# WRAP-UP REPORT Plant Health Pest Risk Analysis Training Course

Regional Workshop on Pest Risk Analysis Chennai, India March 5-9, 2007

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#### **WORKSHOP RESULTS**

# **Project Description:**

The Canadian Food Inspection Agency (CFIA) was invited by the Standards Trade and Development Facility (STDF) of the Food and Agriculture Organization (FAO) to lead development of a training course in plant health risk analysis (PRA) for the Government of India. Funding for travel and related expenses were provided by the STDF; salaries were provided by the CFIA. The CFIA led an International Steering Committee, with representatives from United Kingdom, India, Chile, Germany, New Zealand and the Secretariat of the International Plant Protection Convention (IPPC), in the development of the course materials. The course was taught by three CFIA employees (Lesley Cree, Claire Wilson and Andrea Sissons) and a member of the International Steering Committee (Alan MacLeod, Central Science Laboratory, United Kingdom).

The five-day course was held at the Regional Plant Quarantine Station at Chennai; a station with fully equipped laboratories for nematology, entomology, botany, mycology and virology, and approximately 200 staff, mostly inspectors, diagnosticians and researchers. Twenty-two people participated in the course; participants came mainly from the Ministry of Agriculture or affiliated research centres in all regions of India, along with some from universities and private consulting firms. All had previous exposure to PRA and are employed in plant quarantine work in various capacities in India.

The course material covered the pertinent international standards and resources available, as well as the fundamental principles of the IPPC and risk assessment, risk management and risk communication, as outlined in the related IPPC standards. This is an introductory level course, designed to provide practical guidance and be readily transferable to other countries or languages. Participants were presented with various teaching methods ranging from formal presentations to the whole group, to interactive group exercises and discussion groups in which all participants had an active role.

While the material was developed initially for India, the course materials will be provided to the Secretariat of the IPPC for delivery elsewhere.

Workshop materials include: background reading material and information on international agreements and standards, oral presentations with PowerPoint slides, a participant's manual providing further information and resource material on PRA, an exercise book containing group exercises, and a teacher's guide with guidance on how to deliver the course, speaker's notes for presentations and background information on the group exercises.

Participation and response to the workshop was excellent. A course evaluation was completed by participants who indicated a high level of satisfaction with the course content and a high level of learning achieved.

# **Achievement of Goals:**

The first objective of this project, that of developing a one-week training package for use in developing countries to provide introductory level understanding and capacity in PRA, was achieved. Based on initial feedback and email correspondence since the event, the course was successful in providing participants with basic knowledge and understanding of the importance and role of PRA in developing a national plant protection program according to the IPPC. Comments and questions received indicate a greater degree of understanding and confidence among participants at the end of the workshop than previously enjoyed.

The second objective, that of providing PRA training to Government of India representatives specifically, was also achieved. Participants were very engaged, actively participated in the training and gained considerable knowledge and understanding through their participation. Participants acknowledged a greater degree of understanding of PRA and its relationship to the principles of the IPPC and this is expected to contribute to a more transparent and consistent PRA process in India.

# **Workshop Evaluation**

Participants were asked to complete a course evaluation at the end of each day and also at the close of the workshop. The purpose of this evaluation was to evaluate the success of each portion of the course in order to make changes to the final package to be delivered to the IPPC. Comments received both through the written evaluation and verbally during the course of the training were generally positive and enthusiastic. All participants felt that they had benefited from attending the course. The full evaluation is attached as Appendix 1.

# **Future activities**

The Secretariat of the IPPC has proposed that materials generated for the Workshop be further developed to serve as a training package for use world-wide in developing or advancing pest risk analysis activities at the national and international level. This final package of course materials with a teacher's guide will be delivered to the Secretariat in June 2007.

#### Recommendations

It is recommended that funding and leadership be provided to establish an international pool of qualified course instructors to deliver or help deliver the course in any country when requested. Involvement, to the extent possible, of at least some members of the international steering committee which directed development of the course materials would ensure continuity.

