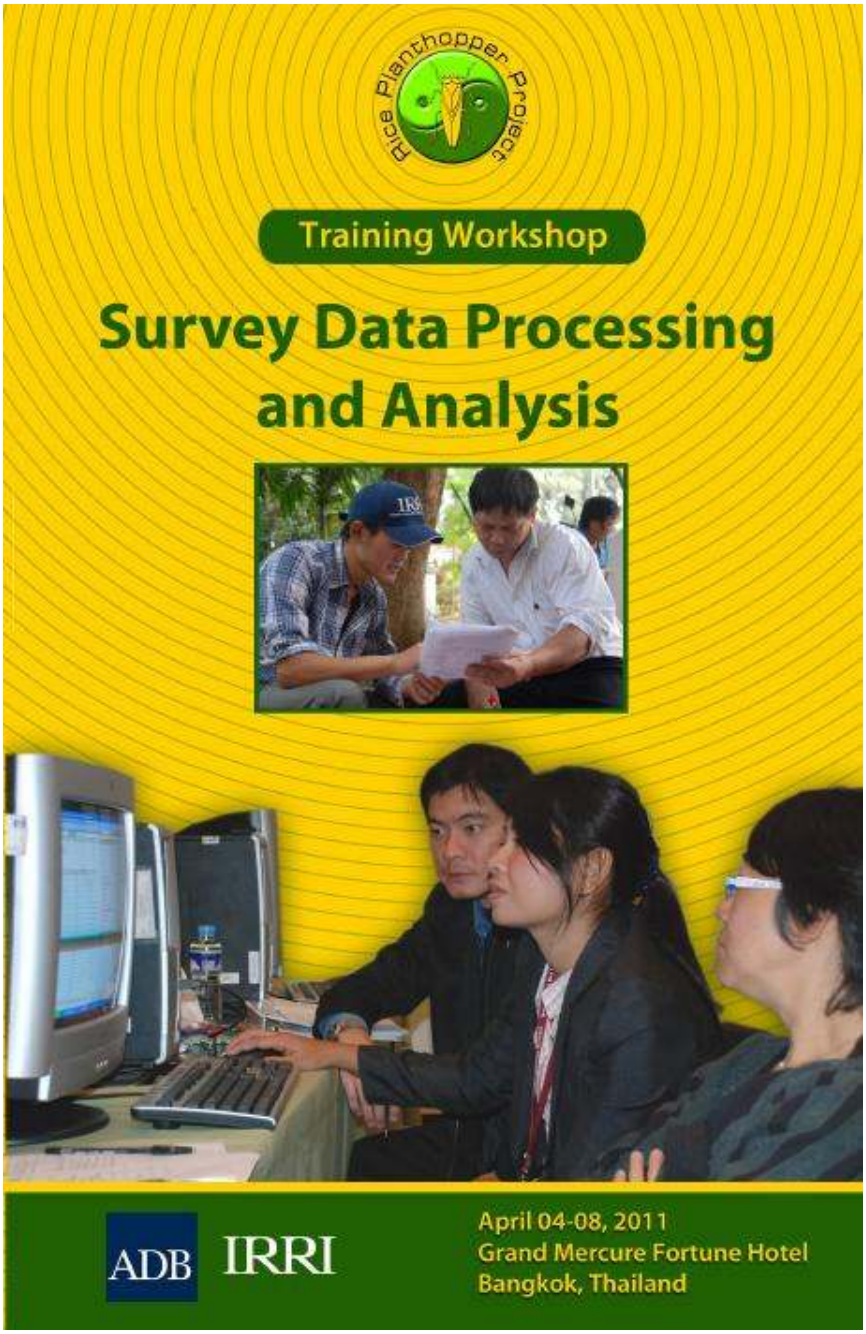
WORKSHOP REPORT



by
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SUMMARY

Fifteen researchers from China, Thailand and Vietnam participated in a joint data analysis workshop held in Bangkok Thailand April 4 – 8, 2011. Baseline surveys have been conducted in China (Jinhua, Guilin, Hainan), Thailand (Chainat) and Vietnam (Tien Giang, An Giang) to assess farmers' knowledge, attitudes and knowledge (KAP) on biodiversity conservation, pest management and use of ecological engineering methods. In the three countries, a total of 2397 farmers have been interviewed using a common questionnaire instrument developed through a series of focus group discussions . All the survey data sets have been coded using Excel. Using hands-on techniques, participants developed skills in data cleaning and uploaded into a statistical package, like SPSS. Various data management tools such as data exploring, constructing new variables, transforming variable values and recoding were introduced. In addition statistical techniques for comparing groups, analyzing relationships between variables and comparing farmers' beliefs were discussed. Participants will put all analyses into baseline reports.

