



Food and Agriculture Organization  
of the United Nations



European Bank  
for Reconstruction and Development

# INVESTING IN TRADE DIGITALIZATION *THE CASE OF ePHYTO*

*OECD-FAO-EBRD Webinar*

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## Investing in Trade Digitalization. *The Case of ePhyto*

- This report continues the shared commitment of the **Food and Agriculture Organization of the United Nations (FAO)** and the **European Bank for Reconstruction and Development (EBRD)** to advancing the adoption of digital solutions in the wider food system context.
- It is the **first comprehensive assessment of the costs and benefits and one of the few quantified assessments of the IPPC ePhyto Solution on trade** .

## Two Complementary Analyses

### A country-level cost-benefit analysis.

- **4 countries:** Egypt, Serbia, Ukraine and Uzbekistan
- Mostly fruit commodities, but also cereals in the case of Ukraine
- Compares a situation where the country uses paper phytosanitary certificates to a situation where the country switches to ePhyto and uses digital certificates. Considers exporting costs from the perspectives of exporting companies and the country as a whole
- Based on extensive interviews of exporting agribusinesses and NPPOs in the assessed countries.

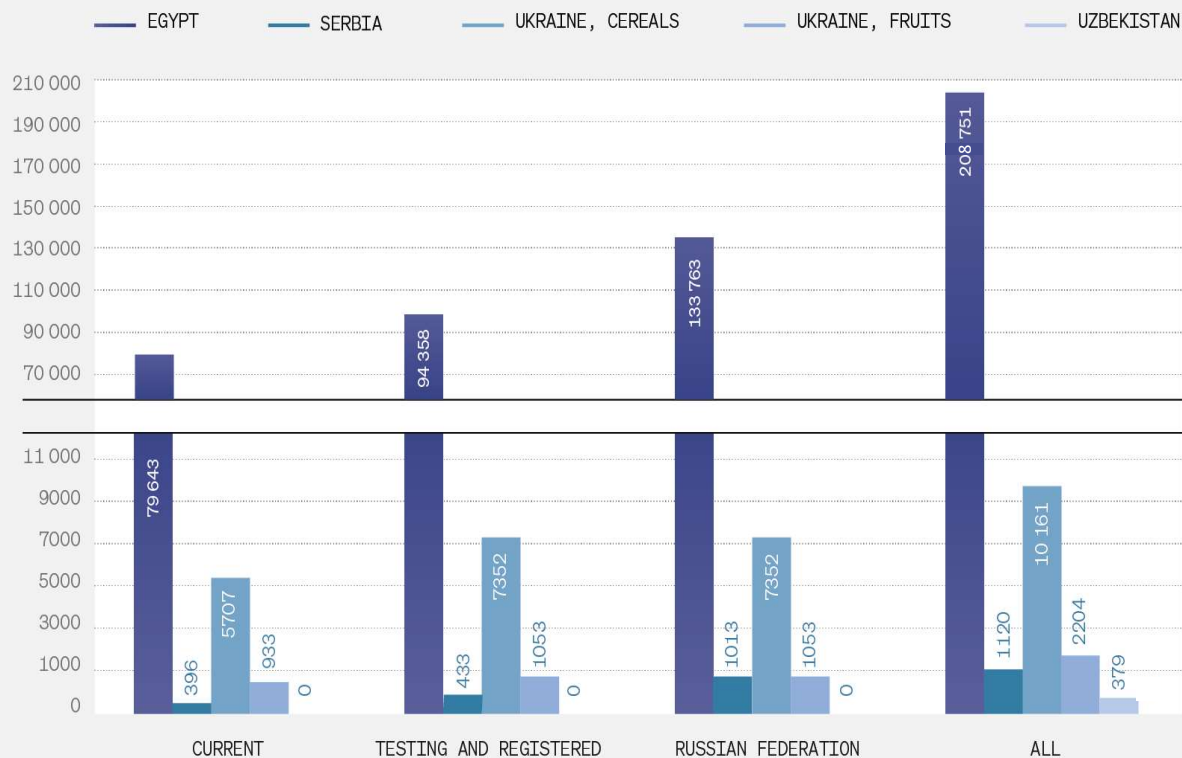
### An econometric model using global trade data to assess the effects of ePhyto use on bilateral trade

- This analysis relies on:
  - IPPC data on ePhytos exchanged between country pairs (2017-2023)
  - Trade data for plants and plant products that typically require phytosanitary certificates (2015-2023)
- ePhyto's effect on bilateral trade assessed using gravity model.

