Launching the Future: The Inception of the IPPC ePhyto Solution Project

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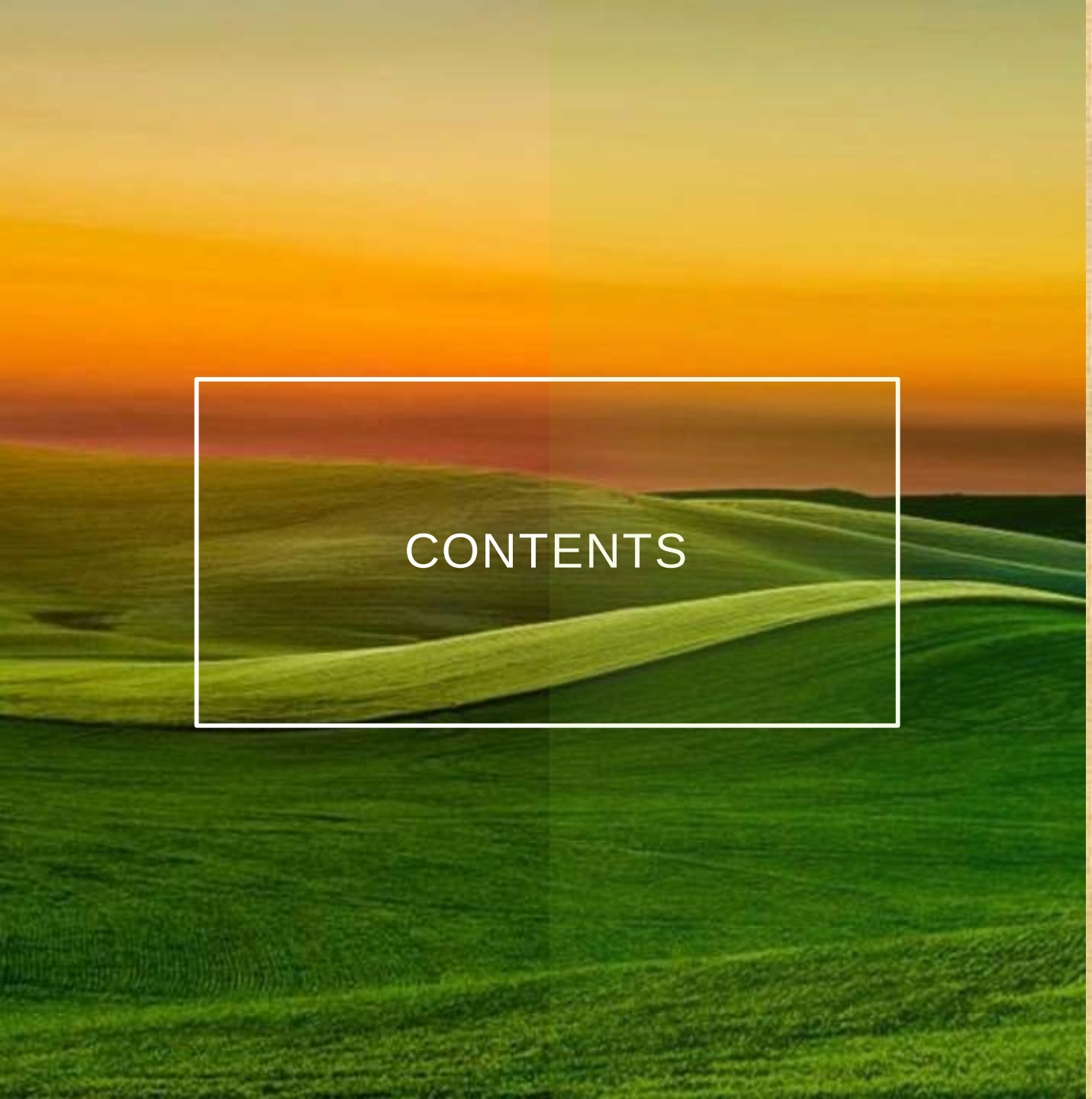

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Beginnings

- A few key trading countries were developing their own digital systems at the turn of the century, among them:
  - Netherlands – The CLIENT system
  - New Zealand – Secure Method of Information Exchange (SMIE)
  - USA – Phytosanitary Certificate Issuance and Tracking (PCIT)
- There were two primary **transmission mechanisms.** They are referred to as **point to point** and **single point (**transmission control protocols or TCPs)
- This needed to be resolved

- Bryant Christie Inc. was commissioned by the IPPC Secretariat to conduct a Global ePhyto Feasibility Study in 2013
- The study's 2014 conclusions were:
  - All IPPC contracting parties should accept and use the same transmission control protocol (TCP).
  - NPPOs should harmonize operating or business rules, and further harmonize codes, terms and schema
  - The IPPC develop a hub as a means of widely implementing the harmonized business rules and transmission protocols.
  - Develop a scoping document for an IPPC sponsored hub.