It is also recommended that funding be made available for delivery of the course in IPPC member countries who request assistance or training. This funding could cover the costs for trained instructors to deliver the course, perhaps in conjunction with one or more representative(s) from the host country, in order that the host country develop its own capacity to deliver the course in future.

# **Appendix 1: Evaluation**

# **PRA TRAINING COURSE EVALUATION – Summary**

Please take some time to complete the course evaluation. This information will be helpful to us in planning future courses and events. Your comments are appreciated.

# 1. My expectations for this course:

Were not met				Were exceeded
1	2	3	4	5
(0)	(0)	(1)	(13)	(4)

#### Comments:

- Fully met expectations
- The course was up to my expectations
- The expectations of this course were fully met with
- Practical classes really helped my understanding
- Practical classes really helped to learn the subject
- What was expected has been exceedingly met and much of the teaching including breakouts was interesting

# 2. The length of time (5 days) for the course was:

Not long enough				Too long
1	2	3	4	5
(4)	(2)	(5)	(5)	(1)

- The length of time for the course should have been more for 10 days. The time to do practical exercises on PRA should have been at least three for each group (insects, diseases, weeds)
- In my opinion, duration of course should be reduced if possible
- Duration of training should be enough to make the exercises on pest-wise, crop-wise and location specific
- Five days is appropriate
- Subject can be explained in 3 days difficult for officers to spare time
- A week of exercises with more details (15 days)
- More exercises and discussion
- 3-4 days would have been sufficient
- Appropriate length of time
- The course was long enough
- 10 days for more exercises
- It needs more time to do more exercises and discussion of different variabilities
- It was not long enough

3. The numb	er of breaks eacl	n day was:		
Not enough 1 (1)	2 <b>(0)</b>	3 <b>(11)</b>	4 <b>(5)</b>	Too many 5 <b>(0)</b>
<ul><li>Enough bre</li><li>Reasonable</li><li>Sufficient</li></ul>	aks	ay are normal – sho		uture

# 4. The time allotted for lectures and presentations was:

Not long enough				Too long
1	2	3	4	5
(1)	(1)	(10)	(3)	(0)

# Comments:

- Time allotted for lectures and presentations is alright continue in future
- Enough time

AdequateIt is alright

- Time allotted was adequate
- Just sufficient
- The time allotted for lectures and presentations was insufficient
- A little more time could have been spent on analysis of economic consequences and techniques available and when to use what

# 5. The time allotted for break-out sessions was:

Not long enough	Too long			
1	2	3	4	5
(0)	(4)	(6)	(5)	(0)

- Need more time here to have discussion
- Enough time
- It was reasonable
- Sufficient time
- A bit longer
- Break out sessions were adequate
- It needs more time for discussion and thinking

# 6. What did you find most useful in this course?

# Comments:

- The systematic approach to the target from initiation to end
- The helpful, cooperative and encourageous efforts of all the trainers. The way of explanation is appreciable.
- The participatory approach and breakout exercises were very useful
- Case study and working it through
- Breakout sessions and discussion was most useful
- Breakout session, developing models, discussions during risk communication
- Discussions
- Exercises, group presentations and discussions
- Interaction between groups, case study
- Interaction and involvement of participants, giving him encouragement to interact freely
- Practical exercises to do by the participants themselves. It is discovery based learning not just listening learning
- Systematic approach
- Everything
- The idea of taking the case of thrips (or any other pest) and working out all aspects of PRA was an extremely good one. This made us think and work it through
- Practical exercises
- Every part of study is co-related to each other and thus it is difficult to assess which area is most useful. Every part of study is essential and useful
- Concept becomes quite clear how to start and accomplish the work. Group formation and discussions were most useful to clear doubts and improve individuals ability to perform the work
- Pest risk management

