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农业信息技术与信息管理

AGRICULTURAL INFORMATION TECHNOLOGY AND INFORMATION MANAGEMENT

2007

中国农业科学院农业信息研究所

Agricultural Information Institute,
Chinese Academy of Agricultural Sciences

中国农业出版社
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前　言

2007年是中国农业科学院农业信息研究所建所50周年的重要年份，也是研究所各项事业快速发展的关键一年。这一年中信息所隆重举行了建所50周年庆祝活动，召开了全国农业信息学科发展与创新大会，国家农业图书馆改扩建工程项目也得到国家发改委的正式批准。与此同时，研究所继续以全面提高研究所的科技创新能力和公益服务能力为中心，以增强研究所的整体实力为目标，大力加强学科建设，积极争取国家科研项目，加强人才队伍建设与管理机制创新。在农业信息技术、农业信息管理、农业信息分析等学科领域取得了重要科研进展，并在农业信息资源建设、文献信息公益服务、农业科技期刊编辑等方面取得了显著成绩。

《农业信息技术与信息管理》从2002年起每年公开出版一册。主要是将我所科技人员当年发表的学术论文和撰写的科技报告选编成册，以充分检阅和展示这些成绩，尊重和激励全所科技人员的创造性劳动，更广泛地宣传和应用好这些研究成果。

《农业信息技术与信息管理（2007年）》集中反映了2007年我所在农业信息技术、农业信息管理、农业分析等学科领域的科研进展，收集了科技人员在农业信息系统管理、农业多媒体技术、农业信息网络技术、农业生产与管理信息技术、农业数据库建设、农业信息资源管理、农业信息化、农业信息分析与预警、农产品供求分析、期刊编辑等方面的研究论文与探讨类文章。

《农业信息技术与信息管理（2007年）》，共选编了我所研究人员2007年度的论文与科技报告51篇，分农业信息化战略、农业信息技

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术、农业信息资源管理、农业科技期刊、农业信息分析与宏观农业5个部分。

本书附录中收录了中国农业科学院农业信息研究所组织机构和各部门负责人的名单，以及2007年部分在研课题、出版著作、获奖成果、登记的计算机软件等情况。2007年还选编了我所大事记，以进一步增强本书的纪实性。

为方便交流，收录的学术论文题目和作者采用了中英文两种文字。文中学术观点和其它文责由作者本人负责。我们希望，通过本书的出版，进一步得到社会各界对我们工作的关心与支持，不断提高我所的科技创新能力、公益服务能力和产业发展能力，也力图通过这种形式加强与科技同行的学术交流，共同为我国农业信息科技事业发展做出新的贡献。

中国农业科学院农业信息研究所所长

2008年3月3日

Foreword

2007 is an important year when the Agricultural Information Institute, Chinese Academy of Agricultural Sciences (AII-CAAS) celebrated its 50th anniversary of the founding of the AII-CAAS, and also a key year when various undertakings of AII-CAAS gained a rapid development. In 2007, the AII-CAAS held a grand celebration of its 50th anniversary, convened the National Conference of Agricultural Information Science Development and Innovation"; and the "Remold and Expansion Engineering Project of the National Agricultural Library" had been formally approved by the State Development and Reform Commission. Meanwhile, the AII-CAAS had continued its efforts to strengthened discipline construction in a big way, actively strived to win over national project of scientific research and strengthened talent team construction and management mechanism innovation with improving the science and technology innovation capacity and public welfare service capability as its center and strengthening the overall strength of the AII-CAAS as its objective. The AII-CAAS has gained important scientific research progress in agricultural information technology, agricultural information management, agricultural information analysis, and other scientific domains and achieved significant achievements in the aspects of agricultural information resource construction, bibliographic information public welfare service, agricultural science and technology periodical editing, etc.

Since 2002, the monograph entitled "Agricultural Information Technology and Information Management" has been published each year. It mainly collects academic papers and science and technology reports written by the research staff of the AII-CAAS, so as to review and demonstrate these achievements, show respect for and encourage the creative labor of all the staff, and propaganda and better apply these research achievements even more extensively.

The monograph entitled "Agricultural Information Technology and Information Management (2007)" has centrally reflected the research progress of the AII-CAAS in agricultural information technology, agricultural information management, agricultural information analysis and other disciplines, and collected research papers and discussion articles written by the research staff in the aspects of agricultural information system management, agricultural multi-media technology, agricultural

information network technology, agricultural production and management information technology, agricultural database construction, agricultural information resource management, IT application in agriculture, agricultural information analysis and early warning, farm produce supply and demand analysis, agricultural periodical editing, etc.