- The IPPC Secretariat applied for and received a US$1.1 million project grant from the Standards and Trade Development Facility (STDF) in December 2016.The UN International Computing Centre (UNICC) was contracted to build the Hub.
- March 2017, technical developments were completed, allowing for the Hub piloting effort. Nine countries joined the pilot in October 2017 by connecting their existing national systems to the Hub.
- In January 2018, the IPPC and UNICC finalized a contract to develop the web-based Generic ePhyto National System (GeNS) for countries without their own national system

- On 15 June 2018, the IPPC ePhyto Hub component of the ePhyto Solution was launched in full production.
- The GeNS component of the ePhyto Solution was opened to all interested IPPC contracting parties as of 15 July 2019
- The onset of the Covid19 pandemic in early 2020, as well as the connection linking EU TRACES NT to the ePhyto Hub significantly boosted the development and uptake of the ePhyto Solution
- **The STDF project concluded with a complete build of the Hub and the GeNS in April 2020 under budget!**

Today

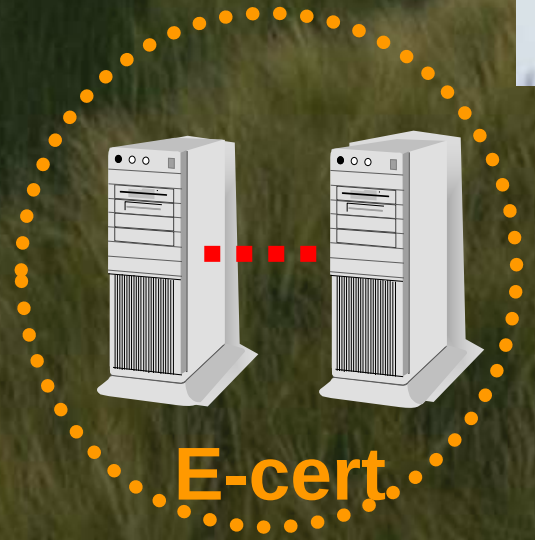
- 133 countries registered
- 89 countries actively exchanging, although it is not clear exactly how many are truly exchanging
- Nearly 7 million certificates successfully exchanged through June 2024
- Not sustainably funded
- Not all countries have a legal framework to allow for digital exchanges
- Only one certificate (phytosanitary certificate) being exchanged
- Now available in five of the six FAO languages (Chinese not yet available)
- Developing and less developing countries need assistance to implement
- BUT, it works and works well. Countries like Morocco, Ecuador, and Jordan report significant cost savings through digitalization (as much as US$40 million per year) (https://www.tradefacilitation.org/project/measurable-agri-food-trade-efficiencies/)

Partners

STDF | STANDARDS and TRADE DEVELOPMENT FACILITY

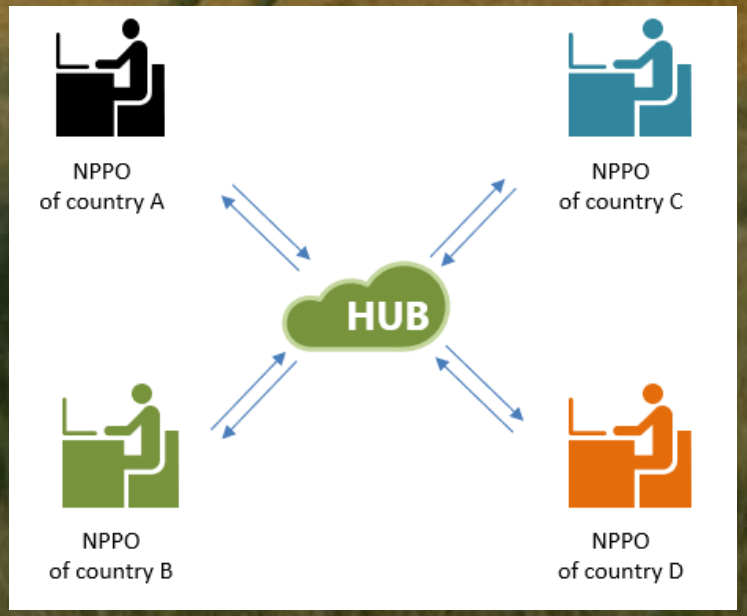
A Global partnership that helps developing countries improve their food safety, and animal and plant health capacity to meet SPS requirements and facilitate safe trade

- Focusing on how electronic SPS certification can contribute significantly to facilitating safe trade
- STDF work:
  - Seminar on SPS eCert, Geneva, Jun-2016
  - ePhyto Project STDF 504: Enhancing safe trade in plants and plant products (Dec-16 to Apr-20), evaluated May-2023
  - Facilitating eVet certification based on Single Window (Jul-2018 to Jul-2020)
  - eCert Advisory Committee (ECAC)
  - Enhancing multilateral eVet certification in Latin America and the Caribbean (approved in Nov-2023)
  - Thematic Session on Digital Tools – June 2024



Why is the ePhyto Solution relevant to the STDF?

