Environmental economists began to use choice experiments in the early 1990s (Adamowicz 2004). The early applications focused on recreation demand analysis, as a complement to the travel cost model, and on passive use values associated with policy options. These applications were almost all in industrialized nations. At about the same time, the dominant stated preference method, contingent valuation, was being applied to cases in developing countries, after many years of application in the developed world. Whittington (1998) summarizes the emergence of contingent valuation in developing country applications, as well as some of the challenges.

This book, Choice Experiments in Developing Countries, edited by Bennett and Birol, illustrates the similar path that has emerged in the case of choice experiments. These techniques are now increasingly applied to developing country problems. The authors of the papers in this edited volume discuss some of the challenges associated with applying choice experiment methods in the developing world. Much as Whittington (1998) found in the case of contingent valuation, issues of information provision, interpretation of responses, enumerator training, specifying attribute (and price) levels, and ethical questions arise in the case of choice experiments. The chapters in this book contain a variety of approaches to addressing these issues and the summary chapter provides a set of ‘best-practices’ as well as a set of research problems associated with the application of choice experiments in developing country contexts.

The chapters in this book illustrate the flexibility of the choice experiment method. The goods examined range from food items, to elephant conservation programmes, to recreation demand, to protection of unique ecosystems and choices over local public goods. There are examples of the measurement of both use values and passive use values. The section on China’s Slope Land Conversion Program provides insights into the values arising from one of the world’s largest single conservation programmes. Methodological issues are also investigated in several of the chapters.

Some authors elicit values from local community members in the developing countries, while others examine values held by tourists who are visiting developing countries for tourism experiences. This is a welcome addition to the literature because the differences inherent in interviewing citizens of developing countries and visitors from industrialized countries is often overlooked. The key point is that tourists cannot vote in the developing country they are
visiting, so stated preference questions cannot employ a referendum-type elicitation procedure. Nor can payment vehicles that employ local income or property taxes be used to value public goods. Instead, researchers must ask visitors contingent behaviour questions designed to reveal how they would react to changing levels of attributes of the local environmental or cultural resource that they came to see.

The chapters in the book illustrate the heterogeneity of policy issues that can be informed by valuation and choice experiments. In fact, these values are often essential to the assessment of policy options or for the evaluation of programmes. What is somewhat hidden in these papers, however, is the immense amount of effort that takes place in designing and implementing a choice experiment in a developing country. Choice experiments require complex survey instruments and the questions posed can be difficult for respondents to interpret. The authors of the chapters are constrained in terms of space and simply could not describe all of these details. However, the author(s) of each chapter had to make critical decisions as to precisely what information to provide respondents. Photographs, diagrams and tables were used to help explain attributes. Translations and back-translations of survey instruments undoubtedly occurred. These aspects of choice experiment implementation arise in developed country applications, but not to the same extent.

The methods used in this book provide a number of different ways of approaching this complexity in a developing country context. Research ethics issues are mentioned in a few chapters, but again space limitations likely preclude much discussion of this important issue. Expectations can be generated by a researcher surveying a local population about provision of public goods – creating a potentially challenging research ethics issue. Familiarity with surveys and hypothetical questions is limited in developing country contexts, raising research ethics questions that are much like the case of contingent valuation discussed by Whittington (2002). Obtaining informed consent can be especially challenging because, unlike for example in clinical trials, it may not be obvious to the respondent why the researcher is requesting informed consent.

This book will provide the reader with a rich set of examples, ranging in terms of goods, policies, respondent population, administration techniques and analytical methods. While a variety of issues are presented, a host of topics for choice experiment researchers remain. These include questions about sampling and response bias, survey implementation (in-person surveys and interviewer effects, time-to-think issues), strategic behaviour, and a host of technical issues regarding experimental design and econometric analysis. Some research issues will have special significance in a developing country context. The state of the art in experimental design, for example, has been moving towards efficient or optimal designs. While these have very attractive statistical properties, they also may generate choice sets that create complex combinations of attributes and
present challenging trade-offs. Further investigation of the issue of statistical efficiency versus respondent efficiency is warranted (Severin 2000; Maddala et al. 2003). The issues of hypothetical bias and strategic behaviour are of concern with choice experiments, just as they are with the contingent valuation method. Additional investigation of these issues, either via fusion with revealed preference data or via experimental economic methods, but in a developing country context, is required (Adamowicz et al. 1994). The nature and extent of hypothetical bias and the ‘corrections’ employed in valuation research may be quite different in developing country applications, and more research is needed. Finally, the primary focus of most of the papers in this volume, and in most choice experiment applications, is the measurements of values. Choice experiments will also be useful in assessing behaviour in market and non-market contexts. Intra-household bargaining, for example, is a complex behavioural situation and well-designed choice tasks can provide insight into such behaviour.

Overall, this book is a wide-ranging compilation of choice experiment studies in developing countries. It will be interesting reading for researchers and policy makers, particularly those interested in the application of economic analysis to environmental, food and agricultural policy. We hope that the applications of choice modelling techniques in this volume help convince researchers that asking poor respondents in developing countries complex questions about their preferences is feasible, and encourages researchers to tackle more complex research protocols designed to improve the accuracy and reliability of respondents’ answers to questions in choice experiments.

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REFERENCES


