



International Plant
Protection Convention



Australian Government
Department of Agriculture

Ministry for Primary Industries
Manatū Ahu Matua



Pacific
Community
Communauté
du Pacifique

PACIFIC PLANT PROTECTION ORGANISATION REGIONAL ePHYTO WORKSHOP



**29-30 AUGUST, 2019
NOVOTEL HOTEL, NADI, FIJI**

KEY SPEAKERS:

1. **Mr. Craig Fedchok**, International Plant Protection Convention(IPPC) Representative.
2. **Mr. Peter Neimanis**, Chairman of the ePhyto Steering Group.
3. **Mr. Venkat Venkateswaran**, United Nations International Computing Centre (UNICC)
4. **Mr.Christian Dellis**, United States Department of Agriculture (USDA)
5. **Mr.Shane Sela**, World Bank Group.

SUMMARY

The Pacific Plant Protection Organisation (PPPO) held its first ever Regional Workshop on electronic phytosanitary certification on the 29-30 August, 2019 in Nadi, Fiji. The workshop which was co-funded by Australia's Department of Foreign Affairs and Trade (DFAT) and New Zealand's Ministry of Foreign Affairs and Trade (MFAT) was attended by the Heads of the National Plant Protection Organisation (NPPO), representatives of 18 member countries, other international organisations and relevant stakeholders.

The workshop was opened by the International Plant Protection Convention-Commission of Phytosanitary Measure (IPPC-CPM) Bureau member of the South West Pacific-Dr. Stephen Butcher who shared the optimism of the PPPO in this exciting new avenue of electronically exchanging phytosanitary certificates. Dr. Butcher stated that this is a great opportunity for the Pacific, to be part of the launching into this new ePhyto platform when considering the economic benefit it will bring to the individual countries and the region as a whole. It was encouraging that two countries from the region- Samoa and Fiji- are part of the pilot and early adopter countries respectively.

The Project Update was discussed by IPPC Representative Mr. Craig Fedchok who briefly described the outline of the ePhyto project and how it started and the progress it has made till to date. Mr Peter Neimanis who is the Chairperson of the IPPC ePhyto Steering Group further described the project, its components, its benefits and the future work that is still to be done. There were other presentations made on the different components of the system and its mechanisms. Each participant was expected to understand that they would return to their respective countries as advocates and champions of the ePhyto project and to gather support nationally for its adoption. The workshop discussions also raised the broader trade facilitation context that ePhyto can be viewed within across the region.

This is the first PPPO meeting where the World Bank was represented and was able to make a linkage between the ePhyto Solution and the World Trade Organisation (WTO)/Trade Facilitation Agreement (TFA). While the World Bank does not actually provide funding, it is able to seek funding from regular donors to deliver Sanitary and Phytosanitary Measures (SPS) projects under inter-agencies approach.

The PPPO made the following significant decisions and some recommendations by the end of the workshops that highlights the commitment by the PPPO towards the ePhyto platform:

- i. The PPPO endorsed the ePhyto Solution and countries have agreed to adopt it.
- ii. The Heads of the NPPO have been nominated to form the ePhyto Working Group that would oversee the administration, development and adoption of ePhyto in the region
- iii. A Regional Project Manager is to be appointed and to be housed under the PPPO Secretariat that would oversee the technical component of ePhyto Solution in the region.
- iv. The PPPO made a commitment to revive the engagement with the Regional Trade Facilitation Program and use it as a regional platform to facilitate safe trade of plant and plant products.
- v. The Phytosanitary Capacity Evaluation (PCE) is to be updated so that a current regional evaluation is available.

Finally, the workshop ended with a reconfirmation of the PACER PLUS involvement in the region and how projects under the SPS space such as ePhyto could benefit from this engagement.

RECOMMENDATIONS

- i) Where feasible, as a means of linking the physical consignment with the ePhyto bar codes/QR codes on the consignment must match the bar codes/QR codes on the ePhyto. The officer can scan the bar code to confirm authenticity of the certificate and the consignment presented.
- ii) It was recommended that a Regional Project Manager is to be appointed and to be housed under the PPPO Secretariat. The appointee will move around the NPPOs collaborating with the national managers and to also ensure that the national legislation is in place to support implementation. To ensure proper running of the system, it was recommended that monitoring of the ePhyto system to be done twice a year.
- iii) A technical assistance team under the Regional Project Manager is to be available to assist member countries with implementation of the system and on any other issues.
- iv) It was recommended that a dedicated person in each member country be trained to be responsible for the system in each country and to become the national manager.
- v) Training of NPPOs and Stakeholders on ePhyto and GeNS is needed on a national and regional level. Training module is to be custom fit for small island countries. Important stakeholders such as Exporters, Importers, Customs, Clearing agents and NPPOs have been identified to be part of training and awareness programs.
- vi) Trade Facilitation Agreement (TFA) Program: There was a recommendation to have regional platform for the implementation of Trade Facilitation Agreement (TFA) program. Technical Assistance from World Bank would bring stakeholders together and provides the opportunity for collaboration and to coordinate the outputs between trade facilitation and ePhyto.
- vii) Trade Facilitation Agreement (TFA) Workshop: This is seen as a very important training and it is recommended that this workshop be held sooner both on a regional and national level. More so because of the close working environment between Biosecurity/ Quarantine with Customs and other border agencies.
- viii) Guidelines: It was recommended that there should be some standardization in terms of guidelines to be followed by PPPO members for those countries who want to adopt ePhyto.
- ix) French territories recommended of having ePhyto available in the French language.

- x) The region issues more non-commercial consignment certificates than the commercial consignment certificates hence the recommendation for more information and inclusion of non-commercial consignments on ePhyto.
- xi) The Secretariat is to work with the individual countries to update the PCE and to have this as an updated regional evaluation.
- xii) Secretariat is to assist countries in writing Letters of Interest to be delivered to DFAT, the World Bank and the IPPC Secretariat within 2 weeks from the date of the workshop.
- xiii) The Secretariat, with the support of the countries, is to lift trade facilitation to the regional level and to seek the revival of the Regional Trade Facilitation Program so that the ePhyto Solution can be coordinated together with single window initiatives through the regional level and also the revival of National Trade Facilitation Committees (NTFC).
- xiv) All the Heads of the NPPOs have been nominated to form the PPPO ePhyto Working Group and to drive the work of ePhyto in the region.
- xv) The PPPO also considered the potential for a second regional ePhyto workshop, alongside the 2020 IPPC regional workshop to maintain the progress from the success of the first workshop.