## Country Analysis: Exporters' Savings

	Egypt	Serbia	Ukraine, cereals	Ukraine, fruits	Uzbekistan
Average saving per certificate where ePhyto applies (US\$)	83.5	4.5	66.3	18.1	3.7
Average saving per tonne exported (US\$)	4.24	0.22	0.27	1.01	0.18
Average number of phytosanitary certificates per company per year	2,499	250	153	122	103
<b>Potential total savings per company (US\$ per year)</b>	<b>208,751</b>	<b>1,120</b>	<b>10,161</b>	<b>2,204</b>	<b>379</b>

# Country Analysis: Average Exporters' Savings, US\$ per Year



The terms “current”, “testing and registered”, “Russian Federation” and “all” correspond to four scenarios of ePhyto adoption and use.

ePhyto importing partners include:

- **Current scenario:** countries that currently use ePhyto.
- **Testing and registered scenario:** countries that currently use ePhyto and additional countries that tested and registered for ePhyto.
- **The Russian Federation scenario:** countries that currently use ePhyto, those testing and registered and the Russian Federation.
- **All scenario:** all importing partners adopt and use ePhyto.

## Two Complementary Analyses

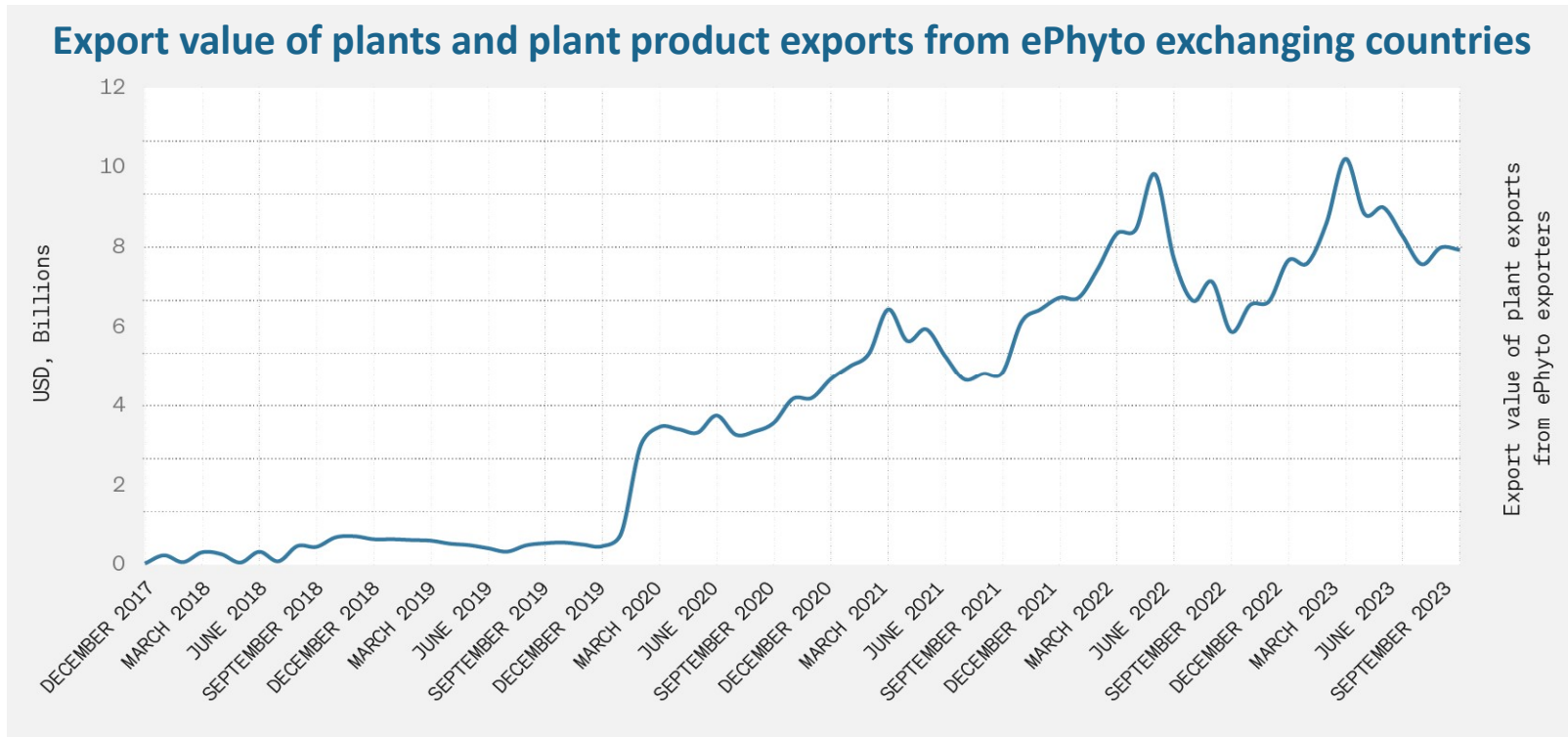
### A country-level cost-benefit analysis.