The monograph entitled "Agricultural Information Technology and Information Management (2007)" has selected 51 papers and science and technology reports written by the research staff of the AII-CAAS in 2007. It is broken down into 5 parts: strategy for IT application in agriculture, agricultural information technology, agricultural information resource management, agricultural science and technology periodicals, and agricultural information analysis and macro agriculture.

The appendixes of this monograph have collected a list of the institutional organization of the AII-CAAS and division heads, as well as partial on-going research projects, published monographs, prized research achievement, registered computer software packages, etc. The monograph entitled "Agricultural Information Technology and Information Management (2007)" has also compiled the chronicle of events of the AII-CAAS so as to further strengthen the records of actual events of this monograph.

For the convenience of communication, the academic papers in this monograph have both Chinese and English title and authors. The academic viewpoints and other responsibility in the paper will be taken care of by the authors. We hope that through the publication of this monograph, we can further get the concern and support of our work by all walks of life in the society, continue to improve our science and technology innovation capacity, public welfare service capacity and industrial development capacity. In addition, we also hope to strengthen academic exchange with our science and technology colleagues through this form and jointly make new contributions to the development of agricultural information science and technology cause in China.

Xu Shiwei

Director-General
Agricultural Information Institute,
Chinese Academy of Agricultural Sciences (AII-CAAS)
March 3, 2008

目　录

前言

农业信息化战略

农业信息学科进展与展望 …… 许世卫 (3)
我国信息分类法的历史回顾与发展趋势分析 …… 孟宪学等 (13)
农业科学数据共享中心建设 …… 周国民 (19)
中国农村信息化测度指标体系研究 …… 刘世洪 (24)
加强我国农业信息知识产权保护 …… 于迎建等 (32)
国家农业图书馆知识网络系统建设初探 …… 李秀峰等 (40)
加快我国农业信息网络化与网站建设的对策建议 …… 王　丹 (49)
学术交流，促进农业图书馆事业的发展 …… 陈益忠 (55)

农业信息技术

网格技术在农业中应用前景分析 …… 王文生等 (65)
基于内容的农业科技多媒体数据的存储与检索技术研究 …… 杨晓蓉等 (73)
基于网格技术的农业信息共享系统研究 …… 谢能付等 (80)
基于“三网合一”的基层农户信息服务软件的研制 …… 丘耘等 (88)
国家农业图书馆回溯书目数据库建设 …… 赵素牌等 (91)
农业古籍图文数据库建设中的质量管理与控制 …… 盛玲玉 (98)
数字图书馆服务平台内容管理系统集成模型探讨 …… 寇远涛等 (104)
玉米数字模拟器研究 …… 诸叶平等 (112)
web N.0，互联网发展新思路 …… 孙志国 (121)
基于 Agent 技术建立小麦模拟模型 …… 刘升平等 (127)
.NET 下水晶报表传递数据的两种模式 …… 郑火国 (135)
实例简述 Hlp 帮助文件的制作 …… 崔晓阳 (145)

农业信息资源管理

图书馆信息服务能力提升策略分析 …… 赵瑞雪 (153)
农业数字图书馆研究与构建 …… 潘淑春 (159)
网络数据库引进和综合评价
——中国农业科学院图书馆工作实践 …… 颜蕴等 (169)
国外图书文献机构文献传递与馆际互借服务概述 …… 皮介郑 (183)
国家农业图书馆外文期刊馆藏结构与利用分析 …… 续玉红等 (195)
连续出版物编目存在问题及质量控制方法 …… 吴雨华 (204)
节水农业专题导引库资源的采集与分析 …… 王玉芹等 (211)
浅谈国家农业图书馆中文图书的采访模式 …… 王鹭飞 (218)
网络环境下中文期刊协调采访初探 …… 黄桂英 (222)
运用现代管理理念与手段，努力做好财务管理工作
——中国农业科学院农业信息研究所典型案例分析 …… 王义明 (229)

农业科技期刊

农业资源环境类核心期刊引文特征分析 …… 李云霞 (239)
浅析我国农业技术类期刊的研究现状 …… 曾祥秀 (247)
浅议栏目责任编辑在办刊中的作用 …… 田惠岳 (252)
《农业展望》发展探析 …… 潘月红 (256)
浅析《中国农业科学》英文版稿源和审稿人的优化 …… 赵 琪 (263)

农业信息分析与宏观农业

生物质能源快速发展下的中国大豆产业 …… 许世卫 (271)
生物质能源发展对粮食安全的影响 …… 李志强等 (281)
生物质能源对我国畜牧业的影响分析 …… 李干琼 (291)
中国农业风险管理体系：一个框架性设计 …… 张峭等 (298)
我国农业持续发展的资金需求测算 …… 王川等 (304)
中国食物安全保障政策 …… 聂凤英 (315)

