

2014 APS OIP Global Experience Award

Vegetable IDM - Train the Trainer Paksong, Lao PDR



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Agriculture Section, PAFO Champasak
and the Crawford Fund of Australia
11/15/2014

Summary

The Train the Trainer Workshop on Integrated Disease Management for Vegetables in Paksong District, Lao PDR, supported by the APS OIP Global Experience Grant was a resounding success. The workshop brought together plant health stakeholders from the public and private/NGO sectors (Fig. 1). The workshop included five intensive days of practical training, followed by a farmer field school and graduation day, when participants delivered the content to a new group of more than 30 farmers. Funds provided by the APS OIP and APS Foundation were bolstered by in-kind and cash support from the Agriculture Section of the Provincial Agriculture and Forestry Office (PAFO) of Champasak, the Crawford Fund of Australia, the Global Association for People and the Environment (GAPE) and the United Nations Food and Agriculture Office (FAO).

Feedback from participants was overwhelmingly positive, and adoption of IDM strategies within that week and in the weeks following has already been recorded. The final program of the workshop was simplified greatly, with a focus on the biggest five diseases recorded in Paksong District to date, the best IDM strategies for these diseases and a broader look at diseases of the two most important vegetable crops in Paksong – Cabbages and Tomatoes. Training focused on field diagnostic skills and practical IDM strategies, with a brief understanding of laboratory technique and reinforcement of the use of the Plant Health and Food Safety Laboratory in Pakse for formal diagnosis and management advice. Local staff dominated the presentation of the material in Lao language. All trainees are considered to be competent in the basics of delivering the training in the future, although some follow up will be supported by PAFO and the Crawford Fund to monitor progress and adjust IDM strategies both financially and environmentally to Lao conditions.



Figure 1 Team members, trainee participants and support staff group photo.

Acknowledgements

Professor Burgess, Mr Somlit and I would like to formally acknowledge the support of a number of development partners who have contributed direct financial or in-kind support to the Plant Health and Food Safety Laboratory in Pakse and the broader Crawford Fund Crop Health, Biosecurity and Food Safety Capacity Building Program in Lao PDR. All of these activities have contributed greatly to the success of the Vegetable IDM Train the Trainer Workshop in 2014.

Firstly, we would like to acknowledge the generous contributions of the APS OIP and APS Foundation, through the Global Experience Award, the Library Donation program and the Books for the World program. The synergy of having access to good plant health resources through the library programs while also delivering quality IDM advice and training through the workshop funded by the Global Experience Award is an exciting development in the work being done here and we and the laboratory staff will be forever grateful.

Secondly, we would like to acknowledge the incredible commitment and generosity of The Crawford Fund of Australia. Thanks go particularly to the New South Wales Committee, who have committed to an encompassing and long-term capacity building program in crop health, biosecurity and food safety. We also thank the Queensland Committee, who have contributed to the program through funding and hosting Lao plant health scientists for short term visits and through funding and support of an Integrated Pest Management (Entomology) in Vegetable Workshop held recently in Savannakhet.

We would like to acknowledge the commitment of the Crawford mentors who have been involved throughout our projects here – including, Dr Len Tesoriero (Vegetable pathology & IDM) and Dr Eric Cother (Plant Bacteriology) who have both visited and conducted workshops in Pakse, Mr John Duff (Entomology/IPM) who recently delivered an IPM workshop with other Australian volunteers in Savannakhet, Dr Jenny Cobon (Nematology), Dr Daniel Huberli (Phytophthora and soil-borne diseases), Professor Giles Hardy (Phytophthora, nursery and ecosystem tree pathology), Dr Andre Drenth (Phytophthora and tree pathology), Dr Mike Hodda (Nematology), Dr Aaron Maxwell (Quarantine) and Dr Nerida Donovan (citrus pathology).

