

# REPORT OF THE FIRST REGIONAL EXPERTISE TRAINING WORKSHOP ON PEST SURVEILLANCE

22-24 April 2014  
Chiang Mai, Thailand



## Summary

The 1<sup>st</sup> Regional Expertise Training Workshop on Pest Surveillance was opened with a welcome remark delivered by Dr. Yonfan Piao, Lead Technical Officer of the project and Senior Plant Protection Officer, RAP. Dr. Kyu-Ock Yim, Chairperson of the International Plant Protection Commission (IPPC), gave a presentation on current activities on pest surveillance implemented by IPPC. Mr. Chang-Ho Shin, Project Coordinator, made a presentation on “Project background and implementation environment” based on the survey fed back from National Project Coordinators (NPCs) of participating countries. Dr. Jong-Ho Lee, Senior Researcher of Animal and Plant Quarantine Agency of the Korean Government, provided a lecture on the basic theory of the pest surveillance including “General Survey Methodology”, “Pest List Making” and “Pest Risk Analysis” as expertise subjects. In addition, NPCs from five participating countries presented country reports on past achievement and current situation on pest surveillance issues as well as prioritized area to be improved, expressing their concerns on the pest related to exporting plant products. There was a

discussion session on the last day of the workshop with two topics, “How to improve the capacity on pest surveillance in SEA countries” and “Efficient implementation of the expertise training program on pest surveillance”, which was followed by assessment session to appraise the level of satisfaction of the participants on the implementation of the workshop through the questionnaire prepared by Project Coordinator. Meanwhile, main subjects of next regional training course and in-country training were discussed with each NPC from participating countries and the consolidated outputs were presented to all participants as advance information and appropriate pre-arrangements.

In conclusion of the workshop, Dr. Piao summarized the agendas one by one with highlights of achievement made by the workshop. He also stressed that it was very good opportunity to share the information on pest surveillance situations among participating countries, which may help other forthcoming training course have more specific programs to match specific requirements.

## **REPORT**

### **1. Welcome remark delivered by Dr. Piao, Lead Technical Officer, FAO/RAP**

Dr. Piao welcomed the participants and experts to the workshop on behalf of project staff, expressing his special gratitude to Dr. Yim, Chairperson of IPPC, for her participation in the workshop. He highlighted the importance of capacity development for pest surveillance and identification in South-East Asian countries and recommended participants to use this training as good opportunity to polish the knowledge and to share information and experience on pest surveillance to maximize the benefit from the workshop. He thanked the Korean Government for the financial support provided to the workshop.

### **2. Lecture on IPPC current activities on Pest Surveillance**

Dr. Kyu-Ock Yim, Chairperson of International Plant Protection Commission (IPPC), introduced general information on IPPC such as IPPC’s goal, history and body including contracting parties, Commission on Phytosanitary Measure (CPM), RPPOs and so on.

She also introduced IPPC strategic framework and IRSS survey as IPPC activities related to pest surveillance as well as some of activities for 2014-2015.

Noting the IPPC’s critical role in establishment and implementation of ISPMs, she especially emphasized the importance of pest surveillance as a fundamental activity of NPPOs in addressing the risks of pests to protect national plant resources in connection with the International Standards on Phytosanitary Measure (ISPM) No.6 “Guideline for Surveillance”.

### **3. Presentation on Project Background and Implementation Environment**

Mr. Shin, Project Coordinator, gave a presentation on the background and overview of the project as well as the result of the analysis on feed-back from countries to the questionnaires which were sent to the NPCs before the workshop to get information necessary to the implementation of the expertise trainings.

Collected information comprised the preference of the subject for in-country training, tentative lecturers, retained pest specimen for laboratory practices, current and target number of expert on plant pest and disease, current and target number of laboratory, current, past and future plan on pest surveillance activities, concerned pests and crops for trade and important factors in urgent needs in implementation of pest surveillance and identification.

In addition to this, Mr. Shin introduced recommended trainees' number, expertise level (high, intermediate, low, lower) and training areas (pest, disease, common) on the country base.

#### **4. Lecture on General Survey Methodology**

Dr. Jong-Ho Lee, Senior researcher of Quarantine Inspection Agency (QIA) of the Korean Government, gave a presentation on General Survey Methodology, which was composed of three parts, the basic theory on pest surveillance, Pest Listing and Pest Risk Analysis (PRA).

The basic theory on pest surveillance included main purpose of pest surveillance and NPPO's role, brief introduction on ISPMs such as ISPM 6 (Guidelines for surveillance), ISPM 8 (Determination of pest status in an area) and ISPM 17 (Pest reporting), difference between General Surveillance and Specific Survey as well as methods, types, planning and overall steps of the Specific Surveys.

