

Experimental Study of Extension Impact on Farmers' KAP towards Sri Lankan Cassava Mosaic Disease Prevention in Cambodia

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Introduction

Cassava is the second largest income contribution to Cambodian smallholder farmers after rice in Cambodia. However, Sri Lankan Cassava Mosaic Disease (SLCMD) poses a serious threat to the cassava industry in Cambodia, as well as in the region, as it can reduce cassava yield by up to 80 percent or more in susceptible varieties. As it is not a curable disease, the best prevention involves farmers' practices to prevent its spread.

Objective

-The main objective is to suggest some policy recommendations to the government for preventing the invasion of cassava disease.

-To evaluate effectiveness of dissemination methods to change farmers' knowledge, attitude and practice (KAP) towards pest and disease management and elimination of the re-use of contaminated seedlings

Methods

Table 1. Interview 1st and 2nd survey

	1 st survey	2 nd survey
Treatment 1 group	231	165
Treatment 2 group	157	94
Control group	80	51
Total	468	310

Study area

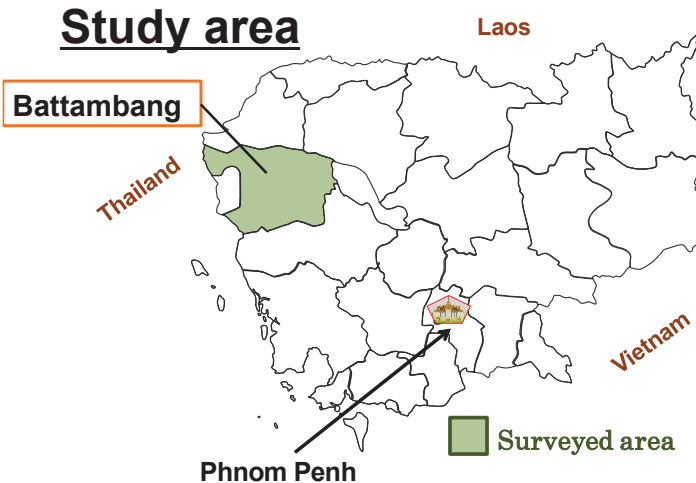


Fig.1 Target area

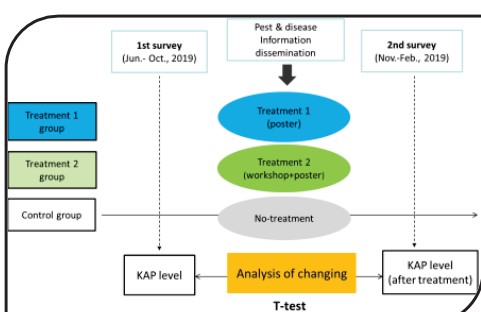


Diagram 1 methodology of research

Results

Table 2. Comparisons of 1st KAP survey and 2nd KAP survey

Variable	Definition of variable (Correct=1; incorrect=0)	Mean-Diff (2 nd - 1 st)			Coefficient	
		Control group (n=51)	Treatment1 group (n=165)	Treatment2 group (n=94)	Control vs. Treatment1	Control vs. Treatment2
KN whitefly	Whitefly is an insect pest.	0.039	0.151	0.351	0.143 ***	0.185 ***
KN slcmd	Do you know SLCMD?	0.156	0.557	0.861	0.200 ***	0.363 ***
KN whitename	Name of whitefly	0.140	0.234	0.554	0.068 ***	0.226 ***
KN whiteanswer	Whitefly causing the symptoms	0.039	0.327	0.489	0.304 ***	0.488 ***
AT neighbor's stem	It can reduce risk of CMD.	-0.078	0.090	-0.510		
AT middle man's stem	It can reduce risk of CMD.	-0.745	-0.915	-0.765		
AT certified healthy	It can reduce risk of CMD.	-0.568	-0.163	-1.042		
AT I can do s.th	I can do something to prevent plant.	0.529	0.446	0.557	0.503 ***	
AT authorityadvise	It is important to know CMD.	1.000	-0.496	-0.574	0.568 ***	0.891 ***
PR trusted sources	Purchasing cassava stem from trusted sources.	0.098		0.414		0.171 **
PR insecticidewhitefly	Timely treatment of whitefly.	0.294	0.000	0.308	0.255 *	0.330 **
PR removed debris	Removing all cassava debris suspected of being CMD	0.254	-0.727	-0.276		

*** Significant at 1% ** Significant at 5% *Significant at 10%

Discussion and Conclusion

According to survey results, it is indicated that dissemination of information by workshop with poster is more effective method than by poster only to increase farmer's. However, neither methods sufficiently upgrade farmer's attitudes toward disease preventive measures. Farmers do not think that purchase of stem from trusted source reduce risk of SLCMD. Furthermore, conducting workshop with poster strongly improve farmer's practice such as purchasing cassava stem from trusted sources. Finally, although treating whitefly in a timely manner is important, farmers may not spraying insecticide. Possible explanation to this result is farmers felt helpless about ever increasing whitefly as a vector of SLCMV. Or it may be that many do not have sufficient finance to treat whitefly. Overall, dissemination of information by workshop plus poster is an effective way to improve farmers' knowledge, farmers' practices and slightly improve their attitudes to prevent the spread of pests and diseases. Policy implication is that we could share our know-how to run the workshop with other government as well as non-governmental and commercial associations and emphasize more about importance of not trusting untrusted source of stems.