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# COMMISSION ON PHYTOSANITARY MEASURES

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**Successes and Challenges in Implementation of the Convention - Countries  
contributions**

**Agenda item 16**

**Prepared by OIRSA, Kenya, Nicaragua, Madagascar and Palestine**

***English only***

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## **Successes and Challenges of Implementation of the Convention Countries contributions**

### **I. Background**

1. At CPM-9 (2014), for the first time, participants were invited to share their successes and challenges in implementing the IPPC, ISPMs and recommendations. These presentations were favourably received and became a standing item on the CPM agenda.

### **II. Procedure for submissions**

2. IPPC Contracting Parties, RPPOs and observers were given the opportunity to present positive solutions to their challenges or to share their success stories during the CPM-14 (2019) plenary session through an “IPPC talk”. Representatives from selected proposals will be given a maximum of 5 minutes to present their issue in a Ted talk style, using a storytelling approach.

3. Proposals submitted by the 20<sup>th</sup> of February 2019 were reviewed and presenters coached by the IPPC Secretariat.

### **III. Presentations**

4. Presentations will be given by representatives from:
- The International Regional Organization for Health in Agriculture (OIRSA);
  - Madagascar;
  - Nicaragua;
  - Kenya;
  - Palestine.

## 1. The destiny of my life depends on a phytosanitary emergency

### OIRSA Experience in phytosanitary emergencies

More than 65 years ago the International Regional Organization for Health in Agriculture (OIRSA acronym in Spanish) was created, as a result of heavy infestations of the central American flying locust (*Schistocerca piceifrons piceifrons*). This pest was managed as a phytosanitary emergency, which allowed the countries of the region to successfully control it. Since 1953, OIRSA manages and assigned financial resources specifically for phytosanitary emergencies, dealt as national or regional emergencies. The phytosanitary emergencies being managed are the flying locust, pine bark beetle (*Dendroctonus frontalis*), pink hibiscus mealybug (*Maconellicoccus hirsutus*), HLB in citrus (*Candidatus Liberibacter asiaticus*), coffee rust (*Hemileia vastatrix*), medfly (*Ceratitis capitata*) and yellow sorghum aphid (*Melanaphis sacchari*) among many.

To be successful, emergency team work needs to create synergies between national, regional and international organizations and to have financial resources, material and protocols to be followed to control a specific pest. As concrete achievements of the OIRSA emergency teams, in the Dominican Republic the export market for fruits and vegetables was closed because of a medfly outbreak and it took 2 years of hard work to re-open those markets. In Nicaragua, it took 18 hours to control an outbreak of the flying locust. In Mexico in the peninsula region of Yucatan, the protocols of control are implemented in time and the outbreaks of flying locust are under control. In Panama, the HLB is currently confined to backyard citrus, thus delaying the detrimental impacts of this pest on the commercial groves, while the producers are getting prepared with preventative measures and integrated pest management.

The challenges to establish an efficient phytosanitary emergency system are: to have experts of the topic just like in human health; to have forecasting models for pest outbreak that are practical; to have financial resources available and specialized protocols to follow for each case; and a great will and strength of the technicians, producers and competent authority. A sanitary emergency is an unexpected event where a zone, a country or region demands an immediate attention due to the agricultural threat that can impact economically, socially and politically.

To anticipate the actions of managing a phytosanitary emergency, the culture for conducting simulations exercises similar to those used for natural disasters like earth quakes, tsunamis, volcano eruptions among others needs to be increased. To date the countries of the region have conducted simulations exercises for quarantine or epidemic pests and on various occasions there are specialized phytosanitary teams or "commands".

OIRSA has expanded the management of agricultural emergency to those caused by natural disasters, drought cases, flooding and likewise to include food safety issues. **From the phytosanitary emergency depends the destiny of my life:** I could be part of the migration caravan, part of the increased poverty statistics, of increased violence, of too many negative issues if the phytosanitary emergency is not managed adequately.

## **2. Conducting the Phytosanitary Capacity Evaluation in Madagascar: less rage than courage**

Heads or operators of NPPOs may have felt, as was felt in Madagascar when executing their mission a feeling of helplessness, frustration, and even anger, sometimes even in the face of the various phytosanitary problems.

In 2015, the Africa Solidarity Trust Fund (ASTF) project managed by FAO focused on activities such as institutional and technical capacity building in the implementation of Sanitary and Phytosanitary measures was implemented in Madagascar. In this framework, the NPPO of Madagascar had the opportunity to conduct a Phytosanitary Capacity Assessment. The PCE is a tool developed by the IPPC Secretariat and its application is conducted under its supervision. Through the application of this tool, it was possible for the NPPO of Madagascar to identify the strengths and weaknesses of the Malagasy phytosanitary system. The team in charge of the project worked with all stakeholders such as operators, producers, other ministerial entities in charge of trade, customs, justice, environment and forestry, and this is a very important point to clarify with them some overlapping activities.

