



**Asia-Pacific
Economic Cooperation**

**Enhancing Food Security through a Regional
Approach and Wide Stakeholder Participation
to Plant Biosecurity**

APEC Agricultural Technical Cooperation Working Group

November 2011

ATC 03/2010A

Prepared by
Crop Protection and Plant Quarantine Division
Department of Agriculture Malaysia
Ministry of Agriculture and Agro-based Industry
Jalan Sultan Salahuddin,
50632 Kuala Lumpur, Malaysia
Phone: 603-20301400
Fax: 603-26913050
e-mail: wanis@doa.gov.my

Published for
APEC Secretariat
35 Heng Mui Keng Terrace Singapore 119616
Tel: (65) 68919-600 Fax: (65) 68919-690
Email: info@apec.org Website: www.apec.org

© 2011 APEC Secretariat

APEC#211-AT-04.3

TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
1. INTRODUCTION	2
2. OBJECTIVES OF THE WORKSHOP	2
3. PARTICIPANTS AND RESOURCE PERSONS	3
4. WORKSHOP PROGRAMME	3
5. WORKSHOP PRESENTATIONS SUMMARY	3
<i>Session 1 – Opening Ceremony</i>	
<i>Session 2 – Food Security and the Role of Stakeholders</i>	3
<i>Session 3 – Stakeholder Participation for Market Access</i>	4
<i>Session 4 – Commonalities in Crop Production and Pest Management</i>	4
<i>Session 5 – Plant Biosecurity</i>	6
<i>Session 6 –Regional Commonalities in Traded Commodities</i>	7
6. WORKSHOP RECOMMENDATIONS	8
7. ACKNOWLEDGEMENT	8
ATTACHMENTS	
Attachment 1. List of Participants	9
Attachment 2. Workshop Programme	17
Attachment 3. Welcoming Speech by the Director of Crop Protection and Plant Quarantine Division, Department of Agriculture	20
Attachment 4. Opening Address by the Director General, Department of Agriculture, Malaysia	24
Attachment 5. 1. Food Security and Food Security Planning – National and Regional Perspective	31
Attachment 5. 2. Compliance with Global Standards – the Case for Stakeholder Engagement	49
Attachment 5. 3. Stakeholder participation in risk management for market access	57
Attachment 5. 4. Overview of fact-finding visits to member economies	69
Attachment 5. 5. Presentation from Chinese Taipei	81
Attachment 5. 6. Presentation from Indonesia	91
Attachment 5. 7. Presentation from Malaysia	98
Attachment 5. 8. Presentation from Philippines	109
Attachment 5. 9. Presentation from Thailand	116
Attachment 5. 10. Presentation from Viet Nam	129
Attachment 5. 11. Presentation from Cambodia	137
Attachment 5. 12. Presentation from Lao PDR	146
Attachment 5. 13. Presentation from Myanmar	154
Attachment 5. 14. Plant Biosecurity Activities in Japan	161
Attachment 5. 15. Food Safety – A new challenge for Plant Protection in China	169
Attachment 5. 16. Biosecurity Continuum	187
Attachment 5. 17. A Regional approach to Biosecurity	197

EXECUTIVE SUMMARY

The APEC Project ATC 03/2010A was successfully implemented by organizing a Workshop held at the Concorde Hotel, Shah Alam, Selangor, Malaysia from 1-3 December 2010. The Workshop was attended by 72 participants from 13 APEC member economies (Australia, China, Indonesia, Japan, Malaysia, Philippines, Chinese Taipei, Thailand, the US and Viet Nam and non-member countries (Cambodia, Lao PDR, , Myanmar), and resource persons from Australia and Malaysia.

Seventeen presentations were given during the workshop with six presentations from resource persons, eight presentations from member economies and three presentations from non-member economies.

The Workshop was divided into 6 (six) sessions, i.e.: a). Opening Sessions, b) Food Security & the Role of Stakeholders, c) Stakeholder Participation for Market Access, d) Overview of Fact-finders Visit to Several Member Economies & Presentation from the Economies, e) Plant Biosecurity, and f) Regional Cooperation and Closing.

Two breakout group discussions were organized, i.e. on a) Stakeholder participation in APEC Economies, and b) Regional Cooperation in Plant Biosecurity. In the concluding session, a round-up discussion was held on Regional Commonalities in Traded Commodities – Opportunity for Shared Responsibilities and Joint Actions.

As the outcomes of the Workshop several recommendations were made as follows:

- The APEC forum should be used to continue discussions on commonalities in biosecurity issues between trading economies, and explore opportunities for cooperation and sharing
- Particularly in the case of trading economies with similar crop commodities, pest and disease status, and market access targets, strengthen collaboration in technical aspects in surveillance, diagnostics, risk analysis and management.
- Participating APEC economies share experiences in stakeholder engagement from government and private sectors and biosecurity networking within their economies, and consider such information sharing between economies.
- APEC economies consider regional policy strategies for specific risks to address shared biosecurity concerns.

In addition several suggested topics for regional cooperation were also proposed, i.e.:

- Capacity buildings on biosecurity, risk mitigation, diagnostics, pest surveillance and impact assessment,
- Regional early warning system,
- Regional biosecurity network/working group,
- Area-wide control program for serious pests (e.g. on fruit-flies)
- Brown plant-hopper (BPH) forecasting and management

1. INTRODUCTION

The world is currently facing a food security crisis. Today, an estimated 852 million people worldwide are going hungry, while 2 billion do not have a regular secure source of food due to the poverty they face (Source: FAO, 2003). The need for increased global food production continues against a backdrop of population growth, changing food preferences, increased pressures on land and water, and climate change. Agriculture is central to the issue of food security; the challenges associated with food security may be addressed not only by growing more, but also by losing less of what is being grown.

The objectives of the Agriculture Technical Cooperation Working Group (ATCWG) are to improve productivity in agriculture, facilitate trade in food products and strengthen biosecurity by containing trans-boundary movement of plant pests. In this respect, some economies are scientifically lagging behind whilst others may be at various levels of development. Nevertheless, these developmental disparities provide opportunities for the maximal use of complementarities through regional approaches to increased crop production and reduce crop losses. The adoption of innovative systems can create an enabling environment for individual member economies whilst facilitating appropriate approaches to regional sharing and learning. The alignment of different domestic policies and processes to the common objectives of the ATCWG can go a long way towards an effective joint action in enhancing regional food security.

The current Workshop is a direct response to the 2008 APEC Leaders' Declaration relating to food security, providing opportunities for developing economies of APEC to share information and capacity in the region and plan joint action. Whilst it is recognized that the challenges relating to food security are multi-faceted and are tied to a wide range of problems, an integrated regional approach will enable us to respond to a multiple range of issues for the benefit of the food supply and value chain, whereby producers' and consumers' interests are inextricably linked. Exploring and building on commonalities in policies and strategies on food security, food safety and biosecurity have the potential for providing an enabling environment for improved plant health management within APEC, leading to greater overall food security.

The Workshop directly supported the underlying objectives of the APEC Food System (AFS) to widen markets into a single regional market with the desired result towards improving the efficiency of food production and trade for the benefit of APEC member economies. It also contributed towards the revised Terms of Reference of the ATCWG that include priorities of environmental sustainability, productivity and diversification, biotechnology, regulatory co-operation, and structural adjustment, enabling the ATCWG to better contribute to APEC's goals, including strengthening the (AFS).

2. OBJECTIVES OF THE WORKSHOP

The key objective of this Workshop was to build on current national systems and capacity within the developing APEC economies to develop a complementary framework that would strengthen region-wide cooperation to facilitate efficient food production. The Workshop objectives are:

- promote an environment of sharing and learning in addressing current constraints to an efficient food production system,
- provide opportunities for member economies to directly exchange strategies and experiences in their efforts towards food security in an APEC (integrated) approach,

- propose and discuss a framework for a regional collaboration approach to meet food security, particularly with respect to common threats of invasive agricultural pests, covering pest management, quarantine and phytosanitary measures, and regulations as they relate to non – tariff barrier of market access and trade,
- promote networking among APEC economies in a systematic manner to share information and expertise in phytosanitary and agricultural trade issues.

3. PARTICIPANTS AND RESOURCE PERSONS

The workshop was attended by 72 participants comprising of 40 official participants from 13 APEC member economies (China, Indonesia, Japan, Malaysia, Philippines, Chinese Taipei, Thailand, the US and Viet Nam and non-member countries (Cambodia, , Lao PDR, , Myanmar),, 16 observers from Malaysia and 4 resource persons from Australia and Malaysia, and 12 from the Organizing Committee. A list of participants, observers, resource persons and from the Organizing Committee is given as **Attachment 1**.

4. WORKSHOP PROGRAMME

The Workshop was organized at Concorde Hotel, Shah Alam, Selangor, Malaysia from 1-3 December 2010. A copy of the full program is given as **Attachment 2**. The Welcoming Speech was given by the Director of Crop Protection and Plant Quarantine Division, Department of Agriculture, Malaysia and the Opening Address were delivered by the Director General of Agriculture, Malaysia (The full speeches are given as **Attachment 3 & 4**).

5. WORKSHOP PRESENTATIONS SUMMARY

Session 2 - Food Security and the Role of Stakeholders

- 5.1. *Food Security and Food Security Planning - National and Regional Perspective:* Dr. Larry Wong informed the workshop participants that in addition to the traditional dimension of food security, i.e. food availability, accessibility, distribution and utilization there are new dimensions which are more complex, multi-scale and interconnected. These includes, e.g. human security, cross-border or regional, pandemic preparedness, traceability and food safety, demand management and the role of private sectors. He explained in details each of these dimensions. He also explained on the strategic approach to food security which comprised of 3 components: rapid growth in macro economy, poverty eradication through rural economic growth, and stability of food system. National and regional approaches of food security framework were also discussed. He concluded by saying that the national food security can only be achieved with Regional and Global food security (Attachment 5.1.).
- 5.2. *Compliance with Global Standards – the case for stakeholder engagement:* Mr. Kit Chan discussed several issues related to food safety standards, e.g. monitoring and controlling standards, implementation for small holders, stakeholder views, etc. Based on stakeholder views there are two standards, i.e. food safety voluntary (private) that was initiated by consumers & retailers and technical regulations which is mandatory. He

then discussed on GAP and its benefits to producers and consumers as well as market-oriented approach to implement standard (Attachment 5.2.).

Session 3 - Stakeholder Participation for Market Access

- 5.3. *Stakeholder participation in risk management for market access – A case study in the implementation of ISPM 14:* Mr. Yusof Othman explained on the objective of ISPM 14, i.e. integrated measures in a systems approach as an option for pest risk management designed to meet phytosanitary requirements for the import of plants, plant products and other regulated articles. He further discussed that pest risk management can be done in the pre-border (e.g. by PRA, traceability, system approach, post-harvest treatment), in the border (import permit & PC, inspection and border mitigation), and post-border (e.g. by surveillance, early warning & eradication, system approach and post-harvest treatments). The use of system approach in risk management for pineapples and durian was discussed in great details, i.e. the rationale, objectives and critical points as well as the stakeholder's involvement. Problems and constraints in using this approach was also presented (Attachment 5.3.).

Session 4 - Commonalities in Crop Production and Pest Management

- 5.4. *Overview of fact-finding visits to member economies:* Dr. K.Y. Lum presented several findings from the pre-forum activities i.e. visits to relevant government and private industry individuals involved in food production. The objectives of the visits was to discuss and document issues in food security in 7 (seven) APEC member economies, i.e. China, Chinese Taipei, Indonesia, Philippines, Singapore, Thailand and Viet Nam. Rice was a common crop grown in these economies, followed closely by fruits and other crops, i.e. potato, corn, root crops, coffee, coconut and sugarcane. Some important pests and diseases of these crops include Golden Apple Snail, *Brontispa*, fruitflies, banana bunchy top, mealybugs, virus, etc. Awareness on local phytosanitary policies and global requirements for export among phytosanitary officers are high, moderate for policymakers and low for other stakeholders. Compliance to standards is seen by some as only relevant for export and not for locally marketed produce. Some developing economies need to update and revise the existing legislations to support better implementation of the global standards. There is a need in these economies to continuously educate all stakeholders on new international regulations, global requirements for export, their involvement in the process, etc. (Attachment 5.4.).
- 5.5. *Economy presentations from APEC member economies:* Representatives from Chinese Taipei, Indonesia, Malaysia, Philippines, Thailand and Viet Nam presented their country report based on the questionnaire sent to them by the Organizing Committee. Some of the questions are on:
- Major pest & disease threats to main export commodities
 - Level of awareness among stakeholders on local phytosanitary policies and global requirements for exports
 - Level of understanding and perception among stakeholders on plant biosecurity concept
 - The need to change/revise their local legislation/regulation to improve compliance with international standards

- Current stakeholder involvement and engagement in compliance to international standards
- The most important issues that require regional collaboration

The most important points from these presentations are the followings:

- a. Level of awareness on local phytosanitary policies and global requirements for exports among policy-makers and phytosanitary officers are high (all economies except Thailand), among exporters are medium and among producers and farmers are between low and medium.
- b. Level of understanding and perception on plant biosecurity concept among policymakers are between low (2 economies), medium (2 economies) or high (1 economy); among phytosanitary officers are between medium (3 economies) and high (3 economies); and among producers & farmers are between low (5 economies) and medium (1 economy)
- c. To promote biosecurity in the economy, phytosanitary officers from 4 economies have only ad-hoc dialogues with stakeholders, and only 2 countries have regular dialogs. One economy specifically mentioned that they have regular dialogues with relevant ministries/department.
- d. Suggested topics for regional cooperation includes:
 - Capacity buildings on risk mitigation, diagnostics, pest surveillance and impact assessment,
 - Regional early warning system,
 - Regional biosecurity network/working group,
 - Area-wide control program for serious pests (e.g. on fruit-flies)

(See Attachment 5.5. to 5.10.).

5.6. *Economy presentations from Non-APEC member economies:* Representatives from Cambodia, Lao PDR and Myanmar presented their economy report based on the same questionnaire described in 5.5. The most important points from these presentations are the followings:

- a. Level of awareness on local phytosanitary policies and global requirements for exports among policy-makers are low for Cambodia, medium for Lao PDR and high for Myanmar, among phytosanitary officers are medium for Cambodia and Lao PR and high for Myanmar. The awareness are all medium for exporters and among producers and farmers are all low except medium for Myanmar producers.
- b. Level of understanding and perception on plant biosecurity concept among policymakers are low (Cambodia and Lao PDR), or high (Myanmar); among phytosanitary officers are between medium (2 economies) and high (1 economy); and among producers & farmers are all low.
- c. To promote biosecurity in the economy, phytosanitary officers from 1 economy have only ad-hoc dialogues with stakeholders, and only 2 economies have

regular dialogs. One non – member country specifically mentioned that regular dialogues with relevant ministries/department was arranged to promote biosecurity.

- d. Suggested topics for regional cooperation includes:
- Capacity buildings on biosecurity, risk mitigation, diagnostics, pest surveillance and impact assessment,
 - Brown planthopper (BPH) forecasting and management

(See Attachment 5.11. to 5.13.).

5.7. *Plant Biosecurity Activities in Japan:* Mr. Kitahara presented two major activities related to plant biosecurity in his economy, i.e.:

- Stakeholders' engagement and participation
- Capacity building for phytosanitary officers

With regard to stakeholder's engagement he informed the meeting that relevant authorities, stakeholders and scientists were regularly involved in the review of draft ISPMs and they always giving comments and feedback. In addition, public hearings were also conducted regularly to collect opinions from all stakeholders, public and scientists on the new draft proposals for revising/amending the current regulations whenever necessary. On the capacity building, so far Japan has organised series of training related to biosecurity through FAO Thrust Fund and JICA. The 1st project that was implemented from 2007 was on the "Cooperation for the Improvement of Phytosanitary Capacity in the Asian Countries and the 2nd project was on "Thermal Treatment for the Disinfestation of Fruit-flies" (See Attachment 5.14).

5.8. *Food Safety – A New Challenge for Plant Protection in China:* Dr Z. Ye discussed about the role of pesticide regulations in China for ensuring all agriculture produce meet with the international food safety standard. He elaborated further on annual pesticide production and sales, regulations on pesticide residues and pesticides that was banned for use in China. In 2001, the Ministry of Agriculture had launched an action plan to monitor and manage the quality and safety of agricultural produce. This action plan was followed by National Campaign on Product Quality & Safety. Through this campaign, pesticide residue inspection laboratories were established in 37 cities. As a result of the campaign, the average of pesticide residues in vegetables from these cities were reduced tremendously in 2009 as compared to 2003, and 96.4% of the samples were below the MRL limits. Finally he gave several suggestions on how to improve pest management practices to get a better food quality and safety system(See Attachment 5.15).

Session 5 – Plant Biosecurity

5.9. *Biosecurity Continuum:* Dr. Naumann explained in great details on "biosecurity continuum" which comprised of three initiatives, i.e. pre-border, border, and post border. The objectives of the pre-border initiatives are: a) to support international, plant health frameworks and mechanisms, and development of international standard; b) to build and strengthen plant health capacity; c) to promote sharing of pest information; and d) to manage phytosanitary risk offshore. The second point was considered as the most important activity of the pre-border initiatives. In this activity several major tasks should be done, i.e. to raise awareness among decision makers, to improve technical capacity

(in surveys, specimen collection and management, identification of P&D), and to develop and improve skill in PRA. The objectives of the border initiatives are: a) to strengthen border security, especially through risk based on targeting of resources, and b) to improve consistency of import conditions and understanding of conditions. Lastly, Dr. Ian discussed on the post-border initiatives, the objectives of it and activities that should be done for each objective (See Attachment 5.16).

- 5.10. *A Regional Approach to Biosecurity:* Dr. Harris presented an overview of global challenges in achieving food security which included e.g. the need to rapidly increase the agricultural productivity especially by reducing the losses caused by P&D, widespread decline in *government* investment for agriculture R&D, food safety and GMO. He then briefed the meeting on the current scenario of food security in APEC Region, global trading environment and the Niigata Declaration on APEC Food Security. Related to PRA (Pest Risk Analysis), he presented the SWOT analysis of this for the APEC Region. From a biosecurity perspective he informed the meeting that a single APEC trading block would be impractical, but economies with similar crops, P&D status and appropriate level of protection (ALOP) could collaborate in market access, PRA and trade. Finally he made several recommendations, i.e. training of biosecurity officers should be done continuously (on PRA, market access, etc.); to improve regional collaboration in P&D diagnostics, identification and surveillance; and to strengthen biosecurity information network (See Attachment 5.16).

Session 6 - Regional Commonalities in Traded Commodities

- 5.11. *Opportunities for Shared Responsibilities:* Dr. Naumann discussed in details about the opportunities for sharing responsibilities in technical and policy aspects related to plant biosecurity. There are at least four opportunities for the technical aspects, i.e. in a) surveillance, b) diagnostics, c) information management, and d) phytosanitary risk management. For the policy aspects, there are three opportunities than can be shared, i.e. on the national strategy, private sector engagement and regional approach to standard setting. He then elaborates further for each opportunity with some examples (Attachment 5.17).
- 5.12. *Rounding Up:* In this final session, participants gathered in plenary to review all preceding presentations and consider opportunities for improved cooperation and sharing towards common objectives. Points deliberated upon included:
- Commonalities in food security crops, invasive species, emergent pests and diseases, current capacity in diagnostics and pest management – opportunities for cooperation
 - Knowledge networking along the whole stakeholder chain – within and between APEC economies, the need for formalization
 - Regional biosecurity – opportunities for a shared approach

6. WORKSHOP RECOMMENDATIONS

As the outcomes of the Workshop several recommendations was made as follows:

- The APEC forum be used to continue discussions on commonalities in biosecurity issues between trading economies, and explore opportunities for cooperation and sharing
- Particularly in the case of trading economies with similar crop commodities, pest and disease status, and market access targets, strengthen collaboration in technical aspects in surveillance, diagnostics, risk analysis and management.
- Participating APEC economies share experiences in broad stakeholder and private sector engagement and biosecurity networking within their economies, and consider such information sharing between economies.
- APEC economies consider regional policy strategies for specific risks to address shared biosecurity concerns.

In addition several suggested topics for regional cooperation were also proposed, i.e.:

- Capacity buildings on biosecurity, risk mitigation, diagnostics, pest surveillance and impact assessment,
- Regional early warning system,
- Regional biosecurity network/working group,
- Area-wide control program for serious pests (e.g. on fruit-flies)
- Brown plant-hopper (BPH) forecasting and management

7. ACKNOWLEDGMENTS

We would like to acknowledge the funding support provided by APEC Secretariat in Singapore that allowed the conduct and completion of the project. We would also like to express our gratitude to the Director General of Agriculture, Ministry of Agriculture & Agro-based Industry, Malaysia for officiating the Workshop. The cooperation and support given by all members of the Organizing Committee is also greatly acknowledged.

ATTACHMENTS 1-4

List of Participants

AUSTRALIA

- 1. Dr. Zamir Hossain**
Policy Officer (International Capacity Building)
Office of the Chief Plant Protection Officer
Biosecurity Service Group
Department of Agriculture, Fisheries and Forestry,
GPO Box 858, Canberra ACT 2601, AUSTRALIA
Phone: 02- 6272 4027 Fax: 02- 6272 5835
Email: zamir.hossain@daff.gov.au

CAMBODIA

- 2. Dr. Dy Sam An**
Deputy Director, Plant Protection,
Sanitary & Phytosanitary Department,
General Directorate of Agriculture.
Ministry of Agriculture, Forestry and Fisheries,
Phnom Penh, CAMBODIA
Tel: +855-12336934 Fax: +855-23885482
E-mail: saman_dy@yahoo.com
- 3. Mr. Uch Sothy**
Officer-in-Charge, Plant Quarantine Office,
Plant Protection, Sanitary & Phytosanitary
Department, General Directorate of Agriculture.
Ministry of Agriculture, Forestry and Fisheries,
Phnom Penh, CAMBODIA
Tel: +855-23885482 Fax: +855-23885267
H/P: +855-12471687
E-mail: uch.sothy@yahoo.com

CHINA

- 4. Prof. Ye Zhi Hua,**
Director General,
Institute of Quality Standards &
Testing Technology for Agro-products,
Chinese Academy of Agricultural Sciences,
12 Southern Street, Zhong Guan Cun,
Beijing 100081, CHINA
E-mail: zhihuaye@mail.caas.net.cn

CHINESE TAIPEI

- 5. Ms. Ko Nai-Wen,**
Associate Specialist,
Bureau of Animal Plant Health Inspection and Quarantine,
Council of Agriculture,
Executive Yuan,
51 Chungching S. Rd,
Sec.2 Taipei, TAIWAN 10075, R.O.C
Tel (HP): +886-21-3343 6415 Fax: +886-2-2343 1473
Email: nwko@mail.baphiq.gov.tw

INDONESIA

- 6. Mr. Bambang Hesti Susilo**
Head of Division, Plant Quarantine Centre,
Agency for Agriculture Quarantine,
Jln. Harsono RM No. 3, Ragunan, Pasar Minggu,
Jakarta, INDONESIA
Tel: +62-21-7816482 Fax: +62-21-7816482
E-mail: quaria2001@yahoo.com
- 7. Mr. Endang Syarifudin**
Supervisor, Plant Quarantine Centre,
Agency for Agriculture Quarantine,
Jln. Harsono RM No. 3, Ragunan, Pasar Minggu,
Jakarta, INDONESIA
Tel: +62-21-7816482 Fax: +62-21-7816482
E-mail: ending_esy@yahoo.co.id
- 8. Ms. Serlina,**
Head of Evaluation & Reporting Sub-division,
Plant quarantine Center,
Agency for Agricultural Quarantine,
Ministry of Agriculture,
Harsono RM no.3 Road, Pasar Minggu,
Jakarta, INDONESIA
E-mail: serlina_2974@yahoo.com OR
pusatkt@indo.net.id

List of Participants

9. Mr. Turhadi Noerachman,

Sub-division Head of Exported & Inter-area Seeds
and other Goods, Plant Quarantine Centre,
Agency for Agricultural Quarantine,
Ministry of Agriculture, Jln. Harsono RM No. 3,
Pasar Minggu, Jakarta, INDONESIA
E-mail: turhadi_noer@yahoo.co.id OR
pusatkt@indo.net.id

JAPAN

10. Mr. Yuji Kitahara

Section Chief, Plant Protection Division
Ministry of Agriculture, Forestry & Fisheries
1-2-1, Kasumigaseki, Chiyoda-ku,
Tokyo, JAPAN 100-8950
Tel: +81-3-35025978 Fax: +81-3-35023386
E-mail: yuji_kitahara@nm.maff.go.jp

LAO PDR

11. Mr. Khanxay Somchanda

Technical Officer, Plant Protection Center
Department of Agriculture,
Ministry of Agriculture and Forestry (MAF),
Thaduae Road Km 13, Nahai Village,
Hadsayfong District,
Vientiane, LAO PDR
Tel: +856-20-54691329 Fax: +856-21-812164
E-mail: khbombay2004@yahoo.com

12. Mr. Souliya Souvanduane

Assistant Director, Plant Quarantine Division
Department of Agriculture,
Ministry of Agriculture and Forestry (MAF),
P.O. Box 811,
Vientiane, LAO PDR
Tel: +856-21-452649 Fax: +856-20-452649
E-mail: souliya_ss@yahoo.com

MALAYSIA

13. Ms. Lailatul Jumaiyah Saleh Huddin

Assistant Director,
Crop Protection & Plant Quarantine Division,
Department of Agriculture,
Gallagher Road,
50480, Kuala Lumpur
Tel (HP): 019-946 3285 Fax: 03-2697 7205
Email: lailasaleh@doa.gov.my OR
lailasaleh@gmail.com

14. Ms. Maliza Hazin @ Ab Rahman

Assistant Director,
Crop Protection & Plant Quarantine Division,
Department of Agriculture,
Sultan Salahuddin Road,
50632, Kuala Lumpur
Tel (HP): 03-2030 1435 Fax: 03-2697 7164
Email: Maliza@doa.gov.my OR
mahadoamy@gmail.com

15. Ms. Masliah Haji Suhaimi

Agriculture Officer,
Agriculture Headquarter,
Tasik Luyang Road,
Off Jalan Maktab Gaya,
P.O Box 2050,
88632 Kota Kinabalu, Sabah.
Tel (HP): 013-548 9956 Fax: 088-239 046
Email: Masliah.Suhaimi@sabah.gov.my

16. Mr. Michael Ranges Nyangob

Assistant Director,
Department of Agriculture of Sarawak,
Plant Quarantine Branch,
Agriculture Annex Complex, Kumpang Road,
93200 Kuching, Sarawak
Tel (HP): 013-802 1952 Fax: 082-413 163
Email: michael@sarawaknet.gov.my

List of Participants

17. Ms. Norsiyenti Othman
Principal Assistant Director,
Crop Protection & Plant Quarantine Division,
Department of Agriculture
Tel (HP): 012-599 4475 Fax: 05-241 7376
E-mail: atieothman@yahoo.com OR
norsiyenti@doa.gov.my