A number of partners have additionally contributed to isolate deposition and formal identification of specimens to assist with formal reporting and quarantine/SPS requirements for plant diseases in Lao PDR. Dr Vigilio Balmas and Dr Alessandro Infantino (*Fusarium*, University di Sassari and CRA Agricultural Research Council, Plant Pathology Research Center, Italy), Dr Roger Shivas and Dr Alistair McTaggart (Herbarium specimens, Brisbane Plant Pathogen Collection, Queensland Department of Agriculture, Fisheries and Forestry) and Dr Bevan Weir and Mrs Maureen Fletcher (Fungi and Bacteria, International Collection of Microorganisms in Plants, New Zealand).

Locally, we are indebted to Ms Niran Nirannoot and Mr Phouvong Keomany from the FAO CFC market-chain project, for facilitating access to key farmers, engaging so productively with our program and assisting with dissemination of extension materials, translation during the workshop and additional transport. Thanks also to the FAO for supporting their target farmers financially, allowing them to attend the workshop. Similarly, we are thankful to Mr Darren Daley and GAPE for productive engagement and financial assistance for their staff, who work regularly with farmers in rural areas, and two of their key female farmers who are also leaders in their villages.

Over the long term we have also had invaluable local support from a retired development worker and expatriate, Mr Gerry Duckitt, who has assisted on numerous occasions with agricultural specific language translation and understanding the cultural and political context in which we operate in Laos.

Special thanks go to Mr David Sharman-Selvidge from Scope Global (previously Austraining) for incredible management of the Australian Volunteers for International Development (AVID) program in Laos, his support and encouragement has allowed the entire plant health program to flourish in southern Laos.

Finally, and most importantly, I would like to acknowledge the incredible hard work of the local staff of the Plant Health and Food Safety Laboratory in Pakse – Panai (Phitsamay), Seng (Sengphet), Khonsavanh and Siphandone. We would never have considered applying for funding and delivering such training without confidence in the commitment and abilities of these young staff to continue plant pathology extension in the future. Words are not enough to thank them for their valuable contributions to the success of this project and the success of plant health initiatives in southern Laos. I would also like to acknowledge the incredible translation and organisation skills of Mrs Kaisone from the Savannakhet laboratory, who assisted with a seamless and well-communicated workshop.

And, personally, from myself, I would like to thank Professor Lester (Crawford Fund of Australia) and Mr Somlit (Head of Agriculture Section, PAFO) for their enthusiasm and support. A passionate, dedicated and experienced mentor such as Lester teamed with an engaged and supportive local counterpart has allowed this workshop and the entire plant health program to be a resounding success – I feel privileged to have been a part of such a successful team.

Thank you, everyone – *Dr Kylie Ireland* (Australian Volunteer for International Development – Plant Pathology Diagnostics and IDM Advisor to PAFO, Chamapasak).

Final program outline:

The program of the workshop was simplified greatly during planning to allow for adequate time for participants to gain more 'hands-on' experience in field diagnostics, tempered with an understanding of the diagnostic process in the laboratory and how this information informs the formulation of appropriate IDM strategies (Appendix A).



Figure 2 Interactive discussion of plant health to begin proceedings

Day 1

The first day of the workshop focused on basics of Plant Health (Fig 2), the Big 5 Plant Diseases causing loss in Paksong vegetable production (Fig 3), the basics of Quarantine and Hygiene and Basic IDM strategies. Proceedings were opened by looking at Plant Health and all of the components that contribute to improved crop health, yield and income, through an interactive activity using images and props. This made use of the “Wheel of Plant Health” (Fig. 2), developed originally by Dr Len Tesoriero and colleagues (Burgess et al., 2008) and adapted for use in teaching in Vietnam. It was used as ice-breaker in addition to a learning activity. A field walk on the training site was conducted after lunch and included all of the Big 5 Diseases – Bacterial Wilt (*Ralstonia solanacearum*), *Phytophthora* leaf, stem and fruit blight (*Phytophthora infestans*) (Fig. 4), Rhizoctonia root and collar rot (*Rhizoctonia solani*), Root Knot Nematode (*Meloidogyne* spp.) and *Sclerotinia* head and stem rot (*Sclerotinia sclerotiorum*). This also allowed participants to experience local hygiene strategies as they were taught to “come-clean, go-clean” by using a footbath to prevent contaminated soil movement (Fig 5).