- **4 countries:** Egypt, Serbia, Ukraine and Uzbekistan
- Compares a situation where the country uses paper phytosanitary certificates to a situation where the country switches to ePhyto for export certification.
- Considers costs and benefits from the perspectives of exporting company and the country as a whole (i.e. economic analysis).
- Results are across 4 scenarios corresponding to different levels of global ePhyto adoption.
- Based on extensive interviews of exporting agribusinesses and NPPOs in the assessed

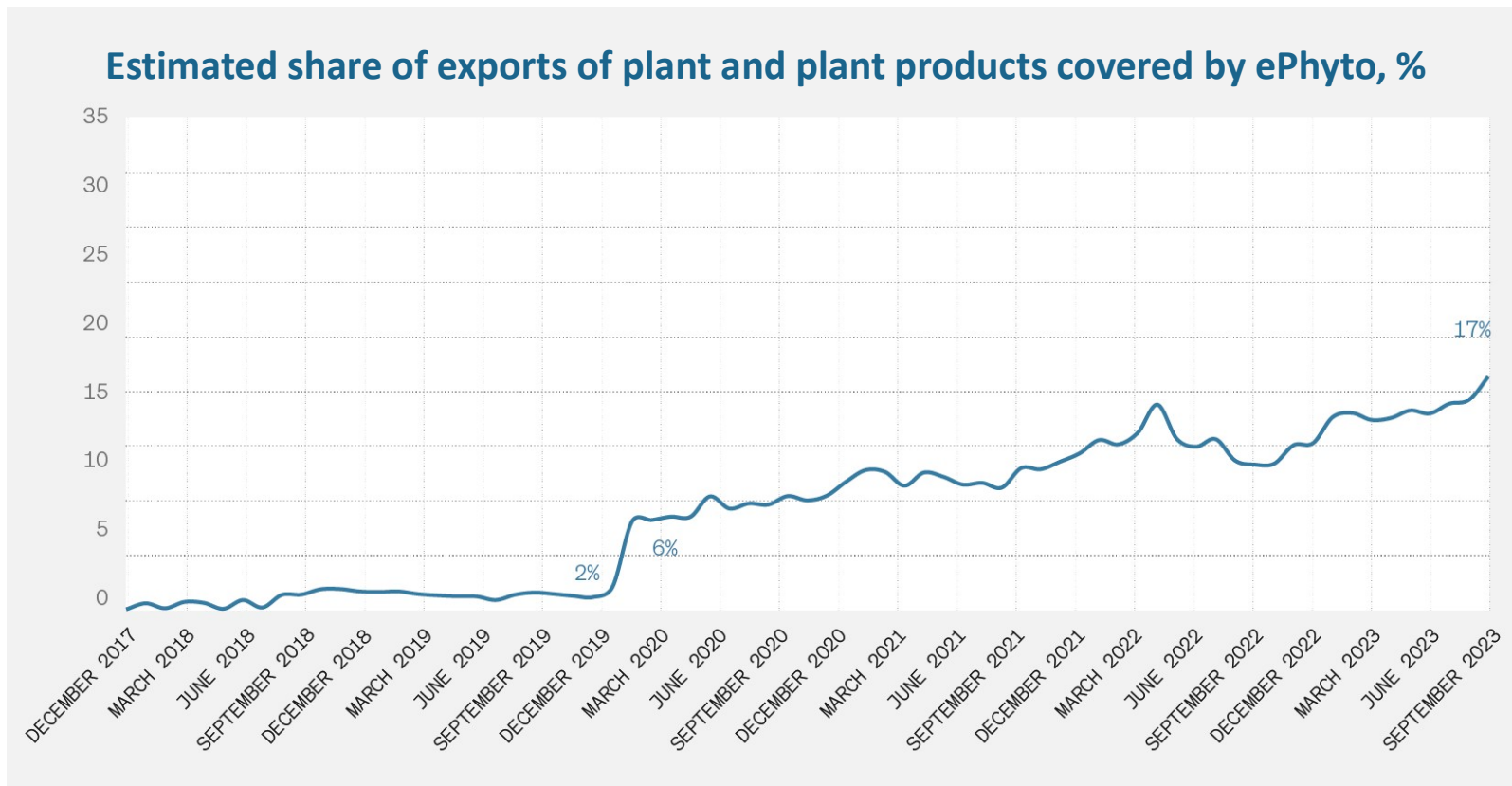
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# Global Analysis : Dynamics of ePhyto Use