Table of Contents:

Opening Remarks- Mr Nacanieli Waqa, Deputy Chairman, PPPO.	7
Host Country Remarks-Fiji – Mr. Surend Pratap, Acting CEO Biosecurity Authority of Fiji.	7
Keynote Remarks-Mr. Peter Neimanis, Chairman of the ePhyto Steering Group	7
Opening Address- Dr. Stephen Butcher, IPPC-CPM Bureau member of the SWP-	7
Intended Outcomes from the Workshop- Mr Peter Neimanis	8
Session 1: Project Updates	8
1.1 Update 1 : Mr. Craig Fedchock, IPPC Representative.	8
1.2 Update 2 : Mr. Peter Neimanis, Chairperson, ePhyto Steering Group.	9
1.3 Talanoa Sessions: 1	12
Session 2 : Country Update	14
14.1 World Bank: Mr.Shane Sela.	14
14.2 Australia	15
14.3 New Zealand:	15
14.4 Samoa	16
14.5 Fiji	16
Session 2 : Discussions	16
Session 3 : Hub Demonstration- Mr.Christian Dellis, USDA.	17
Presentation of Hub: functionalities, workflow and operating mechanism	17
Session 4: GeNS Demonstration-Mr.Venkat Venkateswaran, UNICC.	18
Presentation of GeNS: functionalities, workflow and operating mechanism	18
Session 3 and Session 4 : Discussions	21
Session 5: Presentation of GeNs survey results in the Pacific.	22
22.1 Capacity Development:	22
22.2 GeNS implementation in the Pacific.	23
23.3. Challenges	24
24.4. Opportunities	24
Session 7- Strategic Work Plan	25
List of Appendices.....	i

Opening Remarks- Mr Nacanieli Waqa, Deputy Chairman, PPPO.

The PPPO Deputy Chairperson on behalf of the PPPO Chairperson acknowledged the presence of technical experts, special guests and participants to the first ever ePhyto workshop in the region. The deputy chairperson also acknowledge the contribution of the DFAT and MFAT in enabling this workshop to take place.

Full text of speech in Appendix: 1.

Host Country Remarks-Fiji – Mr. Surend Pratap, Acting CEO Biosecurity Authority of Fiji.

Acting CEO Biosecurity Authority of Fiji welcomed all participants and technical experts present in the workshop stating that the workshop is an excellent opportunity to increase awareness of the ePhyto among officials of the PPPO members and industry. Under WTO trade facilitation agreement, Fiji Biosecurity work closely with other entities such as Fiji Revenue & Customs Service to achieve Single Window. Fiji have started piloting ASYCUDA World system where the consignment are flagged and cleared on line in the attempt to move in to ePhyto.

Full text of speech in Appendix: 2.

Keynote Remarks-Mr. Peter Neimanis, Chairman of the ePhyto Steering Group

The Chairperson of the ePhyto Steering Group acknowledged the effort put in by PPPO through the Secretariat to have this workshop for the first time in the Pacific declaring that it is encouraging to see the support of the PPPO members. The workshop happened at a good time particularly when there is a lot of work that has already done by IPPC through the United Nations International Computing Centre (UNICC) resulting in the solution that is available now for the countries to use.

It is noted that all the countries will go through the same issues such as Governments and stakeholders however there is strength in the Pacific because of the good sense of community.

The focus of the project should be on the benefit that this project will contribute to the countries. The system ensures that there is information available to everyone and that ePhyto is there for trade facilitation.

Full text of speech in Appendix: 3.

Opening Address- Dr. Stephen Butcher, IPPC-CPM Bureau member for the SWP.

The IPPC-CPM Bureau member acknowledged the presence of the steering committee, donors, technical expertise, international guests and member countries and also acknowledged the development of the Hub and GeNS by UNICC. The development of the ePhyto system has been enabled because of the work that has been done throughout the years particularly with ISPM 12.

The phytosanitary system being demonstrated in this meeting is a culmination of inputs through CPM and to the international standards over the many years. The

workshop is critical for the Pacific context especially when the economic benefit of the using ePhyto is through exports and food security and survival from imports.

It is encouraging to know that Samoa and Fiji are two of the countries involve in the testing. More so that these two countries will be sharing lesson learnt to the rest of the PPPO countries. This is a great opportunity for the Pacific being launched into the ePhyto platform especially when the benefits of the system includes safe trade of plants and plant products, reduced fraud, improvements in compliance, increase efficiency and timely communication between NPPOs, harmonization, links with other system.

Full text of speech in Appendix: 4.

Intended Outcomes from the Workshop- Mr. Peter Neimanis

Main Outcome of ePhyto Project

To have a commitment that each participants is to become an advocate or champions of ePhyto upon returning to their respective NPPO.

Outcomes of the Workshop

- a) to have a stronger understanding of the system.
- b) to consider the benefits of the system. This is different between industry and the government.
- c) Start to have plans for implementation at your own country.

Session 1: Project Updates

1.1 Update 1 : Mr. Craig Fedchock, IPPC Representative.

a) Background

The International Plant Protection Convention (IPPC) has built the ePhyto Solution as an innovative approach to providing countries with the opportunity to exchange phytosanitary certificate data electronically. The ePhyto Solution aims to modernize and improve the phytosanitary certification process and holds tremendous potential for trade facilitation.

The United Nations International Computing Centre (UNICC) developed specifications for implementing the Hub and GeNS for the IPPC with funding provided by the Standards & Trade Development Facility (STDF). The UNICC updates the hub and the GeNS at the same time so there will always be an updated version at all times.

b) ePhyto and ePhyto system

The term ePhyto is short for “electronic phytosanitary certificate” which is the electronic version of the information contained in a phytosanitary certificate and the ePhyto system is the IT system by which countries’ phytosanitary certificates are produced and exchanged electronically between NPPOs and it consists of two main elements, i.e. production/receipt of ePhytos and a mechanism for exchange. This system enables countries to produce, send and receive phytosanitary certificates according to Appendix 1 of ISPM 12.

c) **IPPC ePhyto and WTO/Trade Facilitation Agreement (TFA)**

The objectives of the WTO TFA include:

- Expedite movement, release & clearance of goods.
- Improve cooperation between customs/other authorities.
- Enhance technical assistance and capacity building.