Figure 3 Teaching about Bacterial Wilt - one of the Big 5 plant diseases in Paksong. Mixed media teaching, with PowerPoints, flip boards and physical specimens were key to interactive and effective cross-language and cross-cultural teaching.



Figure 4 Mrs Kaisone observes severe *Phytophthora infestans* blight on Tomato under polyhouse production in Paksong during a field walk



Figure 5 The use of foot baths and importance of quarantine and local hygiene was taught theoretically and practically on Day 1 and practiced throughout the workshop.

Day 2

The second day focused on Cabbage Diseases and the Diagnostic Process, with an opportunity for participants to experience laboratory work by isolating *Rhizoctonia* from Cauliflower seedlings, which they could then observe grow over the coming days. Participants thoroughly enjoyed a peek into the world of the laboratory and made great use of the microscopes and other resources (including books provided by the APS OIP Library Donation and Books for the World Programs) during the workshop (Fig. 6 and Fig. 7). Participants then put hygiene practices into action once again as they embarked upon their first field trip to a nearby village to survey for cabbage diseases.

Day 3

Following a pop quiz on the Big 5 plant diseases on the third day, the program focussed on Tomato Diseases and Nursery and Seedling Production Hygiene. A morning field trip to another village involved in the production of high quality coriander and tomato for export to Thailand. Hands-on clean seedling production and management was practiced in the afternoon (Fig. 8).

Day 4

The fourth day was reserved as a revision day, with time allowed for open questions and observation of other crops such as Coriander. Another field trip was conducted and samples were processed and discussed. Participants were then split into four groups and assigned one of four



Figure 6 Practical laboratory experience for all participants, taught by local Lao laboratory staff

diseases to produce an IDM PowerPoint presentation for presentation on the coming final Saturday. Participants were provided with a brief outline of the presentation and allowed to expand and improve translations as they saw fit.

Day 5

On fifth morning of the workshop, Professor Burgess led the participants on a field walk on site to identify where they could collect diseased specimens for use in their presentation on the final day (Fig. 9). Participants were then allowed the rest of the morning to prepare their presentations. The afternoon was spent practicing presentations and resulted in lively discussion around presentation techniques and improvement of presentations. A small celebration was conducted on Friday afternoon in recognition of all of the hard work of the participants and to assist with relationship building for future work together.

Day 6

On the sixth and final day, more than 30 FAO farmers and additional PAFO staff attended the Farmer Field School day. Each group chose two team members to present their IDM presentations. Attendance exceeded expectations and attendees were very engaged and asked many questions of their new trainers. Valuable discussions around the importance of prevention, local quarantine and the use of modern fungicides (which are not yet available in Paksong) were facilitated. Certificates

were handed out. A large group lunch and party supported by the FAO target villagers was held to close the proceedings.

Throughout the workshop presentations were given predominantly in Lao language, with valuable translation of terms and ideas provided by local laboratory staff and FAO project staff (Fig. 12 and Fig. 13). A total of ten presentations were translated into Lao language and the workshop was used to edit and improve them appropriately. Double checking these translations is still underway, and will continue to be a work in progress between local staff and long term Australian volunteers and mentors as Lao-specific and Lao-appropriate IDM strategies are formulated.



Figure 7 Mrs Kaisone examines a slide of *Phytophthora* spores. Note the interactive Plant Family table in the background, with APS Compendia supplied through the APS OIP Library Donation and Books for the World programs



Figure 8 Professor Burgess teaching participants about hygienic seedling production.



