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TRADE POLICY BRIEFS

FAO SUPPORT TO THE WTO NEGOTIATIONS AT THE 12TH MINISTERIAL CONFERENCE

LEVERAGING DIGITAL TRADE FOR EFFICIENT, INCLUSIVE, RESILIENT AND SUSTAINABLE AGRIFOOD SYSTEMS

KEY MESSAGES

- Digitalization offers opportunities for more efficient and transparent agrifood trade. However, scaling up digital trade is challenging.
- Leveraging digital trade requires creating enabling environments that facilitate technology adoption, innovation and business development, including core components like public policy reform, access to finance, adequate digital infrastructure, bridging the digital divide and human capital development.
- Strong coordination and cooperation across countries and borders are required to facilitate digital trade and make it contribute to more efficient, inclusive, resilient and sustainable agrifood systems.

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The role of digitalization in agricultural trade

Digitalization is changing the way goods are produced and traded, offering previously untapped efficiency gains. The bulk of international trade relies on analogue processes that lack efficiency, ranging from duplicate paper documents and exchanging replicate data to reliance on manual labour for checking and clearing documents and goods. Digital technologies can help lower trade costs by making trade more efficient and transparent, with expected impacts in terms of trade growth ranging between 31 to 34 percent by 2030 (WTO, 2018).

Digital technologies have already made considerable inroads in reshaping how agrifood trade transactions are executed. E-commerce and digital trade finance can now operate on a single platform for all parties to communicate and exchange trade information electronically, reducing costs and the length of payment, and increasing access to trade finance for micro, small and medium-sized enterprises (MSMEs) (FAO, 2020). For instance, several trade finance providers use blockchain and smart contracts to offer 'one-stop-shop' open account and letter of credit trading platforms. They provide traders with a simple user-interface to manage the entire trade process from order to payment, which is fully automated and guarantees payments when contractual agreements are met.

Digital trade certificates are another tool for lowering trade costs, helping to facilitate trade by eliminating paper documents, reducing fraud and enabling faster border transactions (Tripoli and Schmidhuber, 2018). The IPPC's ePhyto Solution, a system that provides a harmonized and standardized approach to the production and exchange of electronic phytosanitary certificates, provides a successful example of sanitary and phytosanitary (SPS) e-certification, which now processes more than 90 000 ePhytos per month from 94 registered countries.

Furthermore, digital technologies can help build more effective traceability systems that collect, analyse and share product data in agrifood supply chains, which helps to facilitate compliance with food and sustainability standards, manage food safety risks, and integrate communication flows between producers and national authorities. For instance, some companies are using digital technologies to provide farm-to-fork traceability, helping to combat the spread of the African swine fever in East Asia with faster access to more accurate data, allowing a better response (Tripoli and Schmidhuber, 2020).

Despite such progress, the adoption of digital technologies also comes with challenges and risks. To name a few, the digital divide, or the gap between regions and demographics in accessing communication technologies, is a major challenge for the adoption of digital trade tools. Other important challenges include ensuring that all farmers have adequate data protection and privacy, data ownership, digital knowhow, and access to digital technology. Addressing these challenges should help ensure all market players benefit from the efficiency gains generated by digital technologies.

Building ecosystems to enable digital trade

Scaling up digital trade is challenging and requires collaboration throughout the economy. Governments, supply chain actors and technology providers should all work together to create enabling environments that facilitate digital trade, spur innovation, incentivize business development and address the challenges facing digital trade (Tripoli, 2020).

Strong public policy frameworks that update trade legislation, digitalize trade obligations and simplify bureaucracy underpin such enabling environments. For example, in many countries, legislation needs to be updated to allow for the adoption and acceptance of electronic trade documents. In this regard, in 2017 the United Nations Commission on International Trade Law (UNCITRAL) created the Model Law on Electronic Transferable Records, the Model Law on Electronic Signatures,

and the Model Law on Electronic Commerce.[1] These exemplify sound legislation for legally recognizing digital trade documentation as equivalent to paper-based documents, thus enabling key trade documentation such as e-title documents, e-promissory notes and e-bill of lading as well as e-signatures. Thus far, however, there has been low adoption of these model laws (ABD and ESCAP, 2019).

Trade policies should increasingly be formulated with the objective to enable digital trade. An important step in this direction was the entry into force of the WTO Trade Facilitation Agreement (TFA) in 2017, which contains provisions for expediting the movement, release and clearance of goods, including the adoption of electronic single windows to enable the exchange of e-certificates. To maximize the benefits of electronic single windows, it would also be important to ensure interoperability[2] between national systems to facilitate cross-border electronic data exchange (ABD and ESCAP, 2019). In addition, an important next step is to digitalize sanitary and phytosanitary (SPS) related documentation and other export certificates. The IPPC's ePhyto Solution provides an excellent example that could be extended to all SPS required certificates.

Simplifying administrative processes related to establishing a business, maintaining traceability systems, issuing licenses and export certificates, inspecting shipments and clearing customs is also important to facilitate trade. Ensuring maximum efficiency and transparency in all these processes can help create more productive supply chains. A business process analysis (BPA), an analytical tool that studies business processes across one or more organizations, can be used to facilitate the adoption of digital trade. For example, it can help identify process inefficiencies and provide recommendations on how to make trade procedures more efficient and effective (IPPC, 2021). The BPA could help simplify existing trade procedures, in addition to informing new workflows required for implementing digital trade, which need to be designed and adopted.

Lastly, to scale up digital trade, governments, academia and the private sector, including farmers' organizations, should work together to create long-term strategies for strengthening human capital. It is essential to build the digital skills and knowhow of all agrifood supply chain actors, including farmers, traders, customs officers and regulators. Stimulating public and private investments in vital infrastructures – including ports, terminals and customs agencies – to ensure they are digitally enabled, as well as in mobile network and broadband connectivity in rural areas and in developing countries in particular, is fundamental to bridge the digital divide.

Actions to address key challenges:

- Raise awareness of governments on the benefits and risks of digital trade, and on the legal and institutional reforms required to facilitate its adoption.
- Promote inclusive digital trade, including all supply chain actors to ensure uptake of digital trade tools, challenges are properly addressed, and benefits are shared by all.
- Establish and adopt multilateral standards, rules and protocols for digital trade, such as for electronic single window interoperability, data governance, data exchange, and competition issues.
- Take concrete action to address the digital divide and enhance digital infrastructure, traceability systems and single window systems in developing countries, so that no one is left behind.

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[1] The Model Law on Electronic Transferable Records enables the legal use of electronic transferable records both domestically and across borders. The Model Law on Electronic Signatures enables and facilitates the use of electronic signatures, establishing the equivalence with hand-written signatures. The Model Law on Electronic Commerce facilitates ecommerce with internationally accepted rules to remove legal obstacles and increase legal predictability for electronic commerce (UNCITRAL website).

[2] Interoperability is the ability of a system to work with or use the parts or equipment of another system (from Merriam-Webster dictionary).

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