Although paperless certification is not a specific component of the (TFA), its implementation achieves some of the objectives. Similarly, ePhyto address quarantine concerns with trade facilitation in the areas of better identification of risk, targeting in advance of arrival of consignment and better use of resources based upon risk.

d) **Benefits**

The use of ePhyto increases the national efficiencies with compliance to documentation, improved the security of the documentation transfer, allows for information to be shared between traders and government and provides that option for data transfer and sharing with multiple governments using one system. It also expedites the clearance of good and reduces documentary time. It allows for the NPPO to address certification problems, analyses risk and identify resource requirement before the consignment arrives.

It also reduces the high costs of facilitating trade gained through

- Inefficient processes in place - labor intensive and highly manual with physical paperwork being couriered around and often re-entered
- Any re-issuing of paper phytosanitary certificates has a tremendous cost for business.
- Deterioration of commodities waiting for clearance
- Customer claims for late deliveries or bad quality.
- Mountains of paper, a lot of it expensive paper, are produced, printed and stored or destroyed on an annual basis.

Full ppt. in Appendix: 5.

1.2 **Update 2 : Mr. Peter Neimanis, Chairperson, ePhyto Steering Group.**

1.2.1 **ePhyto Development**

The IPPC ePhyto Solutions has three main parts:

a) **Harmonisation**

The National Plant Protection Organizations (NPPO) use harmonised terms and codes for the contents of the certificate when exchanging ePhytos. Appendix 1 to ISPM 12 is critical to global harmonization as it describes the format and the contents of ePhytos and their exchange.

b) **Hub**

It is a single point multilateral exchange mechanism for transfer of certificates from the NPPO of the exporting country to the NPPO of the importing country using a harmonised protocol.

Business Rules and Operation:

The use of the hub is voluntary and cannot be mandated by the IPPC. It is a single system that everyone can connect to and it's available on a twenty four hours (24hrs) basis. The information is sent to a secure folder and it cannot be lost at any point. The messages are only kept in the hub until delivery when the importing country receives it.

The Hub facilitates encrypted transfer of ePhyto data between countries and will authenticate the identity of both sending and receiving NPPOs.

c) Generic Electronic Solution (GeNS)

GeNS is a basic, secure web based system that allows NPPOs that do not have a National System to produce, send and retrieve ePhytos via the Hub.

It enables:

- Importing NPPO to obtain/view reports, certificates, etc.
- Exporting NPPO to prepare, edit, amend and make replacement certificates for the importing NPPO.

i) Overview

It is a multi-tenanted web based system, centralized to facilitate the creation of ePhytos and developed for countries without their own national systems. It is integrated with the hub to receive and send ePhytos.

NPPOs and clients (Exporters) can interact through the system where clients can request for certificate, submit necessary information with regards to the consignment, submit request for change. However clients can only view their company information send to the NPPO and NPPOs can only view their information send to the hub via the GeNS.

ii) Main Features

The GeNS facilitate data entry through the use standardized codes and drop down lists. It produces ePhyto that is compliant to the ISPM12 Appendix 1 format structure, codes and lists.

The GeNS is also designed to be used in low-bandwidth environment and work with most of the desktop/device & browser. Testing has also proved that this feature is possible.

iii) Functionality

The system is capable of receiving data to produce electronic export certificate according to UN/CEFACT format and in compliance with ISPM 12, Appendix 1. It also has the ability to cancel the certificates if there is a need to or issue a replacement phyto.

iv) Roles

- **GeNS Administrator**- this position is based at the IPPC and its role is to setup new countries who want to have access to the system after receiving requests through the IPPC and UNICC. The GeNS administrator will then set up a version that is specific for that NPPO. This position has a read only access which enables the position to only set up a new country but cannot have access within the country. The position can update technical information and manage tables and hookup lists.
- **NPPO Administrator**: the role of this position is to set up users includes the NPPO Officer, NPPO Inspector and the NPPO Assistant. The roles have slightly different functions and level in the system. These positions can also be customised to suit the NPPO structure where one person can have multiple roles.
- **NPPO Assistant**: this role is responsible for receiving all the export information from clients and can enter this information on the system. Once the certification process moves to next level, the NPPO Assistant do not have any other access to the certification process.
- **NPPO Inspector**: these are field inspectors and the role of this position is that it is able to update the certificate requests and initiate other workflows, submit request for issuance of phytos and is able to view all the phytos under his/her NPPO.
- **NPPO Officer**: this is the only role that is authorised to issue, withdraw or replace phytos. The role is able to issue and cancel an ePhyto, approve or reject an application for an ePhyto and to create or delete an application for ePhyto.
- **Company Administrator**: This role is able to set up company users that can represent the client.
- **Company User**: this position is set up by the Company Administrator and there could be more than one company users. This role is set up to represent the client. This person can request the certificate and initiate that process. This position can view the history of their company's interaction with the NPPO but cannot view other company's information.

1.2.2 Options for Future Modules

As more countries are getting involved in ePhyto, feedback is coming through from pilot countries on areas that may need to be improved such as:

- Determination of export commodity records- inspection records to analyse performance of each export commodities. Inspection times to enable better resource management and useful for trace back issues.
- International cost recovery (charging) function- the ability to raise fees component of the inspections and invoices in the system.