Figure 9 Participants inspect and collect specimens of Root Knot Nematode on carrot in polyhouses in Paksong in preparation for presenting to farmers the following day



Figure 10 Mrs Kaisone teaching local farmers about Root Knot Nematode, using specimens to demonstrate symptoms and breadth of host range



Figure 11 Local farmers observing a bacterial ooze test for Bacterial Wilt in tomato during the Farmer Field School on the final day of proceedings



Figure 12 Laboratory diagnostics presentation presented by Miss Phitsamay (left) and Miss Sengphet (right) in Lao language, with some English translations

RHIZOCTONIA COLLAR AND ROOT ROT
Fungus: *Rhizoctonia solani*

Seedlings collapse at soil line and die



ພະຍາດໂຄນຕົ້ນເນົາແລະຮາກເນົາ
ເຊື້ອລາ: *Rhizoctonia solani*

ອາການເບ້ຍພັກທີ່ຫ່ຽວແຫ້ງ ແລະ ຕາຍ



ສາເຫດ

- ແນວພັນທີ່ຕິດເຊື້ອແລ້ວ
- ພື້ນທີ່ບໍ່ສະອາດ
- ພື້ນທີ່ມີຄວາມຊຸ່ມ
- ເກີດຈາກເຄື່ອງມືທີ່ບໍ່ທັນຂ້າເຊື້ອ




Figure 13 Example of translated *Rhizoctonia* PowerPoint presentations and IDM slides developed by participants and used throughout the workshop

Participants

Twenty four participants were trained during the workshop, thirteen men and ten women (Fig 1; Table 1). Five of these participants were also extremely valuable group leaders and Lao language presenters – Miss Sengphet Phantavong, Miss Phitsamay Phitsanoukane, Miss Khonsavanh Vonvichid and Mr Siphandone are all current members of the PAFO Champasak Plant Health and Food Safety Laboratory in Pakse where Dr Ireland volunteers (Fig. 9). Mrs Kaisone, from a similar laboratory in Savannakhet, led groups and assisted greatly with translation as her English is quite good, especially in the technical agricultural field.

Final presentation groups were assigned on the basis of a complementary mix of personalities (to prevent domination of members in a group, but allow for strong leadership), English and Lao language skill and mental acumen for the material taught throughout the week. Each group consisted of a mix of stakeholder backgrounds, with farmers, NGO and government staff members in each group. Mixing of different stakeholder backgrounds was a deliberate attempt to encourage cross-institutional relationship building.



Figure 14 Plant Health and Food Safety Laboratory staff and group training leaders. L-R: Dr Kylie Ireland, Phitsamay, Siphandone, Khonsavanh and Sengphet (all from Champasak) and Kaisone (Savannakhet)

Table 1. Participant list

Organization/Participant Name	Role	Sector
Plant Health and Food Safety Laboratory, PAFO ^a , Champasak		
Mr Siphandone Keopadchit*	Entomology trainee	Government
Ms Khonsavanh Vongvichid*	Entomology/Plant pathology trainee	Government
Ms Phitsamay Phitsanoukane*	Plant pathology trainee	Government
Ms Sengphet Phantavong*	Plant pathology trainee	Government
Plant Health and Food Safety Laboratory, PAFO ^a , Savannakhet		
Ms Kaisone Sengsoulichan*	Entomology/Plant pathology trainee	Government
Agriculture Extension and Cooperative, PAFO ^a , Champasak		
Mr Bounliem Inthivong	Extension officer	Government
Ms Thippachanh Soulinthone	Extension officer	Government
Agriculture Section, DAFO ^b Paksong		
Mr Khamphou Sengdala	Agriculture officer	Government
Mr Phonexay Phengsouvanh	Agriculture officer	Government
Ms Makkhala Keoboakham	Agriculture officer	Government
Lao-China Farm ^c		
Ms Phetsamone Tepphanava	Farm manager	Government
Lao-China Training Centre ^c		
Mr Sommay Chanthavilath	Training center manager	Government
Lao-Viet Seedling Nursery ^d		
Mr Khitthalasaak Vilayvong	Seedling nursery officer	Government
FAO ^e		
Mr Phouvong Keomany*	Supply chain project manager	NGO [^]
Mr Saysamone Sathongyod	Smallholder farmer/Village chief	Private
Mr Soulivanh Laungkhounsab	Smallholder farmer	Private
Ms Baukeo Sybounheung	Smallholder farmer	Private
Ms Niran Nirannoot*	Supply chain project manager	NGO [^]
GAPE ^f		
Mr Somphet Silimoungkhoun	Project officer	NGO [^]
Mr Vanpheng Vanbisong	Project officer	NGO [^]
Ms Baukham Meanlaung	Women's rep./smallholder farmer	Private
Ms Nee Keomanyxai	Women's rep./smallholder farmer	Private
Sai Nyai Ecoschool ^g		
Mr Mina Sysavard	Local ethnic intern	NGO [^]
Mr Vieng Keomany	Project manager	NGO [^]