Background

Following the baseline surveys conducted in China, Thailand and Vietnam, it was suggested that training on survey data processing is needed to build the capacity of research and extension partners. The proposed training will train research partners on the essential principles in survey data processing and analysis, using the actual baseline survey data sets from the respective target countries. The outputs of this training will be the data analysis results, survey tables, and a survey report outline.

Bringing together research partners and providing them with conceptual and practical skills in reviewing, processing and analyzing their survey data sets will enhance their social science research skills. Data analysis skills learned from this training could be applied to handling data sets in RETA14 and RETA15. It is envisioned that this workshop will fill the knowledge gaps and strengthen the social science data analysis skills of partners.

Learning objectives

At the end of the training, participants will be able to:

1. Prepare survey data files and develop a codebook
2. Enter survey data in Excel and SPSS.
3. Perform SPSS data processing procedures such as variable definition, data screening and transformation, multiple response data, index construction, cross tabs, descriptive statistics, frequency distributions, etc.
4. Raise key research questions and choose appropriate statistical tests to answer them.
5. Analyze the data and interpret statistical test results.
6. Make presentations

Methods

Practical exercises, with limited classroom instruction will be the workshop approach. During the first day, a review will be made of the theoretical framework for beliefs and decision studies -- behavioral decision theories, and basic SPSS and Excel procedures. Participants will also review and clean up their own data sets. Short lectures and guided instruction on analytical techniques using SPSS (Statistical Package for the Social Sciences) will be conducted. On subsequent days, hands-on learning activities will be done on data analysis while introducing statistical concepts and tests.

Resource persons

Dr. K.L. Heong	Project Principal Investigator, IRRI-ADB Planthopper Project
Dr. Monina Escalada	University Professor, Visayas State University, Philippines

Participants

China

Ms Xue-Ping Huang	Jinhua PolyTech College 1188 Wu Zhou Street, Jinhua City, Zhejiang, China Email: hxpjh@163.com
	Ms Fang Zhao Jia Guilin City Plant Protection Station, 14 Luo Si Shan Road Xiu Feng District Guilin City, Guangxi, China Email: guilinzhibao@163.com, JFZ82@163.COM
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Dr Zengrong Zhu	Institute of Insect Sciences Zhejiang University, Hangzhou, P.R. China Email: zrzhu@zju.edu.cn

Thailand

Mr Manit Luecha	Former Director, Chainat Rice Seed Center Email: manitl55@gmail.com
Ms Ornanong Koksungnoen	Agricultural specialist Bureau of Rice Production and Extension Rice Department Email: ornanong_ks@hotmail.com
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Mrs Wanaphan Janlapha	Agricultural Scientist Prachinburi Rice Research Center Moo 6 Amphoe Ban Sang Prachinburi 25150

Vietnam

Dr Ho Van Chien	Director, Southern Regional Plant Protection Center (SRPPC) Long Dinh, Tien Giang Email: hvchien@vnn.vn
Dr Le Huu Hai	Director, Sub-Department of Agricutural and Rural Development Cai Lay District, Tien Giang Province Email: lehuuhai@yahoo.com
Mr La Pham Lan	Researcher, Institute for Agricultural Science Ho Chi Minh City Email: laphamlan@gmail.com
Mr Nguyen Van Toan	Sub-Plant Protection Department An Giang Province Long Xuyen, An Giang Email: nguyentoanlx@gmail.com

Workshop Outcomes

Things learned from the workshop:

1. Excel – numeric, string, splitting text into columns
2. Load Excel into SPSS
3. Transform Compute, recode
4. Data - Split population
5. Descriptive statistics - Frequencies, Descriptives, cross tab
6. Compare means - paired samples T-test, one way ANOVA
7. Correlation – parametric (Pearson product moment correlation) and nonparametric (Spearman's rho)
8. Regression - Linear , Optimal scaling
9. Scale – Reliability analysis
10. Nonparametric - Chi square, 2 independent samples, k independent samples
11. Multiple response – Define, frequency distribution, cross tab
12. Merge files
13. Graphs

Timeline

Participants agreed on the following deadlines for the baseline survey report:

