

## INTRODUCTION

The subject matter of agricultural economics has both broadened and deepened in recent years, and the chapters of this Handbook present the most exciting and innovative work being done today. The field originated early in the twentieth century with a focus on farm management and commodity markets, but has since moved far into analysis of issues in food, resources, international trade, and linkages between agriculture and the rest of the economy. In the process agricultural economists have been pioneering users of developments in economic theory and econometrics. Moreover, in the process of intense focus on problems of economic science that are central to agriculture – market expectations, behavior under uncertainty, multimarket relationships for both products and factors, the economics of research and technology adoption, and public goods and property issues associated with issues like nonpoint pollution and innovations in biotechnology – agricultural economists have developed methods of empirical investigation that have been taken up in other fields.

The chapters are organized into five parts, contained in two volumes. Volume 1 contains Part 1, “Agricultural Production”, and Part 2, “Marketing, Distribution and Consumers”. These two parts include much of the traditional scope of agricultural economics, emphasizing advances in both theory and empirical application of recent years. Volume 2 consists of three parts: “Agriculture, Natural Resources and the Environment”, “Agriculture in the Macroeconomy”, and “Agricultural and Food Policy”. Although agricultural economists have always paid attention to these topics, research devoted to them has increased substantially in scope as well as depth in recent years.

A large-scale effort to review and assess the state of knowledge in agricultural economics was previously undertaken by the American Agricultural Economics Association (AAEA), with publication in four volumes from 1977 to 1992.<sup>1</sup> Those earlier survey volumes have strikingly different subject-matter content from that of the present Handbook, especially considering that they described the same field only 20 years ago. The AAEA volumes have extensive coverage of farm management issues, costs of production in agriculture, and estimates of efficiency of marketing firms. In our judgment little in any fundamental way has been added to our knowledge in these areas, and applications have become routine rather than imaginative research. The largest AAEA volume was devoted entirely to agriculture in economic development. This remains a

<sup>1</sup> *A Survey of Economics Literature*, Lee Martin, ed., Minneapolis: University of Minnesota Press. Volume 1, Traditional Field of Agricultural Economics (1977); Volume 2, Quantitative Methods in Agricultural Economics (1977); Volume 3, Economics of Welfare, Rural Development, and Natural Resources (1981); Volume 4, Agriculture in Economic Development (1992).

most important topic, but we cover it in only one complete chapter and parts of several others. This reflects in part the integration of work on developing countries with mainstream applied work. For example, our chapters on production economics, expectations, and risk management also encompass applications to agriculture in developing economies.

That integration points to another gradual but notable change in agricultural economists' research. The AAEA surveys had most of the chapters of one volume devoted to quantitative methods. We do not have any separate methodological chapters. In contrast, we have several chapters with substantial development of economic theory. This reflects an evolution in the research priorities of leading agricultural economists who, following the earlier work of Nerlove on supply and Griliches on technological change, are working at the theoretical frontiers and simultaneously undertaking empirical work – not just purveying new theories to their more “applied” colleagues.

As its title indicates, the AAEA volumes were surveys of literature, and aimed at completeness of coverage within their subject matter. We asked our authors to be selective, to focus on what they saw as the main contributions to the area they covered, and to assess the state of knowledge and what remains to be learned. This approach has left some gaps in our coverage, and has given us some chapters that are perhaps more idiosyncratic than is usual for a survey chapter. In order to pull things together at a higher level of aggregation, we commissioned five “synthesis” chapters, one for each of the five parts of the Handbook. And, to provide our own even broader overview, the editors have written closing syntheses of each volume. Because these syntheses provide capsule summaries of each Handbook chapter, we will not present further description of content here.

Although advances in research in agricultural economics are increasingly being made in many countries, our authors and coverage of applied topics is heavily U.S.-weighted (only six authors work outside of the U.S.: two in Europe, two in Australia, one in Canada, and one in Israel). Of those in the U.S., however, six are economists at the World Bank, an international rather than American institution. Probably in another twenty years or so one will have to become more international to capture the most interesting and exciting developments in the field, but that day has not arrived yet.

Among the many debts we have accrued in the preparation of this Handbook, the most important was Rachael Goodhue. She not only assessed the substance of many chapters, but she persuaded many reviewers and authors alike to complete their assigned responsibilities. Other critical contributors include the dedicated staff who provided support at the University of California, Berkeley, and at the University of Maryland. At Maryland, Liesl Koch served as copy editor and guided the authors' final revisions and preparation of the manuscript with sure judgment and a firm but diplomatic hand, a job best likened to driving a herd of cats. Coordination of correspondence with authors and reviewers was organized and carried out at Berkeley with exemplary efficiency and organizational skill by Jef Samp, Jessica Berkson, and Jennifer Michael, under the direction of Nancy Lewis.

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BRUCE GARDNER  
GORDON RAUSSER