* Participants who assisted with translation and presentation of Lao language materials.

[^] Non-Government Organisation

^a Provincial Agriculture and Forestry Office

^b District Agriculture and Forestry Office

^c A Chinese government development project supporting polyhouse production in Paksong, leveraging Chinese aid and ADB funding

^d A Vietnamese government development project supporting greenhouse nursery production

^e United Nations Food and Agriculture Organisation (FAO), implementing a Common Fund for Commodities (CFC) vegetable export market chain project

^f Global Association for People and the Environment

^g An eco-school focused on sustainability education, supported by GAPE and located in Batchieng District, Champasak

Project budget acquittal

The APS budget for the workshop was acquitted close to as previously budgeted for all budget groups, except for extension materials and meals, which were almost completely reversed. This was due to the remote nature of the workshop and increased number of participants. Additional funds for extension materials for wider distribution are being sought.. The decision was made to adequately train the initial trainers, with a view to leverage future support from a range of development partners for production of extension materials.

Actual in-kind and additional cash contributions exceeded initial budgets by more than \$2600. A cash contribution of \$583 to extension materials from the Crawford Fund of Australia assisted with addressing additional budgetary requirements as a result of additional participants. FAO and GAPE also contributed to the project through assisting with participant meal allowances for rural smallholder farmer and NGO officer participants. FAO also made a valuable contribution in language translation which is conservatively estimated to be of more than \$2000 value over the course of the week (for two translators). The FAO also made an in-kind contribution by making a vehicle available to assist with transport throughout the workshop.

Table 2. Budget acquittal – budgeted vs actual costs

Budget Group	APS Budget	APS Actual	In Kind Budget	In Kind and Cash Contributions*			
				PAFO ^a	CF ^b	FAO ^c	GAPE ^d
Accommodation	\$210	\$210	\$1,400	\$1,400	\$572	\$420	
Extension materials	\$1,125	\$215	\$240	\$240	\$583	\$120	
Meals	\$275	\$1,250			\$140	\$180	\$60
Room hire			\$250	\$125	\$125		
Training materials	\$33	\$69			\$69		
Translation						\$2,000	
Transport	\$2,350	\$2,256	\$2,125			\$600	
				\$1,765	\$1,489	\$3,320	\$60
Total	\$3,993	\$4,000	\$4,015				\$6,633

*In-kind support is calculated approximately as the amount which would have had to be paid should the facilities, vehicles or staff not be made available for the project. In this case it includes a \$583 cash amount provided by the Crawford Fund of Australia to cover additional room hire, accommodation and meal allowance costs which allowed a larger number of participants, particularly from rural villages, to participate.

^a Agriculture Section of the Provincial Agriculture and Forestry Office (PAFO) of Champasak Province

^b The New South Wales Committee of the Crawford Fund (CF) of Australia

^c United Nations Food and Agriculture Organisation (FAO), implementing a Common Fund for Commodities (CFC) vegetable export market chain project

^d Global Association for People and the Environment (GAPE)

Deliverables and Impact on the Community

In the long term we expect this workshop and its outputs to result in increased yields and profitability for those farmers who implement the IDM strategies taught to them by ourselves or their new locally equipped IDM trainers. Additionally, we expect to see an improvement in the quality of information available to and provided by District and Provincial staff to farmers by empowering them with knowledge and basic presentation skills.

