

**DEVELOPMENT OF FARMER-TO-FARMER LEARNING PROCESS
OF TECHNOLOGICAL INCREASING DIVERSIFICATION
AGRICULTURAL ACTIVITIES**

KRAILERT TAWEEKUL

DOCTOR OF PHILOSOPHY

IN EDUCATION (DEVELOPMENT EDUCATION)

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่
Copyright© by Chiang Mai University
All rights reserved

**GRADUATE SCHOOL
CHIANG MAI UNIVERSITY
MAY 2017**

**DEVELOPMENT OF FARMER-TO-FARMER LEARNING PROCESS
OF TECHNOLOGICAL INCREASING DIVERSIFICATION
AGRICULTURAL ACTIVITIES**

KRAILERT TAWEEKUL

**A THESIS SUBMITTED TO CHIANG MAI UNIVERSITY IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY
IN EDUCATION (DEVELOPMENT EDUCATION)**

ลิขสิทธิ์ © by Chiang Mai University
All rights reserved

GRADUATE SCHOOL CHIANG MAI UNIVERSITY

MAY 2017


**DEVELOPMENT OF FARMER-TO-FARMER LEARNING PROCESS
OF TECHNOLOGICAL INCREASING DIVERSIFICATION
AGRICULTURAL ACTIVITIES**

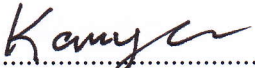
KRAILERT TAWEEKUL


THIS THESIS HAS BEEN APPROVED TO BE A PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY
IN EDUCATION (DEVELOPMENT EDUCATION)


Examination Committee:

 Chairman
(Prof. Dr. Anan Polthanee)


 Member
(Assoc. Prof. Dr. Charin Mangklang)

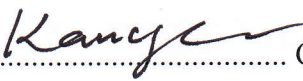
 Member
(Assoc. Prof. Dr. Kanya Kumsiripiman)


 Member
(Assoc. Prof. Dr. Siwarak Siwarom)

 Member
(Assoc. Prof. Dr. Jarunee Maneekul)

Advisory Committee:

 Advisor
(Assoc. Prof. Dr. Charin Mangklang)

 Co-advisor
(Assoc. Prof. Dr. Kanya Kumsiripiman)

 Co-advisor
(Assoc. Prof. Dr. Siwarak Siwarom)

26 May 2017

Copyright © by Chiang Mai University

ACKNOWLEDGEMENT

Firstly, I would like to express my deepest sincere gratitude and highly appreciated to Associate Professor Dr. Charin Mangklang my chairman advisor, for his all kind assistances, warm-warm hearted sympathy, valuable suggestions and kind guidance with perfect benevolence through my study by sacrificing much of their valuable time amidst the plenty of his tasks. I got much knowledge of education for social development and socio-economic from her during my study period with many remarkable moments. I am much indebted and also would like to extent my deepest gratitude to all co-advisors who support me until the dissertation had been completed: Associate Professor Dr. Kanya Kamsiripiman and Associate Professor Dr. Siwarak Siwarom, including Associate Professor Dr. Jarune Manekul for their kind guidance, valuable advices, criticism, supports and encouragement throughout my study period and presentations.

I, furthermore, would like to extend my greatest appreciation and grateful thanks Dr. John Caldwell and Dr. Ryuchi Yamada former Senior Researchers of JIRCAS Japan for their assistance, valuable guidance and encouragement both academic knowledge and the ways of life being. I also thank to Associate Professor Dr. Yupa Hanboonsong for their kind supports both knowledge and kind valuable data.

Next, my thanks go to farmers in five *amphoes*: Ban Phai, Ban Haed, Pey Noi Ban Fangand Nong Song Hong Khon Kaen Province, North East Thailand for participating the research and providing the data as well as many others who aided my field research in these area. Moreover, I would like to sincere thank to Japan International Research Center for Agriculture Science (JIRCAS), Japan for financial supports.

Finally, I would never have got this stage without the closest mine-my parents, my wife and my son. I owe warmest thank very much to my parents, sisters, bothers and my beloved wife and son for their supports. I dedicate this thesis to them.

Krailert Taweekul