EPHYTO IMPLEMENTATION CASE STORY

QUESTIONNAIRE

Country	Rep. of Korea	
NPPO	PO Animal and Plant Quarantine Agency	
Contact Person	Kyu-Ock YIM	
Designation	Senior Researcher	
Date	e 25 May 2021	

TYPE OF IMPLEMENTATION

Please indicate if you have implemented ePhyto through:

- Your own National System
- The IPPC Generic ePhyto National System (GeNS)

own National System

Briefly describe your ePhyto implementation setup (maximum 150 words)

When importers apply phytosanitary import inspection through Customs single window system, they can click "ePhyto" and put ePhyto numbers. This info is automatically transferred to APQA system which is connected to the IPPC hub to retrieve the ePhyto.

If exporters want to use ePhyto, after export inspection relevant information is filled in the National system and ePhyto is transferred to the hub upon approval of the relevant senior staff.

Please also indicate briefly (maximum 150 words) the main reasons for your choice of implementation model (i.e. GeNS or National System)

Korea already has national system which is not only produce PC but also is connected to various DBs and other systems. Therefore APQA developed a separate server to connect between the IPPC hub and Korean National system.

BASIC ePHYTO STATISTICS FOR YOUR COUNTRY

How many ePhytos do you transmit and receive per month through the IPPC ePhyto Hub (average over the past 3 months)?
- N/A because the commercial use of ePhyto started 10 May 2021 with USA only.
What main countries are you exchanging ePhytos with via the IPPC ePhyto Hub?
USA for commercial exchange
Other countries for trial.
Are there new countries to and from which you are now trading as a result of implementing ePhyto?
None

PROJECT DESIGN AND MANAGEMENT

How did you organise the implementation of ePhyto in your country? Was a project team or steering group established to guide the project?

Not an official team but several staff in international cooperation (international organization), IT and import policy worked together with service provider who maintains APQa national IT systems. For commercial implementation, Customs was invited to incorporate into the single window system.

If yes, who participated in the team – what agencies and at what level (we do not need to know the specific names of the team members)?

Team leader was a senior researcher level in international cooperation division and other staff are technical level from import, export and IT. But all decision is made by approval of highest level (Commissioner of APQA) of the agency.

How were the key Stakeholders identified?

To make first decision to go for ePhyto, internal relevant staff identified key stakeholders in their areas.

What process did you have for consulting with these key stakeholders?

ePhyto had been introduced in various internal meetings and reports and outside meetings of exporters, brokers, importers, producers and relevant associations. There had been many requests from stakeholders to implement ePhyto but no objection.

Were the stakeholders engaged in the design of the ePhyto service?

Not much because the system is very same for stakeholders.

What process did you undertake to get buy-in from senior management in your NPPO?

From the beginning of ePhyto discussion in IPPC, it was properly reported and APQA hosted global symposia twice. And digitalization of work process is very well supported in Korea in general.

Did you do a Business Process Analysis (BPA) of the existing paper processes before designing and implementing the ePhyto service (including a cost comparison)?

Not thoroughly but we estimated cost and benefit, comparing paper PC such special print paper, delivery of original PC by importers and exporters, storage of PC, scanning of PC to store in the system etc. Especially COVID 19 became big drive to implement ePhyto.

If yes, did you use this to develop the new procedures?

Yes in certain level

Was any other research undertaken?

None

Was there a pilot project? If yes, please describe (e.g. what countries and or products were chosen)?

After successfully finished the IPPC pilot countries, pilot with USA and NZ for one year was conducted to confirm sustainable operation for all products.

How long did it take from the initial discussions on ePhyto in your country to the first exchange of Production ePhytos through the Hub?

Technical exchange through hub was same as IPPC because Korea was one of pilot countries. Implementation in commercial probably use took 2 years more.

Did implementing ePhyto take more or less time than you expected?

It takes more than thought. Technical implementation is just matter of budget in Korea but revision of the law and regulation, discussion with IT team and final decision making took significant time.

What was your biggest challenge to overcome in implementing ePhyto in your country?

Working together in different area in NPPO such as policy making, import, export and IT which makes no owner to drive strongly with responsibility.

STAKEHOLDER ENGAGEMENT, CHANGE MANAGEMENT

Was there resistance from any specific sectors or agencies in establishing the service? If so, how was this handled?

Not much because it was introduced step by step with communication, it does not change current procedure for industries and it has benefits.

Was a specific Change Management programme implemented? If so, please describe.

APQA designates a IT person to monitor ePhyto and a contact person who can answer questions from stakeholders.

What kind of training was provided for users?

For inspectors in regional offices there were on-line training for how to use and a contact technician is designated to answer questions.