Most importantly, in a recent trip to the plateau, two months after the workshop, we discovered that at least one FAO farmer who attended the whole workshop has implemented an adapted Crop Rotation strategy in her coriander polyhouse production. The farmer, Mrs Baukeo, while uncomfortable with rotating crops until she can build further polyhouses to allow for more flexibility in her production cycle has implemented a fallow period in the past month. In this period she has incorporated goat and poultry manure to assist with inoculum load reduction and increase nutrients in the soil organically. We will continue to monitor Mrs Baukeo's farm and assist her with appropriate IDM strategies over time as her production and family business grows.

We used the workshop to produce bilingual IDM resources which will be invaluable for future training efforts and extension. These resources are as follows:

- Key components of plant health – interactive activity
- Big 5 Vegetable Diseases of Champasak Province
- The Diagnostic Process
- Basic IDM strategies
- Tomato diseases
- Cabbage diseases
- *Rhizoctonia* head and stem rot – Symptoms and IDM (Fig. 13)
- Bacterial wilt, *Ralstonia solanacearum* –Symptoms and IDM
- *Phytophthora* leaf, stem and fruit blight – Symptoms and IDM
- Root Knot Nematode – Symptoms and IDM
- *Sclerotinia* head and stem rot – Symptoms and IDM

Participants were provided with copies of these presentations, which are currently being edited and will be redistributed in edited form in the next month as a means of follow-up. Each participant also received a Certificate of Participation and a collage of photographs depicting their experience by each participating organisation (Appendix B).

Qualitatively, our discussions with participants and their managers indicate that the workshop was extremely successful. We found as the workshop progressed that many participants would rather get back to the workshop than take long meal breaks, with many meal breaks reduced significantly on a regular basis. With the assistance of the talented bilingual FAO staff we were also able to capture direct personal knowledge transfer, particularly amongst FAO and GAPE target farmers, who were observed sharing their positive experiences of working with a farmer-focused supply chain project supported by the Common Fund for Commodities (CFC).

Inclusion of private smallholder farmers, NGO and Government officers was a deliberate strategy to allow for the building of positive and long-term cross-institutional relationships for the delivery of IDM strategies. Our experience has been that farmers are rightfully wary of approaching government officers for assistance, as these officers often expect monetary or other compensation (as they have little to no operating budget for this kind of work), while not necessarily being able to deliver any useful management advice. We observed good relationship building among individuals of these groups and group work with mixed representation was cohesive and inclusive of all team members.

On the final day we launched a direct cell phone number for the Plant Health and Food Safety Laboratory in Pakse, Champasak Province. Featuring the staff of the laboratory as the Lao language trainers for the workshop emphasised to the audience their skills and knowledge base. We believe that through this workshop and other activities we have built trust in the laboratory as a reliable resource and information point for dealing with Plant Disease problems in the future.

Permanent research sites being used to monitor disease levels in cabbage fields/crops in the region will continue to be monitored for the adoption of IDM strategies promoted in the workshop – given the limited budget and time allocations that the Australian volunteers and Crawford Fund work under, this will most likely be on an ad-hoc basis during disease surveys, or in response to requests for specific assistance. However we hope to gain synergies with two new projects being established which may include funding for farmer visits.

Another key outcome is that leaders of potential supply chain projects have been made well aware of the significant detrimental effects on crop yield caused by both foliar and soil-borne pathogens. They have also be made well aware of the insidious nature of soil-borne pathogens and the challenges associated with their management. Without access to training offered through this workshop many of the relatively new polyhouse farms would cease production within a few years, as has happened in the small-holder field cabbage industry. This prediction is based on experiences and observations in other countries in the region.