# 7. What did you find least useful in this course?

#### Comments:

- Nothing
- Presentations
- I don't think anything was least useful

# 8. The student's manual was:

Not helpful Very helpful 1 2 3 4 5 (0) (0) (1) (0) (17)

- Did not get time to go through the manual completely
- Enthusiastic, elaborative, so very helpful
- It needs more elaboration
- Very well written
- It will serve as a practical guide
- It would be of much use even later when we actually do PRA

# 9. The material presented will be helpful to my work in the following ways:

# Comments:

- In preparing PRA of suitable nature
- For conducting PRA
- In a supervisory role
- I can assist in PRA
- I can do my work more effectively
- Use as reference material
- In carrying out my duties
- Guide is to process PRA
- Teaching, research and specific projects
- Stakeholder consultation, PRA and management
- Exercises will help PRA
- Clarified some basic questions
- It helped clarify certain basic questions and presented the things in a simplified manner.

# 10.Do you feel that you have gained the required knowledge and information to complete a PRA?

#### Comments:

- Very much
- Yes
- Yes confident
- Just basic information was gained due to short duration of course
- Yes, after doing some exercises
- Yes, until I get wider knowledge beyond the material provided in this training programme
- Yes-the rest maybe would come with practical experience
- Yes, we found good knowledge and information to complete PRA

# 11.Do you feel that you have gained enough knowledge and information to teach your colleagues to complete a PRA?

- Very much
- Just enough
- Yes
- No still not confident first time exposure
- More knowledge is required by way of experience in the field
- To some extent
- Knowledge is never enough. However, for the present, the knowledge and information gained appears enough to teach colleagues
- Yes I could try at least
- Yes, we have gained knowledge to guide or teach our colleagues to assess PRA

# 12.Do you still have questions about PRA that were not answered by the course? (If yes, list them)

#### Comments:

- No
- Nothing remained unanswered
- Life is full of questions it is a never ending process
- More on uncertainty
- Uncertainty should be elaborated
- To interpret uncertainties
- Evaluate economic impacts
- About pest distribution damage potential in the country of origin for importation of any plant or plant material
- At this stage the subject is clear

# 13.Do you know where or how to find those answers? (If yes, indicate sources)

# Comments:

- Internet
- Past experiences from PRA experts and examples from other PRA
- More training after, during practical use
- Communication with experts
- E-mail
- CABI
- Yes, finding more time, repeated readings of material provided, during practicals and coming through the problems and finesse to the work
- The provided references would be a help.

# 14. Would you recommend this course to your colleagues?

# Comments:

- Very much
- Definitely
- Certainly

# 15.Additional comments and suggestions for future courses on PRA:

- No comments
- More national courses
- Some long-term courses may be conducted
- Continued for new employees
- Topics specific to selected countries
- More examples of PRA having practical problems of different countries
- Course needs more exercises 1) pest with wide range; 2) monophagous; 3)
   management options that are easy/not easy/not possible
- More exercises
- Only one example on insects (alone) does not involve people from different disciplines equally. Take into account pests of all groups
- Real PRA, management, stakeholder consultation has to be presented completely
- Economic impact to be explained more with examples

- More emphasis on practical exercises
   More exercises should be included of different variability and time of course should be enhanced

# DAY 1

# 1. The lecture on the IPPC and its relationship to PRA was:

Not useful				Very useful
1	2	3	4	5
		(1)	(5)	(16)

#### Comments:

- Interesting
- Highly informative
- Because it pertains to all important aspects of PRA
- It is a basic information, which should be required to understand about IPPC
- I came to know the importance of the IPPC
- Very useful in introducing role and functions of IPPC

# 2. The lecture on an overview of PRA was:

Not useful				Very useful
1	2	3	4	5
			(7)	(15)

# Comments:

- It gave me insight details absent in aspects
- Need more time for this lecture
- Speaker may speak slowly at the time of delivering lecture
- Part of understanding of the PRA