MYANMAR

18. Ms. Khin Aye Pwint Khaing
Deputy Supervisor,
Plant Protection Division
Myanma Agriculture Service,
Yangon, MYANMAR
Tel: +95-1-539496 Fax: +95-1-644019
E-mail: khaing.khinayepwint@gmail.com OR
ppmas.moai@mptmail.net.mm

19. Mr. Ko Ko
Deputy Supervisor,
Plant Protection Division
Myanma Agriculture Service,
Yangon, MYANMAR
Tel: +95-9-5098308 Fax: +95-1-644019
E-mail: kokosharp@gmail.com OR
ppmas.moai@mptmail.net.mm

PHILIPPINES

20. Dr. Lilia Portales,
Senior Agriculturist,
Crop Protection Division,
Bureau of Plant Industry,
692 San Andres St., Malate,
Manila, PHILIPPINES
E-mail: ailil2003@yahoo.com

21. Mr. Joselito Antioquia
Officer-in-Charge, Plant Quarantine Service,
NAIA, Ninoy Aquino International Airport, Terminal 1
Pasay City, Philippines
Manila, PHILIPPINES
Tel: +632-8322982 Fax: +632-8771109
E-mail: banglen2001@yahoo.com

22. Mr. Luben Q. Marasigan
Chief, Plant Quarantine Service,
Central Office, Bureau of Plant Industry,
692 San Andreas St., Malate 1004
Manila, PHILIPPINES
Tel: +632-4040409 Fax: +632-5243749
E-mail: lobs_marasigan@yahoo.com

23. Ms. Wilma Cuaterno,
Head of Crop Protection
Bureau of Plant Industry,
692 San Andres St., Malate,
Manila, PHILIPPINES
Tel: (632) 524-7353 Fax: (632) 523-2426
E-mail: wilmanemesio@yahoo.com

THAILAND

24. Dr. Margaret C. Yoovatana
Policy and Plan Specialist,
Department of Agriculture,
50 Phaholyotin Road,
Chattuchak, Bangkok 10900, Thailand
Tel: 6602 5795359 Fax: 6602 561 5024
Email: luckymegy@yahoo.com

25. Mr. Sirichai Thaworn
Agricultural Research Officer
Agricultural Regulation Technical Group
Office of Agricultural Regulation
Department of Agriculture, 50 Ngamwongwan Road,
Chatuchak, Bangkok 10900, Thailand
Tel: + 668-78247225 Fax: + 662-579 5084
Mobile: +668 7824 7225
Email: ilamwa@hotmail.com

26. Mr. Surapol Yinasawapun,
Senior Agricultural Research Specialist,
Plant Quarantine Research Group,
Plant Protection Research and Development Office
Department of Agriculture, 50 Phaholyotin Road,
Chattuchak, Bangkok 10900, Thailand
Email: syinasawapun@yahoo.com

List of Participants

- 27. Ms. Wasana Ridthaisong**
Agricultural Research Officer
Plant Quarantine Research Group
Plant Protection Research and Development Office
Department of Agriculture, 50 Phaholyothin Road
Chatuchak, Bangkok 10900, THAILAND
Tel: +662-9406670 ext. 102 Fax: +662-5794129
Mobile: + (668) 6994 3878
E-mail: wasana_rid@yahoo.com
- U. S. EMBASSY**
- 28. Mr. Bernard Kong**
United States of America Embassy
27 Napier Road,
SINGAPORE 258508,
Tel (HP): +65 6476 9294 Fax: +65 6476 9517
Email: bernard.kong@usda.gov
- 29. Ms. Jacelyn Chang**
United States of America Embassy
376, Jalan Tun Razak,
50400 Kuala Lumpur,
Tel (HP): 012 398 2685 Fax: 03 2168 5023
Email: Jacelyn.Chang@usda.gov
- VIET NAM**
- 30. Ms. Bui Thi Tuyet Nhung,**
Deputy Director
Plant Quarantine Diagnostic Centre,
Plant Protection Department,
Ministry of Agriculture and Rural Development (MARD),
149, Ho Dac Di Street,
Dong Da District,
Hanoi, VIET NAM
E-mail: nhng_bui@yahoo.com
- 31. Mr. Luong Ngoc Quang**
Head, Pest Risk Analysis Division
Plant Protection Department
Ministry of Agriculture and Rural Development
149 Ho Dac Di, Dong Da, Hanoi, Vietnam
Tel: + 844-22-433413 Fax: + 844-38-513746
Email: Inquang73@yahoo.com
- 32. Mr. Nguyen Quang Hieu,**
Quarantine Officer,
Plant Protection Department,
Ministry of Agriculture and Rural Development (MARD),
149, Ho Dac Di Street,
Dong Da District,
Hanoi, VIET NAM
E-mail: hieukdtv@yahoo.com.vn
- 33. Ms. Nguyen Thi Thu Huong**
Plant Quarantine Officer,
Plant Quarantine Division,
Plant Protection Department,
Ministry of Agriculture and Rural Development
149 Ho Dac Di, Dong Da, Hanoi, Vietnam
Tel: + 849-82-157269 Fax: + 844-35-3300403
Email: nguyenuong0211@gmail.com
- Observers**
- 34. Mr. Arizal Arshad**
Principal Assistant Director,
Crop Protection & Plant Quarantine Division,
Department of Agriculture,
Sultan Salahuddin Road,
50632, Kuala Lumpur
Tel (HP): 03-2030 1400 Fax: 03-2697 7164
- 35. Ms. Atikah Abdul Kadir Jailani**
Principal Assistant Director,
Crop Protection & Plant Quarantine Division,
Department of Agriculture,
Sultan Salahuddin Road,
50632, Kuala Lumpur
Tel (HP): 03-2030 1419 Fax: 03-2697 7164
Email: atikah@doa.gov.my
atikakj@hotmail.com

List of Participants

- 36. Mr. Chan Han Hee**
Consultant Food Safety
Malaysian Agrifood Cooperation (MAFC)
No. 3, Jalan Perindustrian Puchong,
Bandar Metro Puchong,
47160 Puchong, Selangor
Tel (HP): 012 325 7905 Fax: 03 5623 5100
Email: chanh@mafc.com.my
- 37. Ms. Che An Mohd Joned**
Principal Assistant Director,
Crop Protection & Plant Quarantine Division,
Department of Agriculture,
Sultan Salahuddin Road,
50632, Kuala Lumpur
Tel (O): 03-2030 1400 Fax: 03-2697 7164
Email: cheanmohdjoned@doa.gov.my
- 38. Dr. Fuziaton Baharudin**
QAD
Malaysian Agrifood Cooperation (MAFC)
No. 3, Jalan Perindustrian Puchong,
Bandar Metro Puchong,
47160 Puchong, Selangor
Tel (HP): 012 308 9948 Fax: 03 5623 5100
Email: fuziaton.b@mafc.com.my
- 39. Dr. Ismail Hashim**
National Association of Smallholders (NASH)
2-5-14, Prima Peninsula,
Jln Setiawangsa 11,
Taman Setiawangsa,
54200 Kuala Lumpur
Tel (HP): 012 287 2339 Fax: 03 4257 3513
Email: ibhmayan@yahoo.com
- 40. Dr. Mohamad Roff Mohd Noor**
Deputy Director
Pest and Disease Programme
Ibu Pejabat MARDI,
P.O. BOX 12301,
50774 Kuala Lumpur
Tel (HP): 03 8943 7228 Fax: 03-8943 7623
Email: roff@mardi.gov.my
- 41. Ms. Ezzatul Syhadah Zainordin**
Crops, Livestock and Fishery Division
Ministry of Agriculture and Agro-Based Industry
Level 10, Block 4G1
Wisma Tani, Precint 4
62624 Putrajaya
Tel (HP): 019 987 0551 Fax: 03 8888 6901
Email: ezzatul@moa.gov.my
- 42. Mr. Ho Haw Leng**
Deputy Director,
Crop Protection & Plant Quarantine Division,
Department of Agriculture,
Jalan Sultan Salahuddin,
50632, Kuala Lumpur
Tel (O): 03-2030 1400 Fax: 03-2697 7164
Email: hawlengho@doa.gov.my
- 43. Ms. Julia Lamdin**
Deputy Director,
Research Division,
Agriculture Research Center,
P.O. Box No.3,
89207 Tuaran
Sabah
Tel (HP): 019-880 7870 Fax: 088-788 548
Email: Julia.Lamdin@sabah.gov.my
- 44. Mr. Kamarulzaman Othman**
JTP Trading Sdn. Bhd.
B9A, Jalan Perang,
Taman Pelangi,
80400, Johor Bahru, Johor
Tel (HP): 019 775 3355 Fax: 07 3333 775
Email: info@jtp.com.my
- 45. Mr. Koh Soo Koon**
Peninsula Plantation,
Karung Berkunci,
Simpang Rengam, Pineapple Estate,
Bt. 46, 86200,
Simpang Rengam, Johor
Tel (HP): 012 787 6068 Fax: 07 755 6415
Email: ppsb@yahoo.com

List of Participants

- 46. Mr. Misrudin Hadis**
Principal Assitant Director
Crop Protection and Plant Quarantine Division
Department of Agriculture, Selangor
Tingkat 4, Bangunan SSAAS 2,
No. 3 Jalan Indah, Seksyen 14,
40632 Shah Alam, Selangor
Tel (HP): 012-617 4588 Fax: 03-5511 3978
Email: -
- 47. Mr. Mohd Anim Hosnan**
Deputy Director,
Horticulture Division,
Department of Agriculture,
Aras 12, No. 30 Persiaran Perdana,
Presint 4,
62624 Putrajaya
Tel (HP): 013-714 5433 Fax: 03-8888 3460
Email: anim@doa.gov.my
- 48. Mr. Mohd Erwan Misran**
Principal Assistant Director
Ministry of International Trade & Innovation
8th floor, Blok 10,
MITI Government Offices Complex
Jalan Duta
50622, Kuala Lumpur
Tel (HP): 016 3235 497 Fax: 03 6201 2341
Email: erwan.misran@miti.gov.my
- 49. Ms. Nazipah Jamaludin**
Senior Director,
International Market Division,
Federal Agricultural Marketing Authority Building
FAMA Point,
Lot 17304, Jln Persiaran Satu,
Bandar Baru Selayang,
68100 Batu Caves, Selangor
Tel (HP): 019 952 8079 Fax: 03 6136 5597
Email: nazipah@fama.gov.my
- 50. Ms. Norshahida Zolkiaply**
Ministry of International Trade & Innovation
8th floor, Blok 10,
MITI Government Offices Complex
Jalan Duta
50622, Kuala Lumpur
Tel (HP): 019 235 3710 Fax: 03 6203 1305
Email: shahida@miti.gov.my
- 51. Prof. Dr. Idris Abd Ghani**
School of Environmental & Natural Resources,
Faculty of Science & Technology,
Universiti Kebangsaan Malaysia
43600 Bangi, Selangor
Tel (HP): 013 335 1511 Fax: 03 8925 3357
Email: idrisgh@ukm.my
- 52. Ms. Sharmila Kaur Harbanas**
Assistant Director,
Planning & ICT Division,
Department of Agriculture,
Aras 15, No. 30 Persiaran Perdana,
Presint 4,
62624 Putrajaya
Tel (HP): 03-8870 3085 Fax: 03 8888 4775
Email: sharmila@doa.gov.my
- 53. Mr. Then Kek Hoe**
FELDA Argiculture Services Sdn Bhd.
Stesen Sungai Tengi Selatan,
44010 Kuala Kubu Bharu, Selangor
Tel (HP): 019 622 5940 Fax: 03 6042 9103
Email: -
- 54. Mr. Wan Darman Wan Abdullah**
Deputy Director
Paddy, Industrial Crop & Floriculture Division
Level 12, No. 30 Persiaran Perdana,
Presint 4,
62624 Putrajaya
Tel (HP): 017-341 6406 Fax: 03-8888 9295
Email: darman@doa.gov.my

List of Participants

55. Mr. Zulkifli Yaacob

Assistant Secretary
Strategic Planning and International Division,
Ministry of Agriculture and Agro-based Industry
Malaysia
Tel (O): 03 – 8870 1102 Fax: 03 – 8870 1088
Email: zulkifli@moa.gov.my

Resource Persons

56. Dr. Adrian Harris

Independent Consultant
6 Daly Street, Deakin, ACT 2600
AUSTRALIA
Telephone (h): (02) 6273 4414;
Mobile: 0457 195 990;
Email: adrianrossharris@msn.com

57. Dr. Ian Naumann

Director, SPS Capacity Building Program
Office of the Chief Plant Protection Officer
Department of Agriculture, Fisheries and Forestry,
GPO Box 858, Canberra ACT 2601, AUSTRALIA
Phone: 02- 6272 3442 Fax: 02- 6272 5835
Mobile: 0412 678 463
Email: ian.naumann@daff.gov.au

58. Mr. Kit Chan

Independent Consultant
K-Farm, 40 Jalan PBS 14/9,
Taman Perindustrian Bukit Serdang,
43300 Seri Kembangan,
Selangor, MALAYSIA
Email: kitchen@kfarm.com

59. Dr. Larry Wong

Independent Consultant
19. Jalan Setiamurni 4,
Bukit Damansara,
50490 Kuala Lumpur, MALAYSIA
Email: larry.wcy@gmail.com

60. Mr. Yusof Othman

Deputy Director
Expertise & Crop Diagnostic Section
Crop Protection and Plant Quarantine Division
Department of Agriculture, Gallagher Road
50480 Kuala Lumpur MALAYSIA
Tel: 03-2697 3077 Fax: 03-2697 7205
Email: yusofothman@doa.gov.my OR
yusofothman@gmail.com

Secretariat

61. Dr. Loke Wai Hong

Regional Director
CABI SEA
Bldg A-19, MARDI
P.O. Box 210, 43400 UPM Serdang
Selangor MALAYSIA
Tel: +603-8943 2921 / 3641 Fax: +603-8942 6490
Email: loke@cabi.org

62. Dr. Lum Keng Yeang

Chief Scientist
CABI SEA
Bldg A-19, MARDI
P.O. Box 210, 43400 UPM Serdang
Selangor MALAYSIA
Tel: +603-8943 2921 / 3641 Fax: +603-8942 6490
Email: ky.lum@cabi.org

63. Dr. Sivapragasam Annamalai

Senior Scientist
CABI SEA
Bldg A-19, MARDI
P.O. Box 210, 43400 UPM Serdang
Selangor MALAYSIA
Tel: +603-8943 2921 / 3641 Fax: +603-8942 6490

64. Dr. Soetikno S. Sastroutomo

Senior Scientist
CABI SEA
Bldg A-19, MARDI
P.O. Box 210, 43400 UPM Serdang
Selangor MALAYSIA
Tel: +603-8943 2921 / 3641 Fax: +603-8942 6490
Email: s.soetikno@cabi.org

List of Participants

- 65. Ms. Wong Wan Cheng**
Principal Assistant Director
Expertise & Crop Diagnostic Section
Crop Protection and Plant Quarantine Division
Department of Agriculture
Gallagher Road
50480 Kuala Lumpur MALAYSIA
Tel: 03-2697 3077 Fax: 03-2697 7205
Email: wancheng@doa.gov.my OR
wong5494@yahoo.com
- 66. Mr. Daryl Leslie Sigah**
Assistant Director
Expertise & Crop Diagnostic Section
Crop Protection and Plant Quarantine Division
Department of Agriculture
Gallagher Road
50480 Kuala Lumpur MALAYSIA
Tel: 03-2697 3077 Fax: 03-2697 7205
Email: daryl@doa.gov.my OR
daryl.leslie.81@gmail.com
- 67. Ms. Faridah Md Noor**
Assistant Agriculture Officer
Expertise & Crop Diagnostic Section
Crop Protection and Plant Quarantine Division
Department of Agriculture
Gallagher Road
50480 Kuala Lumpur MALAYSIA
Tel: 03-2697 3077 Fax: 03-2697 7205
Email: faridahmn@doa.gov.my OR
lidd_far@yahoo.com
- 68. Mr. Low Ying Chiang**
Scientist
CABI SEA
Bldg A-19, MARDI
P.O. Box 210, 43400 UPM Serdang
Selangor MALAYSIA
Tel: +603-8943 2921 / 3641 Fax: +603-8942 6490
Email: lowyc@cabi.org
- 69. Mr. Lum Weng Kiong**
Financial Officer
CABI SEA
Bldg A-19, MARDI
P.O. Box 210, 43400 UPM Serdang
Selangor MALAYSIA
Tel: +603-8943 2921 / 3641 Fax: +603-8942 6490
Email: l.kiong@cabi.org
- 70. Ms. Madora Ab Manan**
Assistant Director
Expertise & Crop Diagnostic Section
Crop Protection and Plant Quarantine Division
Department of Agriculture
Gallagher Road
50480 Kuala Lumpur MALAYSIA
Tel: 03-2697 3077 Fax: 03-2697 7205
Email: madora@doa.gov.my
- 71. Mr. Mohd Sanusi Mohd Kasim**
Assistant Director
Expertise & Crop Diagnostic Section
Crop Protection and Plant Quarantine Division
Department of Agriculture
Gallagher Road
50480 Kuala Lumpur MALAYSIA
Tel: 03-2697 3077 Fax: 03-2697 7205
Email: msanusi@doa.gov.my OR
sanusikasim@gmail.com
- 72. Ms. Shahira Azwani Ali Sabri**
Assistant Director
Crop Protection and Plant Quarantine Division
Department of Agriculture
Jalan Sultan Salahuddin
50632, Kuala Lumpur MALAYSIA
Tel: 03-2030 1421 Fax: 03-2697 7164
Email: shahira@doa.gov.my OR
sira_azwani@yahoo.com

ATTACHMENT 2



Asia-Pacific
Economic Cooperation

**APEC Workshop on Enhancing Food Security through A Regional Approach
and Wide Stakeholder Participation in Plant Biosecurity**

Concorde Hotel, Shah Alam, Malaysia, 1 – 3 December 2010

Workshop Programme

Day 1 – 1st December 2010 (Wednesday)		
Session 1 : Opening Ceremony		
0800 - 0830	Arrival of Participants and Registration	
0830 - 0900	Arrival of Invited Guests	
0900 - 1000	<ul style="list-style-type: none"> - Prayer Recitation - Welcoming Remarks by Director of Crop Protection & Plant Quarantine Division, Department of Agriculture - Opening Speech by Director General of Agriculture, Malaysia 	
1000 - 1030	Tea Break	
Session 2 : Food Security and the Role of Stakeholders		
Chairperson : Ms Wan Normah Wan Ismail		
1030 - 1100	Purpose, Scope and Structure of 3-days Workshop <i>Dr. Lum Keng Yeang</i>	
1100 - 1150	Food Security and Food Security Planning : National and Regional Perspectives <i>Dr. Larry C.Y. Wong</i>	
1150 - 1240	Compliance with Global Standards – the Case for Stakeholder Engagement <i>Mr Kit Chan</i>	
1240 - 1300	General Discussion	
1300 - 1400	Lunch	

	Session 3 : Stakeholder Participation for Market Access	
	Chairperson : Dr. Loke Wai Hong	
	1400 - 1450	Stakeholder Participation in Risk Management for Market Access – A Case Study in the Implementation of ISPM 14 <i>Mr Yusof Othman</i>
	1450 - 1600	Breakout Group Discussion 1 <i>Stakeholder Participation in APEC Economies</i>
	1600 - 1630	Tea Break
	1630 - 1700	Breakout Group Presentations
Day 2 – 2nd December 2010 (Thursday)		
	Session 4 : Commonalities in Crop Production and Pest Management Practices	
	Chairperson : Mr Yusof Othman	
	0900 - 0930	Overview of Fact Finding Visits to Member Economies
	0930 - 1030	Presentations by Participating Member Economies
		- PR China
		- Indonesia
		- Japan
	1030 - 1100	Tea Break
	1100 - 1300	- Malaysia
		- Philippines
		- Chinese Taipei
		- Thailand
		- Viet Nam
	1300 - 1400	Lunch

	Session 5 : Plant Biosecurity	
	Chairperson : Dr. Larry C.Y. Wong	
	1400 - 1450	The Biosecurity Continuum <i>Dr. Ian Naumann</i>
	1450 - 1540	A Regional Approach to Plant Biosecurity <i>Dr. Adrian Harris</i>
	1540 - 1610	Tea Break
	1610 - 1700	Breakout Group Discussion 2 <i>Regional Cooperation in Plant Biosecurity</i>
	1700 - 1730	Breakout Group Presentations
	1930 - 2230	Official Dinner
Day 3 – 3rd December 2010 (Friday)		
	Session 6 : Regional Cooperation and Closing	
	Chairperson : Dr. Lum Keng Yeang	
	0900 - 0950	Potential Areas for Cooperation in Regional Biosecurity <i>Representatives from Developed APEC Economies</i>
	0950 - 1020	Tea Break
	1020 - 1120	Presentations by Participating Non-APEC Economies (Cambodia, Lao PDR and Myanmar)
	1120 - 1200	Round-up Discussion : Regional Commonalities in Traded Commodities – Opportunities for Shared Responsibilities and Joint Action
	1200 - 1210	Workshop Evaluation
	1210 - 1230	Presentation of Certificates and Official Closing
	1230 - 1430	Lunch
	1430 - 1700	Field Visit

ATTACHMENT 3

Welcoming speech by
The Director of Crop Protection and Plant Quarantine Division
Department of Agriculture, Malaysia

IN CONJUNCTION WITH

**THE OPENING OF THE APEC WORKSHOP ON ENHANCING FOOD SECURITY
THROUGH A REGIONAL APPROACH AND WIDE STAKEHOLDER PARTICIPATION
IN PLANT BIOSECURITY**

1st – 3rd OF DECEMBER 2010, AT CONCORDE HOTEL, SHAH ALAM, MALAYSIA

Assalamualaikum wbt

Selamat pagi (Good morning)

Y. Bhg. Datuk Roseley Bin Dato' Haji Khalid, the Director General of Agriculture Malaysia

Y. Bhg. Dato' Sulaiman Md Zain, Deputy Director General (Operations) Department of Agriculture, Malaysia,

Distinguished speakers, resource persons, participants and guests,

Ladies and gentlemen,

At the outset, let me begin by expressing a warm welcome (*Selamat datang*) to all of you to the *Workshop on Enhancing Food Security through a Regional Approach and Wide Stakeholder Participation in Plant Biosecurity*. The encouraging response for participation to this workshop by the government and private sectors from overseas especially APEC Economies as well as within the economy shows the relevance of the subject matter which will be deliberated within the next 3 days.

We are very fortunate that the Director General of Agriculture Malaysia had agreed to officially open this workshop and I wish to express my sincere gratitude to Y. Bhg. Datuk

Roseley Bin Dato' Haji Khalid, for taking time off his very busy schedule to be with us this morning. I would also like to thank the Deputy Director General of Agriculture (Operations) Dato Sulaiman and Directors from DOA who had come to this occasion to give their support.

Ladies and gentlemen,

The organization of this workshop is the result of successful project proposal tendered to APEC Secretariat for funding. The DOA Malaysia in collaboration with CABI South East Asia had put together the proposal for this project which was approved for funding to be implemented in the year 2010 under APEC Project ATC 03/2010A. I would like to take this opportunity to thank CABI for their continuous cooperation with DOA in charting capacity building activities on biosecurity as well as sanitary and phytosanitary matters for Malaysia and for this region for the last five years.

This APEC funded project comprise of 2 core activities; i.e. a 3 days interactive workshop targeted especially for participants from developing APEC Economies to deliberate on food security issues and to tease out commonalities amenable to a regional approach, and a pre-forum activity consisting of brief visits to participating economies to gather information to support preparation of workshop materials. The latter activity, which is the pre-forum activity was carried out within the months of October and November involving officers from DOA Malaysia and CABI. The activities of the visit include meeting with government and private sector individuals involved in food production, market access and export, to discuss and verify their responses in the food security related issues.

As for this workshop, the purpose is to outline building of current national systems and capacity within the developed and developing APEC Economies to develop a complementary framework that will strengthen region-wide cooperation to facilitate efficient food production. The specific objectives are :

- (i) To promote an environment of sharing and learning in addressing current constraints to an efficient food production system;
- (ii) To provide opportunities for member economies to directly exchange strategies and experiences in their efforts towards food security in an APEC (integrated) approach;
- (iii) To propose and discuss a framework for a regional collaboration approach to meet food security, particularly with respect to common threats of invasive agricultural pests, covering pest management, quarantine and phytosanitary measures, and regulations related to market access and trade;
- (iv) To strengthen networking among APEC Economies in a systematic manner for sharing information and expertise in phytosanitary and agricultural trade issues.

Ladies and gentlemen,

The workshop today is attended by representatives of ten APEC Economies comprising of Australia, Chinese Taipei, Indonesia, Japan, Malaysia, People's Republic of China, the Philippines, Thailand, USA and Vietnam and three ASEAN member countries which are non-APEC Economies, comprising of Cambodia, Lao PDR and Myanmar. Besides officials from the government agencies, our local participants include representatives from the research institutions, universities, embassy, importers and exporters.

We have also engaged a list of experienced speakers and facilitators from local and overseas who are experts in their own areas, whose contribution is very crucial in steering the workshop to a successful conclusion. I hope all participants will actively engage in the discussions during the workshop by offering your opinions and share your knowledge on how to improve and manage plant biosecurity to achieve food security for the region.

Before I end my speech, I would like to convey my appreciation to APEC and Aus Aid through DAFF, Australia for co-funding this workshop together with Malaysia

especially in making it possible for representatives from APEC Economies to travel to Malaysia. Again my heartfelt thanks to the Director General of Agriculture, Malaysia Datuk Roseley Dato' Hj. Khalid for your support to make this workshop happen and for gracing this occasion. To the organizing committee, thank you very much for your hard work since the last couple of months and last but not least, I wish all participants a successful workshop and hope the recommendations from this workshop will be of benefit to governments as well as the industry players in the APEC Economies as well as the region.

Thank you.

ATTACHMENT 4

Official speech by
The Director General of Agriculture Malaysia
Y.BHG. DATUK ROSELEY BIN DATO' HAJI KHALID
IN CONJUNCTION WITH
THE OPENING OF THE APEC WORKSHOP ON ENHANCING FOOD SECURITY
THROUGH A REGIONAL APPROACH AND WIDE STAKEHOLDER PARTICIPATION
IN PLANT BIOSECURITY
1st – 3rd OF DECEMBER 2010, AT CONCORDE HOTEL, SHAH ALAM, MALAYSIA

Assalamualaikum warohmatullahi-wabarakatuh

Selamat pagi (Good morning)

Dato' Sulaiman Md Zain, Deputy Director General of Agriculture

Mrs. Wan Normah Wan Ismail, Director of Crop Protection and Plant Quarantine
Division cum APEC Project Overseer,

Distinguished speakers, resource persons, participants and guests,

Ladies and gentlemen,

I am greatly honored and pleased to be invited to officiate the opening of the **APEC Workshop on Enhancing Food Security through a Regional Approach and Wide Stakeholder Participation in Plant Biosecurity** which I expect to be significant for this region and its people. I am pleased to welcome all of you, especially to those participants from overseas who have taken a long trip to attend and share with us your knowledge on this subject. To all of you *Selamat datang* (welcome) to Malaysia. I wish you all a pleasant stay during the workshop.