1st draft – 1st July 2011
Final draft – 1st Oct 2011
Clean SPSS file with labels – 1st May 2011

Field trip to Pathum Thani

Participants visited a BPH outbreak area in Tambol Lumlukka, Pathum Thani and found that the farmer who had spraying insecticide 8 times suffered hopperburn while his neighbor who did not spray at all had only low BPH populations. Farmers in the area obtain their advice from the local pesticide shop. The lady owner had recommended all farmers in the area to add either cypermethrin, abamectin or chlorpyrifos into herbicide sprays as prophylactic treatments for pest control. And if hoppers become problems she recommends the weekly sprays of imidacloprid, BPMC or buprofezin.

Talking to a rice farmer who did not spray his 100 rai. L-R: Apinporn, KL Heong, Manit Luecha and Kamron Ruengsri

L-R: Kamron Ruengsri (A) and Banjevd Songsuk (B)

Pesticide shop in Pathum Thani where farmers obtain pest control advice

Workshop activities

Workshop participants and resource persons

Participants working on their survey data sets

Chinese participants (L-R): Liang Wang, Fang Zhao Jia,, Zengrong Zhu, Xue-Ping Huang

Thai participants (L-R): Parinya Chauchoochat, Jintana Chaiwong, Manit Luecha, and Wongduan Worrapat. Not shown: Wanaphan Janlapha and Ornanong Koksungnoen

Vietnamese participants (L-R): Nguyen Van Toan, Ho Van Chien, Le Huu Hai amd :La Pham Lan

Workshop program

04 April 2011 (Monday)

0800 - 0830	Registration	
0830 - 0900	Opening	K.L. Heong M.M. Escalada
0900 - 1000	Discussion	
1000 - 1015	Tea break	
1015 - 1045	The use of statistical tests in research The null hypothesis Choice of statistical test Levels of measurement Level of significance	M.M. Escalada K.L. Heong
1045 - 1230	Review of basic Excel and SPSS procedures Preparation of data files (defining variables, templates, entering data, inserting and deleting cases and variables) Generating SPSS output tables and formatting them in Microsoft Word	M.M. Escalada K.L. Heong
1230 - 1330	Lunch	
1330 - 1530	Data screening and transformation (errors in data entry, variable transformation, data transformation – recode, compute, data selection) Multiple response data	M.M. Escalada
1530 - 1545	Tea break	
1545 - 1700	Index construction	M.M. Escalada

05 April 2011 (Tuesday)

0800 - 1000	Hands-on: Review and editing of individual data sets (putting labels, applying templates) Splitting multiple response Excel data Editing individual data sets	Participants
1000 - 1015	Tea break	
1015 - 1200	Editing individual data sets - continued	Participants
1200 - 1300	ınch break	

1300 - 1500	eliability analysis Crosstabs, explore Descriptive statistics (frequency distributions, measures of central tendency and variability)	M.M. Escalada
1500 - 1515	Tea break	
1515 - 1700	Hands-on: practice example, exploring data set for outliers	Participants

06 April 2011 (Wednesday)

0800 - 0900	Non-parametric tests: chi-square test, Spearman's rho,	K.L. Heong
0900 - 1000	Hands-on: practice example, running chi-square test, Spearman's rho	Participants
1000 - 1015	Tea break	
1015 - 1200	Correlation (assumptions, practice example) T-tests (assumptions, one-sample t- test, t-tests with more than one sample	M.M. Escalada
1200 - 1300	Lunch break	
1300 - 1700	Analysis of variance, regression analysis Hands-on: running correlations and T-tests on individual data set	K.L. Heong

07 April 2011 (Thursday)

0800 - 1000	Hands-on: Running correlations and nonparametric tests on individual data sets	Participants
1000 - 1015	Tea break	
1015 - 1200	Merging and analysis of baseline and posttest survey data sets	M. M. Escalada Participants
1200 - 1300	Lunch	
1300 - 1700	Field trip to Pathum Thani Rice Research Center	Participants

08 April 2011 (Friday)

0800 - 0830	Overall survey report structure	M.M. Escalada
0830 - 0900	Various ways of presenting survey	

	results: tables and charts	M. M. Escalada
0900 - 0930	How to write up survey data	M. M. Escalada
0930 - 1230	Hands on: Survey report writing Prepare presentations	Participants
1230 - 1330	Lunch break	
1330 - 1530	Survey report presentation	Participants
1530 – 1600	Closing	