# IMPACTS OF AN AGRICULTURAL SMARTPHONE APPLICATION ON FARMERS' LIVELIHOODS AND AGRICULTURAL PRACTIES



MASTER OF SCIENCE IN SUSTAINABLE AGRICULTURE AND INTEGRATED WATERSHED MANAGEMENT

> GRADUATE SCHOOL CHIANG MAI UNIVERSITY FEBRUARY 2017

## IMPACTS OF AN AGRICULTURAL SMARTPHONE APPLICATION ON FARMERS' LIVELIHOODS AND AGRICULTURAL PRACTIES



A THESIS SUBMITTED TO CHIANG MAI UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE IN SUSTAINABLE AGRICULTURE AND INTEGRATED WATERSHED MANAGEMENT

### GRADUATE SCHOOL, CHIANG MAI UNIVERSITY FEBRUARY 2017

## IMPACTS OF AN AGRICULTURAL SMARTPHONE APPLICATION ON FARMERS' LIVELIHOODS AND AGRICULTURAL PRACTICES

#### JAN LIBERA

THIS THESIS HAS BEEN APPROVED TO BE A PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE IN SUSTAINABLE AGRICULTURE AND INTEGRATED WATERSHED MANAGEMENT

**Examination Committee:** 

.....Chairman

(Asst. Prof. Dr. Jitti Pinthog)

Manoj 16 Member

(Dr. Manoj Potapohn)

Member

(Prof. Dr. Regina Birner)

**Advisory Committee:** 

Anansj. 1. 2 Advisor

(Dr. Manoj Potapohn)

Co-advisor

(Prof. Dr. Regina Birner)

14 February 2017 Copyright © by Chiang Mai University

#### ACKNOWLEDGEMENTS

First of all, I would like to thank my first and second supervisors, Dr Manoj Potapohn and Prof Dr Regina Birner, to provide me with the possibility to complete my master thesis at Chiang Mai University and the University of Hohenheim. I especially want to thank my first advisor, Dr Manoj Potapohn, who guided me through my research. I am very grateful for his support, patience and enthusiasm.

Special thanks also to Mr Rawat Sangchuay, who was my liaison officer to the Rak Ban Kerd Foundation and Total Access Communication Public Limited Company. He was a great help conducting my survey and in-depth interviews. Thanks also to Khun Praphan and Mrs Bencharongkul as well as all three farmers who agreed to take part in my interviews. I would also like to thank all workers from the regional Rak Ban Kerd office in Chiang Rai, officials from the regional extension offices and of course the farmers who agreed to participate in my survey. Furthermore, special thanks to Sarocha Anukul, who accompanied me several times to Chiang Rai and helped me conducting and translating the in-depth interviews with farmers in the region.

Furthermore, I want to thank my girlfriend, who was always supportive and helped me overcoming difficult times during my research and the writing process. She was a great help during the whole process of the thesis.

Last but not least I would like to thank my family, in particular, my parents, who made it possible for me to enrol in this master program and who were supportive my whole life. Without them, I would not be at this point. They have my deepest gratitudeJohannes Müller

All rights reserved