As for the pest listing, he introduced survey methods to develop pest list in connection with ISPM 8 and the types of pest list.

Regarding PRA, he described PRA process as three stages in association with ISPM 2 (Framework for pest risk analysis) and 11 (Pest risk analysis for quarantine pests) and principles of PRA as well as some case studies and useful guidelines.

#### **5. Country reports**

The NPCs from five participating countries presented country reports on "Past achievement and current situation on pest surveillance issues, prioritized area to be improved".

Dr. Hean Vanhan, National Project Coordinator in Cambodia, introduced Cambodia's agricultural situation such as production and export as well as pest surveillance activities and capacity status in connection with target market access and relevant crops such as mango, rice, cassava and corn. He expressed its difficult situation in negotiating with Korean and China for the export of major crops.

Mr. Syriphonh Phithaksoun, National Project Coordinator in Lao PDR, introduced past achievement on pest surveillance activities such as the implementation of trainings, pest list establishment and pest identification and current situation on pest surveillance, pointing out lack of technical staff, laboratory equipment and pest warning system. He also specified the prioritized areas to be improved such as strengthening the surveillance system, provision of appropriate equipment and developing the procedural manual.

Dr. Dilli Ram Sharma, National Project Coordinator in Nepal, introduced, as past performances, preparation of several national standards, detection survey on sweet orange and junar and preparation of national pest database and IPM program. As a current situation, he described specific pest detection survey on citrus crops and four medical plants as well as major threatening pests on tomato, citrus, rice, sugarcane, potato and so on. He also emphasized, as challenges to be improved, the training of skilled human resource, use of technically valid survey methodology, collaboration with different institutions, improvement of diagnostic service and pest database server establishment.

Dr. Pornpimon Athipunyakom, National Project Coordinator in Thailand, introduced past pest survey activities on shallot, mango and corn as exporting crops and related pests' status, describing in detail pests' host, information source, symptom and identification. She also explained their efforts to establish Cancer free areas for pummelo which is to be exported to Netherlands. She also introduced ongoing pest survey project on tomato, corn and cucumber.

Ms. Nguyen Thi Thu Huong, on behalf of Le Son Ha, National Project Coordinator in Viet Nam, introduced the history of past achievement on pest and weeds surveillance and the establishment of a National Specimen Museum as well as ongoing activity on pest survey for forest trees. She pointed out the improvement of trained human resource, infrastructure for diagnostic facilities, information management networking and development of national strategy as important challenges that should be accomplished in the future.

## **6. Group Discussion**

Two topics were prepared by Mr. Shin for the discussion session as follows.

- Topic 1: How to improve the capacity on pest surveillance in SEA countries.
- Topic 2: Efficient implementation of the expertise training programs on pest surveillance.

All participants were divided to discuss the topics. The facilitator for topic 1 was Dr. Pornpimon Athipunyakom, NPC of Thailand, and for topic 2 was Mr. Dilli Ram Sharma, NPC of Nepal.

The summaries of the recommendation brought up through the discussion are as follows.

For topic 1, How to improve the capacity on pest surveillance in SEA countries;

- Development of new policy for pest surveillance
- Surveillance policy should be amended and updated as for the treaty of SEA countries.
- Short term and long term action plan should be clear
- Improvement of laboratory and equipment including accredited lab. and
- Development of manual on pest surveillance through international research
- Development of database and network for information sharing
- Fund support from government and international society

For topic 2, Efficient implementation of the expertise training programs on pest surveillance;

- Provision of more exercises and exposure visit during training sessions
- Provision of guideline and manuals for harmonization of methodologies in SEA countries
- Development of expertise group on taxonomy for proper identification of pests in respective countries
- Development of standard diagnosis procedures for particular pests
- Development of regional networking for information sharing
- Training program should be on demand basis according requirement of countries
- Extension of training duration to 7 days

## **7. Project Assessment**

As a last session of the workshop, prepared questionnaires were distributed to the participants to evaluate the workshop. Questionnaires were composed of five sections such as overall assessment of the project, rating the lecture and lecturers, rating the impact of the workshop, rating the logistics and description on the strength, weakness of the workshop and suggestion.

According to the result of the analysis of the questionnaires collected from 41 participants, 99% of the participants were content with overall project content, structure and organization and 95% of the participants were “satisfied” or “fully satisfied” with the lecture or lecturers’ presentation. 91% of the participants think that this workshop will impact on their technical knowledge, professional activities, regional networking and improving the work service. As for the workshop logistics such as flight arrangement, accommodation, meeting facilities and other things, 97% of the participants expressed their satisfaction.