On behalf of the Government of Malaysia, I wish to express our gratitude to APEC for selecting Malaysia to be the organizer of this highly important programme for five consecutive years. In this regards, I would like to congratulate the organizing committee for the successful organization of this APEC workshop. I am impressed by the sizeable

turnout of **seventy two(72)** participants and speakers from **ten (10)** APEC economies and 3 ASEAN member countries (non-APEC economies) and also local representatives from the government and private sectors. Your presence here is a clear indication that this workshop is an important programme that justifies our support in order to enhance food security in this region.

Ladies and gentlemen,

As you might be aware, global food security stands at a crossroad. The food price spike in 2007 and 2008 served as a wake-up call about the vulnerability of long-term food security. In 2009, for the first time in human history, the number of undernourished people in the world exceeded 1 billion (**ref: FAO (2009) *The State of Food Insecurity in the World 2009***), although it is estimated to have declined to 925 million in 2010. Looking to the future, the world's population is expected to reach 9.1 billion by 2050, and food production will have to increase by 70 percent to feed them (**ref: FAO (2009) *How to Feed the World in 2050***). On the other hand, agricultural production has been increasingly constrained as crop yields are not improving as fast as in previous years; public investment has diminished in the long term; and desertification, shortages of fresh water, conversion of farmland to non-food production and the adverse impacts of climate change have increased. Consequently, average crop prices over the next decade are projected to remain above the levels evident during the decade prior to the 2007-08 peaks. These realities underscore the importance of trade in food and agricultural products.

The lessons learned from the recent food price spikes provide valuable guidance on the ways in which APEC economies can address food security. For the past few decades, efforts by the international community have placed a strong emphasis on the demand side measures as a means to improve access to food through poverty alleviation programmes. So, now is the time to take concrete actions to feed the future. Food security cannot be achieved without stable, efficient and equitable distribution systems that can deliver food to the population. In this regard, APEC economies should work together to facilitate improved agricultural trade, maintain reliable markets, enhance the

business environment and ensure food safety in the region in cooperation with key stakeholders. Promoting responsible agricultural investment is an indispensable element of this goal.

Ladies and gentlemen,

Building the capacity of economies to produce, access, and distribute safe food, as well as developing appropriate food safety regulation is an important element of food security. Meaningful consultation with relevant stakeholders is critical in making sustained progress towards our food security goals. Robust engagement helps strengthen the commitment of key players and ensures that the best ideas are utilized. Stakeholders comprise a broad range of players including non-government organizations, foundations, universities, multilateral institutions and private sector entities. Given the significant public health and economic impacts of unsafe food, greater collaboration among food scientists and regulators, as well as the use of science and risk-based food safety systems, should be accelerated to improve regulatory outcomes. This workshop can be used as a platform to facilitate sustainable agricultural production, trade and investment in agricultural products, technical cooperation, development and use of science-based regulations, and other initiatives to strengthen regional and global food security. This will bring benefit to economies as it provides avenue to share and contribute, among others, food supply and demand data, technical know-how, and disaster preparedness among APEC economies.

There is a need to synergize between rural development and food security, whereby we should remain committed to advancing the agriculture sector to increase food production as well as to generate income for farmers. This effort may include funding to develop agro-entrepreneurs, support best practices, upgrade infrastructure as well as providing means for consolidation of resources, accessibility and affordability which at the end of the day increases productivity and hence benefit the rural communities and smallholding farmers. Moreover, services designed to facilitate agricultural programmes such as R&D and extension activities will effectively help small-scale farmers to reduce

cost, enhancing efficiency and diversify income sources. We, either the APEC economies or non-APEC economies, should emphasize on human capacity building to establish contingency plan for any emergency situation. This aims to avoid any disruption in the food supply chain and to ensure continuous agricultural production and efficient distribution systems. It is essential that, cooperation in the control and improvement of surveillance, public awareness and response to pandemics due to possible trans-boundary plant diseases be established among APEC economies. Further, APEC economies should strengthen and enhance the establishment of Early Warning System for natural disasters as well as for crop pest and diseases outbreak to ensure better productivity.

Ladies and gentlemen,

There is an enormous challenge ahead of us. There is much more that we need to understand with respect to risk analysis. Many regional/International and inter-governmental organizations and professional bodies are making the right initiatives in taking the first step in providing support to projects that will raise awareness, and build capacity in risk analysis. Integrated pest management is a shared responsibility, and each stakeholder has an important role to play. Agriculture sector has suffered enormous losses and there are now important lessons learned from the past. Movement of plants and its products is a necessity for agriculture development at both subsistence and commercial levels. However, intensified trade, will foster increased global exposure to disease, pest and alien invasive organisms, the impacts of which may be irreversible.

The risks of major disease incursion and newly emerging pests and diseases will continue to threaten the agriculture sector, and unless appropriate pests and diseases management measures are put in place, it will cost the government and private sectors much more in terms of production losses, and efforts to contain and eradicate them compared to the amount spent in preventing their entries into the system. There is no clear cut strategy. Strong national commitment from responsible administration and proactive support and cooperation from the private sector and stakeholders toward

harmonizing health management measures and promoting responsible trans-boundary movement of agriculture and products will reduce the risk.

Ladies and gentlemen,

APEC Leaders have recognized that the involvement of the private sector is an important feature of APEC work. Hence, in 1998 the APEC Business Advisory Council (ABAC) recommended that APEC should build an APEC Food System (AFS) to achieve a more robust regional food system. Since then, APEC has recognized that the underlying objective of ABAC's original proposal for AFS is the widening of markets into a more integrated regional food market. The desired result is to improve the efficiency of food production and trade for the benefit of APEC member economies, whether food for export or import. The gains from improved productivity and a more efficient regional food market will also help ensure the long term availability of food at affordable prices to all consumers. APEC initiatives to advance the AFS have since included the development of a framework to strengthen cooperation in food safety activities across member economies, as well as to share information and build capacity in the region to harmonise food safety regulatory frameworks with existing international food standards.

In any case, good cooperation in developing and setting standards that are internationally acceptable will contribute to growth in agriculture trade. Protecting the nation's food and agriculture industry demands the coordinated effort of the public, private and university as partners in the same way that all of these stakeholders have cooperated for decades on issues of food safety and plant protection. Accordingly, the roles and responsibilities of each stakeholder must be more carefully defined, understood, and supported. Meanwhile, there are limitations and gaps in the existing programs which should serve as a basis for efforts needed to enhance food security. Notably, current systems were developed primarily to prevent the accidental introduction of pathogens, pests and diseases but the assistance of public security partners is not fully developed. Moreover, private sector food and agriculture

businesses must be full and active partners in the process to develop a national integrated security and emergency management capability.

In addition to trade liberalization, the ABAC's proposal for an APEC food system also stresses the need for trade promotion via cooperative action to reduce frictions to regional trades in the form of customs procedures and myriad other regulations. Examples of the types of initiatives that might be taken are greater transparency in and simplification of customs procedures, smoother electronic data interchange and closer adoption of WTO procedures for valuing traded products and for pre-shipment inspection and classification. There is also great scope for technical assistance to better assess sanitary and phytosanitary procedures and other technical regulations where they are unduly limiting trade in food products, sharing information on food safety and to negotiate for the harmonization or mutual recognition of food safety standards. Implementation of measures such as the International Standards for Phytosanitary Measures (ISPMs) to prevent the introduction and spread of plant pests is critical to ensuring the development of a viable and sustainable global agriculture market. The strengthening of policy and regulatory frameworks for biosecurity in food and agriculture must be among the highest priorities. While the value of such initiatives is difficult to quantify, they are undoubtedly beneficial in lowering transaction costs of doing business in the region and thereby increasing interdependence among APEC's food markets without compromising consumer concerns about food quality and safety.

Ladies and gentlemen,

I wish you all once again a most stimulating and successful workshop, and for those from overseas, have a pleasant stay in Malaysia. I am confident that the workshop will provide opportunities to exchanging of ideas and information and also to establish contacts and networking. Do spare some of time to go around Kuala Lumpur and Shah Alam. I would like to encourage you to sample some of our local fruits and foods, to experience more of what our beautiful and peaceful country has to offer, enjoy our

hospitality and take home with you wonderful memories and mementos to remind you of your stay here.

On that note, and with the recitation of 'Bismillahir Rahmanir Rahim', it is my pleasure to declare open **APEC Workshop on Enhancing Food Security through a Regional Approach and Wide Stakeholder Participation in Plant Biosecurity.**

Terima kasih (Thank you)

ATTACHMENT 5

Attachment 5.1.



Food Security and Food Security Planning: Regional and National Perspectives

by

Dr. Larry C. Y. Wong



Government of Malaysia

OUTLINE:

1. **INTRODUCTION**
2. **FOOD SECURITY: NEW DIMENSIONS, STRATEGIC ARRANGEMENTS AT NATIONAL AND REGIONAL LEVELS**
3. **FRAMING THE PROBLEM**
4. **OTHER CONSIDERATIONS**
5. **CONCLUDING REMARKS**

**APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity**
Concorde Hotel, Shah Alam, Malaysia, 1-3 December 2010

**APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity**



Food Security and Food Security Planning: Regional and National Perspectives

by

Dr. Larry C. Y. Wong



**APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity**
Concorde Hotel, Shah Alam, Malaysia, 1-3 December 2010

OUTLINE:

1. **INTRODUCTION**
2. **FOOD SECURITY: NEW DIMENSIONS, STRATEGIC ARRANGEMENTS AT NATIONAL AND REGIONAL LEVELS**
3. **FRAMING THE PROBLEM**
4. **OTHER CONSIDERATIONS**
5. **CONCLUDING REMARKS**

**APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity**

INTRODUCTION:

- **Purpose:** Provide a Bird's eye view of Food Security and Food Security Planning from a National (with a Malaysian slant) and Regional (with an ASEAN slant) in view of new dimensions related to Food Security as a backdrop for this workshop
- **Underlying theme:** It is prudent to see things in proper perspective and recognize the strategic arrangements and new dimensions in Food Security as well as their interplay/interconnectivity so as to be able to 'get the basics and balance right'.
- **Key Take-Home Message:** Food Security considerations has become so complex, multi-scale and interdependent that unless we think through and frame problems well, the solutions we arrive at will always be half-baked and/or easily over-taken by events.

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

"Food Security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life."

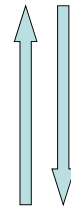
(Food and Agriculture Organization, U.N.)

Traditional Dimensions:

- Availability
- Accessibility
- Distribution/Stability
- Utilization

Food Security Levels

- Global
- Regional
- National (Country)
- Community
- Household
- Individual



Strong Inter-play between Levels

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

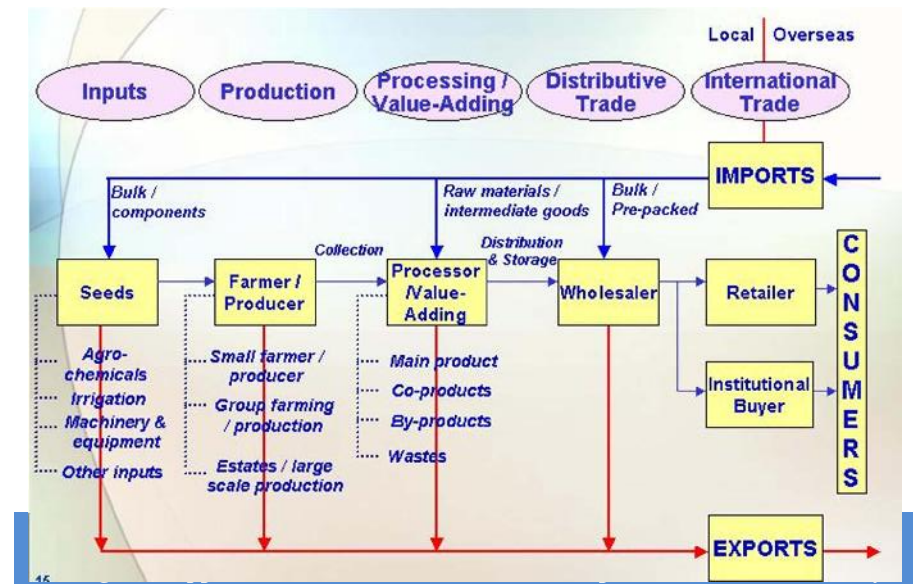
NEW DIMENSIONS OF FOOD SECURITY

Beyond the 'Traditional' Dimensions of Availability; Accessibility; Distribution; and Utilization – new dimensions have rendered Food Security more complex, multi-scale, and interconnected.

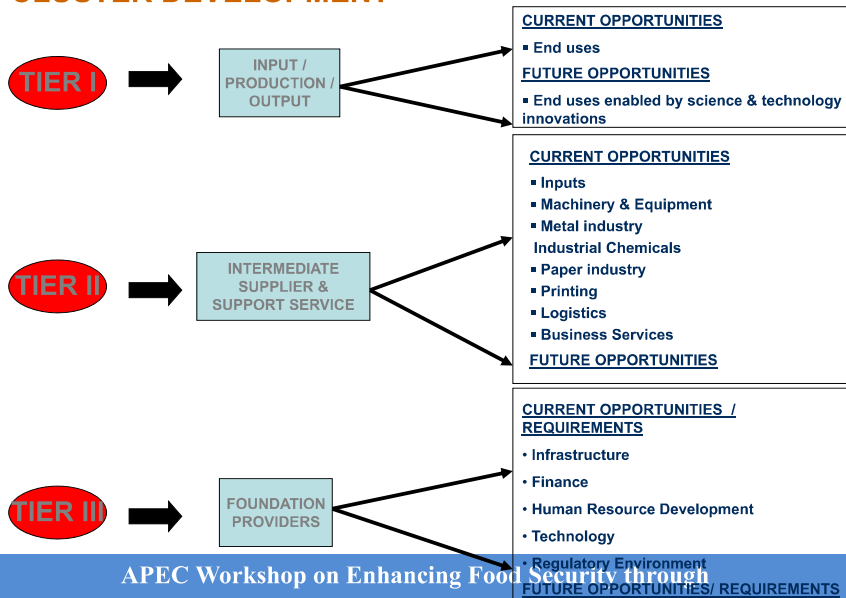
- Human Security dimension
- Cross-border or Regional dimension – collaboration/solutions
- Pandemic Preparedness
- Traceability and food safety
- Self-reliance rather than self-sufficiency
- Demand management
- Role of private sector – Public-Private Partnership

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

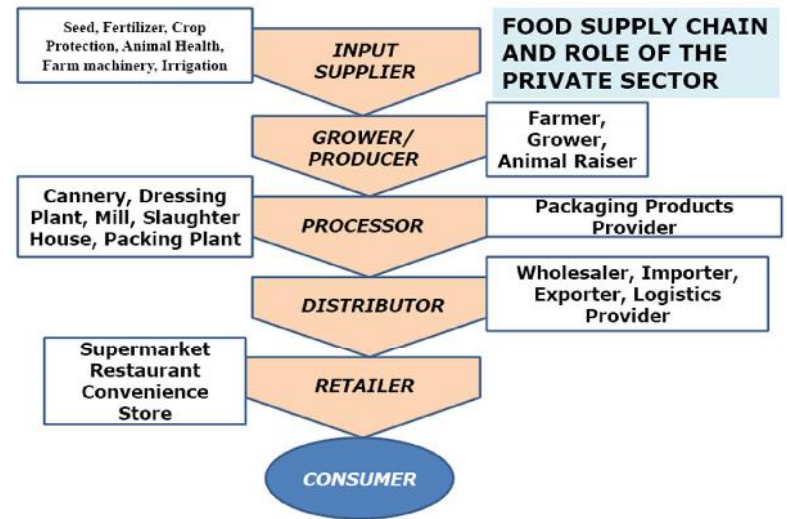
Agri-Food Supply Chain – From 'Seed to Shelf' : Potential Economic Activities



CLUSTER DEVELOPMENT

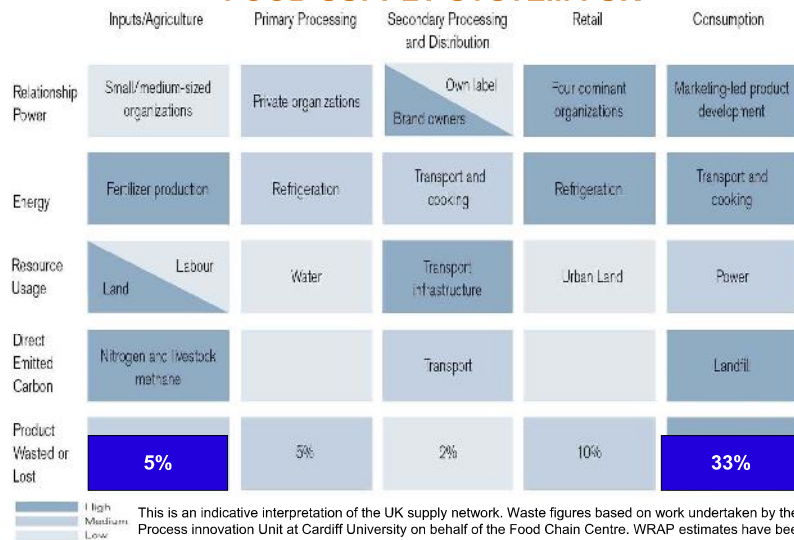


APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity



APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

FOOD SUPPLY SYSTEM : UK

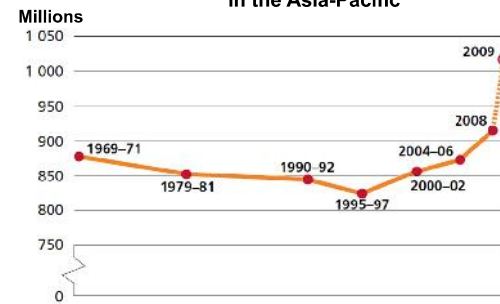


APEC Workshop on Enhancing Food Security through
 A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

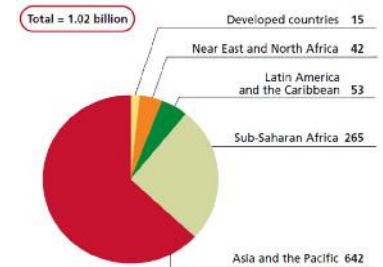
Source : http://www.wrap.org.uk/wrap_corporate/news/food_waste_set_to.html (15.10.08).

TRENDS IN WORLD HUNGER

Of the estimated 1.02 Billion of hungry people, 642 Million live in the Asia-Pacific



Where do the Hungry Live ?



APEC Workshop on Enhancing Food Security through
 A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Changes in demand for food

- Meat consumption

- 100 years ago, average 25 kg/person/yr
- Today, average 80 kg/person/yr (USA – 124 kg/person/yr)
- China: 1962 – 4 kg/person/yr; 2005 – 60 kg/person/yr

- Fish consumption

- 1960s – 9.9 kg/person/yr; 2005 – 16.4 kg/person/yr
- 5 kg feed-fish to produce 1 kg of salmon

- Vegetable consumption

- 1970s – 60 kg/person/yr; 2000 – >100 kg/person/yr
- China: 1970 – 44.4 kg/person/yr; 2005 – 270.6 kg/person/yr

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity



NATIONAL: STRATEGIC APPROACH

Some countries, including Malaysia, which have cushioned the impact – have invariably adopted a pragmatic **Strategic Approach** linking:

- **Food Security** (focused on rice – basic staple, ‘political’ crop); and
- **Economic Growth** (growth with redistribution)

at both the ‘macro’ and ‘micro’ levels.

- **Macro-level** : leverage policy control over:
 - Sectoral composition of income growth
 - Food prices - stabilisation
- **Micro-level** : rural development
 - Rural education/HRD – accessible to poor and females
 - Rural clinics – healthcare, family planning
 - Home economics, nutrition education

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

STRATEGIC APPROACH TO FOOD SECURITY

Strategic Approach comprises 3 components:

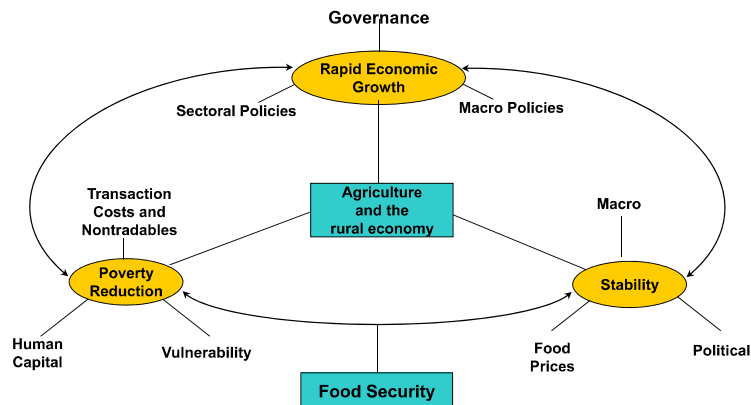
- **Rapid growth** in macro economy;
- **Poverty eradication** through rural economic growth (‘pro-poor’ growth); and
- **Stability** of food system.

Net-result : **GOT THE JOB DONE!** – though sometimes frowned upon by some economists because of ‘**distortionary**’, ‘**efficiency**’, and **cost effectiveness** arguments.

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

A MACRO PERSPECTIVE OF THE DETERMINANTS OF FOOD SECURITY:

Three “virtuous circles” of activity, held together by agriculture and the rural economy



Source : Adapted from Timmer (2004)

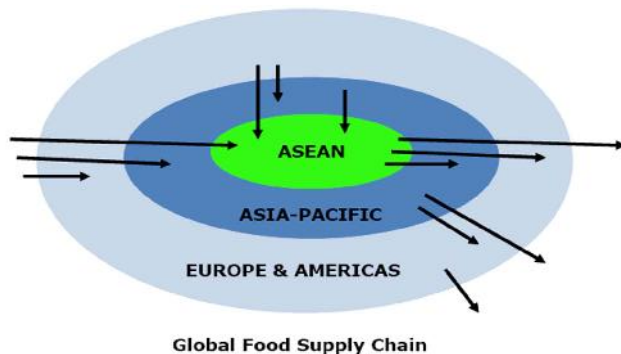
APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

REGIONAL: STATE of FOOD SECURITY in ASIA

- 947 Million Asians live on less than US\$ 1.25 per day (UN MDG Summit, 20-22 Sept 2010)
- Asia is home to 2/3rds of the world's poor and hungry
- Asia is home to the largest number of hungry and malnourished (580 million) with over 40% in China and India alone.
- Destabilizing factors persist:
 - Economic uncertainty, competition for land,
 - Rapid urbanization, an increasing population
 - Climate change, unseasonal weather patterns,
 - Failing water availability, energy security and
 - Resource scarcity, Degradation of the natural resource base trends

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Conceptualization of the inter-relationships between Food Supply and Demand at regional and global levels



APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

SOME REGIONAL DECLARATIONS, PROGRAMMES, FRAMEWORKS AND PLANS

- Cha-am Hua Hin Statement on ASEAN Plus Three Cooperation on Food Security and Bio-Energy Development (Oct 2009)
- ASEAN Food Security Information System (AFSIS)
- Strategic Plan of Action on ASEAN Food Security (SPA-FS)
- ASEAN MultiSectoral Framework on Climate Change and Food Security
- NEAT Working Group on East Asian Food Security (July 2009)
- ASEAN Plus Three Roundtable on Food Security Cooperation Strategies
- Asia and the Pacific Region Food Security Partnership Framework (ADB, FAO, IFAD)
- APEC Food System and Niigata Declaration on Food Security (adopted in inaugural Ministers Meeting on Food Security in Niigata, Japan in October 2010)

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

ASEAN OVERVIEW - 2008

(ASEAN as a production base as well as a market)

	ASEAN	China	India
Population (million)	583.7	1,338.6	1,166.1
Land Area (million km ²)	4.4	9.6	3.3
GDP (US\$ billion)	1,506.2	7.973 trillion	3.297 trillion
GDP Per Capita (US\$)	2,582	6,000	2,900
Exports (US\$ billion)	879.1	1.435 trillion	176.4
Imports (US\$ billion)	831.2	1.074 trillion	305.5
GDP Growth (%)	4.4	9.0	7.4

Source : ASEAN Secretariat & World Fact Book

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

ASEAN: Agri-Food Trade Balances, 2007. US\$ Billion

Country	Exports	Imports	Surplus (Deficit)
Indonesia	23.4	10.5	12.9
Malaysia	20.5	10.6	9.9
Thailand	25.0	8.4	16.6
Vietnam	11.7	6.1	5.6
Cambodia	0.1	0.3	(0.2)
Laos	-	-	-
Myanmar	-	-	-
Brunei	*	*	*
Philippines	3.2	4.3	(1.1)
Singapore	6.0	8.3	(2.3)

ASEAN	89.9	53.2	36.7
WORLD	1128.0	1128.0	

Source: R. Dy. 2009 APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

ASEAN COUNTRIES – Major Agri-Food Commodities Produced and World Ranking

Country	Major Ag Commodities Produced	World Ranking
Brunei	rice, vegetables, fruits; chickens, water buffalo	
Burma (Myanmar)	rice, pulses, beans, sesame, groundnuts, sugarcane;	2- pigeon pea, cowpeas; 3- sesame
Cambodia	rice, rubber, corn, vegetables, cashews	
Indonesia	rice, cassava (tapioca), peanuts, rubber, cocoa, coffee, palm oil, copra; poultry, beef, pork, eggs	1- palm oil, cloves, cinnamon, coconuts; 2 - rubber, pepper; 3 - rice, coffee, cocoa
Laos	sweet potatoes, vegetables, corn, coffee	
Malaysia	rubber, palm oil, cocoa, rice, coconuts, pepper, poultry, eggs	2 - palm oil; 3 - rubber
Philippines	sugarcane, coconuts, rice, corn, bananas, cassavas, pineapples, mangoes; pork, eggs	2 - coconuts, pineapple
Singapore	orchids, vegetables; poultry, eggs; fish	
Thailand	rice, cassava (tapioca), rubber, corn, sugarcane, coconuts, soybeans	1 - rice & shrimp exporter; 1 - rubber, pineapple; 2- eggs
Vietnam	rice, coffee, rubber, cotton, tea, pepper, soybeans, cashews, sugar cane, peanuts, bananas; poultry; fish, seafood	1- cashew pepper; 2 - coffee; 2 - rice exporter

Source: FAO APEC Workshop on Enhancing Food Security through A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

THE ROLE OF THE PRIVATE SECTOR – ASEAN Strategic Thrust 2 – Towards Promoting Food Market & Trade

- **Bello (2005)** - Ensuring Food Security via **ASEAN Integration** (focused on rice, maize and wheat)
- **Noraini (2007)** - **Food Safety** in Southeast Asia – Challenges & Response
- Mostly focus on what Governments can and should do.