- Compilation of historical volume and data associated with ePhyto for statistical assessments. Once more data goes through the GeNS, this component can be improved.
- Training modules-the UNICC is currently developing online learning tools that the countries can use for internal training.
 - Mobile App: this is aimed at the inspectors who are out in the field and can access the app version of the GeNS while conducting inspection. This may not be the full GeNS but an inspector's version that can be used in the field.
 - Message Back Function: this is to enable importing countries to send information back to the exporting country to update on the status of the ePhyto that is whether it has been approved, a replacement is needed or the certificate has been rejected or any non-compliances.

e) Future for the IPPC ePhyto Steering Group

- Continue working on greater harmonization of ePhyto elements such as translations for export certification to other languages, continue to work on improving low bandwidth reception and potential offline functions and make the ePhyto system appeal to countries.
- Conduct regional workshops for Africa and the Near East.
- Establish a benefits framework for cost/benefits analysis.
- Review industry evaluation of impacts during pilot and consider integration opportunities with block chain technologies.
- Include outcomes from the pilot to the ePhyto Business model.
- Seek ways to have animal and food safety certification integrated as a cost savings effort for SPS agencies.
- Explore ways to work with Customs Single Windows systems.

Full ppt. in Appendix: 6.

1.3 Talanoa Sessions: 1

The following issues were raised during this session.

a) Non-Commercial ePhyto (Personal)

The ePhyto system can also accommodate personal phyto. There are options available on the GeNS such as the availability of templates that can help NPPOs create personal ePhyto. The only distinguished difference is that non-commercial ePhyto is done in the office of the NPPO and the start process is different.

b) Linking ePhyto to Physical Consignment

This has to come with how the single window is designed and how the Quarantine/Biosecurity and Customs interacts. The example given for Australia is that, either Customs Brokers lodges their consignment based on the profiles or the eCert

comes straight to the system. Someone would need to do the matching and it's generally the broker who connects the certificate to the physical consignment.

The certificates have QR codes that are part of the authenticating process however the system still has to work on that. It was suggested that consignment must have bar code/QR code that matches with the barcode/QR code on the ePhyto. The inspector can scan the bar code to confirm authenticity of the consignment and the certificate.

c) Starting up Requirement

Although the starting up would be different for all countries, the NPPO must first ensure that the government grants the political support for the new system. The NPPO is to verify that its Legislation allows the transfer of Phytosanitary Certificates in any form or manner. If this is not the case then the NPPO is to work on getting this legislation amended. The NPPO could also start stakeholder engagement to create awareness and advocate on the benefit of the system. It could take stock of the available resources and infrastructure and make decisions on resources requirement.

An onboarding document will be sent to any NPPO who is interested in the GeNS so that its profile on the GeNS can be created. The onboarding documents will inform UNICC on all the specifics that will be added on the profile including customised and technical information.

A checklist will also assist the NPPO in its preparedness to state what is available in the country such as number of staff, ports of entry and internet service.

d) Set Up Costs

Each country will have different starting up requirements and costs. This would depend on comparing current infrastructure available against areas that needs to be improved and current resources available against resources that need upgrading. For example, in the case of Fiji, approximately \$80,000 was required to set up the system however most of this funding was required to upgrade internet connections in remote offices.

Countries could also change operating systems and to adapt to existing infrastructure. For example, remote offices could call head office with the details and have the phyto sent from an office where internet is available. The GeNs however is free once a country is connected.

e) Connection to the Hub

Any country that does not have a national system and adopts the GeNS is automatically connected to the hub. Countries that have a national system will need to connect straight to the hub through each national system. For GeNS countries, there will be no need to change anything in order to connect to the hub as the GeNS is always connected to the Hub.

f) Low Bandwidth and ePhyto

The system is designed that users save regularly and not designed to be sending documents continuously. The system has the capability to produce certificate offline so users can load it and then send the certificates when internet is available. The system is actually transferring a compressed data which is very small therefore if the transfer is interrupted, the transfer will pause.

The Steering Group is also looking into this area for further improvement.

g) Single Window and ePhyto

Aside from the NPPO, work has started to determine how the exporters may choose any other stakeholders that would need to be receiving the ePhyto. Work is still underway for the ability of the system to send ePhyto to national single window system. The GeNS was designed to transfer ePhytos between government to government while the Single Window system was designed as a single point of entry and point of exit into and from a country. Based on previous discussions, the single window system has not been able to send message to other single window system.

More work needs to be done to ensure that the two concept aligns too and that the Single Window can be connected to the hub so that anyone wanting to send to the Single Window can also send to the NPPOs.

h) Multiple commodities consignment

The ePhyto system, including GeNS, allows the NPPO to add multiple lines on the certificate for each commodity and additional declarations required.

j) Communicating Non-Compliance

Any non-compliance needs to be reported back to the NPPO of the exporting country. Currently these non-compliances are not reported back and it could have an effect on trade. The ePhyto system cannot address at the moment however, this is one of the options for future modules that UNICC and the Steering Group is constructing.

k) Other Certificates

The Hub does allow for changes so that other certificates such as the Sanitary Certificates can be transferred through the system. This will soon be tested by Australia and New Zealand.

Session 2 : Country Update

2.1 World Bank Group: Mr.Shane Sela

The World Bank is a major provider of trade related assistance and with a focus on analysis, diagnostic and advisory services. It has run 120 programs for the last 20 years around banking and trade, mostly on Customs but recently has included the SPS environment. The Trade Facilitation Support Program contribution to areas of work with the SPS agencies through:

- Publication and Availability of Information
- Risk Management
- Border Cooperation
- Single Window implementation
- Institutional Arrangements

Trade facilitation could be defined from the perspectives of both the government and industry or traders. The ePhyto system provides an important contribution to trade facilitation through the tremendous reduction paper documents and the time associated with processing those documents. This can really enhance trade and make a huge difference to the efficiency and effectiveness of both traders and governments.

Trade Facilitation Agreement (TFA) was introduced in 2013 but is coming into practical implementation now. Unlike other WTO agreements, this agreement allows

country to change their systems in their own time given that countries are different and that it takes different timeline to make changes.

Full ppt. in Appendix : 7.

2.2 Australia

Australia has been exchanging electronic certificates with a few of their bilateral partners for over 10 years now. However there have always been differences in the versions used, different mapping and coding and there was no standard Web Services Description Language (WSDLs). Currently there are two national systems in Australia- eCert for Imports and eCert for Exports. Since Australia has been connected to the Hub in User Acceptance Test(UAT), upgrades are required to existing imports and exports eCert systems before commencing production exchange. These two national systems are expected to be rolled out within 2020.