中国居民主要食物消费量与营养素转换表的建立研究 …… 李哲敏 (323)
城市农产品不同零售渠道价格水平差异及其成因分析 …… 董晓霞 (335)
我国农业科学数据共享存在问题与制约因素分析 …… 张 莉 (342)
我国农业科技进步与科研投资分析 …… 王启现等 (350)
绿色农业产业化与农业保险 …… 潘月红 (358)
2007 年我国牛羊肉市场形势分析 …… 司智陟 (364)
发达国家农业增长方式转变对我国的启示 …… 魏 虹 (373)
美国农民对生产者补贴项目的态度及其对我国的启示 …… 王永春 (383)
生物柴油的国际发展现状和前景 …… 孙国凤 (391)

附 录

一、中国农业科学院农业信息研究所 2007 年主要在研项目 …… (394)
二、中国农业科学院农业信息研究所科研人员 2007 年度出版的著作 …… (398)
三、中国农业科学院农业信息研究所科研人员 2007 年度翻译出版的译著 …… (402)
四、中国农业科学院农业信息研究所 2007 年年度获奖的科研成果 …… (407)
五、中国农业科学院农业信息研究所 2007 年年度鉴定的科研成果 …… (409)
六、中国农业科学院农业信息研究所 2007 年登记的软件著作权 …… (410)
七、中国农业科学院农业信息研究所 2007 年大事记 …… (411)
八、中国农业科学院农业信息研究所组织机构和各部门负责人名单 …… (426)

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Contents

Foreword

Strategy for IT Application in Agriculture

Advances and Prospect of Agricultural Information Discipline ..... *Xu Shiwei* (3)
Historical Review and Analysis of Development Trend of Information Classification in China ..... *Meng Xianxue et al.* (13)
Construction of Agricultural Science Data Sharing Center ..... *Zhou Guomin* (19)
Study on the Target System of Rural IT Application Measurement in China ..... *Liu Shihong* (24)
Strengthen Agricultural Information Property Right Protection in China ..... *Yu Yingjian et al.* (32)
Primary Study on the Construction of the Knowledge Network System of the National Agricultural Library ..... *Li Xiufeng et al.* (40)
Suggestions for the Countermeasures of Strengthening the Agricultural Information Networking and Website Construction in China ..... *Wang Dan* (49)
Academic Exchange Has Promoted the development of Agricultural Library Undertakings ..... *Chen Yizhong* (55)

Agricultural Information Technology

Analysis of the Prospect of Grid Technology Application in Agriculture ..... *Wang Wensheng et al.* (65)
Study on the Storage and Retrieval Technology of Agricultural Science and Technology Multimedia Data Based on Content ..... *Yang Xiaorong et al.* (73)
Study on Agricultural Information Sharing System Based on Grid Technology ..... *Xie Nengfu et al.* (80)

Development of Grass-root Rural Household Information Service Software Based on "Three Networks in One" ..... *Qiu Yun et al.* (88)
Construction of Retrospective Bibliographic Database of the National Agricultural Library ..... *Zhao Supai et al.* (91)
Quality Management and Control in the Construction of Ancient Agricultural Book Image-text Database ..... *Sheng Lingyu* (98)
Study on the Integration Model of the Content Management System of Digital Library Service Platform ..... *Kou Yuantao et al.* (104)
Study on Maize Digital Simulator ..... *Chu Yeping et al.* (112)
Web N. 0, New Thought for Internet Development ..... *Sun Zhiguo* (121)
Construction of Wheat Simulation Model Based on Agent Technology ..... *Liu Shengping et al.* (127)
Two Models of Crystal Report Transmission Data under . NET Environment ..... *Zheng Huoguo* (135)
Brief Explanation of Hip Document Manufacture with Examples ..... *Cui Xiaoyang* (145)

Agricultural Information Resource Management

Analysis of the Strategy of Improveming Library Information Service Capacity ..... *Zhao Ruixue* (153)
Study and Construction of Digital Agricultural Library ..... *Pan Shuchun* (159)
Introduction and Comprehensive Evaluation of Network database: Work Practice in CAAS Library ..... *Yan Yun et al.* (169)
Summary of Bibliographic Transmission and Inter-Library Loan Service in Foreign Library and Bibliographic Institution ..... *Pi Jiezheng et al.* (183)
Analysis of Collection Structure and Utilization of Foreign Periodicals in the National Agricultural Library ..... *Xu Yuhong et al.* (195)
Quality Management and Control during the Construction of Existing Problems and Control Methods in Serials Publication cataloging ..... *Wu Yuhua* (204)
Collection and Analysis of Guide Database Resources in the subject of Water-Conservation Agriculture ..... *Wang Yuqin et al.* (211)
Discussion on the Chinese Book Acquisition Models in the National Agricultural Library ..... *Wang Yuefei* (218)