Meanwhile, participants described the main strength, weakness of the workshop and made suggestion to improve the quality of for the forthcoming workshops.

The summaries are as follows.

<Strength>

- Lecturers are enthusiastic, having deep knowledge

- Good opportunity to get technical knowledge
- Good opportunity to communicate with other countries
- Good coordination of the workshop
- Appropriate training contents

#### <Weakness>

- Workshop duration is too short
- Lectures are simple and not diverse
- Need to provide more detailed knowledge related to trade of agricultural products
- Low coverage area of topic
- Need to include practical exercise and field trip
- Low DSA
- Tight schedules
- Need to have a SOP for pest surveillance

#### <Suggestion>

- Organize the networking to identify the pests, to share the information
- Field trip, Laboratory practice
- Longer duration of workshop
- Provide a lecture about case studies on other countries' successful one
- Include more technical topic
- Crop-based specific training
- Training should be implemented considering the technical gap among countries
- Provide SEA countries with available surveillance guidelines

## 8. Check list survey

In addition to the project assessment above, there was another survey at the beginning of the workshop to check out the trainees' knowledge background, working experience, training participation, laboratory equipment handling skill, knowledge on IPPC and ISPMs and interesting subject and crops on the country base.

The questionnaires are collected from 36 trainees.

The results of the survey are as follow.

- All trainees have agricultural background and working experience at NPPO
- 86% of trainees have working experience in the pest surveillance area
- 61% of trainees have ever taken part in the training program on pest surveillance in their countries
- 53% of trainees assessed their expertise level as "intermediate" and 39% as "low", whereas only one trainee are on the "high" and "lower" level respectively.
- 69% of trainees have knowledge on IPPC and 61% have on ISPMs
- Majority of trainees pointed out fruit-fly and beetle as the most interesting pests

## 9. Discussion on regional and in-country training schedule

As participating countries have made presentation on their special interest crops and pests through country reports, three-party face-to-face meetings were held among FAO/RAP, Korean experts and NPCs from participating countries during the break time to discuss about workshop schedule for both regional and in-country trainings. Especially there were some discussions on how to connect the training program of the project with Korean training program for Myanmar and ADB funding project for Lao PDR.

Based on the talks, some expertise trainings' schedules for 2014-2015 were tentatively confirmed as below.

Time	Training	Subject	Place	Participant
July 2014	Regional	Fruit-fly Grain insect	Viet Nam	6 countries
Oct. 2014	Regional	Fungi	Cambodia	6 countries
Jan. 2015	In-country	Bacteria, Phytoplasma	Thailand	Thailand Viet Nam
Apr.-June 2015	In-country	Citrus fruit-fly (surveillance and data production)	Nepal	Nepal
2015	In-country	Water melon (surveillance, identification and listing)	Lao PDR	Laos
2015	In-country	Grain insect	Cambodia	Cambodia Lao PDR
2015	In-country	Grain insect	Myanmar	Myanmar Nepal
2015	In-country	Fungi Moth	Myanmar	Myanmar
2015	In-country	Scale insect	Viet Nam	Viet Nam Cambodia

## 10. Closing Remarks by Lead Technical Officer of FAO/RAP

Dr. Piao thanked lecturers, NPCs and other participants for their hard work and cooperation first.

He highlighted achievement of the workshop by mentioning that it was very efficient and good opportunity to share the information on each country's status on pest surveillance and summarized the agenda one by one. Especially he emphasized the importance of familiarity with IPPC and ISPMs as well as general knowledge on pest surveillance as an essential component of the trainings. He also recommended the trainees to keep reading, digesting and reminding the contents of the lectures and to have a positive attitude to the training workshop with combining the ideas on what is their next step and duty and what are their needs and strategies to take after the training, categorizing the priority areas for further development of capacity.

He concluded with the remarks that how to maximize the benefit of training program and how to use this opportunity to increase country's capacity are quite important for the successful implementation of the project.

## **11. The results of the Workshop**

This workshop produced very significant and meaningful results in association with forthcoming training workshops as follow.

Firstly, participants increased knowledge of IPPC and ISPMs especially the role of pest surveillance in pest risk analysis and complying IPPC. As well they have an opportunity to enhance capacity of implementing pest surveillance with better understanding of basic knowledge of key elements of pest surveillance. Detail reference materials provided to each participant enable them to have further study and sharing with other colleagues. In addition, presentation on country reports was also good material for the participants to share and exchange information on each country's pest surveillance status and on-going activities.

