



ePhyto: Enhancing safe trade in plants and plant products

The project aims to provide developing countries with a simple generic system for the production, sending and receipt of electronic phytosanitary certificates (ePhyto) and to establish a harmonised exchange tool to facilitate the exchange of electronic certificates as an alternative to the current practice of exchanging paper certificates. The establishment of these tools will improve the security of official communications between countries and the trade flows by enhancing border access of plants and plant products. It will also eliminate the cost and complexity of countries developing individual systems for electronic data exchange and the necessity to negotiate exchange protocols on a country by country basis.

Look at the latest information about the [ePhyto Solution](#) or visit the project website [here](#).

STDF/PG/504

Status

Completed

Start Date

15/12/2016

End Date

30/04/2020

Project Value (US\$)

\$1,728,000

STDF Contribution (US\$)

\$1,120,000

Beneficiaries

Developing countries

Implementing Entities

Food and Agriculture Organization of the United Nations (FAO)

Partners

Canadian Food Inspection Agency

United States Department of Agriculture (USDA)

Background

The International Plant Protection Convention (IPPC) has adopted International Standard for Phytosanitary Measures (ISPMs), which provide harmonized guidance on phytosanitary certification that has contributed to facilitating safe trade. In 2012, an appendix to ISPM 12 on electronic phytosanitary certification was approved, which provided guidance on the exchange of electronic phytosanitary certificates. In recent years, some Contracting Parties to the IPPC, predominantly developed countries have made significant advances in developing systems for electronic certification. These have often required considerable

resources to develop the necessary electronic tools for producing and receiving electronic certificates as well as negotiating exchange agreements with trading partners.

This project will provide developing countries lacking a national system with a simple generic ePhyto national system (GeNS) capable of producing, sending and receiving electronic phytosanitary certificates. It will also establish a harmonised exchange tool, referred to as a "hub" which facilitates electronic exchange based upon a single communication protocol eliminating the cost and complexity of bilateral exchange protocols. The combination of these two systems, referred to as "the ePhyto Solution" will make it easier for countries (especially those with limited resources) to start transmitting electronic phytosanitary certificates for their export consignments and to receive certificates for imported consignment thereby facilitating the trade of plants and plant products and improving access to food. The Solution is intended to be compatible with existing border information management systems and it is expected to build upon such systems where possible.

The ePhyto project involves many stakeholders:

- Project Steering Group is composed of individual technical experts from IPPC, the United Nations International Computing Centre (UNICC), Argentina, Australia, China, Kenya, Korea, Morocco, the Netherlands and the United States (US).
- Project Advisory Committee is composed of FAO, UNICC, the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT), The United Nations Conference on Trade and Development (UNCTAD), World Customs Organization (WCO), the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), OIE, Codex, World Bank Group, the Netherlands, Australia and the US.
- Project Industry Advisory Group is composed of Federation of Cocoa Commerce Limited, International Community of Breeders of Asexually Reproduced Ornamental and Fruit Varieties (CIOPORA), International Grain Trade Coalition (IGTC), International Seed Federation (ISF), International Wood Products Association (IWPA), Union Fleurs (International Flower Trade Association), European Seed Association (ESA), European potato trade association (Europatat), European Fresh Produce Association (Freshfel Europe), The Global Express Association, and International Cotton Advisory Committee. The IAG observers includes representatives of Global Alliance for Trade Facilitation (GATF) and Wine Institute.

Expected Results

Establishment of the Solution

Many developing countries perceive that electronic phytosanitary certification is unattainable. Many do not possess the technical and financial capacity to develop a system for the automation of issuance and transfer of phytosanitary certificates nor the financial and strategic capacity to establish complex bilateral trade arrangements. The project seeks to establish the infrastructure for developing countries to produce, send and receive electronic certificates based upon a generic web-based system (GeNS). The establishment of an international hub that facilitates exchange between countries removes the need for complex country by country arrangements. Following the establishment of project development and service agreements between the IPPC and UNICC, UNICC, in collaboration with the project governance committees and the IPPC Secretariat, will articulate the specifications for the hub and GeNS, evaluate and report on existing software and hardware available for use as the Solution. UNICC will then establish the GeNS and hub for piloting through 10-12 countries. Two to three countries that adopt the GeNS and eight to ten countries that currently operate existing national systems for the exchange of electronic data will link to the hub and conduct exchanges to validate the performance of the system. The outcome of this pilot testing will be used to refine the Solution components for full implementation by all national plant protection organizations (NPPOs).

Australia, Argentina, Chile, China, Ecuador, Kenya, the Netherlands, New Zealand, Korea and the US have been selected as pilot countries to roll out the ePhyto hub. Pilot countries for the ePhyto GeNS are Ghana, Samoa and Sri Lanka.

Establishment of business and technical tools to support the implementation of ePhyto

Many countries do not understand the complex business and technical changes required to implement electronic data exchange. Transition to electronic exchange not only impacts the operations of the NPPO, but also the organizations and entities conducting or supporting the trade of plants and plant products including traders and other government departments. As such, NPPOs should carefully undertake business and strategic policy analysis, change management and technical training to evaluate and support the transition to electronic data exchange. The project will work with experts to evaluate, modify, where appropriate, and develop tools that will support developing countries implementing ePhyto. These tools include advocacy materials explaining to policy makers the concept of electronic phytosanitary certification and its benefits for countries; readiness assessment questionnaires and situation analysis providing a quick assessment of countries' level of readiness to

adopt ePhyto; Business Process Analysis guides to evaluate business transition; technical user guides and manuals for the ePhyto Solution to explain the operation of the ePhyto Solution components; decision support tools to enable countries to take an informed decision about implementing ePhyto; and business process reengineering guides to transition countries from their current workflows to those under an ePhyto environment.

Establishment of a business model to support the long term sustainability of the ePhyto Solution

The establishment of electronic phytosanitary certificates will result in improvements to NPPO operations by reducing fraudulent practices, increasing staff efficiencies and removing redundancies in data collection and storage. ePhyto is also expected to facilitate trade and improve border efficiencies. However, the long term sustainability of the Solution is dependent on recovery of the direct and indirect cost of operating the hub and GeNS. Working with project governance committees and with experts in finance and electronic data exchange, the IPPC Secretariat will develop proposals for the implementation of a cost recovery model for the operation of the Solution.