For outside stakeholders, there was banner connected to detail guide in the web site.

Do you provide any helpdesk or customer service?

Yes, there is a designated technician to contact which is in the APQA web site and Customs web site.

COMMUNICATIONS

How were the stakeholders kept informed about the ePhyto implementation progress?

ePhyto was continuously introduced in various stakeholder meeting for years. The commercial implementation was press released. APQS web site has a banner on ePhyto implementation.

How did you promote ePhyto to the business community, other stakeholders?

The implementation press release was cited in various newspapers and other press more than 30 cases and it was shared with relevant associations.

Other relevant meetings such as exporter meetings, embassy meetings, training for brokers etc. included ePhyto.

MONITORING AND EVALUATION

How did you monitor and evaluate progress in implementing ePhyto and in achieving the project objectives? What Key Performance Indicators (KPIs) did you use?

There were comprehensive reports upon each mile stones such as joining IPPC pilot countries, ePhyto symposiums, initiation of pilot with USA and NZ and initiation of commercialization with analysis of current situation and results, problems and future plan tec.

Since commercialization APQA will make monthly reports on ePhyto use.

KPIs: numbers of ePhyto for import and export, number of paper PC along with ePhyto, errors in exchange, request from trading partners to use ePhyto etc.

BENEFITS OBTAINED

What are	the main	benefits	generated	bv the	introdu	ction of	ePhyto?
			8				

- (1) For your NPPO
- save time, budget and labor; no need to scan the paper PC to save time, labor and space, save special paper for PC, participate national digitalization policy, participate national Carbonneutral policy, prevent fraudulent PC etc.
- (2) For Companies
- save time, money and labor to travel to NPPO for submission of original PC, PC submission is secured (COVID-19 situation, easy to correct PC, prevent problem with loss of PC
- (3) Others?
- N/A

What p	problems	did it	solve?
--------	----------	--------	--------

Not clear yet because commercialization was started recently.

Is it possible to put a dollar value on the benefits achieved?

Not yet.

COSTS AND SUSTAINABILITY

How much did it cost to establish ePhyto in your country? National system was already set and additional cost to adjust the system to ePhyto hub exchange was not huge What were the main costs areas? Adjust the national system to ePhyto hub exchange, monitor and adjust trial exchange with certain countries to confirm stable exchange (service providers) What are the ongoing operational costs (annual)? It seems small amount of money is needed to confirm and adjust small problems with new countries who has national system. APQA hopes exchange ePhyto with GeN countries does not cost budget. Approx. 35,000\$ is budgeted to maintain ePhyto system in genenral. Do you charge for issuing a Phytosanitary Certificate? If yes, what is the charge per certificate? No. Are there any additional user fees for ePhyto? No. If yes, Do the revenues generated cover operational costs? N/A Are the revenues (if any) reinvested in the facility? No How will the facility/service be sustained over the coming years? With national budget for operation and maintenance of IT system **FUNDING SOURCE(S)**

How was the implementation of ePhyto funded?
Annual allocation of organizational budget from operation and maintenance of IT system
Did you receive Donor Support? If so, please describe.
No

CAPACITY BUILDING AND TECHNICAL ASSISTANCE

Describe any capacity building or technical assistance you received, including the source:

(1) to conceptualise and design your country's approach to ePhyto

N/A (The IT team and service provider work for technical arrangement)

(2) to actually implement ePhyto

N/A (The IT team and service provider work for technical arrangement)

LEGISLATION CHANGES REQUIRED

Were any specific legislation changes necessary?

Yes, Plant Protection Act was revised and relevant regulation for import and export were revised to include ePhyto.

If so, what was the process and how long did this take?

Act went through congress approval and regulations went through ministerial approval. For Act it took 1.5 years, for regulation it took 6 months approximately.

How is the privacy of information protected?

Basic privacy protection in included in all legislations and industries can take a look only own information with a specific PC numbers.

TECHNOLOGY

What were the additional hardware or software or Internet facilities required to introduce ePhyto in your NPPO?

A new server was established between the global hub and the national system.

SUCCESS FACTORS AND LESSONS LEARNED

What are the main lessons learned from implementing this service?

Adjust technical IT system to ePhyto was relatively easy. However, practical exchange in commercial base takes longer and complicate.

What were the crucial success factors?

Take chance of COVID-19 and national policy of digitalization and carbon-neutrality policy.

What were the greatest obstacles?

Communication between different divisions.

What are the biggest obstacles to further development of the Facility/service?

Not much

Are you or other colleagues available to be resources to other countries implementing ePhyto?

Yes in some areas.

CONTACT DETAILS FOR FURTHER INFORMATION

Contact details	koyim@korea.kr