- ePhyto is the electronic equivalent of a paper phytosanitary certificate (ISPM 12)
- Reduce the need for bilateral agreements between NPPOs to transfer electronic certificates
- Benefits developing countries (LDCs)
- Collaborative effort: FAO/IPPC, UNICC, Codex, WOAH, CITES, UNCTAD, UN/CEFACT, WBG, WCO, CFIA, USDA, Australia, EU, Private Sector



STDF Project 504

Lessons Learned

- **Harmonization** of certificates is crucial to implementing eCert.
- **Relatively minor investments** in digitization can have significant catalyzing effects on trade facilitation.
- Developing countries have **access and equipment challenges** that can inhibit the uptake of opportunities to participate in the digitization of trade documentation.
- The **private sector** is interested, engaged, and willing to contribute to improving trade facilitation in the right circumstances.
- **Implementation of eCert does not need to be all or nothing – a rolling implementation is both possible and effective.**

Partners

FAO INVESTMENT CENTRE: COUNTRY LEVEL COST-BENEFITS ANALYSIS: PRELIMINARY RESULTS

Cost	Who pays/saves	Savings or additional cost
Cost of obtaining the certificate	Exporters	Savings *Transport costs for the certificate*
Costs associated with delays or reissues of certificates	Exporters	Savings *Reissue costs and/or storage, demurrage and power costs while the shipment waits*
Administration printing costs	Administration	Savings *Printing certificate forms*
Setup costs for ePhyto	Administration	Additional cost
Operational costs	Administration	Additional cost
Greenhouse gas emissions associated to reissues of PCs	Society	Savings

Country level analyses are being undertaken to assess how ePhyto can decrease trade costs in Serbia, Egypt, Uzbekistan, and Ukraine.

Preliminary results for Egypt show that switching to ePhyto could save:

- Around USD 80 per shipment/certificate, mostly from risks and costs associated with delays and/or reissues of the phytosanitary certificate;
- Over USD 2 million per year (using 2022 export volumes and current ePhyto users) for citruses and potato exporters.

Results for Serbia showed that switching to ePhyto could save USD 9 per shipment for fruit exporters.

Partners

GLOBAL ALLIANCE FOR TRADE FACILITATION

HOST ORGANISATIONS

IN COOPERATION WITH

SUPPORTED BY

PRIVATE SECTOR PARTNERS INCLUDING

Partners

Industry - 2022 Grain Industry Survey Results

- Approximately 66% of respondents claimed to be early adopters and have been engaged in eDocs for several years. 28% made digitalization a priority post-Covid
- Contract efficiency (89% of respondents), process automation (78%) and payment efficiency (67%) were considered the biggest benefits of electronic trade documentation
- The most common disadvantages noted were a lack of broad adoption – 56% of respondents, lack of harmonization of data platforms – 50%, lack of government support and technology problems – about 48%
- 67% of respondents reported an increase in electronic trade documentation from 2019 to 2022.

Other Trade Digitalization Efforts

- The World Customs Organization (WCO) is working on the digitalization of certificates of origin.
- There are many national and private sector platforms providing digital first solutions, i.e., TradeWaltz, UAE Trade Connect, Covantis, WaveBL, etc.
- The International Chamber of Commerce (ICC) is taking several initiatives to promote digitalization in trade
- 9 of the top container lines have committed to 100% eBLs by 2030 (MSC, Maersk, CMA-CGM, Hapag-Lloyd, ONE, Evergreen, Yang Ming, HMM & Zim – total 74% of container capacity
- 100+ companies, banks, port operators, lines, forwarders and solution providers signed the FIT Alliance eBL declaration committing to reach 25% eBLs in bulk shipping by 2025
- BIMCO has developed a standard clause for electronic signatures in charter parties and other contracts, enabling parties to sign contracts and accompanying documents electronically

ePhyto Short Term *Possibilities*

- China, Canada and Australia need to begin actively exchanging in greater volumes, both import and export
- Keep working on national single windows systems, but in the interim use ePhyto GeNS
- Pursue piloting of other certificates, even on a limited basis, to further prove the concept on things such as eVet
- Actively pursue engagement with private sector blockchain, eBills of Lading and other digital platforms – Bills of Lading can be up to 15 pages alone
- Aggressively pursue and gather data on ePhyto's economic impact to underscore messaging intended to increase onboarding
- Sustainably fund ePhyto, preferably through FAO regular program funding
- Mobile application

ePhyto Long Term *Possibilities*

- Make use of AI systems to build side databases integrated with the ePhyto Hub that could track import requirements for plants and plant products for the countries using ePhyto
- Embrace the concepts of Big Data to build better standards and products for the IPPC and other organizations (this could include analysis to improve additional declarations, build technically sound commodity standards, etc.)
- Establish partnerships with the other SPS “Sisters” initially, and then with other organizations that use paper certificates to negate having to duplicate efforts in building an ePhyto-like system
- Encourage and engage the private sector to digitize all trade documentation – not just eCert, but eDocs.
- Especially work with the banking system to figure out a way to eliminate the need for a paper phyto to get a letter of credit

THANK YOU

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