Australia supports the ePhyto program and have contributed AUD\$575,000 in support to the IPPC. The Australian legislation allows for the issuance of phytosanitary certificate in any form but some of the countries do not have allowance like such in their legislation.

Australia has a National Single Window (NSW) which is currently being reviewed for future needs such as inclusion of industry systems and discussion is being initiated on how this could work with the ePhyto system.

The country continues to work with Samoa to finalise ePhyto planning, help with country report, conducted industry sessions, finalise country infra-structure, work plan. Australia was also able to secure funding through DFAT for capacity development such as in-house training and identifying a project manager. Finally, Australia would like to work with the PPPO and SW Pacific countries to get the entire region using ePhyto.

Full ppt. in Appendix : 8.

2.3 New Zealand

Cost recovery processes by New Zealand enables the industry to pay for the maintenance of the nation system for electronic certification. The total national set up cost was NZ\$1m and \$150,000 to maintain annually. The system has been in place since 2006 and updated in 2015. The MPI enables accurate export assurances, it sets standards, gives authorization for Independent Verification agencies and MPI Approved Organisation (MAO).It also maintains oversight and consultation responsibilities.

The ePhyto system is used for providing government to government (official) assurances about the compliance of New Zealand's plants and plant products with importing country regulatory requirements. ePhyto users must register with MPI and have a RealMe govt login with the Department of Internal Affairs (DIA).Australia is the only country that receive official ePhyto however New Zealand conducted trial with USA and Argentina via ePhyto hub an trialing with Samoa and Fiji via GeNS.

New Zealand looks forward to participating on IPPC ePhyto Working Group(s), assist the IPPC Steering Committee & Working Group(s) identify and confirm the operational business rules & technical detail for ePhyto. Explore, with aim of operating, ePhyto pilot between interested NPPOs, share experiences with the IPPC ePhyto Steering Committee, continue to offer assistance to Fiji, Samoa and other PPPO members countries.

Full ppt. in Appendix : 9.

2.4 Samoa

Currently Samoa uses a stand-alone system known as SQID. Certificates are printed, endorsed and given to clients. If clients are overseas, certificate are scanned and emailed to them. There is no online payment facility that is directly linked to the service but payments of service are remitted through the Ministry of Finance.

Samoa is committed to take part in the piloting of the ePhyto system. Some of the challenges faced includes lack of formal policies and procedures, limited understanding of the industry and lack of access at work stations.

Some expectation of the GeNS includes more accurate reports generated for certs issued and received, improvement in clearance and industry to have direct access to the GeNS.

Full ppt. in Appendix : 10.

2.5 Fiji

Fiji started experimenting with electronic certificates in 2010 and began printing electronic generated certificates. Personal certificate are still being hand written. It became the second country in the region to go into piloting of the ePhyto via GeNS and draft copies with dummy data were exchanged with Samoa and New Zealand.

Fiji plans to conduct more GeNS training with staff and the industry on the process and most importantly the benefits.

Full ppt. in Appendix : 11.

Session 2 : Discussions

The following issues were discussed during this session:

a) World Bank and ePhyto.

While the IPPC created, maintain and expand the capability of the ePhyto system, World Bank's assistance to the countries on ePhyto is offered in such a way that it complements the work already done by IPPC and is implemented in a way that improves the country. The program focuses more on implementing ePhyto in a way that compliments efforts on the development of single window, use of risk management by borders services and the cooperation between border agencies including Customs and is currently working with Samoa on the implementation of ePhyto in this way.

b) Funding For Projects

Core partners of the World Bank identified that ePhyto is a fundamental piece to the advancement of trade facilitation and a key piece in improving trade flow.

c) Engagement At National Levels

When it comes to trade facilitation projects, the objective of the World Bank is to have a whole of government approach and this is normally achieved through a focus on the work of the National Trade Facilitation Committee (NTFC). This would lead to

dialogues and assurances of commitment by the country that would enable the World Bank to identify potential areas for assistance. The World Bank provides technical assistance that enable countries to implement ePhyto.

d) Capacity Development

One of the two overall components of the World Bank is the facilitation of knowledge sharing, peer-to-peer learning, and the measurement of progress and results. A workshop is being planned for the region tentatively towards the end of the year to look at border collaboration, risk management, risk-based inspection and how these programs can be incorporated into automated systems.

e) Monitoring and Evaluation

Monitoring and evaluation is a critical part of the Banks work. The World Bank uses time-release studies to benchmark and measure the benefits and impacts on trade.

Session 3 : Hub Demonstration- Mr.Christian Dellis, USDA.

Presentation of Hub: functionalities, workflow and operating mechanism

3.1 Hub

- Centralized system to facilitate exchange of ePhytos between NPPOs
- Single message format
- Standardized
- It has a test environment. An NPPO is given access to both the test and the live production environments.

National System (USA)

- Mapping document took 10 years to develop
- US Schema (National System) and ISPM 12- do not coordinate, ISPM 12 have 4 types of additional declaration.
- Some schema components have to be present in order to pass ePhyto validation even though it is not useful when printing the phyto. This is not required for GeNS as GeNS is built against the harmonised mapping schema.

3.2 Validation Hub vs GeNS

- One advantage of the GeNS is that it has inbuilt harmonization or validation tools. Once a phyto is sent, the system can validate it automatically.
- The GeNS is a totally new system where new ideas were used in its construction such as an automatic validation tool.
- Validation on the Hub is done by the computer where it authorizes and verifies the fields.
- With the Hub, the national system is already running and it takes time to modify.

3.3 Benefit of electronic certification:

i) Electronic certificate protects legitimate trade. In the example given, the US sent 9 shipments to a trading partner where insect pests were intercepted on 8 of

the shipments. The importing country had intended to stop the market which could result in a loss of a billion dollars in revenue for the US. When the phytosanitary certificates were returned, it was found that 8 of those phytosanitary certificates were counterfeit.

ii) Electronic certificates saves the cost of documentation: Another benefit of the electronic system is that it saves the cost of documentation especially security paper that is normally used for printing phytosanitary certificate. In the USA, it costs \$180,000 to buy, transport and keep security paper for phytos. With ePhyto, the USA is saving this money and uses \$100,00 to keep the ePhyto running while receiving a saving of \$80,000.