At the end of this evaluation, Madagascar has a new draft law on phytosanitary legislation which in the process of being validated (the old law dating from 1986). Madagascar also has a strong National Phytosanitary Strategic Plan validated by the stakeholders and the decision-makers by consensus. This National Phytosanitary Strategic Plan will be valid for 10 years and focuses on 3 main strategic axes which require the approval and the total commitment of the Government and needs to be funded:

- Strategic Axis 1: Strengthening the phytosanitary system
- Strategic Axis 2: Strengthening the Management of the National Plant Protection Organization
- Strategic Axis 3: Strengthening Basic Phytosanitary Activities.

The Malagasy team was able to make known to the donors and especially to Malagasy operators and decision-makers the importance of the NPPO. Currently, Madagascar is starting to reap the benefits of the PCE as some parts of the strategic axes have already been carried out as capacity building of the NPPO. The NPPO concretely obtained material support for the three laboratories. Some activities are already part of projects with donors and it has become easier for the NPPO to ask for and obtain support from donors. Other NPPOs are warmly to get involved in running a PCE, you will not regret it! You will work hard but the results will be spectacular. And finally, let me tell you this proverb: "Less is rage than courage. ... ».

### 3. The use of Mobile apps technologies for surveillance in Nicaragua

The Nicaraguan Institute of Agricultural Protection and Health (IPSA) and the National Plant Protection Organization of Nicaragua began to implement Information and Communication Technologies (ICT) for phytosanitary surveillance in 2015.

This initiative was born with the support of FAO, since late of 2012 in Nicaragua and other Central American countries, an outbreak of coffee rust (*Hemileia vastatrix*) occurred, affecting coffee production. In 2014, at the request of countries, FAO developed SATCAFE (Early Warning System for Mesoamerica), an innovative ICT tool, using "Smartphone" and a mobile application for the monitoring of rust and coffee berry borer (*Hypothenemus hampei*). This device improves the capture, storage, data processing, and above all the generation of dynamic reports and data available in real time, allowing for timely decision making.

The success of SATCAFE stood as an inspiration for IPSA, which was at the time in a process of transformation and modernization of the phytosanitary surveillance system through the use of mobile applications. In 2016, with the financial support of FIDA, SATCACAO (Early Warning System in Cocoa) was born for the monitoring of the pest *Theobroma cacao* in cocoa. From 2017, the SIVIFI was implemented (Phytosanitary Surveillance System) for pest monitoring using traps, including quarantine fruit flies (*Bactrocera dorsalis* and *B. cucurbitae*), among other pests species as well as non-quarantine fruit flies (*Ceratitis capitata* and *Anastrepha* spp.).

Based on this successful initiative, nine mobile applications are currently available in Nicaragua, not only for phytosanitary surveillance, but also for phytosanitary certification, certification of good agricultural practices, certification of seeds, sampling and dispatch of samples to the laboratory and survey of polygons.

The innovative use of mobile applications in plant health allows to obtain information on the phytosanitary situation in real time, to improve quality of information, to generate automated reports that can alert and implement control measures in a timely manner to prevent crops losses. Such applications are an asset to save human and financial resources, to secure storage of data, to improve substantially the quality of data and to undertake a total control of the activity in the field.

#### **4. Is a systems approach the way to beat quarantine restrictions in the developing world? A case of Kenya Fresh avocado exports to South Africa**

**The challenge:** What would you do if you were an avocado farmer with no other livelihood and all of your crop cannot be exported due to a trade restriction occasioned by some pest attack? This is what happened to an avocado farmer in Central Kenya. The farmer's *fuerte* avocados fetched a premium price in South African market in the period of November to February every year, prior to the trade restriction in 2007. This restriction had substantial economic consequences for the affected avocado farmers that saw them loose about Ksh 150 million in foreign exchange annually. The restricted trade remained despite the concerted efforts by KEPHIS and other stakeholders in Kenya to pursue negotiations, as well as implement initiatives to create pest free zones and cold treatment protocols for avocado in order to re-gain the market. These initiatives proved expensive hence non-viable for the resource poor farmer to implement.