# 3. The breakout session on terminology was:

Not useful				Very useful
1	2	3	4	5
		(1)	(8)	(13)

# Comments:

- Very useful and most interactive
- Very interactive
- It is very much informative
- More demonstration on blackboard is required
- Excellent, particularly interactive session of matching the terms with the definition
- It is a wonderful and very appropriate approach to learn terminology

# 4. The lecture on initiation was:

Not useful				Very useful
1	2	3	4	5
			(6)	(16)

# Comments:

Very good

# 5. The lecture on pest categorization was:

Not useful Very useful 2 3 5 1 (17)**(5)** 

#### Comments:

- Enjoyed the exercise of pest categorization using different pest scenarios as a case studv
- Highly informative
- Interesting

# 6. The group discussion on information gathering was:

Not useful Very useful 2 1 3 4 5 **(1)** (19)

#### Comments:

- Excellent and very useful
- It is very encouraging
- The group discussion on information gathering a practical exercise made me understand

# 7. The breakout session on categorization was:

Not useful Very useful 2 3 5 1 (3) (19)

# Comments:

- It clarify our doubt in respect to PRA during the discussion
- Excellent
- It is really innovative and very very interesting
- Very interesting and useful
- It was not only very useful but also very interesting

# 8. Other comments on Day 1

- Very useful discussion held on categorization and our facilitators clarify us very well
- Perfectly organised, excellently coordinated
- It is highly encouraging regarding the introduction of new material to our group and different locations in the world
- Similar pattern of education may be continued everyday please
- Similar pattern of education may be continued everyday predoc
   If the hard copies or soft copies of presentation material are given to the participants
- It was very useful
- Useful session during day course
- The practical exercise was of immense use and able to gain knowledge.

- Very good and very useful
- PRA is based on data especially the publications in scientific journals. In case of non availability or non-reliability how to conclude scientifically?
- Excellent
- Slides and all related papers of the presentations may be provided
  Lectures and exercises were very informative and understandable

# <u>DAY 2</u>

1. T	he lecture on p	obability of intr	oduction was:		
	nseful 1	2	3 ( <b>3</b> )	4 <b>(4)</b>	Very useful 5 <b>(14)</b>
Commen • T	nts: The presentation w	as excellent			
2. T	he lecture on p	obability of enti	ry was:		
Not u	ıseful 1	2	3	4 (10)	Very useful 5 <b>(11)</b>
Commen	nts: (none)				
3. T	he breakout ses	sion on probabi	lity of entry was	:	
Not u	ıseful 1	2	3 (1)	4 <b>(3)</b>	Very useful 5 <b>(17)</b>
Commen • H	nts: Highly informative				
4. T	he lecture on pi	robability of esta	blishment was:		
Not u	nseful 1	2	3 <b>(2)</b>	4 <b>(6)</b>	Very useful 5 <b>(13)</b>
	nformative	and systematically	organised presenta	ation	
5. T	he lecture/disc	ussion on proba	bility of spread v	vas:	
	nseful 1	2	3 (3)	4 <b>(5)</b>	Very useful 5 <b>(12)</b>
Commen • E	nts: Excellent				

# 6. The breakout session on probability of establishment and spread was:

Not useful

1 2 3 4 5
(1) (4) (16)

#### Comments:

- Well organized
- The exercise was useful.

