

Agriculture's Futures

L. Tim Wallace

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America's Food System

With 16 Figures



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Preface

Agriculture is more than farming. It is a highly specialized, internationally industrialized, and productive food and fiber system. Its many components have an interdependent future, the sum total of which is the industry's future.

The complexity of agriculture extends throughout the economy, making it increasingly vulnerable to political, social, and institutional forces. Although one can summarize the future of agriculture more than is done here, to do so would lose the scope of the different parts of the industry that relate to each other. Awareness of these interrelationships will be the analytical focus within the U.S. food and fiber system for at least the next decade. Not recognizing these interrelationships is key to understanding why production agriculture is in such a financial bind today, why consumers are upset about food quality and food safety, why government programs to "help" agriculture are by and large failing, why the governments of other nations are upset about our agricultural trade policies, why environmentalists and many farmers are confused about the "right" long-run course for using the nation's natural resources, and why the education and research establishment has such trouble anticipating the "next" round of emerging technical, institutional, or political issues.

The entire system is increasingly consumer driven, with market power shifting to the retail outlets as they respond to consumer preferences rather than to urgings from food manufacturers. The production sector is still primarily a response mechanism adjusting cost structures where possible in line with "given" market prices. Keys to profit and survivability throughout the system lie in product/service differentiation, superior management (finance in particular), use of relevant technologies, and effective communication of all kinds.

This book has the goal of increasing public understanding about our food and fiber system by sketching its complexity and interdependence without too much simplification of the major issues bearing on agriculture's future or without losing relevance, casting the whole in a manageable analytical framework without blocking inquiry into possibilities for future development. A list of suggested readings is provided for students who desire to pursue particular links in the system for greater understanding.

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Introduction

This book addresses the future of the U.S. production/food system. Beginning with an overview of the current "state of the agricultural art," it identifies the major macroinfluences shaping agriculture's future. The changing structure of production agriculture, selected input industries, and technological influences are then reviewed in order to see what the potential supply side of the eternal food equation might be. Demand, the equation's other side, is searched for domestic and international market opportunities and matched with the consumption/retailing/distribution sectors. A portrait of farm price and income policies and the role of government in helping resolve some of the present and anticipated agricultural dilemmas follows. A glance at the impact on the environment through use of natural resources marks the end of the cursory trip through the system.

At any moment the food and fiber system is a resolution of many forces beginning with one's basic food needs and climaxing in the interactions between government policies and individual management decisions. Since each force influencing the system has a future, predictions about the system's future depend on predictions about each component's future. Although there is opportunity for compounding prediction error, there is also a need to contribute knowledge and insights about "what might be."

It is to that goal that this text is dedicated. Beyond merely informing the reader, another purpose is to push the reader past being fully comfortable within a limited base of knowledge and experience into a broadening awareness of future possibilities. In an era of geometrically expanding scientific knowledge, growing international human need, and rapidly expanding human population in geographic areas of limited economic opportunity, societies are faced with making choices about their collective futures. This issue touches on many interrelationships within the complex food and fiber system which might aid in making those decisions.

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Chapter 3. *Changing Structure of Agriculture*: N. Dorow (North Dakota University); papers from the USDA 1986 Outlook Session; R.C. Powers and D. Hobbs (University of Missouri); P. Farris and J. Connor (Purdue University).

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