**How it was successfully dealt with:** Armed with a new publication (Ware et al., 2016), it was observed that the risk posed by *B. dorsalis* (= *B. invadens*) is negligible under standard export conditions for *hass*, *fuerte* and *pinkerton* varieties. KEPHIS therefore re-opened negotiations with the RSA plant quarantine colleagues. KEPHIS proposed the use of a sound systems approach encompassing management of fruit flies and false codling moth Kenya at production and pack house levels in line with the publication. Consequently, a work plan for the implementation of the systems approach was agreed upon bilaterally. KEPHIS trained the concerned farmers about the new work plan and followed up for its implementation in their farms. In 2018, a team of technical experts from South Africa visited Kenya to establish the implementation of the work plan and were satisfied with the systems they observed. As a result, the market restrictions for fresh avocado from Kenya to South Africa were lifted.

**Effect of action:** The South African market is a special market for Kenya to cover for South Africa's seasonal avocado production lapse from November to February annually. The 2007 restriction resulted in a loss of business worth over Kshs 150 million (USD 2.1 million) per year. The *fuerte* variety which is the main variety exported to South Africa was uprooted and or top worked to *hass* by the affected farmers. The lifting of the restriction therefore is set to reverse the decreased fortunes due to lost revenues.

**How story can inspire or help others:** Most fruit exporting countries predominantly rely on post-harvest treatments to manage pest risks associated with the movement of fresh produce internationally. In particular, cold treatment which has been proposed for avocado as a risk mitigation against fruit flies and false codling moth is not always practical for every circumstance due to long treatment periods and high costs involved. A systems approach may provide a more viable option to facilitate or expand trade while effectively managing pest risks.

## 5. Palestine takes the first step towards better Plant Health – The experience of Palestine

In the last ten years Palestine has faced a number of challenges caused by pests which have affected agricultural production. In addition, there is a danger of introduction of new pests. The Plant Protection and Inspection Service (PPIS) faces challenges in diagnosing new pests including weeds, and some of its officers are not properly trained to detect pests on time.

Some essential services are missing; and there is some duplication and overlap of responsibilities. This results in the less than optimal performance of the PPIS, not meeting the needs of the importers and exporters, and a lack of compliance with international standards.

The challenges that the PPIS and the government of Palestine face are an obstacle to joining international organizations (e.g. NEPPO, WTO etc.) and entering bilateral agreements with trading partners.

The solution was to implement the Phytosanitary Capacity Evaluation (PCE) which is a management tool designed to help identify both strengths and weaknesses in existing and planned phytosanitary systems.

In October 2014, the PPIS formed a core group from its staff along with relevant stakeholders to develop the National Phytosanitary Action Plan (NPAP). The IPPC facilitator guided the core group in the development of a national phytosanitary capacity building strategy using the methodological tools in the PCE. Palestine worked on all 13 modules of the PCE. In March 2015, the team finalized the NPAP and formulated a project outline for a value of USD 350,000.

Throughout the PCE process, PPIS staff and relevant stakeholders agreed that there were many weaknesses covering all aspects of phytosanitary capacity in Palestine.

The following activities were identified as priorities of the USD 350,000 project financed by FAO:

1. Complete the National Phytosanitary Action Plan (NPAP) (2015-2021).
2. Create a comprehensive phytosanitary law with modern phytosanitary components.
3. Set an effective and active NPPO structure that fully reflect its roles and responsibilities.
4. Implement the strategy for pest diagnosis.
5. Equip diagnostic laboratories and train staff to diagnose pests.
6. Set a computerized and documented database.
7. Train qualified inspectors and provide them with logistics capabilities and infrastructure.

From this fruitful experience, Palestine encourages all National Plant Protection Organizations (NPPO) worldwide to undertake a Phytosanitary Capacity Evaluation (PCE) in their countries because:

1. The PCE provided Palestine with a framework for strategic planning. Now, in Palestine we have a six-year action plan (National Phytosanitary Action Plan - 2015-2021).
2. The team determined by consensus priorities and activities for the period 2015-2021.
3. The effectiveness of the overall phytosanitary system was greatly enhanced. Strategic plans developed through the PCE also provided the basis for dialogue with donors of development aid and thus improved the likelihood of access to further funding.
4. Through a project called “Capacity building program in support of the Palestinian National Authority – Sanitary and Phytosanitary (SPS) measures” which involves coordination and cooperation between the Food and Agriculture Organization of the United Nations (FAO), The International Plant Protection Convention (IPPC) and Ministry of Agriculture (MoA), Palestine has already implemented some of the activities listed in the NPAP. Other activities will be implemented through other .
5. The PPIS team now knows what it wants and feels empowered to strengthen its phytosanitary system.