3.4 Validation Tools

Validation is done by the validation tool that is available the hub. It automatically verifies all the fields and any other information in that field that it follows the prescribed format.

Currently the validation is only verifying against the field but it cannot pick up mistakes in data or irregularity in exports. This is one area that the system will try and address in the future. In the example given, the US faces the challenge with European exports because it has to comply with a lot of European legislations. Currently it is difficult to harmonise additional declaration because it corresponds to EU directives that matches with numerals unlike the US where the additional declaration is stated in words such as, "no Khapra Beetle". Europe is adopting language now so this will make it easier to put codes on the additional declarations.

Full ppt. in Appendix: 11.

Session 4: GeNS Demonstration- Mr.Venkat Venkateswaran, UNICC.

Presentation of GeNS: functionalities, workflow and operating mechanism

4.1 Business Rules

The intention of the system is to make it simple, adaptable and flexible to be adopted by different countries and different commodities. The GeNS allow to enter data, store, issue and send ePhyto to another country. It can print certificate on paper and receive ePhyto from another country.

It has the ability to check the authenticity of an ePhyto after receipt from the exporting verifying the format of the certificate. If the incoming certificate is not in the format stated in ISPM 12 Appendix 1, then the system will reject it.

The GeNS can extract data from an ePhyto and there is an option where the data can be downloaded in a special file and can print the received certificate data on paper. It also has the ability to store ePhytos for later reference by storing the data on the system

It is automatically connected to the hub to facilitate certificate transfer and there is an automatic standardization of the data and certificate.

4.2 Security of the GeNS

The UNICC is a UN Agency where security is very strict. Certain actions are taken to prevent hacking and limited people have access to data circuit. There are different roles and clear demarcation of responsibilities. System access is logged and service is monitored 24 hours a day basis. Data is transferred through secure and trusted channel and there is a monthly security and vulnerability scan on the system.

4.3 System Functions

The GeNS does export certificates, import certificates, reference data management, manages users, exporters and consignee which is also localize to a particular country. It can manage global information and the kind of roles and workflows that have been implemented by the system.

4.4 GeNS- User Role: different roles and level of authority for each user.

a) Roles

- GeNS Admin- this position is regarded as the super user and is being held by the IPPC and UNICC is the technical advisor for the position. The GeNS Admin will help countries in case there are access issues as this position have access to the GeNS.
- NPPO Admin: this role is nominated by the NPPO as the technical focal point who will help set up the system locally. The role of this position is also to set up users including the NPPO Officer, NPPO Inspector, NPPO Assistant and Company Admin. The NPPO Admin is not a one user but a group of users so that in case one is not available, another one can perform the task. In the event that the industry tries to access the system, the NPPO Admin will receive an email and will have to give approval
- NPPO Assistant: this role initiates the workflow for the client requesting a certificate. If someone within the NPPO requests a search, this position can list and search for the certificate and other requests. The position can also print paper certificate, prints paper versions of ePhytos issued, runs reports on certificates issued and received.
- NPPO Inspectors: this position is In-field inspectors who can update certificate requests and confirm the consignment cleared the export inspection.
- NPPO Officer: The only role that is authorized to issue, withdraw or replace phytos. Issue (transmit the certificate to the hub) & cancel an ePhyto, Approve/Reject an application for an ePhyto, Create/Delete an application
- Company Admin: This role is able to set up company users that can act on behalf of the exporter/client.
- Company User: this position is set up by the Company Administrator and there could be more than one company users. It can request the certificate and initiate that

process. Similarly, the position can view the history of their company's interaction with the NPPO but cannot view other company's information.

b) Basic Workflow

Company User or NPPO Assistant can create a certificate request (CR) and each new CR has to be 'addressed' to a particular office of the NPPO. Any Inspectors of a NPPO can view/edit all CRs for their NPPO irrespective of their location but ability to limit CR to specific locations is part of the GeNS enhancement roadmap.

NPPO can attach same number of documents per certificate.

The attachments will be deleted from the system after 6 months. NPPO may keep local copies if they need it for Record keeping (for example on local file-servers).

c) System Status

Certificate request go through the following statuses:

Draft, Deleted, Pending Review, Under Review, Ready for Issuance, Change Request, Issued, Under Replacement, Pending Issuance and Withdraw request.

The certificate is sent to the destination country as soon as it is issued.

d) Login-GeNS

Only authorized users from the NPPOs are able to access the GeNS according to its role through login email and login password. Each production domain/url will be customised for that particular country and a two letter country code will identify the countries. For example, Fiji will be <https://fj.ephytoexchange.org/>.

The User Acceptance Testing (UAT) allows users to test the system and get used to the system by creating dummy certificates. Whenever there are new releases of GeNS due to new functionality or any update, NPPOs are required to use the UAT and get the sign off before going into production. Countries that want to test the system can be given a user id to go on the UAT.

Test certificates are the same as full version but do not have the connection to live environment. This can be used for training or to get familiarize with the system. Once on the live production, certificates are linked to the export consignment.

e) Managing my Information

Once the NPPO Admin create and approves a user, an email will be sent to the user giving permission now to use the system. Users are then required to update information and change their password. In case a password is forgotten, there is an option to reset password on the main page of GeNS.

f) Dashboard

Indicates the number of export certificates sent to trading countries and the number of certificates received from trading countries. This information can be downloaded and be kept separately. Feedback is requested from NPPOs on how this can be improved.

Full ppt. attached as Appendix: 12.

Session 3 and Session 4 : Discussions

The following issues were raised during the two sessions.

a) Safety of Data

The data is safe and each country is only able to see their own information. Countries cannot view or download the information of another country.

b) Data Storage Period

Although the data storage period is 3 years, request for consideration was received to extend the storage period to 7 years to comply with local legislations. The system however will enable the country data to be taken off the GeNS after 3 years and all the information will be provided to the countries on a special file which countries could keep for the legal duration of data storage.

c) Documented System and User Guides

The GeNS has a lot of documentation and training documents and there will be an upcoming training video as well to use. This training material is getting translated to different languages such as French and Spanish. Some user guides are available but needs updating to ensure the perspectives are suitable and make sense.