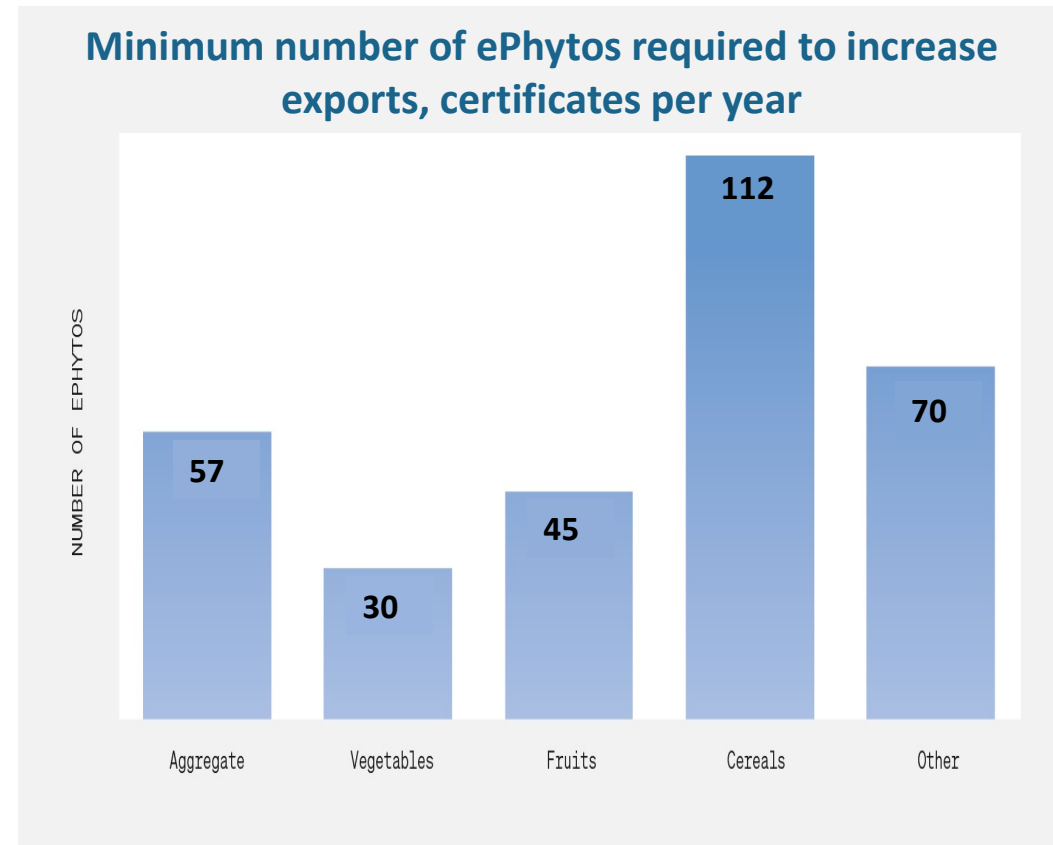


# Global Analysis: Dynamics of ePhyto Use



## Global Analysis: Gravity Model Results

- Confirms that ePhyto has a positive impact on bilateral trade after a certain number of certificates are issued.
- After an exporter passes the minimum threshold of **57 certificates** per year (**average** for all plant and plant products), its exports begin to rise.
- This threshold is well below the number of certificates that countries typically issue
- The effect of ePhyto on trade varies across product categories.





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# Thank you

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