However:

- *'International Cooperation is far too important to be left to Governments alone'* ~ Willy Brandt
- Our Contention: One of the **key role** of private sector (on it's own or through Public-Private Partnership) is to **develop, manage and orchestrate agri-food supply chains & regional trading networks** towards promoting Food Market and Trade and ultimately **ASEAN Food Security**

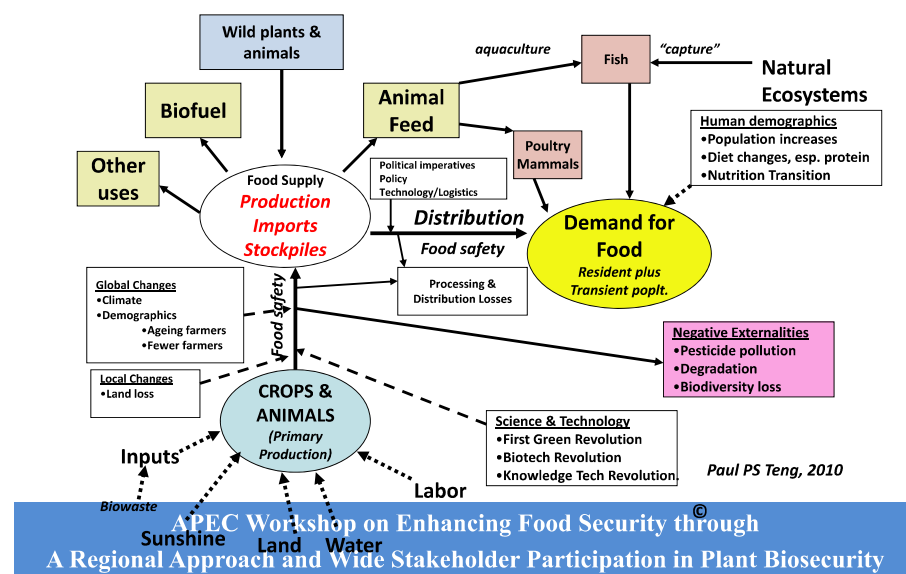
APEC Workshop on Enhancing Food Security through A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

THE ROLE OF THE PRIVATE SECTOR (Cont'd)

- **TNCs** active in the region – Nestle, Cargill, Tesco, Carrefour – regional chains, export platforms, CSR, also CSV (“**Creating Shared Value**”)
- **Cross Border Investments** – ASEAN Business Council (ASEAN Business Advisory Council); Business Angel Network of Southeast Asia (BANSEA); Malaysian South-South Association (MASSA)
- **Comprehensive Cross Border Investments** - along entire supply chain(s)
 - **Oil Palm** – FELDA, Sime Darby, KLK, SinarMas
 - **Livestock** – Charoen Pokphand Group (in Malaysia, Indonesia, Viet Nam, Cambodia, Myanmar – animal feed, layers, broilers, pigs, shrimp); Leong Hup Holdings (in Indonesia, Viet Nam – animal feed, layers and broilers).
 - Initial step is to supply host country’s market – subsequently integrate sourcing of inputs and marketing on regional basis
 - **Rice** – more sensitive – need to **stabilize supplies & prices** of BOTH **domestic and international (export/import) market** – to balance the interests of farmers, consumers and regional food security – examine examples of exporting and importing countries.

A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Theoretical Framing : Conceptual Framework



Main Threats to Food Security

- Transitory Food Security**
- Weather disruptions
 - Pest and Disease outbreaks
 - Fluctuating/increasing energy prices
 - Competition from energy sector
 - Policy changes e.g. trade
 - Lower holdings of cereal stocks
 - Diversion from staple to cash crops
 - Conflict / Terrorist activities
 - Economic factors
 - Etc.

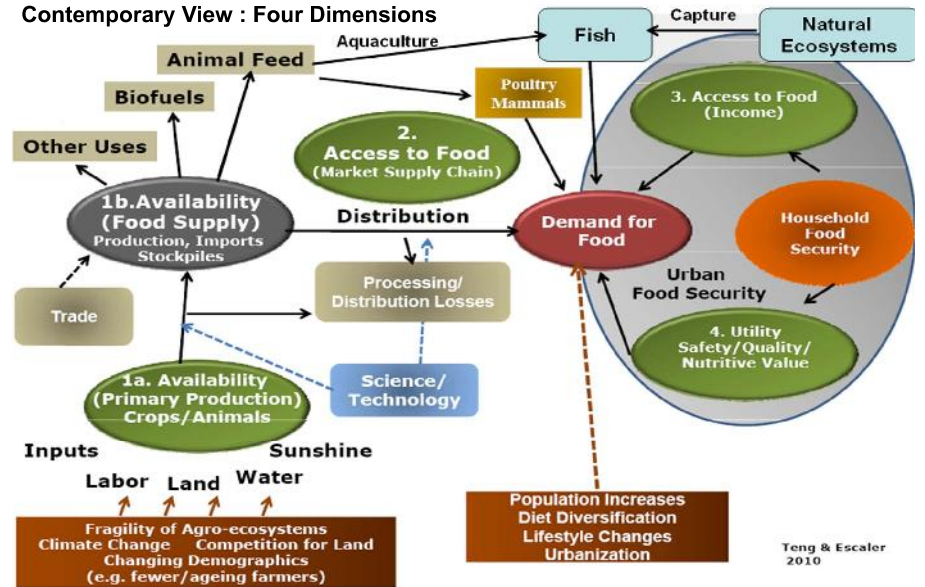
- I. Food Availability**
Production
Imports
Stockpiles
- II. Food Access (Physical)**
Access to markets
Infrastructure
- III. Food Access (Economic)**
Employment
Overseas Remittances
Foreign Direct Investment
Trade
- IV. Food Utilization**
Health and nutrition
Sanitation / Hygiene
Storage / processing facilities
Clean water

- Chronic Food Security**
- Demographic changes
 - Poverty
 - Underinvestment in infrastructure / technology
 - Climate change
 - Fragility of agro-ecosystems
 - Bias against agriculture – unfriendly policies towards farmers
 - Declining number of farmers
 - Globalisation
 - Etc.

Four Dimensions of Food Security

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

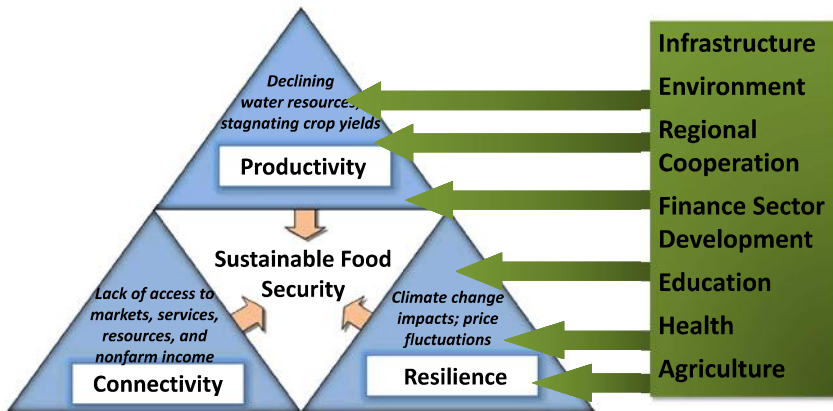
Contemporary View : Four Dimensions



APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

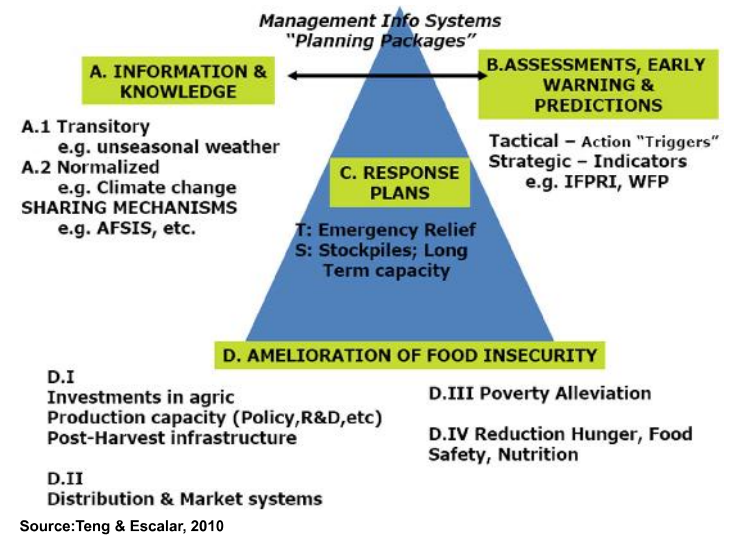
Sustainable food security needs multi-sector investment approach

long-term strategy and Operational Plan for Food Security



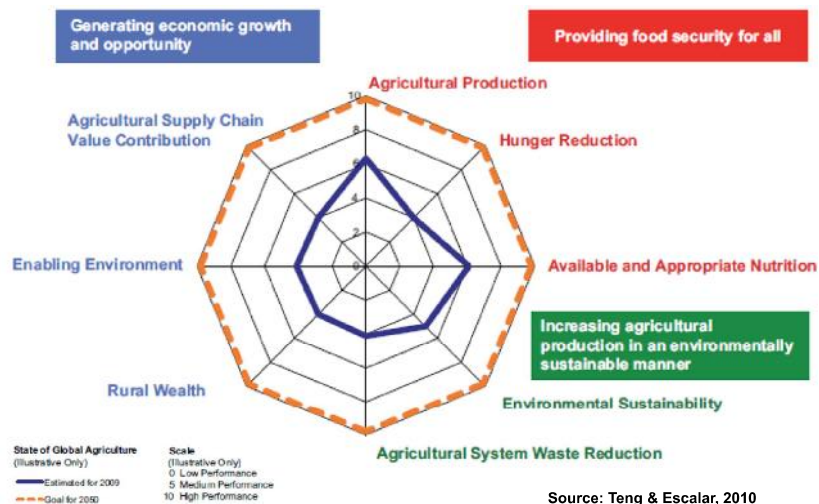
APEC Workshop on Enhancing Food Security through A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

REGIONAL FOOD SECURITY FRAMEWORK



APEC Workshop on Enhancing Food Security through A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

OTHER CONSIDERATIONS : Assessment Methodology

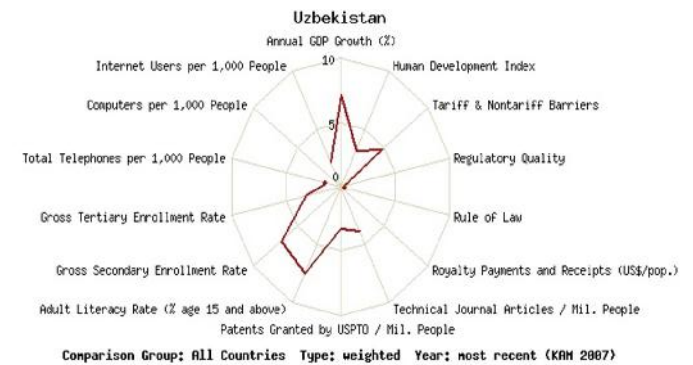


APEC Workshop on Enhancing Food Security through A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

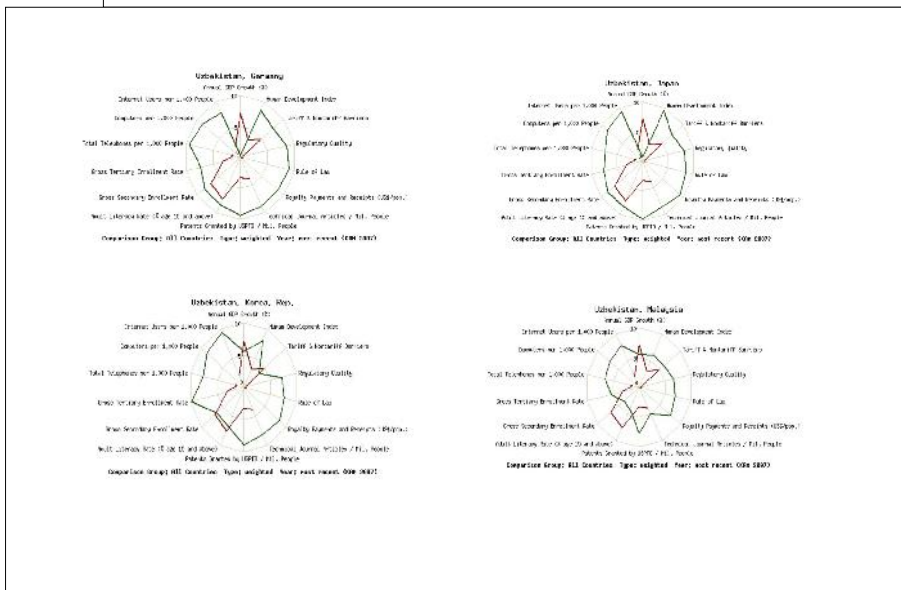
Parallel : Knowledge Assessment Methodology -

World Bank Institute's KAM 2007 ranks Uzbekistan 92 out of 137 countries –

Behind Germany (15), Japan (17), Korea (27), Malaysia (40), Russian Federation (47), Turkey (53), Brazil (54), Kazakhstan (72), Kyrgyzstan (87) but Ahead of China (75), India (101), and Tajikistan (108)



KAM – COMPARISON WITH SELECTED COUNTRIES



CONCLUDING REMARKS

- Many increasingly contend that National Food Security can only be achieved with Regional and Global Food Security
- With increasing interconnectivity/interdependence in Food Security – need to view as food ecosystem – increasingly develop and apply systems and trans-disciplinary approach, especially in view of overlapping regional frameworks (‘spaghetti bowl’?)
- Interesting work is being conducted incorporating ‘complex theory’ – involving systems approach innovatively combining hard and soft systems analysis, coupled with systems to manage information/knowledge
- Ultimately, and paraphrasing Victor Hugo, markets open to trade and minds open to ideas will help drive and reconcile regional efforts with national interests and put an end to food insecurity.



APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

THANK YOU!

larry@isis.org.my

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Attachment 5.2.

 <p>Asia-Pacific Economic Cooperation</p>  <p>Government of Malaysia</p>	<h2>Compliance with global standards – the case for stakeholder engagement.</h2> <p>presented by</p> <p>Kit Chan K-Farm Sdn Bhd</p>
<p>APEC Workshop on Enhancing Food Security through A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity Concorde Hotel, Shah Alam, Malaysia, 1-3 December 2010</p>	

Something about Standards*

Standards are rules designed to provide communities a basis to compare and measure desired quality level, a tool to seek alternative approaches of objectives, and a criteria to judge good decisions



*Standards are man made,
standards are subjected to change with time and social values*

Standards are valid only when the public have confidence in them

Standards must be build on acceptable tangible principles that are grounded on firm quantifiable scientific rationales

* Kit Chan 25th October 2010

APEC Workshop on Enhancing Food Security Through
a Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

 <p>Asia-Pacific Economic Cooperation</p>  <p>Government of Malaysia</p>	<h2>Compliance with global standards – the case for stakeholder engagement.</h2> <p>presented by</p> <p>Kit Chan K-Farm Sdn Bhd</p>
<p>APEC Workshop on Enhancing Food Security through A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity Concorde Hotel, Shah Alam, Malaysia, 1-3 December 2010</p>	

Something about Standards*

Standards are rules designed to provide communities a basis to compare and measure desired quality level, a tool to seek alternative approaches of objectives, and a criteria to judge good decisions

*Standards are man made,
standards are subjected to change with time and social values*

Standards are valid only when the public have confidence in them

Standards must be build on acceptable tangible principles that are grounded on firm quantifiable scientific rationales

* Kit Chan 25th October 2010

APEC Workshop on Enhancing Food Security Through
a Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Global Concerns in Food Production

- Ecological concerns
 - Soil productivity (Erosion, depletion of top soil, desertification)
 - Water (Depletion, groundwater usage, contamination)
 - Pest and Disease resistance to pesticides
 - Greenhouse effect and Climate Change
- Economic and social concerns
 - Price of food
 - Income of the small and rural farmers
- Impacts on human health
 - Food safety and food hygiene
 - Farm workers health and welfare

APEC Workshop on Enhancing Food Security Through
a Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Sustainable Agriculture

... a farming system that provide the needs of safe nutritious and affordable food for the world population, in a way that progressively conserve the natural environment and natural resources, by seeking to optimize the skills and technologies to achieve long term productivity and profitability of the stakeholders of the agriculture enterprise, to ensure that future generations can also experience the same satisfactions that we enjoy today.

APEC Workshop on Enhancing Food Security Through
a Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Monitoring and Controlling Standards

- Historically, food safety standards borne mostly by the food processors.
- Food safety responsibilities now affect all stakeholders of the food chain.

- Food safety regulators traditionally focused on enforcement mechanisms to remove unsafe food from the market.
- Exporters are now warned to take prevention of hazard contaminations at every critical control point of the food chain from pre-production stage.

- In the past, regulators are responsible to monitor and control food safety.
- The adoption of a food chain framework now facilitates consumer driven, monitor and control approach in production and food safety system.

APEC Workshop on Enhancing Food Security Through
a Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Conditions of smallholder rural farmers

- 85% of farmers are rural and smallholders
- Mostly elderly and not literate
- Work with traditional cultivation practices
- Limited financial resources
- Confused about modern horticulture technology
 - Achieve quality produce by applying more chemicals
 - Meeting demands of the export market
- Rely on informal sources for technical information

APEC Workshop on Enhancing Food Security Through
a Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Implementing standards to smallholder farmers

Horticulture is a science and a business, and farmers need to access the knowledge and information basin to understand the full implications of the regulation and standard

Smallholder farmers are often isolated from access to this production technology and marketing information

The farm extension stakeholders must be empowered to bridge this connection with the farmers in order to implement the standards meaningfully and effectively.

APEC Workshop on Enhancing Food Security Through
a Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Stakeholder View of Standards

- Food Safety Voluntary (Private) Standards
 - Initiated and driven by the Consumers (and Retailers)
 - Creates competitiveness of Producers and Producers
 - Derive economic benefits (profits and market share)
 - Non-compliance lead to commercial sanctions
 - Standards designed to provide assurance of food safety to consumers

- Technical Regulations (Mandatory Standards)
 - Standards designed to ensure food safety conformation
 - Non-conformity lead to quarantine or rejection
 - Stakeholders are obliged to conform to the standards

APEC Workshop on Enhancing Food Security Through
a Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Cannot guarantee food safety

But we can assure food safety

If we can remove all hazards

We have minimal risk

APEC Workshop on Enhancing Food Security Through
a Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Good Agriculture Practice - GAP

GAP is a production pathway that identifies critical control points and establish compliance standards of varying degrees to eliminate hazards and prevent accidents in order to progressively promote safe and hygienic fresh produce at the farm with minimum negative impacts to the environment.

The good practices proposed in GAP are universally established science - based rationales and justifications.

The close monitoring and specific control system provides assurances of safety to the consumers of GAP produce.

Conducting a continual risk assessment of farm activities and its surrounding conditions will continually keep check of accidents and upgrade the standard.

APEC Workshop on Enhancing Food Security Through
a Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Benefits with GAP compliance

- Enhance food safety – thro' improving coordination with suppliers
- Reduce risk and liabilities in production – less recalls of products
- Lower costs – good practices of IPM
- Improve productivity – introduce efficient operations management
- Create competitive advantage – costs, market, credibility, price
- Create market access – recognition by buyers
- Improve corporate image
- Improve farm ecology – thro' good management of input resources

APEC Workshop on Enhancing Food Security Through
a Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Processes of a progressive GAP standard

- Initiated by the food chain stakeholders
- Development stage included wide stakeholder participation
- The GAP standard is based on strong foundations
- Market oriented approach to implementation
 - Rules are painstakingly explained and reasoned
 - Intense communication to the industry stakeholder
 - Prevention persuasion and not punitive intention
 - Standard not protectionism but for improving the industry
 - Creates competitiveness
- Standards is control by mechanism of it own supply chain

APEC Workshop on Enhancing Food Security Through
a Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Market-oriented approach to implement standard

*Every stakeholder in the chain is a supplier and a consumer –
they will exert pressure up the chain as a consumer and
be responsible as a supplier down in the chain*

Define the role and responsibilities of each stakeholders in the chain

*Every stakeholder not only is responsible of its role, but will also keep a
watch that the others also keep their responsibilities.*

The action of one stakeholder will affect everyone in the chain

APEC Workshop on Enhancing Food Security Through
a Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Thank you



For more enquiries, please write to

kitchan@kfarm.com



or visit us @

www.kfarm.com





APEC Workshop on Enhancing Food Security Through
a Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Attachment 5.3.

 <p>Asia-Pacific Economic Cooperation</p>  <p>Government of Malaysia</p>	<p>Stakeholder Participation in Risk Management for Market Access – A Case Study in the Implementation of ISPM 14</p> <p>Yusof Othman Malaysia</p>
<p>APEC Workshop on Enhancing Food Security through A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity Concorde Hotel, Shah Alam, Malaysia, 1-3 December 2010</p>	

<p>Presentation Outline</p> <ul style="list-style-type: none">• Introduction• Biosecurity and market Access• Stakeholders Involvement• System Approach (SA)• Case study in implementing SA• Problems and Constrains in SA
<p>APEC Workshop on Enhancing Food Security through A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity</p>

 <p>Asia-Pacific Economic Cooperation</p>  <p>Government of Malaysia</p>	<h2>Stakeholder Participation in Risk Management for Market Access – A Case Study in the Implementation of ISPM 14</h2> <p>Yusof Othman Malaysia</p>
<p>APEC Workshop on Enhancing Food Security through A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity Concorde Hotel, Shah Alam, Malaysia, 1-3 December 2010</p>	

<h2>Presentation Outline</h2> <ul style="list-style-type: none">• Introduction• Biosecurity and market Access• Stakeholders Involvement• System Approach (SA)• Case study in implementing SA• Problems and Constrains in SA
<p>APEC Workshop on Enhancing Food Security through A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity</p>

INTRODUCTION

- **Food Security - assess to prefer food in enough quantity and affordable price**
- **Biosecurity - prevent and control of invasive endemic and quarantine pests at pre-border, border and post- border**
- **Stakeholder involvement – changes in normal practices to meet the objective of biosecurity and getting higher income that contribute to better assess to food (food Security)**

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Pre- Border

- **PRA – pest list, technical documents and mitigation**
- **Traceability- registration of farms, packing house and treatment facilities**
- **System Approach – reduce of concern pests to the lowest population**
- **Post harvest treatment – lower the dosage and effectiveness**

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Border

- **Documentation – Import Permit and Phytosanitary Certificate**
- **Consignment Inspection**
- **Border Mitigation**

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Post-Border

- **Surveillance**
- **Eradication and Early Warning System**
- **System Approach/IPM**
- **Post Harvest Treatments**

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Stakeholder Involvement

- **Empowerment**
- **Changes in GAP**
- **Recording**
- **Corrective measures**

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Empowerment

- **Identification of pests and diseases of concern**
- **Capacity building on mitigation requirements of the invasive endemic and quarantine pests**
- **Initiate changes to the normal GAP**
- **Record measures**

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

System Approach

- **Rational**
- **Objectives**
- **Critical Points**
- **Recording**

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Rational

- **No single treatment to mitigate pests of concern or cost is too expensive**
- **Single treatment at specified dose cause injury to the produces, harm to human health and the environment**
- **Cost of system approach is acceptable**
- **Implementation of the system approach is feasible**

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Objectives

- **Secure market access**
- **Avoid or reduce the dosage of single post harvest treatment that cause injury to the produces**
- **To fulfill the phytosanitary measure of the importing country**

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Critical points

- **Provide impact to the mitigation of the pests of concern**
- **Divided into pre-planting (pre-flowering), planting (fruiting), harvesting, packing and transportation**
- **Conduct surveillance and quality control to mitigate quarantine and other endemic pests**
- **Most important activities to be implemented by all stakeholders**

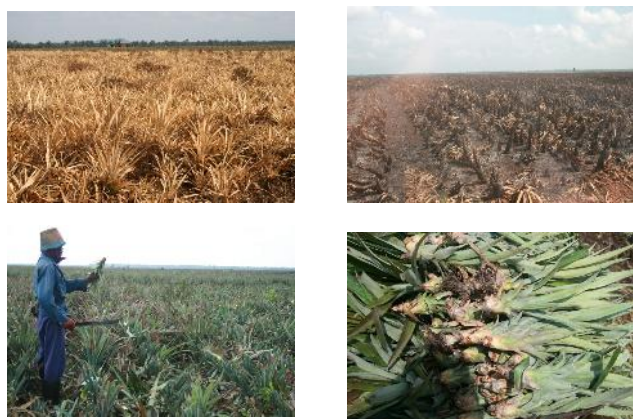
APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

SA of Pineapples



APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Pre-Planting



APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Planting



APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Harvesting



APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Packing



APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

SA Jackfruit



APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

SA Durian



APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Problems and Constrains

- **Feasibility of the system in term of cost and benefit to the stakeholders**
- **The availability of SA Technology that could fulfilled the need of phytosanitary measures of the importing countries**
- **Capacity building especially to the supervisors and operators**
- **Awareness on the level of effective treatment by farmers, exporters and transporters**

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity



Asia-Pacific
Economic Cooperation





Government of Malaysia

Thank You

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Attachment 5.4.

 <p>Asia-Pacific Economic Cooperation</p>  <p>Government of Malaysia</p>	<h1>Overview of Fact- finding Visits to Member Economies</h1> <p>KY Lum CABI SEA</p>
<p>APEC Workshop on Enhancing Food Security through A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity Concorde Hotel, Shah Alam, Malaysia, 1-3 December 2010</p>	

<p>Member economies visited include Chinese Taipei, Indonesia, Philippines, PR China, Singapore, Thailand and VietNam</p> <p>Meetings arranged with plant health and phytosanitary personnel, and include private sector</p> <p>Discussions based on a number of questions related to Workshop topic</p>
<p>APEC Workshop on Enhancing Food Security through A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity</p>

Plant pest/Invasive threats to food security of member economies

- Rice a common crop, followed closely by fruits
- Others include potato, corn, root crops, coffee, coconut, sugarcane.....
- Commonalities in pest threats associated with these commonly grown crops
- Rice p&d, Golden Apple Snail, *Brontispa*, fruitflies, phytoplasmas, banana bunchy top virus, mealybugs, etc

Awareness of stakeholders on local phytosanitary policies and global requirements for exports.

Many responded that while awareness among phytosanitary personnel (and exporters) are high, that among policymakers are only moderate, and, that among other stakeholders are generally low

Compliance to standards seen by some as only relevant for export; and not locally marketed produce

Local legislation/regulations and compliance with international standards.

- Some developing economies need updates or revisions to existing legislation to support better implementation of global standards

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Current stakeholder engagement and participation in compliance to international standards.

