

Preface

In 2002, the three coeditors of this book firmly agreed that in order to deepen our understanding of African agriculture we needed carefully collected and comparable panel data of rural households across countries over extended periods. We do not mean to say that the panel data on African agriculture did not exist. In fact, the senior editor of this book participated in the “Food Security Project” of the Michigan State University, which covered many countries in sub-Saharan Africa (SSA) and conducted panel surveys in some countries. There are also other panel data sets of rural households in sub-Saharan Africa. Yet, there is no denying that systematically collected panel data designed to analyze “the process of agricultural development” over decades in SSA remain relatively rare compared with Asia.

This becomes evident, for instance, when we compare African studies with Asian studies such as Hayami and Kikuchi (2000), which analyzes dynamic technological and structural changes in the Philippines based on the careful and repeated surveys of all households in the same villages over the three decades since the early 1970s. Another example of an Asian study is Otsuka et al. (2009), which analyzes panel data of rural households in the Philippines, Thailand, Bangladesh, and India covering nearly two decades. This too is a useful study in tracing pathways out of rural poverty over time in several Asian countries. These two studies inspired our current project leading to this book.

We began a collaborative research project between the National Graduate Institute for Policy Studies (GRIPS) represented by Takashi Yamano and Keijiro Otsuka and the World Agroforestry Center represented by Frank Place in 2003. Fortunately we received generous financial support from the 21st Century Center of Excellence (COE) Program of Japan Society for the Promotion of Science from 2003 to 2007. We have chosen Kenya, Uganda, and Ethiopia as the study sites because there are signs of emerging but varying agricultural development within and among these countries. Further, as a region of high rural population density, the factors of agricultural development that emerge in these countries are likely to be relevant for other African countries in the near future.

In order to express our strong will and commitment to repeat household surveys in these countries, we decided to call our project “RePEAT” project, abbreviated for “Research on Poverty, Environment, and Agricultural Technology.” Regarding the

environment, we decided to focus on soil fertility, as it is widely considered to be a major constraint on the agricultural growth in SSA, even though there has not been a quantitative analysis of this relationship at a significant scale. Thus, we have undertaken soil sampling at the household level in our project in the three countries. We paid special attention to emerging and promising technological changes in agriculture, such as the increased use of hybrid maize seeds, both inorganic and organic fertilizers, and improved dairy cows. Extending the RePEAT survey into complementary sites, we have conducted studies of upland NERICA rice and lowland rice in Uganda, as we find that rice is a particularly promising crop in East Africa.

Although the term RePEAT does not refer to markets, we have found in the course of our research that some product markets, such as maize, milk, and banana, and some input markets, such as inorganic fertilizer, have been emerging and developing. Furthermore, we have found profound impacts of the rapidly diffusing mobile phone network on the marketing of agricultural products. Thus we have placed special focus on the analysis of the efficiency of marketing systems. In order to incorporate marketing costs into the analyses, we use spatial data now available on road quality, distance and travel time, as well as other geographical characteristics.

The purpose of this book is to provide a synthesis of our empirical studies concerned with diverse aspects of agricultural development in Kenya, Uganda, and Ethiopia, with an objective to draw useful policy implications for strategies for agricultural development and poverty reduction. We focus on the impacts of markets, soil fertility, and technology innovations on agricultural development, as we believe that these are the critical drivers for changes in African agriculture.

Having completed the 21st century COE Program successfully, we have received the financial support of the Global COE project from 2008 to 2012. So far we have been successful in “repeating” surveys for two rounds in Kenya and Ethiopia and three rounds in Uganda in a consistent and comparable manner. We are grateful for the continuous financial support of the Japan Society for the Promotion of Science and Technology.

We received large amount of useful comments from so many researchers. We are particularly grateful to Peter Hazell and Derek Byerlee who provided invaluable comments on various occasions. James Nyoro significantly contributed to data collection based on his rich empirical knowledge and survey experience. We have also received so many useful comments and encouragements from our colleagues at the GRIPS: Jonna P. Estudillo, Hideaki Goto, Yujiro Hayami, Kei Kajisa, Kaliappa Kalirajan, Yukichi Mano, Tetsushi Sonobe, and Chika Yamauchi. In addition, we received useful comments from many researchers on various occasions: Jock R. Anderson, Pranab Bardhan, Alain de Janvry, Nobuhiko Fuwa, Yoshihisa Godo, Takashi Kurosaki, Tetsuji Okazaki, Gustav Ranis, Takeshi Sakurai Yasuyuki Sawada, and John Strauss. We would like to thank Mayuko Tanaka who provided excellent editorial support and Paul Kandasamy who carefully edited the whole manuscript.

March 2011

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Emerging Development of Agriculture in East Africa
Markets, Soil, and Innovations

Yamano, T.; Otsuka, K.; Place, F. (Eds.)

2011, XVII, 214 p., Hardcover

ISBN: 978-94-007-1200-3