></p>	<ul style="list-style-type: none"> <li>• Young generation leaving rural areas</li> <li>• Ageing farming population</li> <li>• Majority of farmers are smallholders and technologies not yet fully adapted to their needs</li> <li>• Awareness level and mentality of stakeholders towards digitalisation and digital solutions.</li> <li>• Digital divide between rural and urban areas (e.g. digital infrastructure, skills, gender divide)</li> <li>• Lack of trust in the technologies</li> <li>• Low profitability of the sector / reluctance to invest</li> <li>• Human capital (lack of competencies or specialized expertise)</li> </ul>

<p><b>Lessons</b></p>	<ul style="list-style-type: none"> <li>• National Digital Agriculture Strategies are offering a good framework to bridge the rural / gender / digital divides</li> <li>• Use multi-stakeholders approach, inviting different ministries, private sector, public institution, academia</li> <li>• Sharing good practices at national, regional and global levels</li> <li>• Analysing the digital solutions with a return over investment perspective</li> <li>• Speeding up innovation according to the new CAP – potential development paths for the pre-accession countries.</li> <li>• Benefits of a more digitalised integrated system for both the government and the farmer.</li> <li>• Importance of providing guidelines and</li> </ul>
<p><b>Links to additional materials</b></p>	<p><i>Status of Digital Agriculture in 18 countries of Europe and Central Asia</i> - <a href="http://www.fao.org/3/ca9578en/CA9578EN.pdf">www.fao.org/3/ca9578en/CA9578EN.pdf</a>  <i>Gender and Information and Communication Technologies</i> - <a href="http://www.fao.org/3/i8670en/I8670EN.pdf">www.fao.org/3/i8670en/I8670EN.pdf</a>  <b>FAO websites:</b> <a href="http://www.fao.org/digital-agriculture">www.fao.org/digital-agriculture</a>  <a href="http://www.fao.org/e-agriculture/news/digital-excellence-agriculture-europe-and-central-asia">www.fao.org/e-agriculture/news/digital-excellence-agriculture-europe-and-central-asia</a>  <a href="http://www.fao.org/europe/resources/e-agriculture">www.fao.org/europe/resources/e-agriculture</a>  <b>ITU website:</b> <a href="https://www.itu.int/en/ITU-D/ICT-Applications/Pages/e-agriculture.aspx">https://www.itu.int/en/ITU-D/ICT-Applications/Pages/e-agriculture.aspx</a>  <b>European Union resources related to digitalization</b>  <a href="https://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX:52018PC0392">https://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX:52018PC0392</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2018%3A393%3AFIN">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2018%3A393%3AFIN</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2020:67:FIN">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2020:67:FIN</a>  <a href="https://ec.europa.eu/neighbourhood-enlargement/sites/near/files/communication_on_wb_economic_and_investment_plan_october_2020_en.pdf">https://ec.europa.eu/neighbourhood-enlargement/sites/near/files/communication_on_wb_economic_and_investment_plan_october_2020_en.pdf</a></p>