Provisions in place for stakeholder engagement, mostly on a need-to basis

Need for continuous awareness-raising, knowledge transfer, empowerment through involvement in process development

APEC Workshop on Understanding and Developing Risk
Management Options for Market Access

Understanding of biosecurity concept

Again, good understanding of the concept seem to be high only among plant health personnel, room for improvement with other stakeholders

Many see pre-border, border and post-border risk management as the biosecurity continuum

Monitoring/early warning system vs contingency planning, (industry) biosecurity plans

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Stakeholders' current perceptions towards the need for biosecurity?

Biosecurity seen as a government responsibility

Need to improve inter-department/ministry cooperation

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Benefits can be obtained from a regional approach to biosecurity?

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Some highlighted areas for regional cooperation

Sharing knowledge and expertise

Capacity building in (pre-border) risk management, diagnostics, etc

Harmonization, reducing disparities

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Thank you

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Attachment 5.4 Salient Observations on Pre-Forum Visits to Participating Economies

CHINESE TAIPEI

1. Chinese Taipei recognizes the importance of pest and disease issues, including invasive alien species, posing threats to food security.
2. The long-established agricultural and food production system in this participating economy supports many crops, including rice, mango, banana, cucurbits and others.
3. Robust pest and disease management policies and practices have been the main thrust towards continued productivity. Serious problems such as the Banana Bunchy Top Virus (BBVT) and regional movement of planthoppers have emphasized the importance of quarantine, farmer education and participation, and regional cooperation in pest management
4. Enforcement of pest management policies and practices is well-supported by the Plant Protection and Quarantine Act 2008
5. Government plant and animal health personnel are very well-versed with current global regulations and conventions, and actively participate in activities of APEC, OIE, FAO, etc. As a signatory to the WTO/SPS Agreement, Chinese Taipei complies with the requirements under the Agreement, and actively implements many ISPMs such as those related to pest risk analysis, wood packaging materials, pest-free area for fruit flies, etc
6. Chinese Taipei has an elaborate and sophisticated system of monitoring the incursion of invasive pests and diseases at off-shore, border, post-entry as well as domestic levels, effectively providing an early warning system for pest surveillance and control. This is supported by defined institutional responsibilities from:
 - a. Bureau of Animal and Plant Health Inspection and Quarantine (BAPHIQ)
 - b. Plant Protection Division of BAPHIQ
 - c. Plant Quarantine Division
 - d. Inspection Stations at Kee Ling, Hsinchi, Taichung and Kaohsiung
 - e. Identification centers funded by PAPHIQ at Taiwan Agriculture Research Institute (TARI), National Taiwan University (NTU), National Chung Tsing University (NCHU), National Chiayi University and National Pingtung University of Science and TechnologySome forty international and local experts from these centers provide identification for pests and diseases
7. Thirty Pest Diagnostic Centers provide and conduct regular programs on plant pest prevention, control and eradication; and also promote coordinated responses to emergent pest problems. These are set up at:
 - a. District Agricultural Research & Extension Stations under the Council of Agriculture (COA)
 - b. Taiwan Agricultural Chemicals and Toxic Substances Research Institute (TACTRI)
 - c. Taiwan Banana Research Institute (TBRI)
 - d. Taiwan Tea Experiment Station
8. Budget constraints have steered the economy towards a number of innovations in pest management:
 - a. An sms monitoring system linking BAPHIQ, farmers and pesticide vendors to monitor pest incursion
 - b. Internet access (www.bahpiq.gov.tw) to a range of information, including approved PEQ facilities for import, treatment facilities for export such as fumigation, heat treatment, etc

9. Competency of local phytosanitary personnel is high, stakeholder training and engagement are held on a regular as well as a need-to basis, and contract farming companies take responsibility to train contract farmers.
10. High level advocacy to promote and support the plant health system has room for improvement. This should lead to sustained and assured support so necessary for the implementation of a robust biosecurity plan for this participating economy.

INDONESIA

1. Implementation of policies and regulations related to plant health and pest management comes under the purview of three departments of the Ministry of Agriculture:
 - a. Directorate of Food Production
 - b. Directorate of Estate Crops Production
 - c. Directorate of Horticultural Crops Production
 Under these agencies, a Prediction and Surveillance Centre, and Commissions on Plant Protection and on Plant Quarantine Pests have been established. These bodies are always guided in their work by contributions from professional associations.
2. Since 1964, some twenty key pieces of legislation have been passed to address and allow necessary action on plant health-related issues.
3. The relevant agencies have been very active in recent years in the development of national pest lists; notably an Indonesian List of Fruit-flies in collaboration.
4. The Indonesian Agriculture Quarantine Agency (IAQA) has prepared a List of Plant Quarantine Pests, but is concerned about the lack of transparency among importing economies in their pest lists, and in particular the lack of progress among ASEAN economies in the development of regional pest lists of the ten commonly-traded commodities.
5. Indonesia is also concerned with the slow progress often associated with market access negotiations with its trading partners in the region. Other specific market access concerns include the phasing out of methyl bromide and the need for treatment of wood packaging materials.
6. In terms of biosecurity, Indonesia is in the process of establishing a national body to overlook national biosecurity and invasive species in a coordinated manner.
7. Wide stakeholder involvement is recognised as an important approach in plant health, quarantine and market access. In the context of contract farming, an important component of Indonesian agriculture, close working relationships between IAQA and stakeholders in the areas of plant health, inspection and certification and eventual export is essential

PEOPLES' REPUBLIC OF CHINA

1. Chinese phytosanitary authorities list: rice water weevil, golden apple snail on rice, Colorado potato beetle on vegetable crops, fruit flies on fruits and vegetables and tobacco whitefly as major threats to local agriculture
2. The enforcement of pest management policies and practices which is based on the Plant Protection and Quarantine Act is very well established. There are more than 20 laws and 50 regulations on the entry and export of animals and plants.
3. The Law on Quality and Safety of Agricultural Products approved in 2006 provides the means to improve product quality and safety and therefore greater competitiveness of agricultural produce from the economy.
4. A pre-emptive approach to biosecurity and the management of invasive species is driven by a number of agencies:

- a. Ministry of Agriculture (MOA)
 - b. General Administration of Quality Supervision Inspection and Quarantine (AQSIQ)
 - c. State Forestry Commission
 - d. Department of Science, Technology and Education
 - e. Department of Crop Protection (Office of Plant Protection)
 - f. Bureau of Agri-food Quality and Safety
5. Agriculture in PRC is constrained by the fact that the farming community is made up largely of the old, women and children, making dissemination and implementation of government policies and plans in pest management difficult. With agriculture shifting from the community system to the free enterprise system, it becomes difficult to impose government crop protection programs onto farmers. Subsidies received by farmers may not be used effectively.
 6. Stakeholder engagement takes the form of meetings between importers, exporters and farm operators, interactions between scientists and phytosanitary personnel at scientific society meetings, and ad hoc meetings to deal with emergent plant health issues.
 7. Implementing agencies and key personnel in PRC are well aware of the benefits of a biosecurity approach and regional cooperation.

PHILIPPINES

1. Major export crops and important pests are:
 - a. Rice – stemborers, green leafhoppers, RBB, tungro virus, bacterial leaf blight, golden apple snail
 - b. Corn – corn borer, stalk rot, corn planthopper
 - c. Mango – fruitfly, mealybugs, thrips, hoppers, anthracnose
 - d. Pineapple – mealybugs, crown rot
 - e. Banana – corn weevil, aphids, bunchy top virus, sigatoka
 - f. Okra – jassid cotton stainer, leaf spot
 - g. Papaya - spiralling whitefly, mealybug, papaya ringspot virus
 - h. Coconut – Brontispa, Rhinoceros beetle, mealybug
2. On the other hand, the Philippines imports a range of produce, including wheat, fruits, fresh and frozen potatoes, fresh and frozen vegetables, tobacco, rubber, etc from a number of countries.
3. The Bureau of Plant Industry is the main agency with plant health and quarantine responsibility, and many protocols have recently been developed or revised to cater for exports.
4. With respect to Plant Biosecurity and Invasive Species, the Pest Management Council of the Philippines has deliberated on the issue. The Department of Environment and Natural Resources is the national focal point for invasive species.
5. Since 1978, the BPI has issued over 40 Administrative Orders to regulate plant health and quarantine issues.
6. Stakeholder participation is ensured through the Pest Management Council and the working group meetings with grower associations such as the National Mango Action Team, Philippine Corn Growers Association, Philippine Fruit Producers Association, Cut Flowers Association of the Philippines, Philippines Coconut Federation and Philippine Okra Producers Association.
7. BPI plays an active role in promoting awareness and involvement of the public in plant biosecurity implementation.
8. Contract farming is a huge business involving many international companies; BPI and DOA plays an active role in providing agronomic supervision and P&D inspections.
9. The range of contract farming activities operating in the Philippines include:

Southern Mindanao

- Dole-TropiFresh – asparagus
- Marsman-Drysdale – asparagus
- Stanfilco-Dole – Cavendish banana
- Dole Philippines – pineapples
- Nestle – soybeans
- Pioneer Hi-Bred – maize seeds
- Asia Hybrid – maize seeds

Northern Mindanao

- Del Monte – papaya and pineapples
- Nestle – Coffee
- Guthrie(Sime Darby) – oil palm

Luzon

- California Manufacturing – cucumber
- Kraft general Foods – cucumber
- Ram Food Products – young maize, sweet maize, bell peppers, tomato
- Lancaster Philippines – tobacco
- East West Seed Company – vegetable seeds
- San Miguel Corporation – cassava

Visayas

- G. Hermanos Inc – black pepper

SINGAPORE

1. Singapore is a net importer of agricultural produce, and sees postharvest losses as a major concern in terms of food security e.g. some 30 percent of fresh produce imports from neighbouring are lost postharvest. Investment in cold chain is seen as an appropriate intervention.
2. The unintentional introduction of storage pests as a result of the importation of grains and spices is a concern
3. Invasives, introduced through planting materials, vegetables, orchids, etc is considered a threat largely to the island's parks and gardens
4. In terms of food security, Singapore as a net importer practices diversification of food supply from offshore.
5. Accordingly, it practices offshore risk management / pre-quarantine measures.
6. Offshore contract farming, to secure food supplies to the economy, is considered a private sector arrangement/activity, with the government in a facilitation role only
7. Singapore-imposed standards can serve as regional benchmarking; private sector involvement is essential in the implementation of standards. Industry awareness is a key activity.
8. Singapore sees its role in ASEAN and APEC in the region very much in a G-to-G facilitation role, and in capacity building. Singapore offers to act as a plant biosecurity hub for the region.

THAILAND

1. Thailand identified the following priority crops and their associated pests of concern:
 - a. Rice – brown planthopper, white-backed planthopper, ragged and grassy stunt virus, yellow stunt virus, and weedy rice
 - b. Sugarcane – white grubs and white leaf phytoplasma
 - c. Fruits – fruitflies, scale insects and mealybugs

- d. Vegetables – leafminers, whiteflies and thrips
- e. Coconut – *Brontispa longissima*, black headed caterpillar
- f. Cassava – pink cassava mealybug
- g. Ornamentals – *Thrips palmi*, white rust

A number of these are of regional concern and threats to regional food security.

2. Existing pest management policies and practices are supported by the Plant Quarantine Act B.E. 2507 (1964), now amended B.E. 2551 to cover SPS and GMOs. There is also a Food Safety Program involving all of DoA, DLD and DoF, with each having their respective GAPs and GMPs. Expedient urgent matters are well supported by the Government.
3. Pre-emptive approaches to biosecurity is embodied in such practices as eradication and PRAs (ISPM No. 8), monitoring and inspection at all 42 border entry points, and keeping stakeholders informed through various channels on invasive pests.
4. Constraints to the implementation of the biosecurity approach have been: i) difficulties in diagnostic protocols, ii) awareness and acceptance by exporters and weak linkages between the public and private sectors on implementation.
5. High staff competency is supported by training, use of mass media and call centers, and the establishment of accredited central laboratories in all 8 regional offices.
6. While there is regular interaction with stakeholders, small farmer perception on the importance and economics of compliance to the biosecurity approach needs improvement. Given that contract farming covers some 21 GAP crops, training of farmers in GAP before joining such schemes is crucial.
7. Regional cooperation and sharing of information is widely recognized. However, closer rapport between CIQS agencies remains a major challenge.

VIETNAM

1. Vietnam identified the following pests and diseases as threats to the economy:
 - a. Rice – brown planthoppers, grassy stunt virus, ragged stunt virus southern black streak virus, yellow stunt virus, golden apple snail
 - b. Coffee – coffee berry borer, hornworm, mealybug, nematodes
 - c. Corn – southern black streak virus
 - d. Rubber – *Corynespora* leaf fall
 - e. Sugarcane – phytoplasma
 - f. Fruit crops – fruitflies, scale insects
 - g. Coconut – *Brontispa longissima*
 - h. Cassava – phytoplasma
2. The Ordinance on Plant Protection and Quarantine, Decree on Plant Quarantine Regulations and Law on Biodiversity Protection provide the basis for management of pests and diseases as well as invasive alien species.
3. Quarantine personnel are constantly updated on recent developments with respect to SPS and ISPM developments. Awareness on these developments is high among phytosanitary personnel.
4. There is a newly implemented national project on Prevention and Control of IAS (2010 – 2015) involving all relevant government agencies. This and other farmer-targeted programs address capacity building, training, harmonization of new regulations, etc. It is perceived that an awareness-raising program for senior personnel would be beneficial, as well as raising penalties for non-compliance to relevant regulations.
5. The biosecurity approach is advocated through the following activities: pest risk analysis, inspection services at more than 70 entry points, surveillance and monitoring programs and dissemination and sharing of information on invasives with stakeholders.

6. Weaknesses in the existing system include: inadequate diagnostic capacity, particularly in storage product pests and diseases including phytoplasmas, and capacity in post-harvest loss management.
7. The weak private sector response to SPS compliance may be attributed to the continued strong demand for products locally and in regional markets with less stringent requirements. Nevertheless, constant consultations are held with downstream stakeholders.
8. Stringent enforcement of current legislation and adequate resources to support implementation of existing regulations remain the main issues that need to be addressed to overcome current constraints.

Attachment 5.5.




Asia-Pacific
Economic Cooperation



Government of Malaysia

Commonalities in crop protection and pest management practices in Chinese Taipei

Nai-Wen Ko
Bureau of Animal and Plant Health
Inspection and Quarantine (BAPHIQ),
Council of Agriculture,
Taiwan, ROC
December 2, 2010



APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity
Concorde Hotel, Shah Alam, Malaysia, 1-3 December 2010

1. Major pest & disease threats to food production and food security

Crops (prioritized for exports)	Insect Pests	Diseases/ pathogens	Invasive pests/ emergent pests	Comments
Banana	Banana skipper/ Banana aphid	panama disease /banana mosaic (CMV)		
Mango	Thrips/ Fruit fly	anthracnose	<i>Bactrocera dorsalis</i>	
citrus fruit	Fruit fly/ Plant lice	citrus canker / black spot	<i>B. dorsalis</i>	
Orchid	Thrips/ Mealybug	bacterial soft rot/ gray mold		

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

2. Awareness of stakeholders on local phytosanitary policies and global requirements for exports

Stakeholders	Awareness level (<i>high, moderate or low</i>)	
	Local policies/ regulations	Global requirements for export
Policy makers/ Politicians	high	high
Phytosanitary personnel	high	high
Exporters/Importers	moderate	moderate
Producers	moderate	moderate
Farmers/Entrepreneurs	moderate/low	moderate/low

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

3. Understanding of biosecurity concept among various stakeholders.

Stakeholder	High	Moderate	Low
Policy makers/ Politician	V		
Phytosanitary personnel	V		
Exporters/ Importers		V	
Producers		V	
Farmers/ Entrepreneurs		V	V
Etc., etc.			V

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

4. Perception of your member economy towards improvements in plant biosecurity. In what areas?

In order to effectively control domestic plant diseases and pests, and mitigate risks of invasion by exotic diseases and pests, BAPHIQ has set forth the following policies and implemented in accordance with the administrative guidelines:

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

a. Strengthening of Domestic Plant Protection

- disease and pest surveillance, monitoring and notification system
- detection of exotic diseases and pests at the airports, seaports and nearby areas.
- a monitoring and notification system for domestic pests and diseases

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

- **enforcement of emergency control, coordinated control and integrated pest management (IPM)**

- **emergency control:** Red imported fire ant
- **coordinated control:** Oriental fruit flies, field rodents and rice diseases and pests
- **IPM:** employing various control methods such as resistant varieties, pesticides, biological control agents, paper bagging and sex pheromone, etc. to reduce the use of chemical pesticides

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

b. Strengthening of Import Quarantine

- **strict plant quarantine and surveillance**
- **improvement of quarantine and treatment facilities and equipments**
- **establishment of detector dog teams**
- **on-site inspection**

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

c. Development and Improvement of Technologies and their Application

- **development and improvement technologies** of quarantine treatment ,disease and pest detection, diagnosis and IPM promotion of the application and extension of effective control measures
- **strengthening and update of database** for disease and pest management, in order to provide technical assistance and services to farmers and agricultural industry

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

d. Education of the General Public

- educational courses, workshop or extension activities on the importance of pest management and quarantine
- booklets, single sheets, posters, and other publications

e. Eradication Exercises

- farmers, industry people and relevant government agencies prepared for any outbreak of diseases or pests and to take necessary actions
- Mediterranean fruit flies in 2002, codling moths in 2005, western flower thrips in 2006 and bulb mites in 2008

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

5. Changes needed in local legislation/ regulations to improve compliance with international standards.

■ Promulgation and Amendment of Laws and Regulations

- Laws and regulations have been amended in accordance with domestic and international status of plant diseases and pests.

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

6. Current situation regarding stakeholder engagement and participation in compliance to international standards.

a. Which stakeholders are involved?

- farmer/entrepreneurs, producer, exporters/importers, and phytosanitary personnel

b. With regular consultations or only when needed?

- BAPHIQ holds consultation conferences regularly to amend pests and diseases management policies and regulations
- the existing laws and regulations will be amended if necessary

c. Is there a need to improve current situation?

- temporary not

APEC Workshop on Understanding and Developing Risk
Management Options for Market Access

7. What are stakeholders' current perceptions towards the need for biosecurity?

■ Invasive alien species

- increasing risk of introduction of exotic diseases and pests
- quarantine and management of imported alien species

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

8. Do phytosanitary personnel regularly have dialogues with stakeholders to promote biosecurity?

- Council of Agriculture (COA) holds symposiums regularly to discuss with farmers, producers and their organizations on biosecurity.
- Besides, phytosanitary personnel usually have dialogues with stakeholders at the educational courses, extension activities, and public hearings, etc.

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

9. Is there a need for better engagement with policy makers to promote the need for more support for plant biosecurity?

- **In order to make policies better to fit in with the situation of agricultural environment and work effectively, it needs to...**

- clarify the responsibilities and works
- keep good relationship, communication and collaboration
- meet local agencies regularly

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

10. What benefits can be obtained from a regional approach to biosecurity?

- Area-wide coordinated control enhances the efficiency of pests/diseases management and reduces the production cost

11. In what areas can regional APEC economies cooperate to achieve this objective?

- exchange of plant protection and quarantine information and technology
- strengthening of international cooperation in the technical aspect

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

12. What is the most important issues in your economy that require regional collaboration?

■ Area-wide control program

(for Oriental Fruit flies and mask melon viral diseases, etc)

- monitor pests/diseases' density
- hold courses and demonstrations for integrated crop management
- implement control approaches

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

13. Highlight the most important invasives in your economy (economic damage caused -directly & indirectly)

■ Oriental Fruit flies (*B. dorsalis*)

- ➔ if we could not control the fly...
 - the damage to the fruit crops may reach 10-30 %
 - cause losses near 181 million (USD)
 - impede export of many fruits and hurt our reputation of the worldwide market

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Summary / Conclusion


- **To safeguard agricultural environment and promote sustainable development of agriculture in Taiwan, BAPHIQ will...**
 - continue to devote efforts to strengthen the plant protection and quarantine system
 - promote international cooperation in the technical aspects
 - exchange information and experiences in the prevention of the spread of diseases and pests

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

**Thanks for
your attention !**

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Attachment 5.6.



Asia-Pacific
Economic Cooperation



Government of Malaysia

Enhancing of Stakeholder Participation in Plant Biosecurity to Accelerate Market Access

Presented by
Mr. Turhadi Noerachman
Ms. Serlina
(Participants from Indonesia)

**APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity**
Concorde Hotel, Shah Alam, Malaysia, 1-3 December 2010

Major pest & disease threats to main export commodities

Crops (prioritized for exports)	Insect Pests	Diseases/ pathogens	Comments
Cocoa	Cocoa borer	Phytophthora palmivora (budrot)	IPM
Coffee	Coffee borer beetle	Leaf rust	IPM
Rubber	none	Ganoderma spp (root rot)	IPM
Corn	Corn borer Stalk rot	Corn borer Stalk rot	IPM
Tropical Fruit : mango, sallaca, etc.	Fruit Flies	Anthracoese	IPM/ALPP

Invasive pests/ emergent pests of concern as quarantine pests

**APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity**

Awareness Level of stakeholders on local phytosanitary policies and global requirements for exports.

Stakeholders	Awareness level (<i>high, moderate or low</i>)	
	Local policies/ regulations	Global requirements for export
Policy makers/ Politicians	High	High
Phytosanitary personnel	Moderate	Moderate
Exporters/Importers	Moderate	Moderate
Producers	Moderate	Low
Farmers/Entrepreneurs	Low	Low

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Understanding level of plant biosecurity concept among various stakeholders.

Stakeholder	High	Moderate	Low
Policy makers/ Politician	√	-	-
Phytosanitary personnel	-	√	-
Exporters/ Importers	-	√	-
Producers	-	-	√
Farmers/ Entrepreneurs	-	-	√

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

CURRENT SITUATION

1. **Stakeholders engagement and participation in compliance to international standards involved are policy maker (NPPO), phytosanitary personnel, exporter or importer, producers, and the farmer.**
2. **NPPO as facilitators to conduct the regular meeting with stakeholders to inform the technical requirements to market access.**

- APEC Workshop on Enhancing Food Security through
- A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Current situation ...

3. **All stakeholders involved to compile the technical information for market access, such as :**
 - **Information of commodity;**
 - **Information of good agriculture practices;**
 - **Information of pest status;**
 - **Information of IPM;**
 - **Information of post harvest management;**
 - **Information of phytosanitary certification.**
4. **Phytosanitary personnel (plant quarantine officer) carry out technical assistance, training and advocacy to the exporters or importers, producers and farmers how to prepare products to meet phytosanitary standards.**
5. **Registered the facility of producers as quarantine premise.**

- APEC Workshop on Enhancing Food Security through
- A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Current situation ...

6. Stakeholders perception of Plant Biosecurity

- **The stakeholder considered that requirement of plant biosecurity as a technical barrier to market access in international trade.**
- **Develop countries implement high plant biosecurity standards.**
- **Simplification of the rules related to plant biosecurity must be done effectively and efficiently.**
- **The government have to make efforts continuously awerenes public.**

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

- **The result of evaluation of the implementation of plant biosecurity shown that changes needed regulation to improve compliance with international standards.**

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Policy makers effort to to promote and more support for plant biosecurity

1. **The main priorities in improving the regulation which related with plant biosecurity are improvement of :**
 - **quarantine requirement to imported product;**
 - **export certification system.**
2. **Preparing regulation and capacity building to control Invasive Plant Species.**
3. **Strengthening to control residue of biological and chemical in imported product.**

**APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity**

Benefit of regional approach to plant biosecurity

Regional approach to implement plant biosecurity should be simplified the application of principles of phytosanitary measures in trade accordance ISPM No. 1. Besides, regional approach would be easy to information exchange among stakeholders among countries to requirement or standard fulfill.

- **APEC Workshop on Enhancing Food Security through**
- **A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity**

The most issues in regional collaboration

- **Harmonizing and simplifying regulation and procedures between member**
- **To establish working group or task force to address issues relating to plant biosecurity will aim to enhance trade competitiveness and coordination between member**

- APEC Workshop on Enhancing Food Security through
- A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Summary/Conclusion

- To enhance trade competitiveness, the stakeholders must be able to improve their capability to compliance international standard related plant biosecurity.
- Regional collaboration most important to harmonize and simplify regulation and procedures to market access among member

- APEC Workshop on Enhancing Food Security through
- A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity


Thank you
for your attention




Indonesian Agricultural Quarantine Agency

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Attachment 5.7.



Asia-Pacific
Economic Cooperation



Government of Malaysia

Malaysia's Role in Enhancing Food Security Through A Regional Approach and Wide Stakeholder Participation to Plant Biosecurity

by
Atikah Abdul Kadir Jailani
(DOA Kuala Lumpur)
Julia Lamdin
(DOA Sabah)

**APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity**
Concorde Hotel, Shah Alam, Malaysia, 1-3 December 2010

1. Major pest & disease threats to food production and food security

Crops (prioritized for exports)	Insect Pests	Diseases/ pathogens	Invasive / emergent pests	Comments
Rice	<ul style="list-style-type: none"> • Brown Plant Hopper • Green Leaf Hopper 	<ul style="list-style-type: none"> • RiceTungro Virus (RTV) •Blast 	<ul style="list-style-type: none"> •Yellowing Syndrome (Tungro + RRSV+RGSV) •Golden Apple Snails (GAS) •weedy rice 	IPM adopted to control RTV, GAS and weedy rice
Starfruit	<ul style="list-style-type: none"> Fruit fly <i>B.carambolae</i> <i>B. papayae</i> 	-	<ul style="list-style-type: none"> Fruit fly (other than <i>B.carambolae</i>/<i>B.papayae</i>) 	

**APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity**

...cont..

1. Major pest & disease threats to food production and food security

Crops (prioritized for exports)	Insect Pests	Diseases/ pathogens	Invasive / emergent pests	Comments
Papaya	Fruit fly • <i>B.carambolae</i> • <i>B. papayae</i>	Antracnose (<i>Colletrotricum</i>)	• Fruit fly (other than <i>B.carambolae</i> / <i>B.papayae</i> • Papaya dieback • PRSV	
Pineapple	Mealybug	• Crown rot • Black eye rot	-	

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

...cont..