This is quite important because most of the countries have bilateral arrangement and the certification has an audit component. The current system will be replaced by the GeNS which will now be the technical language of the NPPO.

d) Access by the Industry Users

When industry users tries to login for the first time, the NPPO Admin will receive an email notification after which the NPPO Admin will have to log in to the system in order to give access approval to the industry users.

e) NPPO Admin and Access Approval

It was perceived that this role is suited for IT personnel and there is a contradiction that this position (NPPO Admin) is granting approval for Phytosanitary activities which is seen to be the role of the Head of the NPPO. However the position does not have to be IT person but can also be a biosecurity officer.

For instance, in Jamaica the IPPC Contact Point is also the NPPO Admin. But this role was also given to the one of the deputies but both do not have IT background. The NPPO Admin does not have to be a person with IT background but one that knows phytosanitary issues. Similarly, there should be more than one NPPO Admin so as not to load the Contact Point unnecessarily.

Furthermore, if a company user has approved another user, the Contact Point does not have to approve the new user. Approved companies have to manage their own account.

f) Pacific Help Desk

Help desks are available at UNICC however apart from the train the trainers programs happening with pilot countries, there are other countries that could help out such as NZ, Australia, USA and the Netherlands who are ready to guide other

countries. The idea is to build a network of technical people across the region to be the first point of contact.

g) Additional Declaration on ePhyto

The GeNS allows for the certificate to expand and to include so many other pages. This feature can be used for commodities that require much more information by the importing country. There is no provision on the system to attach any other documentation. When filling in the information on the ePhyto, most of the fields are not mandatory which enables the exporting country to input whatever necessary information required by the importing country.

h) Testing the System

Any tests carried out will be linked to the test environment of the hub. There is a test environment for the hub and the GeNS. The GeNS is always connected to the hub.

i) Paper Certificates

The GeNS will automatically send the ePhyto to any country that is connected to the hub so if the country is not connected to the hub the paper certificates can be printed and issued like normal.

j) Number of NPPO Admin

It is possible to have more than one NPPO Admin role in the case where there is shortage of human resources and the number of staff available can share the roles.

Session 5: Presentation of GeNs survey results in the Pacific.

PPPO members utilized this session to continue with the demonstration of the GeNs and getting familiar with the ePhyto system.

Session 6 : Regional Implementation-

6.1 Capacity Development:

Recommendations:

a) Program Manager for ePhyto System

The Micronesia sub-regional group recommended that a dedicated person in each member country be trained to be responsible for the system in each country. Furthermore, a Regional Project Manager needs to be appointed and to be housed under the PPPO Secretariat who will move around the NPPOs and collaborate with the national managers. The Regional Manager is to also monitor that the legislation is in place.

b) Training of NPPOs and Stakeholders

Polynesia and Melanesia sub-regional groups recommended that training programs on ePhyto and GeNS is needed on a national and regional level and training module is to be custom fit for small island countries. Important stakeholders such as

Exporters, Importers, Customs, Clearing agents and NPPOs have been identified to be part of training and awareness programs.

c) Formation of regional ePhyto Working groups

All the Heads of the NPPOs are members of the working who will drive the work of ePhyto in the region.

d) Trade Facilitation Agreement (TFA) program.

The Melanesia sub-regional group raised a recommendation to have a regional platform for the implementation of Trade Facilitation Agreement (TFA) program. Technical Assistance from World Bank would bring stakeholders together and provide the opportunity for collaboration and produce outputs.

e) Trade Facilitation Agreement (TFA) workshop

This is seen as a very important training and the Polynesia sub-regional group recommended that this workshop be held sooner both on a regional and national level. More so because of the close working environment between Biosecurity/ Quarantine with Customs and other border agencies.

6.2 GeNS implementation in the Pacific.

Recommendations

a) Guidelines – for all NPPOs – Pacific

The Polynesia sub-regional group identified and recommended that there should be some standardization in terms of guidelines to be followed by PPPO members for those countries who want to adopt ePhyto.

b) Harmonisation

All the three (3) sub regional groups of the PPPO agreed that ePhyto is definitely the way forward and is needed among member countries, as this will bring about harmonization that is required for trade facilitation. Similarly, members agreed that ePhyto would result in time efficient biosecurity processes during trade.

c) GeNS in French

French territories in the region recommended having the GeNS available in the French language.

d) Periodical monitoring and evaluation

The Polynesia sub regional group recommended that monitoring of the ePhyto system to be done twice a year to ensure proper running of the system.

e) Non-commercial consignments within the Region

The region issues more non-commercial consignment certificates than the commercial consignment certificates hence the Polynesia sub-regional group recommendation for more information and inclusion of non-commercial consignments on ePhyto system.

6.3. Challenges

a) IT infrastructure and Capacity - Internet speed variation

All three (3) sub-regional groups identified this as a real issue in the Pacific. ePhyto is an internet based program and smaller island nations would need to improve their internet bandwidth and invest in desktop and laptop computers to be able to use the ePhyto system.

b) Technical Assistance/Backup for the ePhyto system

The Polynesia sub-regional group raised the issue of capacity development in the smaller islands. Trained personnel often leave for greener pastures resulting in high turnover of staff. It is therefore recommended that technical assistance team be available to assist member countries when the need arises.

c) Funding

Micronesia and Melanesian sub-regional groups raised that upgrading of Internet bandwidth and improvement of the whole IT infrastructure including investments in desktops and laptops depends on government priorities and availability of funding.

d) Cooperation from public and private sectors

The Melanesia sub-regional group identified that it is always challenging to bring together public and private sectors to discuss on projects and it could be a similar scenario when discussing ePhyto.

e) Legislation

The process of reviewing the legislation usually takes a long period of time and the Melanesia sub-regional group identified that it would be a challenge when wanting to adopt ePhyto in the earliest time possible.

6.4. Opportunities

a) Future Use

The Melanesia sub-regional group raised this issue and recognized that the benefit and flexibility of the ePhyto system makes it more attractive so there will be less resistance to its adoption. For example, the system could also work to send sanitary certificates and any other certificates.

b) Easy Accessibility of Data

The Melanesia sub-regional group raised this issue and acknowledged that the ePhyto system allows for easy accessibility of the data, which may be required for relevant reasons such as analysis, reporting, risk management targeting and audit trail.

c) Support System.

