

**博士論文審査結果報告**  
**Report on Ph.D. / Doctoral Dissertation Defense**

Otaru University of Commerce  
 Professor MATSUMOTO Tomoya

査委員会を代表し、以下のとおり審査結果を報告します。

On behalf of the Doctoral Thesis Review Committee, I would like to report the result of the Ph. D. / Doctoral Dissertation Defense as follows.

学位申請者氏名 Ph.D. Candidate	Francisco M. P. Mugizi		
学籍番号 ID Number	PHD13102		
プログラム名 Program	Policy Analysis Program		
審査委員会 Doctoral Thesis Review Committee	主査 Main referee	松本 朋哉 MATSUMOTO Tomoya	主指導教員 Main Advisor
	審査委員 Referee	木島 陽子 KIJIMA Yoko	副指導教員 Sub Advisor
	審査委員 Referee	山内 慎子 YAMAUCHI Chikako	副指導教員 Sub Advisor
	審査委員 Referee	飯尾 潤 IIO Jun	博士課程委員会委員長代理 Acting Chairperson of the Doctoral Programs Committee
	審査委員 Referee	山野 峰 YAMANO Takashi (Asian Development Bank)	外部審査委員 External Referee
論文タイトル Dissertation Title  (タイトル和訳)※ Title in Japanese	Between Three Fires: Population Pressure, Soil Degradation and Land Conflicts in Sub-Saharan Africa — Evidence from Kenya and Uganda  人口圧力、土壌劣化、土地争い：サブサハラアフリカにおける三つの苦難の相互関係 — ケニア、ウガンダ家計調査データに基づく実証研究		
学位名 Degree Title	博士（開発経済学） Ph.D. in Development Economics		
論文提出日 Submission Date of the Draft Dissertation	2018年5月8日	論文審査会開催日 Date of the Doctoral Thesis Review Committee	2018年6月5日
論文発表会開催日 Date of the Defense	2018年6月5日	論文最終版提出日 Submission Date of the Final Dissertation	2018年8月22日
審査結果 Result	<div style="display: flex; justify-content: space-around;"> <span style="border: 1px solid black; border-radius: 50%; padding: 5px;">合格 Pass</span> <span>不合格 Failure</span> </div>		

※タイトルが英文の場合、文部科学省に報告するため、和訳を付してください

If the title is in English, please translate in Japanese in order to report MEXT.

## 1. 論文要旨 **Thesis overview and summary of the presentation.**

In Sub-Saharan Africa (SSA), land scarcity due to population pressure has been increasingly serious and causing problems which directly affect well-beings of people. This dissertation thesis addresses mainly two issues related to farmlands in rural societies in SSA especially on i) soil degradation and ii) land conflicts between neighbors, on which rigorous empirical studies have been scanty despite their importance and emergent need. Without finding ways to resolve these problems, there would be serious negative consequences in agricultural productivity, food security, and poverty in the region in near future. Thus, it is critically important to describe and summarize the current situation and its recent trend and analyze the mechanism behind using the accurate longitudinal data indicating the real change in livelihood of residents in the region to provide basic and important information and lessons derived from the analysis for policy makers to understand the situation and implement better policies to solve the problems. To fill the gap, using the household level survey data collected in rural communities in Kenya and Uganda, this dissertation seeks to answer five important questions: i) whether population pressure on farmlands affects soil quality, and if so how?; ii) whether population pressure induces agricultural intensification; iii) whether insecure land rights affect soil quality; iv) whether displacement caused by armed conflicts have increased land conflicts in post-war Northern Uganda; and v) whether land-related conflicts affect agricultural productivity.

Chapter 2 and 3 describe and summarize findings on the relationship between soil degradation and population pressure in Kenya and Uganda, respectively, using unique longitudinal household survey data with soil quality information based on soil samples collected from farmlands of the survey target households. To the best knowledge of the main referee, this is the first study to analyze the issue using panel data on soil quality at the household level which allow us to use scientific measurements of soil degradation to examine its relationship with population pressure. It provides empirical evidence which indicates that the population pressure reduces soil quality in both countries, and that it induces agricultural intensification considerably in

Kenya but not in Uganda. The findings suggest that although Kenyan farmers are trying to mitigate the negative effect of population pressure on soil quality, the rate of soil degradation is probably outpacing that of agricultural intensification. Furthermore, the results indicate that unlike Kenya, farmers in densely populated areas of Uganda are yet to respond to the adverse effect of population pressure on farmlands. The study also finds that insecure land rights can indeed reduce farmers' incentives to invest in soil improvement in Uganda since parcels that are individually-owned are found to have better soil than communally-owned parcels.

Chapter 4 describes the issue on land conflicts which have occurred between neighbors among in communities in Northern Uganda after people who displaced to refugee camps due to the civil war in the region returned home after the long-term absence from the camps. It uses unique household level data collected from Northern Uganda and finds that the displacement has increased incidences of land conflicts in post-war Northern Uganda. Specifically, households that were displaced to locations far away from their homes are more likely to have new land conflicts and more likely to be concerned about land conflicts in future. The number of years a household spent without doing farming in its home village, and weakening of informal institutions of land governance are found to be the main transmission mechanisms of the obtained results. It also finds that land conflicts have a negative effect on agricultural productivity since they reduce farmers' incentive to invest in the plots due to insecure property right to the lands.

## **2. 審査報告 Notes from the Doctoral Thesis Review Committee (including changes required to the thesis by the referees)**

Following the Ph.D. dissertation defense by Mr. Mugizi on June 5<sup>th</sup>, 2018, the degree committee meeting was held with attendance of Profs. Iio, Kijima, and Yamauchi from GRIPS, Dr. Yamano as an external examiner from the Asian Development Bank and Prof. Matsumoto as his main adviser from Otaru University of Commerce.

The referees agreed that the presentation was done well and the thesis examined very important issues for rural development and had very interesting empirical findings. Thus, the referees judged that he passed the defense.

However, the referees also agreed that his thesis had some room for improvement in terms of writings and some of the analyses. Then, they suggested that the comments made by the committee members should be incorporated for the final version of the thesis. Given the number of comments raised by the committee members, they expected that Mr. Mugizi needed to spend a month for the revision of the thesis.

### **3. 最終提出論文確認結果 Confirmation by the Main Referee that changes have been done to the satisfaction of the referees**

Mr. Mugizi has revised his thesis and incorporated most of the comments by the referees. The main referee carefully read the revised version and found that his thesis quality had been improved dramatically and satisfied the required quality as a Ph.D. thesis. He provided the list of the changes he made corresponding to each of the comments.

### **4. 最終審查結果 Final recommendation**

We recommend that the degree of Ph.D. in Development Economics be awarded to Mr. Mugizi.