1. Major pest & disease threats to food production and food security

Crops (prioritized for exports)	Insect Pests	Diseases/ pathogens	Invasive / emergent pests	Comments
Citrus	•Fruit fly • <i>Diphorina citri</i>		• Citrus greening	
Mango	• Fruitfly • Hopper • Mites • Branch Borer (<i>Rhytidodera simulans</i>)	Anthracnose (<i>Colletrotricum sp.</i>)	• Mango Seed Weevil (MSW)	

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

1. Major pest & disease threats to food production and food security

Crops (prioritized for exports)	Insect Pests	Diseases/ pathogens	Invasive pests/ emergent pests	Comments
Oil Palm	Rhinoceros beetle	Ganoderma		Undercontrol (Cultural practices)
Cocoa	Cocoa Pod Borer (CPB)	Vascular streak dieback (VSD)	No major threat	Undercontrol (Cultural practices)
Coconut	<i>Brontispa longissima</i> (Two coloured leaf beetle)**	Phytophthora	Red palm weevil	** severe during dry season (Sbh)

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

1. Major pest & disease threats to food production and food security

Crops (prioritized for exports)	Insect Pests	Diseases/ pathogens	Invasive pests/ emergent pests	Comments
VEGETABLES				
- Sweet Peas	Leaf miner	Powdery Mildew Leaf Spot (<i>Ascochyta</i> sp)		IPM was developed, and produced Resistant variety – SP007, through selection process
- Brassica	Plutella	Soft rot		
- Capsicum	- Fruit fly (PM)	- Bacterial wilt - Leaf spot		
- Ginger	- <i>Conogethes punctiferalis</i> (rhizome borer)	Bacterial Wilt (<i>Ralstonia solanacearum</i>) (Sbh)		

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

2. Awareness of stakeholders on local phytosanitary policies and global requirements for exports.

Stakeholders	Awareness level (<i>high, moderate or low</i>)	
	Local policies/ regulations	Global requirements for export
Policy makers/ Politicians	<i>Medium</i>	<i>Medium</i>
Phytosanitary personnel	<i>High</i>	<i>High</i>
Exporters/Importers	<i>Medium</i>	<i>Medium</i>
Producers / Farmers	<i>Low - Medium</i>	<i>Low - Medium</i>
Entrepreneurs	<i>Medium</i>	<i>Medium</i>

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

3. Understanding of biosecurity concept among various stakeholders.

Stakeholder	High	Moderate	Low
Policy makers/ Politician		✓	
Phytosanitary personnel	✓	✓	
Exporters/ Importers		✓	
Producers/ Farmers		✓	✓
Entrepreneurs			✓
Etc., etc.			

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

4. Perception of your member economy towards improvements in plant biosecurity. In what areas?

- Capacity building – in PRA, training center (quarantine)
- Empowerment (technical expertise / competency on subject matter, facilities)
- Border control (MAQIS & DOA).
- accreditation system - strengthening
- Traceability system
- Treatment providers
- Surveillance

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

5. Changes needed in local legislation/ regulations to improve compliance with international standards.

- Updating the Plant Quarantine Act & Regulations - to be consistent with current situation and international standards
- new legislations – Plant Protection Bill & MAQIS Bill are at the final stages of drafting / being passed in Parliament
- Import procedures needs to be updated from time to time
- Pest list – to be revised and updated
- Strengthening legislations on smuggling

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

6. Current situation regarding stakeholder engagement and participation in compliance to international standards.

a. Which stakeholders are involved?

- farmers / producers
- entrepreneurs / GLCs
- packing house operators
- treatment providers
- transportation operators
- exporters / importers
- agencies: MOA - DOA, FAMA, Farmers' Organization Board
MOH - Food Quality Control Division

APEC Workshop on Understanding and Developing Risk Management Options for Market Access

6. Current situation regarding stakeholder engagement and participation in compliance to international standards.

b. With regular consultations or only when needed/ad hoc ?

- consultations held regularly, for specific target group e.g: mango groups, durian groups
- regular and ad-hoc training given depending on needs of the group

APEC Workshop on Understanding and Developing Risk Management Options for Market Access

.... 6. Current situation regarding stakeholder engagement and participation in compliance to international standards.

c. Is there a need to improve current situation? How?

- **Yes**

- **Adopting system approach**
- **Capacity building for extension workers**
- **Improve R&D & tailored it towards phytosanitary requirement esp. for export.**
- **Capacity building for treatment providers (procedures, protocol required by importing countries).**

APEC Workshop on Understanding and Developing Risk
Management Options for Market Access

7. What are stakeholders' current perceptions towards the need for biosecurity?

- **Farmers / Producers - compliance to SPS is still not very important**
- **a well coordinated program between implementing agencies and other stakeholders would enhance the perception on biosecurity**

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

8. Do phytosanitary personnel regularly have dialogues with stakeholders to promote biosecurity?

Regular basis:

- **Monthly MITI dialogues (for agriculture – once a year)**
- **Dialogues with the members of the Malaysian Timber Council**

Ad hoc:

- **Dialogues with the Growers' Association**
- **Dialogues with treatment providers**

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

9. Is there a need for better engagement with policy makers to promote the need for more support for plant biosecurity? Please explain....

- **Yes.**
- **By providing them with the knowledge on the importance of biosecurity and how to integrate this concept in the implementation of their activities.**
- **To provide sufficient funding to implement the activities of plant biosecurity.**
- **Strengthen linkages between Quarantine and Custom to ensure a sound plant biosecurity and food security.**

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

10. What benefits can be obtained from a regional approach to biosecurity?

- Movement /spread of pest & diseases - borderless
- Regional cooperation is needed to ensure that it can be managed properly

Benefit:

- Maximise resources – sharing of information, knowledge & expertise e.g: Regional Diagnostic Network (coordinated by ASEAN Net)
- Minimise cost - Consolidated approach in getting market access in commonly grown crops.

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

11. In what areas can regional APEC economies cooperate to achieve this objective?

- comparing and updating regional pest list
- capacity building in disinfestation of fruit fly and other common major pest
- market access for common crops in the region
- technology sharing & networking among member economies

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

12. What is the most important issues in your economy that require regional collaboration?

- most important – update the A1 and A2 pest list
- regional mitigation – IAS and RNQP (Regulated Non- Q Pest)
- lack taxonomic experts, we need to share this expertise regionally

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

13. Highlight the most important invasives in your economy (economic damage caused – directly & indirectly).

- Papaya dieback
- Yellow syndrome - paddy
- Fruit fly
- PRSV
- MSW
- Golden apple snail
- *Mimosa pigra*

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity


Summary/Conclusion

- The need to address all stakeholders (policy makers -- farmers) on the importance of plant biosecurity and food security.
 - There is a high need to establish commonalities in agriculture production & trade as well as food commodities in the APEC region
 - The need to establish and update local & regional pest list including A1 & A2 pest list
 - Collaboration & close linkage among member economies is required for market access negotiations
- ▶▶ As to achieve the above recommendations capacity building on plant health management of commonly traded crops / agriculture products, & networking among have to be further enhanced


APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity



Attachment 5.8.



Asia-Pacific
Economic Cooperation



Government of Malaysia

Philippine Report for APEC Workshop on Enhancing Food Security through a Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Wilma Cuaterno, Luben Marasigan,
Lilia Portales and Joselito Antioquia

**APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity**
Concorde Hotel, Shah Alam, Malaysia, 1-3 December 2010

1. Major pest & disease threats to food production and food security

Crops (prioritized for exports)	Insect Pests	Diseases/ pathogens	Invasive pests/ emergent pests	Comments
Banana	Aphids, Corn weevil	Bunchy top	-	
Pineapple	Mealybug	Crown rot	-	
Mango	Mango pulp weevil	Anthraxnose, Stem end rot	Twig borer, Thrips	
Shallots	-	-	-	
Papaya	Aphids	PRSV	-	
Coconut (young/dehusked)	<i>Brontispa</i> sp.	Cadang-cadang, Socorro wilt	Mealybug, Scale	
Banana (Balangon)				
Okra	Cotton stainer, <i>Empoasca</i> sp.	-	-	
Banana (Señorita)				
Asparagus	Mealybug			
Rice	Hoppers	Tungro, Rice blast	Rice Black Bug	
Corn	Asian Corn Borer, Corn planthopper, Aphids	Downy mildew, Stalk rot	Corn planthopper	

A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

2. Awareness of stakeholders on local phytosanitary policies and global requirements for exports.

Stakeholders	Awareness level (<i>high, moderate or low</i>)	
	Local policies/ regulations	Global requirements for export
Policy makers/ Politicians	Pol. M – High - Mod Politic – Low	Pol. M – High - Mod Politic – Low
Phytosanitary personnel	Moderate	High to Moderate
Exporters/Importers	Moderate to Low	Moderate to Low
Producers	Moderate to Low	Moderate to Low
Farmers/Entrepreneurs	Moderate to Low	Moderate to Low

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

3. Understanding of biosecurity concept among various stakeholders.

Stakeholder	High	Moderate	Low
Policy makers/ Politician			✓
Phytosanitary personnel		✓	
Exporters/ Importers			✓
Producers			✓
Farmers/ Entrepreneurs			✓
Etc., etc. (QTP's)		✓	

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

4. Perception of your member economy towards improvements in plant biosecurity. In what areas?

- Risk Management/assessment (contingency planning)
- Resource management (references/information, pest lists, etc.)
- Administrative arrangement on border control (BOC before BPI)
- Access to information
- Upgrade physical capability (resources)

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

5. Changes needed in local legislation/regulations to improve compliance with international standards.

- Updating of administrative orders/memos to be consistent with international standards
- Improvement of coordination mechanism among national government & local regulations
- Consultations with local SH's, producers, etc.
- Coordinate with politicians/congress

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

6. Current situation regarding stakeholder engagement and participation in compliance to international standards.

- a. Which stakeholders are involved?
 - export/import/quarantine treat. providers/regulatory agencies
 - producers/DA-BPI
- b. With regular consultations or only when needed/ad hoc ?
 - ad hoc
- c. Is there a need to improve current situation? How?
 - yes. more regular consultations, communication improvement, SPS, awareness programs

APEC Workshop on Understanding and Developing Risk Management Options for Market Access

7. What are stakeholders' current perceptions towards the need for biosecurity?

- Producers – SPS compliance not that important (food sufficiency is more important)
- Farmers – only if there are issues coming up do they become interested

8. Do phytosanitary personnel regularly have dialogues with stakeholders to promote biosecurity?

- Ad hoc only

APEC Workshop on Enhancing Food Security through A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

9. Is there a need for better engagement with policy makers to promote the need for more support for plant biosecurity? Please explain....

- Yes. PM's are the ones who formulate compliance mechanisms
- Once we have support from PM's/heads of agencies, plant biosecurity measures can be improved.
- Coordination with politicians/heads of other involved agencies

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

10. What benefits can be obtained from a regional approach to biosecurity?

- more awareness in SPS
- better integration with trade partners
- transparency
- harmonization of PS measures (EWG-PS)

11. In what areas can regional APEC economies cooperate to achieve this objective?

- Regional pest lists/resources
- Capacity building

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

12. What are the most important issues in your economy that require regional collaboration?

- Harmonization of Plant Quarantine Procedures
- Regular capacity-building programs
- Coordination/integration in sharing resources/ technical capacity and other PS info.

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

13. Highlight the most important invasives in your economy (economic damage caused – directly & indirectly).

- Rice Black Bug
- Brontispa
- Corn Leafhopper
- Mealybug

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Summary/Conclusion


- There is a need to identify major threats to food production and food security in local and regional levels.
- Awareness of policy makers and stakeholders regarding food security and plant biosecurity should be established and disseminated .
- Policy makers should be appraised to how biosecurity concepts can be fully understood and appreciated by various stakeholders

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity


- There should be initiative for policy makers, congress to enact laws that will support the need for biosecurity.
- Existing policies and regulations should be updated, reviewed and improved to comply with international standards.
- Collaboration and close linkage among member economies and trade partners should be strengthened.
- There should be regular communication and consultations re implementation of policies that will affect the interest of various stakeholders .

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Attachment 5.9.



Asia-Pacific
Economic Cooperation






Government of Malaysia

Enhancing Food Security thru Plant Biosecurity Approaches in Thailand

- Mr. Surapol Yinasawapun, Chief of Plant Quarantine Research Group, Plant Protection Research and Development Office, Department of Agriculture
- Dr. Margaret C. Yoovatana, Policy and Plan Specialist, International Agricultural Affairs Group, Planning and Technical Division, Department of Agriculture




**APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity**
Concorde Hotel, Shah Alam, Malaysia, 1-3 December 2010

1. Major pest & disease threats to food production and food security

Crops (prioritized for exports)	Insect Pests	Diseases/ pathogens	Invasive pests/ emergent pests	Comments
Rice	BPH, WBPH 	Ragged and grassy stunt virus, Yellow stunt virus 	Weedy rice 	




**APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity**

1. Major pest & disease threats to food production and food security (cont.1)

Crops (prioritized for exports)	Insect Pests	Diseases/ pathogens	Invasive pests/ emergent pests	Comments
Aquatic plants	<i>Bemisia tabaci</i> 			
Sugar cane	White grubs 	White leaf (Phytoplasma)		




APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

1. Major pest & disease threats to food production and food security (cont.2)

Crops (prioritized for exports)	Insect Pests		Invasive pests/ emergent pests	Comments
Fruit Crops	Fruit flies 			
	Scales 			
	Mealybug 			



APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

1. Major pest & disease threats to food production and food security (cont.3)

Crops (prioritized for exports)	Insect Pests		Invasive pests/emergent pests	Comments
Vegetables	- Leafminers (<i>Liriomyza</i> spp.)			
	-White flies			
	-Thrips			




APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

1. Major pest & disease threats to food production and food security (cont.4)

Crops (prioritized for exports)	Insect Pests	Diseases/pathogens	Invasive pests/emergent pests	Comments
Coconut	- <i>Brantisa longissima</i>			
	- Black headed caterpillar <i>Nephantis</i> sp.			

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

1. Major pest & disease threats to food production and food security (cont.4)

Crops (prioritized for exports)	Insect Pests		Invasive pests/emergent pests	Comments
Cassava			Pink cassava Mealybug <i>Phenacoccus manihoti</i> * Emergency action using biological control, <i>Anagyrus lopezii</i>	
Ornamentals	<i>Thrips palmi</i>	 Mekong Thrips Thrips palmi Damage in Thailand		

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

2. Awareness of stakeholders on local phytosanitary policies and global requirements for exports.

Stakeholders	Awareness level (<i>high, moderate or low</i>)	
	Local policies/regulations	Global requirements for export
Policy makers/ Politicians	high	high
Phytosanitary personnel	high	high
Exporters/Importers	moderate	moderate
Producers	moderate	moderate
Farmers/Entrepreneurs	low	low

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

3. Understanding of biosecurity concept among various stakeholders.

Stakeholder	High	Moderate	Low
Policy makers/ Politician			✓
Phytosanitary personnel		✓	
Exporters/ Importers		✓	
Producers			✓
Farmers/ Entrepreneurs			✓

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

4. Perception of your member economy towards improvements in plant biosecurity. In what areas?

- ✓ Capacity building and improved understanding on the management of plant health of major economic crops
- ✓ Establishment of an effective and coordinated mechanism to support plant pest surveillance and biosecurity preparedness
- ✓ Information sharing on plant health and biosecurity data for biosecurity planning and market access negotiations
- ✓ Raise awareness on the need to address biosecurity concerns at national level

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

5. Changes needed in local legislation/regulations to improve compliance with international standards.

- ✓ Harmonize diagnostic protocols between countries that affects exports (e.g. bacterial wilt caused by *Pantoea stewartii* subsp. *stewartii*)
- ✓ Exporters are generally less appreciative on the importance of the biosecurity approach, hence there is a need for the enhancement of awareness among the stakeholders
- ✓ Strengthen law enforcement on smuggling
- ✓ Strengthen linkage between the public and private sector stakeholders on the implementation of biosecurity approach

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

6. Current situation regarding stakeholder engagement and participation in compliance to international standards.

6.1 Which stakeholders are involved?

- ❖ **Ministry of Agriculture and Cooperatives (MOAC)**
 - Department of Agriculture (DOA)
 - Agricultural Commodities and Food Standards Bureau (ACFS)
 - Department of Agricultural Extension (DOAE)
- ❖ **Food and Drug Administration (FDA)**
- ❖ **Exporter/Importer**
- ❖ **Producer/Farmer**

APEC Workshop on Understanding and Developing Risk
Management Options for Market Access

6.1 Which stakeholders are involved? (cont.)

Department of Agriculture (DOA)

- Plant Protection Research and Development Office (PPRDO)
 - ✳ Plant Quarantine Research Group ✳ Entomology and Zoology Research Group ✳
 - Weed Science Research Group ✳ Plant Pathology Research Group ✳ Pest
 - Management Research Group
- Agricultural Regulatory Office (ARO)
 - ✳ Licencing and Registration Section
 - ✳ Plant Quarantine Stations (Central, North, East, Northeast, South)
- Plant Standards and Certification Office (PSCO)
- Agricultural Production Sciences Research and Development Office (APSRDO)
- Post-harvest and Products Processing Research and Development Office (PPPRDO)
- Biotechnology Research and Development Office
- Office of Agricultural Research and Development Office (Region 1-8)

APEC Workshop on Understanding and Developing Risk
Management Options for Market Access

Plant Biosecurity related legislations and regulations

- ❖ Plant Quarantine Act 1st Edition B.E. 2507 (1964),
2nd Edition B.E. 2540 (1997), 3rd Edition B.E. 2551 (2008)
(includes SPS; GMOs-related guidelines)
- ❖ Hazardous Substances Act B.E. 2535 (1992) revised B.E. 2544 (2001),
B.E. 2551 (2008)
- ❖ Plant Act B.E. 2518 (1975), revised B.E. 2535(1992), B.E. 2550 (2007)

National Biosecurity related Programs

- ❖ Food Safety Program launced since 2004
- ❖ Thailand as Kitchen of the World

APEC Workshop on Understanding and Developing Risk
Management Options for Market Access

6.2 With regular consultations or only when needed/ad hoc ?

The National Food Safety Committee was formed comprised of representatives from all the stakeholders which has the Mandate to set-up the food safety road map of Thailand.

Regular consultations are the norm complemented by *ad hoc* Working groups for specific interventions (e.g. recent outbreaks of pests and diseases)

6.3 Is there a need to improve current situation? How?

There will always be room for improvement. Regional cooperation need to be encouraged to find solutions to recent problems confronting the region. Also, strong policy support and continued capacity building at national level would be crucial to the implementation of biosecurity programs.

APEC Workshop on Understanding and Developing Risk Management Options for Market Access

7. What are stakeholders' current perceptions towards the need for biosecurity?

- ✓ There are still problems with small-holders perception on the importance and economics of compliance to biosecurity.
- ✓ A mechanism to ensure strong linkage among the stakeholders and an efficient coordination system has still to be established.
- ✓ A well coordinated and strongly implemented regional cooperation on Biosecurity would enhanced food security in the region.

APEC Workshop on Enhancing Food Security through A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

8. Do phytosanitary personnel regularly have dialogues with stakeholders to promote biosecurity?

- ✓ **The public sector under the food safety program has implemented activities related to enhancing awareness on Good Agricultural Practices (GAP)/Good Manufacturing Practices (GMP), HACCP etc.**
- ✓ **The GAP/GMP advisers and inspectors have regular dialogues with the producers to give recommendations on how to comply with the production and quality standards.**
- ✓ **Regular consultations are being held within related committees to discuss on biosecurity related issues.**

**APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity**

9. Is there a need for better engagement with policy makers to promote the need for more support for plant biosecurity?

By and large, the government recognizes the benefits of regional sharing of information, resources and effort, and the advantages of stakeholder involvement.

Also, policy support to promote wider stakeholder engagement and the biosecurity approach has to be further strengthened.

Investment on research and development as well as capacity-building on biosecurity approach has to be greatly encouraged.

Limited resources and weaker linkage between the Customs and Quarantine for enforcement are major challenges that needs to be addressed.

**APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity**

10. What benefits can be obtained from a regional approach to biosecurity?

- ✓ **Regional approach to biosecurity helps address biosecurity concerns in a wider scope**
- ✓ **Resources are shared whereby addressing biosecurity concerns at minimized cost**
- ✓ **Knowledge sharing among wide stakeholder participation**
- ✓ **Sharing of expertise to solve common biosecurity problems**
- ✓ **Greater understanding on SPS protocols and procedures hence facilitates trade and investment**
- ✓ **Common understanding on SPS rules and regulations resulting to better compliance and lesser rejections thus minimizing food losses**

**APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity**

11. In what areas can regional APEC economies cooperate to achieve this objective?

- ✓ **Capacity building on areas of plant health management, pest and diseases diagnostics, biosecurity management, pest surveillance, policy advocacy and impact assessments**
- ✓ **Experts Dispatching Programs**
- ✓ **Research collaborations**
- ✓ **Information Sharing**
- ✓ **Regional Early Warning System**
- ✓ **Disaster Preparedness Scheme**
- ✓ **Biosecurity Networks**
- ✓ **Enhancement of awareness on biosecurity approaches**

**APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity**

12. What is the most important issues your economy that require collaboration?

- ✓ **Capacity building**
- ✓ **Research collaborations**
- ✓ **Enhanced awareness and understanding on biosecurity approaches**
- ✓ **Regional collaborations**
- ✓ **Effective implementation mechanism for biosecurity approaches**

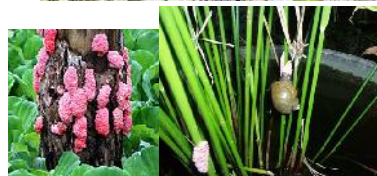
APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

13. Highlight the most important invasives in your economy (economic damage caused – directly & indirectly).

Water hyacinth (*Eichhornia crassipes*)



Golden apple snail (*Pomacea canaliculata*)



APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Summary/Conclusion

- ❖ A regional cooperation is needed to raise the capacities of the member economies to accurately describe and manage the plant health of their major traded agricultural commodities.
- ❖ The region has to take the advantage of taking stock of APEC-wide resources in plant pest diagnostics and plant biosecurity management.
- ❖ Regional initiatives to coordinate and support plant pest surveillance and biosecurity preparedness has to be initiated.

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Summary/Conclusion

- ❖ There should be cooperative mechanism to share plant health and biosecurity data through an appropriate communication forum to facilitate easy access information for biosecurity planning and market access negotiations.
- ❖ The region has to identify commonalities in plant pest threats, priorities in pest surveillance and invasive species management.
- ❖ The awareness of member economies to the need to address biosecurity concerns at national as well as regional basis has be enhanced.

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity



Attachment 5.10.

 Asia-Pacific Economic Cooperation  Government of Malaysia	<h2 style="margin: 0;">Enhancing Food Security through A Regional Approach and Wide Stakeholder Participation to Plant Biosecurity in Viet Nam</h2> <p style="margin: 10px 0 0 0;">presented by Nguyen Quang Hieu Plant Protection Department of Viet Nam</p>
<p>APEC Workshop on Enhancing Food Security through A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity Concorde Hotel, Shah Alam, Malaysia, 1-3 December 2010</p>	

1. Pests & diseases threats to food production and food security

Crops (prioritized for exports)	Insect Pests	Diseases/ pathogens	Invasive pests/ emergent pests	Comments
Rice	Brown plant hopper (as vector to virus)	- Rice grassy stunt virus - Rice ragged stunt virus		Pest outbreak, leading yield loss, will directly and adversely effect many farmers
Casava		Phytoplasma (?)		Absence of an effective control method so far. It reduce quality of cassava products, resulting lost trade
Fresh fruits	Fruit flies			constraining market access of our products.
Rubber		Corynespora leaf fall		Emerging threat; 100,000 ha infected; problem of control in mature trees due to height

**APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity**

2. Awareness of stakeholders on local phytosanitary policies and global requirements for exports.

Stakeholders	Awareness level (<i>high, moderate or low</i>)	
	Local policies/ regulations	Global requirements for export
Policy makers/ Politicians	Moderate	Moderate
Phytosanitary personnel	High	High
Exporters/Importers	Moderate	Moderate
Producers	Low	Low
Farmers/Entrepreneurs	Low	Low

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

3. Understanding of biosecurity concept among various stakeholders.

Stakeholder	High	Moderate	Low
Policy makers/ Politician		X	
Phytosanitary personnel	X		
Exporters/ Importers		X	
Producers			X
Farmers/ Entrepreneurs			X
Etc., etc.			

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

4. Perception of your member economy towards improvements in plant biosecurity.

- Develop an active phytosanitary system (pre-border, pre-clearance control)
- Strengthen border control capacity
- Comprehensive system approach with protection, control and eradication programs

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

5. Changes needed in local legislation/ regulations to improve compliance with international standards.

- Increase levels of protection to equivalent levels with intl. standards
- Improve law enforcement
- Raise awareness for stakeholders toward benefits of compliance and sustain their “long term” profits

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

6. Current situation regarding stakeholder engagement and participation in compliance to international standards.

a. Which stakeholders are involved?

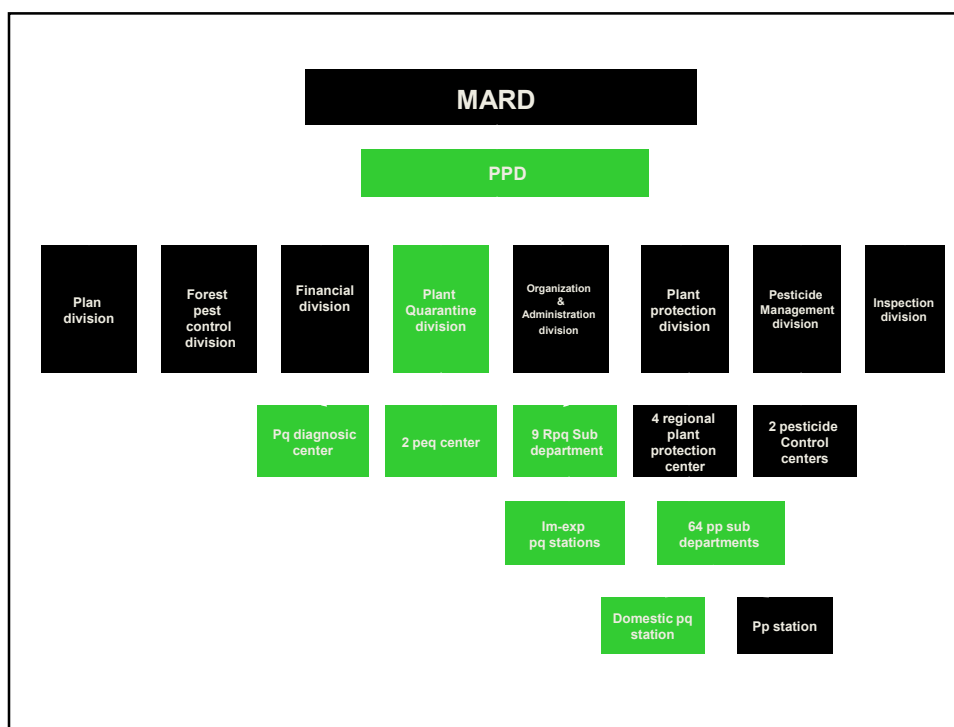
- phytosanitary agencies
- producers (farmers)/service providers/traders

b. Vietnam has a regular system in place and on a need basis when there any problem occur to discuss

c. Need to improve current situation

- Mechanism to call for participation from public
- Financial support for awareness raising programs
- Improve efficiency of communication with stakeholder

APEC Workshop on Understanding and Developing Risk Management Options for Market Access



7. What are stakeholders' current perceptions towards the need for bio-security?

- Compliance benefits
- Wait support from government

8. Do phytosanitary personnel regularly have dialogues with stakeholders to promote biosecurity?

- Much attention on crop protection
- Need directions base on an biosecurity action plan

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

9. Is there a need for better engagement with policy makers to promote the need for more support for plant biosecurity?

- A national strategic plan to give directions
- Improve cooperation amongst agencies and those with other stakeholders
- Increase public participation in legislation formulation

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

10. What benefits can be obtained from a regional approach to biosecurity?

- reduce costs
- more efficient
- more market access opportunities

11. In what areas can regional APEC economies cooperate to achieve this objective?

- A regional expert network & database
- A legal frame work and hamonization
- Closing gaps between countries

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

12. What is the most important issues in your economy that require regional collaboration?

- Law formulations
- Finance and expert support for pest surveillance programs
- Training on pre-border control and risk mitigation
- diagnosis, monitoring capacity building

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

**13. Highlight the most important invasives
in your economy.**

- *Brontispa longissima*
- *Balansia oryzae*
- *Pomacea* sp.