# 7. Other comments on Day 2

- Breakout session may be more useful if it was made on a real situation/assessment instead of a fictitious example
- Probability lecture on entry and spread are good able to understanding
- Very useful
- Good
- After each breakout session (wherein uncertainties are raised) fresh information if possible may be given so that this may be used in the next step as additional information
- Very useful and highly interactive
- Very good points given for discussions on different aspects of introduction
- All the experts of the training programme are very cooperative, helpful, knowledgeable, and energetic
- The half day theory and half day workshop like day one should be done for the rest of the days also and more discussions is required.
- The presentations of all the topics were excellent. Highly information. Practical exercises were very useful.
- Interesting lectures and breakout sessions
- Required some case studies on quantitative PRA and demonstration on CLIMAX
- PRA, which needs to be based on scientific facts ended up with more assumptions, speculations, interpretations, not going or basing results on published information. There is a lot more information which needs to be generated than presently available on pests/climate etc. etc. before conclusively we conclude anything

# <u>DAY 3</u>

1.	The lecture	on introductio	n to impacts was:		
No	t useful				Very useful
	1	2	3 <b>(2)</b>	4 <b>(5)</b>	5 ( <b>13</b> )
Comm	Very good nar	ration with good ages of entry and	examples. Especially l establishment	y group interactio	n with advantages
2.	The lecture/was:	discussion on	assessment of pot	ential economi	c consequences
No	rt useful 1	2	3 ( <b>3</b> )	4 ( <b>4</b> )	Very useful 5 <b>(12)</b>
Comm	ents: (none)				
3.	The breakou	it session on a	ssessing impacts/c	consequences w	as:
No	t useful 1	2	3 <b>(2)</b>	4 <b>(3)</b>	Very useful 5 <b>(14)</b>
Comm	The graph pre	d and monitored	ts over time was impr specially assessing th		nic and
4.	The lecture/	discussion on	overall assessmen	t of risk was:	
No	t useful 1	2	3 ( <b>3</b> )	4 <b>(3)</b>	Very useful 5 <b>(12)</b>
Comm	ents: A good presen Very impressiv				
5.	The lecture	on uncertainty	was:		
No	t useful 1	2	3 <b>(2)</b>	4 <b>(3)</b>	Very useful 5 <b>(14)</b>

Comments: (none)

# 6. The breakout session on pest risk assessment conclusions was:



#### Comments:

- Facilitate to come on to derive a formula for pest risk assessment
- Fantastic exercise in assessing risk and developing model with specific values from negligible, low...high values
- The development of the (mathematical) model was a good exercise to learn how to really go about reaching to some conclusions regarding risk assessment
- Very much elated after completing the PRA assessment

# 7. Other comments on Day 3

- Group discussions were made to analyse the scenario which helped to understand
- Entry is most important when compared to establishment and spread. Hence it should have more value. Other things depend on entry.
- To come to conclusion on the risk assessment we have an excellent interaction with the coordinator and facilitator which assisted us to come to conclusion
- Very informative, organised, involving all participants in discussion and encouraging participants to involve in discussion
- I really enjoyed today's session. The breakout sessions are really mind-boggling
- Display and explanation was very excellent for PRA. Idea is more clear by further more exercises as it is need to be assessing for quarantine risk purpose
- Very useful and meaningful discussion were made during exercise/session and conclusive results were drawn. Credit goes to the experts who demonstrated the exercise.
- Discussion on advantages and disadvantages for import of millets to Canada was very informative/interesting.
- Breakout session for advantage/disadvantage of a import for Canada was very useful and that may really take place while doing real PRA
- Highly informative fun, practical
- The breakout exercise this morning on import of millets contaminated with weed seeds was really good. Maybe in the next course more such small exercises on each of the aspects of risk assessments could be given following or in between the lectures to clarify and simplify the issue.
- A fruitful discussion ended with results on PRA assessment
- Is was useful to know any one method (quantitative or qualitative) is not enough. We need a third method which is still not defined.
- The breakout session on millet import into Canada contaminated with cup grass weed seeds was very useful. Is was great fun and informative to debate on advantages and disadvantage of the same.
- The lectures were imparted in a win-win atmosphere