Primary Study on Chinese Periodical Coordinated Acquisition under Network Environment ..... *Huang Guiying* (222)
Strive to Do Well the Financial Management Work by Adopting Modern Management Concept and Means: Analysis of Typical Case in AII, CAAS ..... *Wang Yiming* (229)

Agricultural Science and Technology Periodicals

Analysis of Citation Characteristics of the Key Periodicals in Agricultural Resource and Environment ..... *Li Yunxia* (239)
Analysis of Research Status of Agricultural Technical Periodicals in China ..... *Zeng Xiangxiu* (247)
Discussion on the Role of Column Executive Editor in Periodical Running ..... *Tian Huiyue* (252)
Analysis of the Development of "Agricultural Outlook" ..... *Pan Yuehong* (256)
Brief Analysis of the Optimization of Contribution Sources and Peer Reviewers for the English Version of "Agricultural Sciences in China" ..... *Zhao Qi* (263)

Agricultural Information Analysis and Macro Agriculture

Soybean Industry in China under the Situation of the Rapid Development of Biomass Energy ..... *Xu Shiwei* (271)
Effect of Biomass Energy Development on Grain Security ..... *Li Zhiqiang et al.* (281)
Analysis of the Effect of Biomass Energy on Animal Production in China ..... *Li Ganqiong* (291)
Chinese Agricultural Security Management System: A framework Design ..... *Zhang Qiao et al.* (298)
Estimation of the Fund Demand for a Sustainable Agricultural Development in China ..... *Wang Chuan et al.* (304)
Food Security Guarantee Policy in China ..... *Nei Fengying* (315)
Study on the Establishment of a Conversion Table from Major Food Consumption to Nutrients Consumed by Chinese Residents ..... *Li Zhemin* (323)
Analysis of the Difference and Its Cause of Price Level of Farm Produces from

Different Marketing Channels in Urban Areas ..... *Dong Xiaoxia* (335)
Analysis of the Existing Problems and Constraints in Agricultural Scientific Data Sharing in China ..... *Zhang Li* (342)
Analysis of Agricultural Science and Technology Advances and Research Investment in China ..... *Wang Qixian et al.* (350)
Green Agriculture Industrialization and Agricultural Insurance ..... *Pan Yuehong* (358)
Science and Technology Strategic Emphasis of Regional Analysis of the Situation of Beef and Mutton Market in China in 2007 ..... *Si Zhizhi* (364)
Enlightenment of the Transition of Agricultural Growth Mode in the Developed Countries on China ..... *Wei Hong* (373)
Attitude of American Farmers to Producer Subsidy Program and Its Enlightenment on China ..... *Wang Yongchun* (383)
Current Situation and Prospect of the International Development of Bio-Diesel ..... *Sun Guofeng* (391)

Appendixes

I. Major on-going research projects of the Agricultural Information Institute, Chinese Academy of Agricultural Sciences in 2007 ..... (394)
II. Works published by the research staff of the Agricultural Information Institute, Chinese Academy of Agricultural Sciences in 2007 ..... (398)
III. Works translated and published by the research staff of the Agricultural Information Institute, Chinese Academy of Agricultural Sciences in 2007 ..... (402)
IV. Prized research achievements of the Agricultural Information Institute, Chinese Academy of Agricultural Sciences in 2007 ..... (407)
V. Appraised research achievements of the Agricultural Information Institute, Chinese Academy of Agricultural Sciences in 2007 ..... (409)
VI. Registered software copyright of the Agricultural Information Institute, Chinese Academy of Agricultural Sciences in 2007 ..... (410)
VII. Chronicle of events of the Agricultural Information Institute, Chinese Academy of Agricultural Sciences in 2007 ..... (411)
VIII. Institutional organization and division heads of the Agricultural Information Institute, Chinese Academy of Agricultural Sciences ..... (426)

2007

农业信息化战略

Strategy for IT Application in Agriculture

- 农业信息学科进展与展望
- 我国信息分类法的历史回顾与发展趋势分析
- 农业科学数据共享中心建设
- 中国农村信息化测度指标体系研究
- 加强我国农业信息知识产权保护
- 国家农业图书馆知识网络系统建设初探
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