

TABLE OF CONTENTS

List of Contributors	vii
Acknowledgements	ix
Introduction	
Steven Wolf and David Zilberman.....	xi

I. CONTEXT AND ANALYTIC PRINCIPLES

1. Beyond the Endless Frontier: From the Land Grant to the Entrepreneurial University Henry Etzkowitz	3
2. Generation and Commercialization of Knowledge: Trends, Implications, and Models for Public and Private Agricultural Research and Education William Lacy.....	27
3. Public Research/Private Alignments Gordon Rausser.....	55
4. Challenges for Public Agricultural Research and Extension in A World of Proprietary Science and Technology Brian Wright.....	63
5. Finance, Organization, and Impacts of U.S. Agricultural Research: Future Prospects Wallace Huffman.....	79
6. Agricultural Knowledge Systems: Issues of Accountability Cornelia Butler Flora	111
7. Institutional Innovation in Natural Resource Management: A Conceptualization and Some Australian Examples John Cary.....	125

II. EMPIRICAL STUDIES

8. **Land-Grant/Industry Relationships and the Institutional Relations of Technological Innovation in Agriculture: Longitudinal Evidence from National Surveys of Agricultural Scientists**
Frederick H. Buttel..... 151
9. **Structure of Public-Private Knowledge Networks in Plant Biotechnology: An EU-US Comparison**
Irina Theodorakopoulou and Nicholas Kalaitzandonakes..... 177
10. **Offices of Technology Transfer: Privatizing University Innovations for Agriculture**
Douglas Parker, David Zilberman and Federico Castillo 193
11. **Origins of Public-Private Knowledge Flows and Current State-of-the-Art: Can Agriculture Learn from Industry?**
Jaqueline Senker and Wendy Faulkner..... 203
12. **Institutional Relations in Agricultural Information Systems**
Steven Wolf, David Zilberman, Steve Wu and David Just..... 233
13. **Innovative Models of Technology Generation and Transfer: Lessons Learned from the South**
Lori Ann Thrupp and Miguel Altieri..... 267
14. **Whither Agricultural Extension Worldwide? Reforms and Prospects**
William Rivera..... 291
15. **Agricultural Extension: Generic Challenges and the Ingredients for Solutions**
Gershon Feder, Anthony Willett, and Willem Zijp..... 313

III. CONCLUSION

16. **Institutional Dimensions of Knowledge System Design and Analysis**
Steven Wolf and David Zilberman..... 357
- Index**..... 367