Secondly, as the participation countries, through the country reports, have shared lessons and experience in pest surveillance. It also provided an opportunity for each participating country to express their priorities of concerns and interest on the pests and crops in association with trade strategies. At the same time, the subjects and schedules for in-country trainings for the next year could be consulted and adjusted based on the country prioritized areas in consideration of feasibility of resource and laboratory conditions.

Thirdly, survey questionnaires and check lists collected from participants provided detail information on the trainees' expertise level, equipment handling skill and preference of the subjects as well as demand for training environment. The results of the review and analysis would benefit planning next training workshop by arranging appropriate contexts of the course in consideration of their background and capacity of digestions.

Lastly, suggestions and recommendations made by participants at the discussion for the effective implementation of the workshop and capacity development of SEA countries may contribute to the development of the short-term and long-term strategies for better achievement of the project.



However, the only matter for regret was that the trainees of Myanmar could not take part in the workshop by the reason of Thailand's political and social instability.

## **12. A list of follow-up actions**

Based on the agreements or recommendations of the workshop, some actions to be followed up in implementation of the project will be as follows.

- Preparation of scheduled regional training in consideration of the results of the surveys and the suggestions of the discussion session
- Consultation with potential experts/trainers for follow-up trainings
- Undertaking the laboratory equipment procurement for the smooth implementation of training practices
- Preparation of operational manuals/protocols for pest survey/diagnostics
- Adjustment/finalization of in-country training plan in consultation with NPCs

## Annex 1

### Agenda for Regional Workshops on Pest Surveillance

#### Day-1 (April 22, 2014)

Time	Session	Facilitator
08:00 – 09:00	Registration (Imperial Mae Ping Hotel)	
<b><i>Opening Session</i></b>		
09:00 - 09:15	Welcome remark	Dr. Yongfan Piao
09:15 – 09:30	Announcement on Training Program	Mr. Chang-Ho Shin
09:30 – 10:00	Group photo and Coffee break	
<b><i>Session 1: Lecture (1)</i></b>		
10:00 – 11:00	Lecture on IPPC current activities on pest surveillance	Dr. Kyu Ock Yim (IPPC Chairperson)
11:00 – 12:00	General survey methodology (1)	Dr. Jong-Ho Lee
12:00 – 13:30	Lunch	
13:30 - 14:30	General survey methodology (2)	Dr. Jong-Ho Lee
<b><i>Session 2: Summary of feedback on the survey</i></b>		
14:30 – 15:30	Presentation on project background and implementation environment - Based on survey feedback from participating countries	Mr. Chang-Ho Shin
15:30 – 15:50	Coffee break	
<b><i>Session 3: Lecture (2)</i></b>		
15:50 – 17:00	General survey methodology (3)	Dr. Jong-Ho Lee
17:00 – 17:20	Q/A	
17:20 -	Break	
18:30 -	Welcome Dinner	FAO/RAP

**Day-2 (April 23, 2014)**

<b>Time</b>	<b>Session</b>	<b>Facilitator</b>
<b><i>Session 4: Country Report</i></b>		
09:30 – 10:30	Past achievement and current situation on pest surveillance issues, prioritized area to be improved in Cambodia	Dr. Hean Vanhan
10:30 – 10:50	Coffee break	
10:50 – 11:50	Past achievement and current situation on pest surveillance issues, prioritized area to be improved in Lao PDR	Mr. Siriphonh Phithaksoun
11:50 – 13:30	Lunch	
13:30 – 14:20	Past achievement and current situation on pest surveillance issues, prioritized area to be improved in Nepal	Mr. Dilli Ram Sharma
14:30 – 15:30	Past achievement and current situation on pest surveillance issues, prioritized area to be improved in Thailand	Dr. Pornpimon Athipunyakom
15:30 – 15:50	Coffee break	
15:50 – 16:50	Past achievement and current situation on pest surveillance issues, prioritized area to be improved in Viet Nam	Ms. Nguyen Thi Thu Huong

**Day-3 (April 24, 2014)**

<b>Time</b>	<b>Session</b>	<b>Facilitator</b>
<b><i>Session 5: Discussion</i></b>		
09:00 – 10:00	Discussion Session Topic 1: How to improve the capacity on pest surveillance in SEA countries Topic 2: Effective implementation of the expertise training program on pest surveillance	Two NPCs (Dr. Pornpimon Athipunyakom and MR. Dilli Ram Sharma)
10:00 – 10:20	Coffee break	
10:20 – 11:00	Presentation on discussion results	Two NPCs
<b><i>Session 6: Assessment</i></b>		
11:00 – 11:20	Questionnaire on workshop	
<b><i>Session 7: Closure</i></b>		
11:20 – 11:30	Closing remarks	Dr. Yongfan Piao

## Annex 2

### List of Participants

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