OIP GLOBAL EXPERIENCE REPORT 2014
Appendix A: Final Program



FINAL PROGRAM:

**VEGETABLE INTEGRATED DISEASE MANAGEMENT “TRAIN THE TRAINER”
WORKSHOP**

1ST -6TH SEPTEMBER 2014 – PAKSONG

Monday 1 September		
09:30	Opening Ceremony	
10:00	Wheel of Plant Health	
10:30	BREAK	
11:00	Big 5 Diseases	
12:00	LUNCH	
14:00	Quarantine and Hygiene	
14:30	Field walk – Big 5 Diseases	Lao-China
15:00	Process samples	
15:30	Integrated Disease Management (IDM) Basics	
16:30	Finish	

Tuesday 2 September		
09:00	The Diagnostic Process	
09:30	Laboratory work - isolations	
10:30	BREAK	
11:00	Cabbage Diseases	
12:00	LUNCH	
13:30	Field trip – Cabbage Diseases	Nong Soong
15:00	Process samples	
15:30	Integrated Disease Management (IDM) Basics	
16:30	Finish	

Wednesday 3 September		
09:00	Test – Big 5 Diseases	
09:30	Field trip – Tomato Diseases	Huay Set
10:30	BREAK	
11:00	Tomato Diseases	
12:00	LUNCH	
13:30	Process samples	
15:00	Nursery hygiene and clean seedling production	
16:00	Integrated Disease Management (IDM) Basics	
16:30	Finish	

OIP GLOBAL EXPERIENCE REPORT 2014
Appendix A: Final Program



FINAL PROGRAM:

**VEGETABLE INTEGRATED DISEASE MANAGEMENT “TRAIN THE TRAINER”
WORKSHOP**

1ST -6TH SEPTEMBER 2014 – PAKSONG

Thursday 4 September		
09:00	Field trip – Coriander and other crop Diseases	
09:30	Process samples and open discussion	
10:30	BREAK	
11:00	Group assignments	
12:00	LUNCH	
14:00	Group assignments	
16:30	Finish	

Friday 5 September		
09:00	Practice Field Walk for Farmer Field School	
10:30	BREAK	
11:00	Group work	
12:00	LUNCH	
14:00	Practice group presentations	
15:30	Wrap up	
16:30	PARTY!!!!	

Saturday 6 September – FARMER FIELD SCHOOL		
09:00	Opening ceremony	
09:30	IDM – Root Knot Nematode	Group 1
10:00	IDM – Bacterial Wilt	Group 2
10:30	BREAK	
11:00	IDM – Rhizoctonia	Group 3
11:30	IDM – Phytophthora infestans	Group 4
12:00	Closing ceremony & certificate presentation	
12:30	LUNCH & Local party	

**Plant Health & Food Safety Laboratory
PAFO Champasak**



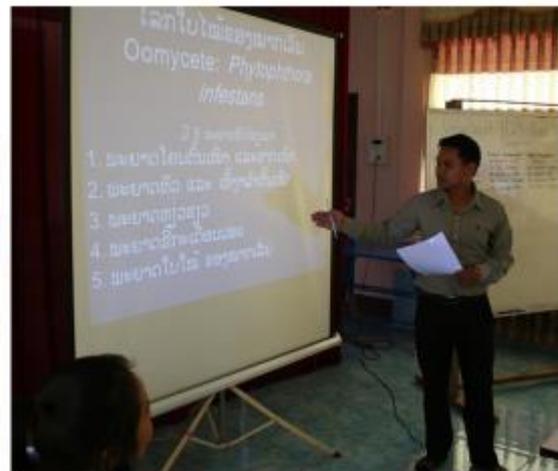
**Plant Health & Food Safety Laboratory
PAFO Savannakhet**



DAFO Paksong



PAFO Agriculture Cooperative & Extension



Lao-China/Lao-Viet



FAO



OIP GLOBAL EXPERIENCE REPORT 2014
Appendix B: Participant Photo Collages

GAPE



Sai Nyai Ecoschool