The Micronesia sub-regional group acknowledged that the presence of a support system through IPPC, World Bank, FAO, GEF 6, SPC, ED11 and the PPPO Secretariat provide huge opportunities for member countries.

d) Next Countries.

All the PPPO member countries are keen to be the next to use the ePhyto system and the following countries have shown interest through the respective sub-regional groups:

-Melanesia: PNG and Vanuatu.

-Polynesia: Tonga, Tuvalu, Cook Islands, Niue, French Polynesia and Tokelau.

-Micronesia: Palau, RMI, FSM, Kiribati, Guam and Nauru.

All the member countries of the Micronesia sub region have shown interest to use the ePhyto system however Palau has been identified as the most suitable country to handle the ePhyto system because of its trade relations with the USA therefore is suitable to be the next for the pilot program.

Session 7- Strategic Work Plan

The following issues were raised during this session that would be aligned with the PPPO Strategic Plan.

a) Regional Ministerial Commitments

In the early 2000s, Regional Trade Ministers agreed to create the Regional Trade Facilitation Program (RTFP). This was an interagency platform that Customs, Immigration and Quarantine/Biosecurity were part of. This regional agreement led to the establishment of National Trade Facilitation Committees(NTFC). Projects were created as a result of this agreement and funding for projects came from the EU.

Programs such as the Biosecurity Information and Facilities (BIF), Harmonisation of Biosecurity Legislations and Standard Operating Procedure (SOP) were three of the projects that resulted from this arrangement that focused of Quarantine/Biosecurity.

b) National Trade Facilitation Committee (NTFC)

Each country that engages at the NTFC level creates priorities at the national level. ePhyto can be a component of that and it gives Trade Facilitation Agreement(TFA) leverage when it becomes part of this. There are various cooperation initiatives at this level where ePhyto can be introduced and progressed to become a priority. From this level, the message should also be going to the regional level. For example the Single Window concept was introduced through the NTFC and was driven by NTFC until it became a priority in the region with the funding for upcoming implementation of automation funded by DFAT.

Members of the PPPO are part of the NTFCs and this presents a good opportunity for ePhyto to be introduced at national levels and be progressed through the priority list of the countries and eventually the region. While the regional platform has been in existence, countries need to renew commitment at the national level to ensure the functionality of the national trade facilitation framework.

The following NPPOs are members of the respective NTFCs: Tonga, Vanuatu, Tuvalu, Tokelau, Palau, Niue, Fiji, Cook Islands and FSM.

The following NTFCs are currently active: Vanuatu, Niue, Cook Islands, Fiji and FSM.

c) Finding the Gaps

PPPO members were encouraged to use the PCE (Phytopanitary Capacity Evaluation) platform to identify areas that would need to be upgraded as each member country prepare for the adoption and implementation of ePhyto. The Secretariat is to work with individual countries to update the PCE and this would become an updated evaluation for the region and provide the basis for a regional requirement. This could then be taken to funding agencies to support the request for the implementation of the ePhyto Solution from a regional perspective.

PPPO members were advised that funding agencies are more willing if regional issues are presented for assistance. This was seen at the establishment of the RTFP where the EU donated funds for project on a regional level. The Secretariat, with the support of the countries, is to lift trade facilitation to the regional level and seek the revival of the RTFP so that the ePhyto Solution can be advanced through the regional level. Similarly, this could also act to support a revival of the NTFCs.

d) CSIRO/DATA 61

The PPPO members were informed about the offer of assistance from the CSIRO/Data 61 that the region could tap into. The Secretariat is to hold further discussions with the representative to work out the details.

e) PACER PLUS

It was explained to the PPPO members that this is a regional pre-trade agreement which focus more on development. It enables the Pacific to benefit from world trade. Funding of approximately \$30 million from PACER PLUS will be available in 2020. This funding will be split in all focus areas which includes SPS. However, five (5) more countries are needed to ratify it so that funding can materialize .

f) DFAT/MFAT Support

Australia and New Zealand have recently increased their engagement with the Pacific through Regional Integration and Cooperation. The focus towards trade is based on the fact that it is difficult to conduct trade in the Pacific but it is very important because discussion like such contributes to food security and livelihood in the region as well as prosperity and resilience in times of disaster.

PACER PLUS through DFAT and MFAT co-fund the workshop because of the view that the countries are shaping a small but a significant part of that fact and are looking at it from the regional level.

The ePhyto Solution is an ideal project to be addressed at the regional level. One of the main components of the ePhyto Solution is harmonisation and it was evident that the ePhyto solution would bring about efficiency in the trade process which would result in the benefit for the region.

PPPO member countries had a view of how the Oceania Customs Organisation (OCO) brought together member countries on a regional platform and presented the gaps identified on a regional level for the facilitation of the WTO/TFA. This resulted in funding approval by PACER PLUS through DFAT. The forum was then encouraged that there is potential to do the same on the SPS space. SPS is already a sub-committee on PACER PLUS so there is space available for SPS projects.

The forum was also reminded that if ePhyto is a priority project then it needs to be conveyed back to DFAT where commitment from the countries is required in terms of time, resources and human power.

g) PPPO and GeNS

PPPO is supporting the ePhyto Solution and member countries have agreed to adopt the GeNS. It was further agreed that letters of interest would be submitted to DFAT stating the decisions to adopt ePhyto. Similarly, the letters would declare their commitment in the provision of resources, time and human power. The Secretariat is to assist non Heads of NPPO present the workshop to obtain letters. The PPPO is also interested in another regional ePhyto workshop to review and maintain the progress from this first regional workshop.

h) Regional ePhyto Working Group

In an effort to move the region forward on the implementation of ePhyto, the Heads of the NPPO were nominated by the Deputy Chairman to be members of the regional ePhyto working group. Heads of NPPO who are present and have agreed to the formation and membership of the Working Group includes: Fiji, Cook Islands, Palau, Vanuatu, Tokelau, RMI and Niue.

The Working Group will discuss the Terms of Reference, Authority and any other related formality with the PPPO Chair and the Secretariat.

CLOSE OF MEETING.