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Brontispa longissima

- Detected since 1999 on oil palm
- 10 mil of oil plant damaged
- Absence of natural enemies, ineffective chemical control
- Research on application of biological control




Balansia oryzae

- Attack rice, a major products of Vietnam
- Not widely distributed, but cause some yield loss in infested areas
- Not economically important, but unacceptable in some markets (Japan, US ...)

Pomacea sp.

- Introduced since 1989
- Widely distributed (throughout Vietnam)
- Highly reproduced
- Very tough invasive pest

Attachment 5. 11.

 <p>Asia-Pacific Economic Cooperation</p>	<h1 style="color: red;">CAMBODIA</h1>
	
 <p>Government of Malaysia</p>	<p style="text-align: center;">Plant Biosecurity in Cambodia</p> <p style="text-align: right;">Prepared by: Dr. DY SAM AN Mr. UCH SOTHY</p>
<p>APEC Workshop on Enhancing Food Security through A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity Concorde Hotel, Shah Alam, Malaysia, 1-3 December 2010</p>	

1. Major pest & disease threats to food production and food security

Crops (prioritized for exports)	Insect Pests	Diseases/ pathogens	Invasive pests/ emergent pests	Comments
Rice	BPH	<ul style="list-style-type: none"> - Rice grassy stunt virus -Rice ragged stunt virus - rice blast 		June-August Lost Yield

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

2. Awareness of stakeholders on local phytosanitary policies and global requirements for exports.

Stakeholders	Awareness level (<i>high, moderate or low</i>)	
	Local policies/ regulations	Global requirements for export
Policy makers/ Politicians	Low	Low
Phytosanitary personnel	Moderate	Moderate
Exporters/Importers	Moderate	Moderate
Producers	Low	Low
Farmers/Entrepreneurs	Low	Low

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

3. Understanding of biosecurity concept among various stakeholders.

Stakeholder	High	Moderate	Low
Policy makers/ Politician			Yes
Phytosanitary personnel		Yes	
Exporters/ Importers		Yes	
Producers			Yes
Farmers/ Entrepreneurs			Yes
Etc., etc.			

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

4. Perception of your member economy towards improvements in plant biosecurity. In what areas?

- Strengthen Plant Protection, Sanitary and Phytosanitary Department in term of:
 - Human resource Development
 - Law and Regulations
 - Equipments
- Advocate to government on placing plant quarantine border check points
- Improve knowledge of importers, exporters, producers, farmers and entrepreneurs on local policies/regulations, global requirements and biosecurity

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

5. Changes needed in local legislation/ regulations to improve compliance with international standards.

- Cambodia phytosanitary is implemented based on sub-decree 15 but at some points, the sub-decree doesn't comply with international standards
- Cambodia is currently drafting its phytosanitary laws to comply with international standards

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

6. Current situation regarding stakeholder engagement and participation in compliance to international standards.

a. Which stakeholders are involved?

- Ministry of Agriculture Forestry & Fisheries
- Ministry of Commerce
- Ministry Economic and Finance
- Private sectors
- Other institution (Royal University of Agriculture, CARDI...)
- Farmers/Producers

APEC Workshop on Understanding and Developing Risk Management Options for Market Access

b. With regular consultations or only when needed/ad hoc?

- Only when needed

c. Is there a need to improve current situation? How? YES

- Enforce the implementation of SPS action plan facilitated by FAO in which the overlapped activities are already clarified
- Increase awareness among producers/ farmers, private sectors on International Standard Requirements

APEC Workshop on Understanding and Developing Risk Management Options for Market Access

7. What are stakeholders' current perceptions towards the need for biosecurity?

Relevant ministries do not understand widely yet on the need for biosecurity while producers/ farmers, importer, exporter still have limited understanding

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

8. Do Phytosanitary personnel regularly have dialogues with stakeholders to promote biosecurity?

- Regular dialogues with relevant ministries during inter-ministry meetings, workshops...etc
- Conduct meeting with private sectors to inform about the regulations but not regularly
- Biosecurity awareness raising has been done to farmers during farmer meetings

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

9. Is there a need for better engagement with policy makers to promote the need for more support for plant biosecurity? Please explain....

- Cambodian government doesn't pay much attention on Plant Quarantine (PQ) that's why government withdrew PQ check points from all borders
- Advocacy to government on the importance of PQ and Phytosanitary law endorsement has to be done continuously

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

10. What benefits can be obtained from a regional approach to biosecurity?

- To cooperate with each other against with the spread of Pest
- To exchange information for the improvement of biosecurity
- To improve production of agriculture products both for local consumptions and export to other countries
- To develop regional standards for phytosanitary measures (RSPM)

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

11. In what areas can regional APEC economies cooperate to achieve this objective?

- Increase cooperation on pest diagnosis
- Share experiences
- Provide technical supports when needed

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

12. What is the most important issues in your economy that require regional collaboration?

BPH forecasting and control

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

13. Highlight the most important invasive in your economy (economic damage caused – directly & indirectly).

- *Cassava Mealybug*
- Golden Apple Snail
- *Brontispa Longissima*
- Annual migration of BPH can cause serious damage on rice field

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Summary/Conclusion


- Capacity of PQ is still limited and not yet comply with international standard, so technical supports are needed
- Cambodia don't have PQ check points meaning that we don't have barrier to protect pests which can damage agriculture products
- Advocate to government to increase more attention on PQ by placing PQ check points in all borders

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity


THANK YOU



Attachment 5.12.



Asia-Pacific
Economic Cooperation



Government of Malaysia

Prospectives and challenges on application of Phytosanitary measure in Lao PDR.

Plant Quarantine Division,
Department of Agriculture
Ministry of Agriculture and Forestry

**APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity**
Concorde Hotel, Shah Alam, Malaysia, 1-3 December 2010

1. Major pest & disease threats to food production and food security

Crops (prioritized for exports)n	Insect Pests	Diseases/ pathogens	Invasive pests/ emergent pests	Comments
Rice	Brown plant hopper, Gall midget, Stem borer, Leaf folder, Rice bug , Thrips	Rice blast Sheath spot (<i>Rhizoctonia</i> sp.) Leaf blight (<i>Xanthomonas</i> sp.)	Golden snail	distribution
coffee	Weevil borer	anthracnose	CBB (Coffee berry borer)	established
Fruit tree	Mealy bug, aphid, Banana weevil, Coconut hispine beetle	anthracnose Leaf spot of Banana black leaf streak	fruit fly	distribution
Maize	Grain weevil, Stem borer	<i>Rhizoctonia</i> sp. <i>Exserohillum</i> sp. Rust	-	distribution

**APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity**

2. Awareness of stakeholders on local phytosanitary policies and global requirements for exports.

Stakeholders	Awareness level (<i>high, moderate or low</i>)	
	Local policies/ regulations	Global requirements for export
Policy makers/ Politicians	Relatively moderate	moderator
Phytosanitary personnel	moderate	moderator
Exporters/Importers	moderate	low
Producers	low	low
Farmers/Entrepreneurs	low	low

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

3. Understanding of biosecurity concept among various stakeholders.

Stakeholder	High	Moderate	Low
Policy makers/ Politician			√
Phytosanitary personnel		√	
Exporters/ Importers			√
Producers			√
Farmers/ Entrepreneurs			√
Etc., etc.			

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

4. Perception of your member economy towards improvements in plant biosecurity. In what areas?

- Import risk analysis
- Phytosanitary export certification
- Treatment of wood packaging material for export
- Human resource development
- And enhance awareness of stakeholder

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

5. Changes needed in local legislation/ regulations to improve compliance with international standard

• Prime Minister Decree on Plant Quarantine” No.66/PM, dated 21 March 1993.



- Plant protection law of Lao PDR No.06 dated 9/12/2008
- Notice No. 034/MAF.06 implementation of ISPM 15

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

6. Current situation regarding stakeholder engagement and participation in compliance to international standards.

a. Which stakeholders are involved?

- policy maker
- local government
- trade organisation
- academic institution (University, plant protection center, research institution)

APEC Workshop on Understanding and Developing Risk Management Options for Market Access

b. With regular consultations or only when needed/ad hoc ?

- only participate in drafting the regulation, provide information, pest surveillance, apply measure on pest out break, disseminate the information . .etc

c. Is there a need to improve current situation? How?

- Enhance awareness of stakeholder on phyto. measure
- Enhance technical skill capacity
- Develop curriculum on plant protection for University

7. What are stakeholders' current perceptions towards the need for biosecurity?

- risk of regulated pest
- market access and facilitate the trade
- integrate into international trade

8. Do phytosanitary personnel regularly have dialogues with stakeholders to promote biosecurity?

- Enquiry point
- Publication, media
- Dissemination workshop
- Consultation workshop

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

9. Is there a need for better engagement with policy makers to promote the need for more support for plant biosecurity?

Please explain....

- yes, Policy maker shall be leading a better engagement in promoting the application of phytosanitary measures, seeking fund, supporting and enhance linkage with related competent authoriting

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

10. What benefits can be obtained from a regional approach to biosecurity?

- Increase awareness, understanding and capacity building
- Enhance market access
- Facilitate the trade
- Safe domestic production from invasive pest

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

11. In what areas can regional APEC economies cooperate to achieve this objective?

- Harmonization of phytosanitary measure
- Exchange of formation and sharing experience
- Capacity building
- Encourage LDC to comply with international measures

12. What is the most important issues in your economy that require regional collaboration?

- Awareness and understanding (participation of stakeholder)
- Adopt and comply with international standard
- Participation of stakeholder
- Harmonisation of phyto. Measure
- Lacking of information and capacity building

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

13. Highlight the most important invasives in your economy (economic damage caused – directly & indirectly).

- Coconut hispine beetle
- Coffee berry borer
- fruit fly
- Golden snail
- Pink mealy bug
- White leaf phytoplasmas

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Summary/Conclusion

Priority to be further discussed:

1. Enhance regional collaboration
2. more stakeholder should be involved
3. Exchange in formation and sharing experience
4. Strengthen quarantine inspection system at the entry/exit points including mechanism to regulate cross-border issues
5. Need assistance on pest identification and taxonomy
6. Short term and long term specific training
7. Furbish with appropriate equipment (stereo microscope, gps, PCR, ELISA, computer network system, laboratory handbook and necessary chemical reagent
8. Develop procedure manual for inspection
9. Establish containment facilities, greenhouse for trial and post entry quarantine station
10. Increase awareness on the importance of SPS through means of media, training, advertisement, etc..
11. Training should be relatively in parallel with adequate equipment and facility investment.

Attachment 5.13.



Asia-Pacific
Economic Cooperation



Government of Malaysia

Food Security in Myanmar

Ko Ko Khin Aye Pwint Khaing

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity
Concorde Hotel, Shah Alam, Malaysia, 1-3 December 2010

1. Major pest & disease threats to food production and food security

Crops (prioritized for exports)	Insect Pests	Diseases/ pathogens	Invasive pests/ emergent pests	Comments
Pulses	Bollworm	Bean Yellow Mosaic	-	
Rice	Stem Borer	Bacterial Blight	-	
Maize	Corn Stalk Borer	Southern Blight	-	
Sesame	Bollworm	Phyllody	-	

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

2. Awareness of stakeholders on local phytosanitary policies and global requirements for exports.

Stakeholders	Awareness level (<i>high, moderate or low</i>)	
	Local policies/ regulations	Global requirements for export
Policy makers/ Politicians	High	High
Phytosanitary personnel	High	High
Exporters/Importers	Moderate	Moderate
Producers	Moderate	Moderate
Farmers/Entrepreneurs	Low	Low

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

3. Understanding of biosecurity concept among various stakeholders.

Stakeholder	High	Moderate	Low
Policy makers/ Politician	√		
Phytosanitary personnel	√		
Exporters/ Importers		√	
Producers		√	
Farmers/ Entrepreneurs			√
Etc., etc.			

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

4. Perception of your member economy towards improvements in plant biosecurity. In what areas?

- **Agriculture (Production food and Protection plants, preservation natural flora and fauna and preventing GMO Import)**
- **Veterinary (Preventing animal diseases)**
- **Forestry (Conservation)**
- **Human Health (Quarantine)**

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

5. Changes needed in local legislation/ regulations to improve compliance with international standards.

- **Reviewing existing Plant Pest Quarantine Law & regulation and redrafting in line with WTO/SPS Agreement**

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

6. Current situation regarding stakeholder engagement and participation in compliance to international standards.

a. Which stakeholders are involved?

- Union of Myanmar Federation of Chamber of Commerce & Industries (UMFCCI) and its sister associations
- Advanced Agriculture & Engineering Co., Ltd for production of world market acceptable rice
- Association of Vegetables and Fruits Growers and Exporters

b. With regular consultations or only when needed/ad hoc ?

- When needed

c. Is there a need to improve current situation? How?

- Yes
- Negotiating with trade partners regarding market access processing and providing required information

APEC Workshop on Understanding and Developing Risk Management Options for Market Access

7. What are stakeholders' current perceptions towards the need for biosecurity?

- Sufficient Production of Rice
- Assisting poor farmers for their inputs for farm by microloan
- Coordination and Cooperation with State
- Information exchange with their trade partners

8. Do phytosanitary personnel regularly have dialogues with stakeholders to promote biosecurity?

- Yes. (Especially for production of staple food, i.e. rice sufficiently, world market acceptable food production)

APEC Workshop on Enhancing Food Security through A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

9. Is there a need for better engagement with policy makers to promote the need for more support for plant biosecurity? Please explain....

- Yes.
- Need to know importance of biosecurity
- Awareness of Importance to Market Access is very essential
- Encouraging stakeholders participation and building partnership with local, regional and global development partners
- Strengthening agricultural research, education and extension systems

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

10. What benefits can be obtained from a regional approach to biosecurity?

- Can define Import Risk Management (IRM)
- Import Market Access
- Import Risk Analysis

11. In what areas can regional APEC economies cooperate to achieve this objective?

- Plant and Animal Quarantine
- National Stakeholder participation in biosecurity
- Trade

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

12. What is the most important issues in your economy that require regional collaboration?

- Shortage of competent human resources in agricultural research and development activities;
- Lack of financial or physical access of the farmers to apply appropriate inputs;
- Transfer of appropriate and sustainable agro-technology which are environmentally friendly;
- Lack of marketing system that guarantee a fair share of benefit for all parties involved in the system;
- Availability of genuine and quality seeds, pesticides, fertilizers, reliable tools, implements and machineries.
- Information and knowledge exchange among trade partners

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

13. Highlight the most important invasives in your economy (economic damage caused – directly & indirectly).

- None



APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Summary/Conclusion

- Myanmar as an ASEAN member country welcomes the strategic Plan of Action focusing on food security, endorsed by AMAF Meeting held in October 2008 in Hanoi.
- Myanmar would like to call for accelerating cooperation on agricultural sector development not only with member states, but also with neighbouring countries and dialogue partners.
- Myanmar would like to participate any activities on regional food security programmes.
- Strengthening of food security information system among APEC economies should be carried out.

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

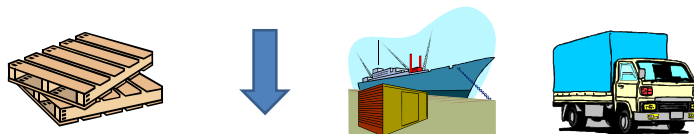
Attachment 5.14.

 <p>Asia-Pacific Economic Cooperation</p>  <p>Government of Malaysia</p>	<h2>Plant Biosecurity activities in JAPAN</h2> <p>Yuji KITAHARA, Plant Protection Division, Ministry of Agriculture, Forestry and Fisheries, JAPAN</p>
<p>APEC Workshop on Enhancing Food Security through A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity Concorde Hotel, Shah Alam, Malaysia, 1-3 December 2010</p>	

<h3>Outline of Presentation</h3> <ol style="list-style-type: none"><u>1. Stakeholders' engagement and participation</u><ul style="list-style-type: none">➤ In developing international standard➤ In reviewing phytosanitary regulations<u>2. Capacity building activities</u><ul style="list-style-type: none">➤ FAO Trust Found Project➤ JICA Training Program
<p>APEC Workshop on Enhancing Food Security through A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity</p>

Stakeholders' engagement and participation in developing ISPM

- IPPC has adopted 34 ISPMs
- Target of phytosanitary measure has been **extending** not only to plant and plant products but also to **packaging, conveyance and containers**



ISPMs make great influence **related authorities and many stakeholders**

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Stakeholders' engagement and participation in developing ISPM

Draft ISPMs are circulated for member consultation



- Have a **meeting** to review and exchange opinions **with related authorities, stakeholders and scientists**
- Provide the **opportunity of submitting comments to draft ISPMs**
- ISPMs are considered to be well-understood



APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Stakeholders' engagement and participation in reviewing phytosanitary regulations

Procedure of amendment of the relevant regulation

1. **Plant Protection Authority makes draft proposals and relevant regulation** followed by examination of the result of experiment or survey
2. **A public hearing** is conducted to collect opinions from the public, stakeholders and scientists.
3. Plant Protection Authority examine the validity **taking into account the collected opinions.**



The relevant regulations are amended

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Capacity building activity, FAO Trust Fund Project

Project :

Cooperation for the improvement of phytosanitary capacity in Asian countries through capacity building

Duration :

1 January 2007 to 31 December 2011

Targeted Country :

Cambodia, Lao PDR, Myanmar, Vietnam, Sri Lanka, Bangladesh, Pakistan, Thailand, Indonesia and Malaysia

Counterpart :

The National Plant Protection Organization (NPPO)

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Capacity building activity, FAO Trust Fund Project

Goal of the Project :

Developing human resources who

- are **engaged in plant quarantine activities** at NPPO in Asian region
- will **contribute to plant quarantine activities** in their countries and IPPC and APPPC activities

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Capacity building activity, FAO Trust Fund Project



The regional Training Workshop on

- Pest Risk Analysis (Vietnam)
- Phytosanitary Inspection and Phytosanitary Certification (Thailand)
- Phytosanitary Inspection for Plants for Planting materials (Philippine)

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Capacity building activity, JICA Training Program

Training program of **skills on ecology, pest control and disinfestations of fruit flies** in cooperation with **JICA**
(Japanese International Cooperation Agency)

- Thermal Treatment for the Disinfestation of Fruit Flies
- Improvement of Thermal Treatment Technique against Fruit Flies on Fresh Mango

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Capacity building activity, JICA Training Program

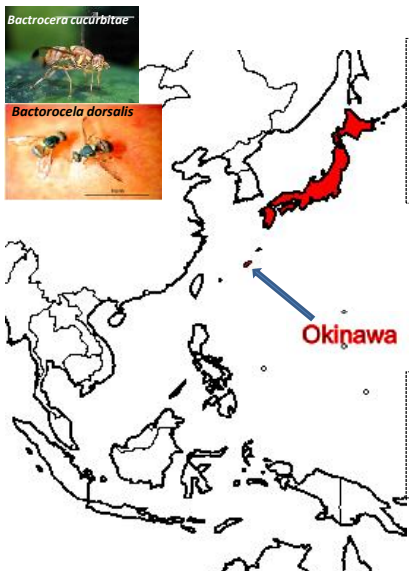


Background :

- Fruit Flies are important pests
 - damage to fruits and vegetables directly
 - restrict international trade indirectly
- Countries producing tropical fruits have **potential to economic development**
- In some countries, the **complete disinfestation technique have not been developed yet**

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Capacity building activity, JICA Training Program



In the past, **Fruit Flies introduced in Okinawa islands**, eradication programs were carried out and **has been succeeded to eradicate**

↓

Japan has leading knowledge and skills on ecology, pest control and disinfestation of Fruit Flies

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Capacity building activity, JICA Training Program

Project :
Thermal Treatment for the Disinfestation of Fruit Flies

Training Program :

- Lectures on **basic knowledge**
- Practice of disinfestation** of Fruit Flies

Objective :

- Provide participants with the opportunity **to acquire knowledge and skills**
- Develop a complete disinfestaion technique** for fruit flies
- Participate in international trade**

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

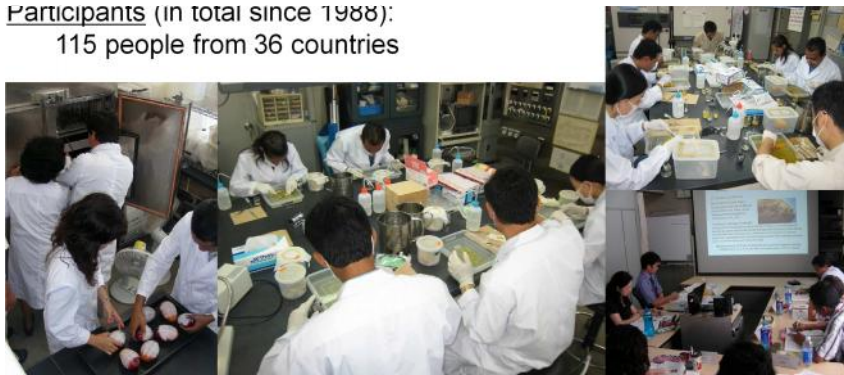
Capacity building activity, JICA Training Program

Dates & Venue :

11 May 2010 - 4 September 2010
Naha Plant Protection Station in Okinawa

Participants (in total since 1988):

115 people from 36 countries



**APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity**

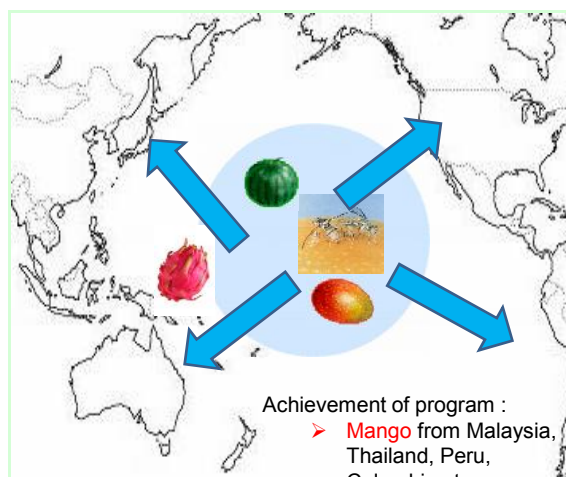
Capacity building activity, JICA Training Program



JICA Training Program in Indonesia :
Improvement of Thermal Treatment Technique assistant Fruit Flies on Fresh Mango

**APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity**

Capacity building activity, JICA Training Program



APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Summary / Conclusion

- Transparency of regulation
(Provide the concerned parties the opportunity to participate)
- Promote international trade of plants through the FAO Trust Fund Project and JICA Training Program

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Attachment 5.15.

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder
Participation to Plant Bio-security, December 1-3, 2010
Kuala Lumpur, Malaysia

Food Safety: A New Challenge for Plant Protection in China

Zhihua Ye



Institute of Quality Standard & Testing Technology for Agro-Products
Chinese Academy of Agricultural Sciences

Contents

- Introduction
- Pest control and use of pesticides
- Regulation on pesticide residues
- Challenges for plant protection
- Suggestions on improving pest control practice for better food safety
- Conclusions



Institute of Quality Standard & Testing Technology for Agro-Products CAAS

Introduction

- Food safety is a very important issue in China in recent years.
- Pesticide residues are among the key hazardous elements to food safety.
- To effectively control pests in food crops and, meanwhile, to provide safe food products for consumers is one of the emerging challenges for plant protection and agriculture production as well.



Institute of Quality Standard & Testing Technology for Agro-Products CAAS

Pest control and use of pesticides

Crop pests

- Cultivation of crops in China is widely distributed from the tropics in the south to the cold temperate region in the north and covers various ecological and climatic conditions. And, therefore, there are all kinds of pests making damages to crops, i.e. plant diseases, insect pests, weeds, rodents, etc.
- More than 100 species of the pests had records of outbreaks in China and caused heavy losses of crops.



Institute of Quality Standard & Testing Technology for Agro-Products CAAS

Yield losses of crops

- Even under various control measures, the annual losses of crops due to pest damage are as followings:

Grain crops	15.0 mill. t /yr
Cotton	0.3 mill. t /yr
Oil-borne crops	0.9 mill. t /yr



Institute of Quality Standard & Testing Technology for Agro-Products CAAS

Pesticide use in agriculture (1990-2009)

Year	Pesticide use (k. t)		Year	Pesticide use (k. t)	
	formulations	a.i.		formulations	a.i.
1990	730	---	2000	1,280	240
1991	760	---	2001	1,280	250
1992	800	---	2002	1,310	260
1993	850	230	2003	1,330	260
1994	870	190	2004	1,390	260
1995	1,090	210	2005	1,460	282
1996	1,140	210	2006	1,540	299
1997	1,200	210	2007	1,500	297
1998	1,230	230	2008	1,350	298
1999	1,310	240	2009	(1,600)	313



Institute of Quality Standard & Testing Technology for Agro-Products CAAS

Trends of pesticide production and use

With the continued adjustment of agricultural structure and the fluctuation of occurrence of crop pests, use of pesticides has been changed in recent years, which brought great impacts on the pesticide production.

In general, the percentage of insecticide production decreased gradually, herbicides achieved a remarkable increase, and the fungicides showed a growing trend, while rodenticides, hygienic pesticides, plant growth regulators and others all gained growth to some extent.



