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Preface

Policy analysis is normally guided by economic theory that helps the policy makers conceptualise and design policy reforms. However, there are always gaps between the realm of pure theory and the real world. Assisting the policy debate not only requires more than the qualitative insights given by the theory, but it also requires quantification of the various mechanisms proposed by the theory. As the framework of analysis is complex, one tends to miss the indirect effects of a policy. Empirical modeling can help reveal these effects. Besides, quantitative analysis allows running sensitivity tests to simulate the implications of alternative policies. It helps to clarify the role of key behavioral assumptions and important parameter values. Under a situation of multiple policy objectives, quantitative policy analysis enables quantification of trade-offs and better-informed policy debates leading to the choice of the appropriate policy to implement.

With the above premise, the Institute of Agricultural and Food Policy Studies (or Institut Kajian Dasar Pertanian dan Makanan, IKDPM), Universiti Putra Malaysia has embarked on a long term project of developing capacity in quantitative modeling for policy analysis. As a first step towards achieving this goal, the institute has organized a workshop titled “Agricultural Sector Modeling in Malaysia: Quantitative Models for Policy Analysis” on 26th – 28th October 2009. The objective of the workshop is to review the various quantitative methods for policy analysis in the agricultural sector to guide the institute in its future research and planning. We have invited a number of international speakers to share their experiences and expert views. They were, Prof. Dr. Tirso Paris from the University of the Philippines-Los Banos who presented his experience in applying an econometric model for agricultural policy analysis in the Philippines. We have also invited Dr. Setyo Pertiwi from Bogor Agricultural University, Indonesia to share her perspectives on system dynamics modeling of the food security policy in Indonesia. A number of local researchers have also presented their findings using a number of methodologies such as econometrics and other multi-variate methods. The other important participants were the stakeholders; i.e., the policymakers
themselves. In fact their presence has been fruitful as they provided the workshop the policy makers’ perspectives to make the models relevant and useful.

The workshop saw a spectrum of approaches, each with its own unique strengths, usefulness and weaknesses in modeling the complex issues in agriculture. Of course no model is able to capture the reality in its true sense. However, with the correct specification, assumptions and theoretical foundations, quantitative models do have the capacity to enlighten the users in understanding the nature of relationship between variables in a system, to quantify them and most of all to make some policy simulations to derive at some reasonable forecast of the future trends and implications. These have been the major benefits or useful insights gained from the workshop. In view of this, the papers presented in the workshop have been rewritten taking into account of all the comments and suggestions by the participants. This book provides a compilation of selected papers presented at the workshop for future reference. We believe that this book will be very useful to researchers, students, policy makers as well as firms and individuals that are interested in modeling.

We take this opportunity to express our gratitude to all participants, particularly from the public agencies for providing useful comments and ideas in the workshop. We are also highly indebted to Prof. Dr. Tirso Paris and Dr. Setyo Pertiwi for their willingness to share their expert knowledge and experiences. Their valuable insights are instrumental in guiding our policy research in the future.

We would like to express our utmost gratitude to the authors for their papers. The dedication and commitment shown by Aswani Farhana Mohd Noh and Noraini Zahari in the preparation of the manuscript is very commendable indeed. Nevertheless, any errors that remain are the sole responsibility of the authors. Last but not least, we appreciate the continuing support from the IKDPM’s staff in the preparation of this book.

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