# **DAY 4**

1.	The lecture on p	eer review was:						
No	ot useful 1	2	3	4 <b>(5)</b>	Very useful 5 <b>(13)</b>			
Comm	nents: (none)							
2.	The lecture on ri	sk management	was:					
No	ot useful 1	2	3 (1)	4 <b>(5)</b>	Very useful 5 <b>(12)</b>			
Comm	Lecture on risk ma		elaborative and exp management option		as for an			
3⋅	3. The breakout session on mitigation measures was:							
No	ot useful 1	2	3	4 <b>(4)</b>	Very useful 5 <b>(14)</b>			
Comm •	<i>ients:</i> Very useful as so m	any views were exp	oressed by each indi	vidual				
4.	The breakout session on risk management was:							
No	ot useful 1	2	3	4 <b>(1)</b>	Very useful 5 <b>(17)</b>			
Comm		naking good awarei ercise	sions, presentations ness of the matter	are observed to	be best tool of			
5.	5. The lecture/discussion on PRA conclusions was:							
No	ot useful 1	2	3 (1)	4 (6)	Very useful 5 <b>(11)</b>			
Comm	nents:							

• Discussion was interesting. A fun practical exercise.

# 6. Other comments on Day 4

- The presentation of the risk assessment by the participants was a good exercise
- Together presentation I attended in noon had well for making understand. This is good enough to say well teaching skill.
- These exercises and the group discussion make us confident to be sure on PRA
- Good
- Very good. The lectures and the discussions and debate on mitigation management were very useful. The peer review was wonderful.
- Presentation of previous day exercise by both the groups was quite exciting and meaningful and support by experts to each group is highly appreciated. Whole day programme of today was also very useful and helpful to all the training.
- Lecture papers of day one and day four are awaited to be distributed
- Lecture on risk communication very useful. Overall the risk management exercises useful, practical, were understood
- Different group exercises with presentation idea by the experts are very useful
- Points on uncertainty requires to be explained if possible.
- More specific examples may be taken for PRA for better understanding

		<u>DAY 5</u>		
1. The lectur	re on risk commu	ınication was:		
Not useful 1	2	3	4 <b>(6)</b>	Very useful 5 <b>(12)</b>
Comments: (none)	)			
2. The break	out session on ri	sk communicatio	on was:	
Not useful 1	2	3	4 (4)	Very useful 5 <b>(13)</b>
Comments:  • In break-own would have	nt note number 4 ap been better to com	e in conclusion	more examples (ie	1, 2, 3, 4 and so on)
3. The break	cout session on st	akeholder consu	ltation was:	
Not useful 1	2	3	4 <b>(4)</b>	Very useful 5 <b>(14)</b>
Comments:  • It was most	important session	of the week		
4. The break	out session on P	RA review was:		
Not useful 1	2	3 (1)	4 <b>(4)</b>	Very useful 5 <b>(13)</b>
Comments: • One worksl	nop week (1-7 days)	is required for such	ı type of PRA traini	ng instead of 5 days

# 5. Other comments on Day 5

- It went very well
- Risk communication exercise was excellent. Interesting between/among groups wonderful
- Stake holder consultation session was very informative and emphasize the point for further consideration into PRA
- Overall view presentation cleared the doubts creating like actual scenario of various stakeholders, discussion amongst groups proved to be a tool of understanding the whole concept purpose and methodology of PRA
- Very useful discussions between NPPO/Importer and grower of cut flowers through exercise; that was really very much a learning process for us.
- Discussion during stakeholder consultations were very informative, giving lots of points/facts for consideration
- Good
- Group presentations/discussion on risk communication by different stakeholders with the NPPO group was all extremely communicative and theory
- Some more days was needed to know about the detailed PRA
- Today's discussion among three groups representing NPPO, importer and growers associations remained quite useful for the participants as the all the points of PRA, their significance and utility was discussed besides the concerns of importers and growers' associations. All the trainers/experts helped a lot in explaining the various constraints in the way. Their cooperative, helpful, and encourageous efforts will remain in my heart forever
- The debate between growers, importers and the NPPO should have been one complete day to learn each other
- The breakout session for stakeholder consultation was very much useful and mindboggling