Institute of Quality Standard & Testing Technology for Agro-Products CAAS

Pesticide production and sales (2009)

	Production		Sales	
	(×1,000 t)	%	(×1,000 t)	%
Total	2262	100.0	824	100.0
Insecticides	797	35.2	361	43.8
Fungicides	240	10.6	153	18.6
Herbicides	816	36.1	231	28.0
Others	409	18.1	79	9.6



Institute of Quality Standard & Testing Technology for Agro-Products CAAS

Role of pesticides

Application of pesticides plays a very important role in agricultural production in China. By using pesticides, it is feasible to cover a huge amount of losses of crops in average:

Grain crops	58.45 mill. t/yr
Cottons	1.01 mill. t/yr
Oil-borne crops	2.28 mill. t/yr
Apples	5.37 mill. t/yr
Oranges	1.19 mill. t/yr
Vegetables	45.00 mill. t/yr



Institute of Quality Standard & Testing Technology for Agro-Products CAAS

Regulation on pesticide residues

Emerging problems of pesticide residues

- Widely application of pesticides in agriculture has led to serious problems of quality and safety of agro-products and, meanwhile, widely concerned by various consumers of the products all over the country.
- Original control of food production process is regarded as the most effective approach for food safety regulations and, therefore, the slogans “**from farm to table**”, “**from farm to plate**” and “**from farm to fork**” are come out and widely accepted, which all emphasize safety regulation from the beginning of food production.



Institute of Quality Standard & Testing Technology for Agro-Products CAAS

Adjustment of regularities on pesticides

Pesticide regulation in China have been greatly improved with increasing concerns on food safety as well as ecological and environmental safety, human and animal health.

- 19 varieties of pesticides with apparent toxicity toward eco-environment have been banned from use;
- Application of 21 varieties of pesticides with high residues toward agro-products and food safety have been limited to fewer crops;
- Registration of 11 varieties of pesticides with high toxicity have been suspended in the country.



Institute of Quality Standard & Testing Technology for Agro-Products CAAS

The banned varieties of pesticides:

BHC	DDT
Strobane	dibromochloropane
chlordimeform	EDB
nitrofen	aldrin
dieldrin	mercury compounds
arsenide	plumbum compounds
N, N'-Methylene-Bis	fluoroacetamide
gliftor	teramine
sodiumfluoroacetate	silatrane



Institute of Quality Standard & Testing Technology for Agro-Products CAAS

Pesticides with constricted use

- Pesticides not allowed to use in vegetables, fruits, tea and herbal medicine crops:

methamidophos	parathion-methyl	parathion
monocrotophos	phosphamidon	phorate
isoenphos-methyl	terbufos	phosfolan-methyl
sulotep	demeton	carbofuran
aldicarb	ethoprophos	phosfolan
coumaphos	fonofos	isazofos
fenamiphos		

- Pesticides not allowed to use in tea orchards:

dicofol	fenvaleerate
---------	--------------



Institute of Quality Standard & Testing Technology for Agro-Products CAAS

Pesticides suspended from registration

Phorate	omethoate	isocarbophos
Terbufos	phosfolan-methyl	sulotep
Isoenphos-methyl	demeton	aldicarb
Carbofuran	methomyl	

In addition, Chinese government made a decision in April, 2006, that the following varieties of OPs will be completely banned from production and use in the country from Jan.1, 2007:

Methamidophos	parathion-methyl	parathion
monocrotophos	phosphamidon	



Institute of Quality Standard & Testing Technology for Agro-Products CAAS

Safe Agro-products Action Program

In 2001, MOA launched an action plan on monitoring and management of the quality and safety of agricultural products and carried out a *Safe Agro-product Action Program*.

- Pilot programs in 4 big cities first and later quickly extended to other 37 big and medium-sized cities across the country.
- The fundamental objective of this Action Program is to solve the safety problems arisen from residues of toxic and/or harmful materials (**pesticides**) in agro-products and pollutants in agricultural environments.



Institute of Quality Standard & Testing Technology for Agro-Products CAAS

The Pilot Routine Inspection Cities



Institute of Quality Standard & Testing Technology for Agro-Products CAAS



National Campaign on Product Quality and Food Safety

Objectives

- To eliminate the production, sale and use of five virulent organophosphate pesticides (Methamidophos, parathion-methyl, parathion, monocrotophos, phosphamidon)
- To inspect all wholesale markets in large or middle-scale cities successfully within four months;
- To eliminate the illegal use of forbidden pesticide and feed additives in agro-product production bases, large-scale farms, and agriculture standardization experiment areas;
- To reduce the disqualification rate of pesticide and veterinary drugs residue in vegetable, livestock or poultry products, and aquatic products further;



Institute of Quality Standard & Testing Technology for Agro-Products CAAS

National Campaign on Product Quality and Food Safety

Tasks

- **To Check pesticides' market and ban high toxic & residual products from sell and application to crops**
- Strengthen quality and safety management of livestock and aquatic products
- Enhance the management on veterinary drugs and pork production
- Intensify management on certified agro-products
- Consolidate the management of agro-product wholesale markets

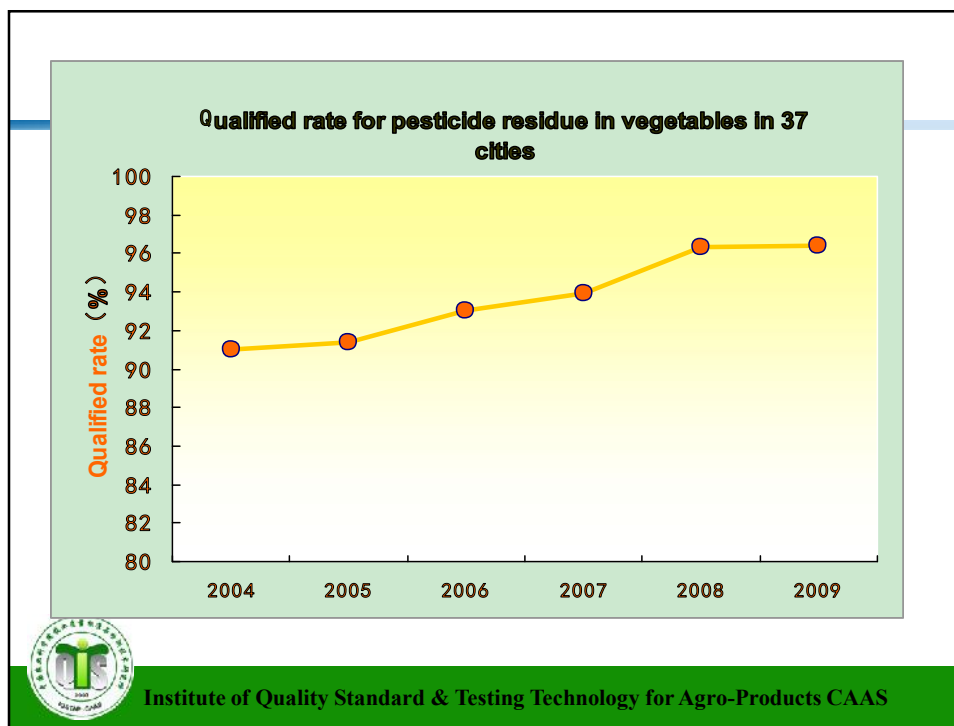


Institute of Quality Standard & Testing Technology for Agro-Products CAAS

Through the *Safe Agro-products Action Program* and the *National Campaign on Quality and Safety of Food Product*, pesticide residue inspections in 37 cities indicated that quality and safety level of vegetables were improved gradually from 2003 to 2009, and the average rate of vegetables which meet the MRL limits in 2009 registered at 96.4%, which is 4.9% higher than that of 2004



Institute of Quality Standard & Testing Technology for Agro-Products CAAS



Challenges for plant protection

- **General mission of plant protection is:**
 - **To control the damage of pests to crops**
 - **To reduce yield losses**
- **The new requirement for plant protection in terms of food safety:**
 - **To provide crop products safe to consumers**



Trends of outbreaks of crop pests

- Mitigation of biological disasters in agriculture are facing more challenges than ever before due to emerging problems of pest outbreaks:
 - Accelerated alteration of pest populations or pathogenic types in the farming ecosystems in accordance with continued changes of biological community structures in agriculture.
 - Occurrence/outbreaks of emerging pests such as invasive species or resurgence of secondary pests.
 - Increased pesticide resistance in major/key species of pests.



Institute of Quality Standard & Testing Technology for Agro-Products CAAS

Food contamination from agrochemicals

- In order to get good yields, the farmers have to apply various chemicals, i.e. pesticides, fertilizer and growth regulators. But overuse or misuse of agrochemicals may result in over-limit residues in crop products.
- The cultivation process of crops is the 1st step and an important source of food contamination.
- China has suffered many food poisoning accidents and refusals of Chinese agro-products in the international market. A number of these accidents are related directly or indirectly with the pesticide residues.



Institute of Quality Standard & Testing Technology for Agro-Products CAAS

New requirement for plant protection

● In terms of food safety, the traditional technologies of plant protection are confronted with various requirements:

- Research for new technologies: new methods, new standards and new regularities
- Development of new products: new varieties and/or new formulations of pesticides, new spraying equipments or pesticide applicators
- Setting up new criteria for evaluation of pest control
 - For products: Toxicology + **Risk**
 - For results: Control efficacy + **Pesticide residues**



Institute of Quality Standard & Testing Technology for Agro-Products CAAS

Suggestions on improving pest control practice for better food safety

Rational use of agrochemicals

- Implement regularities on pesticide applications, absolutely stop use of banned varieties and prevent use of constricted varieties to not permitted crops
- Establish and implement compulsory standards and technical regularities on application of agrochemicals (esp. pesticides), including withdrawal period, time interval of sprays, etc.



Institute of Quality Standard & Testing Technology for Agro-Products CAAS

Reduce the amount of application of agrochemicals

- ▶ Transformation of formulations
- ▶ Development of new applicators
- ▶ Accurate and precise prediction and forecasting



Institute of Quality Standard & Testing Technology for Agro-Products CAAS

Reduce the amount of application of agrochemicals

- ▶ Transformation of formulations
- ▶ Development of new applicators
- ▶ Accurate and precise prediction and forecasting



- ▶ Increase efficacy
- ▶ Reduce sprays



Institute of Quality Standard & Testing Technology for Agro-Products CAAS

Development of novel techniques and products to substitute chemical control

- Explore crop germplasms for screening, breeding and releasing new varieties resistant to crop pests
- Develop new pesticides of botanical and/or microbial origins to promote new pesticide industry
- Search for new methods and/or technologies of biological control to maximize their technical advantages in plant protection



Institute of Quality Standard & Testing Technology for Agro-Products CAAS

- Adopt bioengineering technologies to create new pest-resistant germplasm
- Research and develop all kinds of effective non-chemical techniques/methods to control crop pests, such as the practice of ecological regulation, application of frequoscillation pest-killing lamps, etc.



Institute of Quality Standard & Testing Technology for Agro-Products CAAS

Monitoring residues of agrochemicals

- Monitoring the pesticide residues in cropping/cultivation process
- Checking the amount of residues in crop products
- Setting up maximum residue limits (MRLs) based on risk assessment of pesticide residues



Institute of Quality Standard & Testing Technology for Agro-Products CAAS

Control of cultivation process of crops for food safety

- To implement an effective control of the cultivation process of crops, three regulatory steps should be taken:
 - ▶ *Effective monitoring and regulation on production environments, including on-farm monitoring and controlling of the quality of water, soil and extrinsic pollutants, etc.*



Institute of Quality Standard & Testing Technology for Agro-Products CAAS

- ▶ *Effective monitoring and regulation on agricultural inputs, mainly focus on management of high residual/toxic materials' application.*
- ▶ *Effective control of production process with more concern about adoption of good agricultural practices, and scientific and technical standards.*



Institute of Quality Standard & Testing Technology for Agro-Products CAAS

Conclusions

- ▶ Traditional technologies of plant protection are confronted with widely concern of emerging food safety issues, especially the pesticide residues in crop products.
- ▶ In order to guarantee safe consumption of crop products, it is necessary to effectively regulate the pesticide use and control the whole process of crop production, i.e. from production to products.



Institute of Quality Standard & Testing Technology for Agro-Products CAAS

Conclusions

- Based on analysis of challenges for plant protection and new requirements for pest control, suggestions for improving pest control are made particularly on:
 - Sound/reduced use of agrochemicals
 - Development of substitute techniques/products
 - Control of crop cultivation process
 - Monitoring of pesticide residues in crop products for food safety



Institute of Quality Standard & Testing Technology for Agro-Products CAAS

Thank You for Your Attention!

Contacts:

E-mail: zhihuaye@mail.caas.net.cn



Phone: +86 10 82106501 Fax: +86 10 82106288

Website: www.iqstap.com



Institute of Quality Standard & Testing Technology for Agro-Products
Chinese Academy of Agricultural Sciences

Attachment 5.16.

 Asia-Pacific Economic Cooperation  Government of Malaysia	<h1>A Regional Approach to Biosecurity</h1> <h2>Dr Adrian Harris</h2> Consultant, Canberra, Australia
<p>APEC Workshop on Enhancing Food Security through A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity Concorde Hotel, Shah Alam, Malaysia, 1-3 December 2010</p>	

<h2>Global food security problem</h2> <ul style="list-style-type: none"> ● Global population to grow from 6.6 to 9 billion by 2050 ● 1.7 billion more people by 2030. Food production must double ● Ratio of arable land to population is expected to decline by up to 55% by 2030 ● Ag. production needs to increase 2.3% / year to meet global food demand. Currently increasing 1.5% / yr ● Rice production not keeping up with global demand. In next 10 years, paddy rice production must grow by 8-10 million tons annually to meet demand ● World food situation: 61 days stock (cf. 115 days in 1998). Consumption exceeded production in 7/9 years ● Higher food prices since 2008 ● 20-40% of world's potential crop production is lost annually to pests, diseases and weeds (\$226 billion) ● PP is feeding 3 billion people in the world today – 1 billion each from control of diseases, insects and weeds ● Organic production systems not productive enough to feed the growing population.
<p>APEC Workshop on Enhancing Food Security through A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity</p>

Some global challenges in achieving food security

- Need to rapidly increase productivity, esp. through control of pests, diseases and weeds
- Post-harvest losses: 50% fruit & veg; 25% grains
- Pesticide resistance: can be managed
- Pesticide regulation: phase out of MeBr for quarantine and phytosanitary uses; EU chemical bans
- Widespread decline in government investment in agricultural R & D
- Trade: remove artificial barriers, but strengthen quar.
- Protectionism
- Food safety – direct risk to health & trade
- GMOs – trade barriers.

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Food security in APEC Region

- Developing economies: growing populations, changing demands for food, catch-up in regulation of biosecurity and pesticide use
- Under-investment in Asian agriculture since 1980s
- In East Asia, rapid urbanization has shifted agriculture from 25% of GDP in 1990 to 13% in 2008.
- Need to rapidly increase productivity and a major opportunity is control of pests, diseases and weeds, including quarantine
- Post-harvest losses alone average 25% in s-e Asia
- Natural disasters: Asia-Pacific region in recent years had floods, cyclones, tsunamis, failed monsoons & drought
- Water – disputes over use in China, India and Australia
- UN projects that by 2025, 66% of world's population will be living in drought or water-stressed conditions
- In Asia, more than 80% of available water is used for agriculture, compared with less than 40% in Europe and N. America
- Credit - cuts in agricultural credit and microfinance in Asia.

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Some worrying trends in Australia

Trade: Australia produces about 1% of the world's food (1.8% of value)

- Major exporter of ag. produce and Australia exports 60% of what it grows
- 52% of Australian exports of ag. produce go to the APEC region

Agricultural Productivity: The past long-term trend of increasing productivity has slowed

- Australian farmers need agricultural innovation to stay competitive.
- No-till broad-acre agriculture has revolutionised productivity and sustainability over last 20 yrs, but whole system threatened by development of herbicide resistant weeds

Research, Development and Extension: Federal Government funding for agricultural research has fallen by over one-third since the mid-1980s. Govt. extension services cut

- 50% of Australia's agric. scientists will retire over next 5 years

Agricultural education: Australia is currently training 800 agriculture graduates per year but we need 2000 per year

Climate: Australian agriculture has still not fully recovered from the after-effects of prolonged widespread drought and some regions have now been hit by floods and excessive rain that are threatening harvests

Irrigation: Use has decreased significantly due to prolonged drought and diversion of water for environmental & urban use.

- Area irrigated fell 32% from 2001 to 2009 (2.60 to 1.76 mill ha)
- In one major irrigated horticulture region in the Murray River valley, 45% of plantings abandoned over last few years due to shortage of water

Global Recession: Australian farmers are generally price takers and are affected more than the rest of the economy by economic downturns and changes in commodity prices.

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Global trading environment

Overview of the global trading environment in which a plant pest risk analysis is required and conducted:



- WTO: 1995; 153 member countries; internat. trade rules
- SPS Agreement: Application of S & PS measures
- ISPMs & IPPC: International standards & treaty
- National legislation: NPPOs; ALOP

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

The SPS Agreement

Countries may adopt SPS measures provided that the measures:

- are applied only to the extent necessary to protect health
- are based on scientific principles (and not maintained without sufficient scientific evidence)
- do not discriminate between national and foreign, or among foreign sources of supply.

Members have two options to show that their measures are based on science:

- base on international standards, or
- base on scientific risk assessment.

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Key provisions of SPS Agreement

- Scientific justification
- Harmonization
- Equivalence
- Scientific risk assessment
- Consistency
- Regionalization
- Transparency
- National responsibility

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

National responsibility for quarantine

- SPS Agreement recognises sovereign right of Members to provide level of health protection they deem appropriate
- Each country should ensure that SPS measures do not represent unnecessary, arbitrary, scientifically unjustified, or disguised restrictions on international trade.
- i.e. SPS Agreement allows countries to set their own plant health standards, but they must be based on science, necessary to protect health & not discriminate between countries.
- To achieve its objectives, SPS Agreement encourages Members to use international standards & guidelines.
- Each country develops its own national legislation concerning its quarantine systems and arrangements, consistent with its international obligations.

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Niigata Declaration on APEC Food Security (Oct. 2010)

- “Trade plays a key role in achieving food security. It ensures that people have physical access to the food that they need for a balanced diet.
- ... trade also creates economic opportunities for people, which can increase their incomes and economic access to food.
- ... reconfirmed the value of an open and rules-based multilateral trading system under the framework of the WTO, which provides predictability and stability in agricultural trade.
- ... need to sustain the benefits of globalization and open markets, highlighting the crucial importance of encouraging science-based standards, rejecting protectionism and encouraging the development of regionally integrated markets.”

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

The concept of zero risk

Zero risk quarantine policy: impossible in practice, unrealistic, untenable and undesirable.

Australia's approach to quarantine risk:

- has been described as “scientific evaluation of acceptable risk”
- based on Import Risk Analysis (IRA)
- includes Weed Risk Assessment
- does not consider the economic impact of prospective imports.

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Plant Pest Risk Analysis

PRA consists of:

- Risk assessment
- Risk management
- Risk communication

Appropriate Level of Protection (ALOP) is defined in the SPS Agreement as “the level of protection deemed appropriate by the member establishing a sanitary and phytosanitary measure to protect human, animal and plant life or health within its territory”.

- Determining each country's ALOP is an issue for each government in consultation with the community. ALOP is a societal value judgement and doesn't require scientific basis
- Australia defines its ALOP qualitatively using a risk estimation matrix of likelihood vs. consequences.

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Plant Pest Risk Analysis

To conduct a PRA, each country needs reliable pest records and pest reports.

These require:

- scientific expertise,
- reference collections of insect pests and plant pathogens,
- pest records,
- pest or commodity databases (current)

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Technical Market Access

Aims: Establish, maintain & improve international trade opportunities for commodities thru discussion with trading partners, govt., technical advice & industry strategies.

- Market access submissions: New access usually requires much discussion between NPPOs and provision of technical information on the agricultural industry, crop, and its pest & disease status. Information is used by the potential importing country to conduct PRA
- Market maintenance: Maintain existing markets in response to external threats, e.g. high interceptions of pest, change in national pest status, failure of a treatment
- Market improvement: Usually a review or relaxation of existing import conditions, e.g. new or improved treatment, remove risk mitigation steps in import protocol.

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

PRA in the APEC Region

Strengths:

- International access to scientific literature, resources & ID (CABI)
- Workshops – technical training
- Existing PRAs
- International co-operation (between scientists, NPPOs)
- Technical assistance between Members.

Weaknesses:

- Shortage of plant scientists and quarantine officers
- Insufficient national government funding for biosecurity
- Insufficient quarantine treatment facilities
- Insufficient continuity of experts in technical roles
- Inadequate networking (diagnosis, surveys, ID, e-communications)
- Nationalism and protectionism
- Artificial trade barriers
- Porous national borders
- Linkage of market access for imports with exports
- Lack of engagement of private industry in biosecurity
- Little assessment of weed risks.

**APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity**

PRA in the APEC Region (cont.)

Opportunities:

- Biosecurity should capitalise on current focus on food security to push for more resources
- “A crisis is a terrible thing to waste”
- Greater international collaboration
- More training
- Internet access to pest lists, databases, sci. literature
- Growing economies provide trade opportunities (China)
- More stakeholder consultation in biosecurity.

Threats:

- Increased trade and incursions
- Greater protectionism as food shortages arise
- Corruption, smuggling & pesticide counterfeiting
- Food safety: pesticide residues, contamination
- Opposition to imports of food produced using GM.

**APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity**

Feasibility of regional approach to biosecurity

- Responsibility of each nation to decide their ALOP
- APEC consists of extremely diverse climates, geography, agriculture, natural environments, pest & disease status and culture
- **From a biosecurity viewpoint**, how could all APEC function as a single trading block?
- Where countries have similar crops, pest & disease status and ALOP, they could collaborate in trade
- Joint submissions for export market access
- Joint Pest Risk Analyses for imports
- Shared quarantine inspection and treatment facilities (one stop for imports / exports for 2 or more countries)
- Improve collaboration in pest & disease diagnosis, taxonomic identification and surveillance
- In the EU, there are potential quarantine problems where national trade borders have been broken down, undermining the maintenance of pest-free nations.

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

What would a regional approach entail?

- APEC forum to discuss commonalities in biosecurity between ies
- Involve govt. representatives, quarantine / biosecurity experts, agric. industry reps., importers & exporters
- When commonalities are identified and ies agree to collaborate on a particular trade opportunity, they would organise a meeting to decide on a framework for joint biosecurity requirements & trade
- The collaborating governments would need to ensure adequate biosecurity resources to facilitate the market access and trade
- Stakeholders would be involved / consulted in detailed planning of the market access and trade
- All relevant govts. to participate in trade discussions.

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Summary

- **From a biosecurity perspective**, a single APEC trading block would be impractical
- **But**, nations with similar crops, pest & disease status and ALOP could collaborate in market access, PRA & trade
- National governments need to provide more resources for biosecurity to protect their agriculture & environment and to facilitate trade, esp. export market access
- Continue training of new biosecurity staff. After many years of international training in PRA, market access, pest & disease ID, surveillance, biosecurity infrastructure & Train-the-Trainer workshops, much training can now be delivered by national experts
- Improve collaboration in pest & disease diagnosis, taxonomic ID, pest & disease records and surveillance
- Fund and establish shared quarantine facilities
- Strengthen biosecurity information networks and collaboration both within and between ies.

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Recommendations

- APEC to convene a forum to discuss commonalities in biosecurity between ies
- Identify and initiate collaborations in trade between nations
- Forum should involve government, quarantine / biosecurity experts, agriculture industry, importers & exporters
- National governments to increase funding for quarantine policy and operations, including pest & disease identification, collections, surveys, monitoring, databases & training.

APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Attachment 5.17.

 <p>Asia-Pacific Economic Cooperation</p>  <p>Government of Malaysia</p>	<h1>Opportunities for Shared Responsibilities</h1> <p>Session 6: Regional Commonalities</p> <p>Dr Ian Naumann Office of the Chief Plant Protection Officer Canberra</p>
<p>APEC Workshop on Enhancing Food Security through A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity Concorde Hotel, Shah Alam, Malaysia, 1-3 December 2010</p>	

<h2>Opportunities</h2> <ol style="list-style-type: none">1. Technical<ol style="list-style-type: none">a. Surveillanceb. Diagnosticsc. Information managementd. Phytosanitary risk management2. Policy<ol style="list-style-type: none">a. National strategyb. Private sector engagementc. Regional approach to standard setting
<p>APEC Workshop on Enhancing Food Security through A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity</p>

Opportunities

Objective = shared intelligence

Initiatives:
(NAQS model)

- MoUs
- capacity building
- recurrent – planning, targeting

1. **Technical**
 - a. **Surveillance**
 - b. **Diagnostics**
 - c. **Information management**
 - d. **Phytosanitary risk management**
2. **Policy**
 - a. **National strategy**
 - b. **Private sector engagement**
 - c. **Regional approach to standard setting**



APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

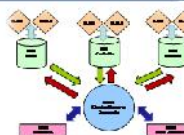
Opportunities

Objectives = shared skills, better tools

Initiatives:

- regional network of experts, remote microscopy etc
- collaboration to develop identification guides and protocols

1. **Technical**
 - a. **Surveillance**
 - b. **Diagnostics**
 - c. **Information management**
 - d. **Phytosanitary risk management**
2. **Policy**
 - a. **National strategy**
 - b. **Private sector engagement**
 - c. **Regional approach to standard setting**



APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Opportunities

Objectives = more comprehensive national information, more efficient notification

Initiatives:

- local databases
- networking systems

1. Technical
 - a. Surveillance
 - b. Diagnostics
 - c. Information management
 - d. Phytosanitary risk management
2. Policy
 - a. National strategy
 - b. Private sector engagement
 - c. Regional approach to standard setting



APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Opportunities

Objectives = management of risk at source

Initiatives:

- collaborative R&D
(e.g. HLB programs)
- certification schemes
(e.g. AFAS)

1. Technical
 - a. Surveillance
 - b. Diagnostics
 - c. Information management
 - d. Phytosanitary risk management
2. Policy
 - a. National strategy
 - b. Private sector engagement
 - c. Regional approach to standard setting



APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity


Opportunities

Objectives = cohesive regional strategies

Initiatives:

- national plant health strategies – strengthen environ. linkages
- regional strategies for specific risks

1. **Technical**
 - a. Surveillance
 - b. Diagnostics
 - c. Information management
 - d. Phytosanitary risk management
2. **Policy**
 - a. Strategic
 - b. Private sector engagement
 - c. Regional approach to standard setting



APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Opportunities

Objectives = private sector assumes share of biosecurity responsibility

Initiatives:

- relevant industry-specific plans & agreements (export/import)

1. **Technical**
 - a. Surveillance
 - b. Diagnostics
 - c. Information management
 - d. Phytosanitary risk management
2. **Policy**
 - a. National strategy
 - b. Private sector engagement
 - c. Regional approach to standard setting



APEC Workshop on Enhancing Food Security through
A Regional Approach and Wide Stakeholder Participation in Plant Biosecurity

Opportunities

1. **Technical**
 - a. **Surveillance**
 - b. **Diagnostics**
 - c. **Information management**
 - d. **Phytopsanitary risk management**
2. **Policy**
 - a. **National strategy**
 - b. **Private sector engagement**
 - c. **Regional approach to standard setting**

Objectives = prioritised, faster development of phytosanitary standards

Initiatives:

- regional initiatives to draft, assess and roll out standards

