
Introduction

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FINDING COMMON GROUND from which to discuss agricultural libraries and information services can be a difficult task. The array of users, institutions, and disciplines that participate in and help shape the provision of agricultural information represent a patchwork of different (and at times radically different) needs, interests, philosophies, and influences. This *Library Trends* issue attempts to find a common ground by covering a full range of topics on agricultural libraries and information services worldwide. It reflects the state of the art, identifies future trends and directions, and relates the present and future to the past.

This work is designed to serve as a handbook for agricultural (and other science) librarians and also can be useful to researchers, practitioners, and administrators in agriculture and related fields. The authors represent a variety of perspectives. They come from universities, library schools, national libraries, and international research and funding organizations. While all are associated with institutions in the United States and Canada, many have international experience. Some are currently involved in provision of basic and advanced services to agriculturists; others are managers in the provision of such services or in the management of the agricultural information system.

This volume covers the acquisition, management, and dissemination of agricultural information of all types and in all formats, as well as the infrastructure of agricultural information worldwide. In doing so, the articles in this issue:

1. *provide an overview of what we know today, how we came to know it, and where that knowledge is documented in the literature or in*

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- human resources.* Beth Paskoff begins the issue by tracing the development and growth of agricultural libraries and information services in the United States;
2. *identify established and emerging trends, as well as the convergence of trends that suggest where things may end up if courses are not altered or additional resources and ways of thinking are not found to modify the rate and direction of change.* Jan Kennedy-Olsen discusses the management of trends in agricultural libraries and highlights the significance of such issues as the changing paradigm of librarianship, the crises in publishing and preservation, the cost and accessibility of electronic data. Carol Ditzler, Veronica Lefebvre, and Barbara Thompson discuss several trends and practices to help guide document delivery specialists through the next decade, including a consideration of strategic planning issues to enhance service options, education and training, and collection development; the adoption of entrepreneurial attitudes, values, and practices; the incorporation of new technology into daily routines; and the establishment of stronger networks;
 3. *highlight some of the basics that are important in the field.* Rita Fisher and Michael Kinch survey the major issues and trends in agricultural reference services as they affect user education, bibliographic searching, communications, collections, and staffing. Beverlee French examines the users of agricultural information and characterizes their information-seeking behaviors, information needs, and responses to library services. She explores the effects of these characteristics on the role of the information professional and on the provision of library services, and considers the relationship of the agricultural library to the agricultural community. Nelda Elder, Brice Hobrock, Debora Madsen, and William Wiese discuss collection development, selection, and acquisition techniques applicable to agricultural libraries. The special challenges that exist for librarians and agricultural specialists who select and acquire agricultural collections are reviewed;
 4. *elucidate possible solutions to library and information problems.* Eleanor Frierson and Georg Lindsey discuss several technological solutions under development at specific institutions and their potential uses for the management of international agricultural information. They identify four technologies as being especially important—telecommunications; optical media, including CD-ROM; data conversion technologies; and expert systems and artificial intelligence;
 5. *raise a number of important questions related to international agricultural information.* Doug Jones provides an overview of the types of agricultural information, the formats for its storage and distribution, the organizations that help create and disseminate it, as well as where it may be found and how it may be accessed. He identifies

several important questions: given limited resources, what should a library try to collect? How can the library community ensure that all nonephemeral materials are collected and made available by at least one institution? What can be done to improve the identification and bibliographic control of library materials? and

6. *review some of the most useful recent literature on agricultural information, information science, library science, and agricultural and scientific research.* The paper by Jim Bird and Jessie Smith, an annotated bibliography, provides a common base of key documents for understanding the status of agricultural information and agricultural libraries. The bibliography plus the references in the articles demonstrate that much relevant information comes from fields outside library science.

In some respects, the image that emerges of agricultural libraries and librarians is not always encouraging. Efforts to collect, control, and disseminate agricultural information are beset by various problems. For example, Sarah Thomas points out that, while several new technologies hold promise, the process of bibliographic description and analysis is still labor intensive for the most part and that much of the effort expended to create a bibliographic record remains manual. Although several cooperative efforts are underway to minimize duplication of effort in establishing bibliographic control over agricultural materials, she predicts that some overlap between and among agricultural databases will continue for the near future.

It also is evident that we do not know much about some aspects of the agricultural information network. However, given what we do know about the current state of the agricultural information infrastructure throughout the world, and about solutions that have worked in some countries, is there a way to hasten the evolution of the agricultural information network country by country? Consider the Plucknett and Smith article mentioned in several articles in this issue. The article concerns international agricultural research, not libraries, but the basic principles upon which successful research networks are founded also apply to agricultural library networks (and library networks in general). In separate papers and from different perspectives, Martha Stone and Susan Harris refer to the Plucknett and Smith principles in their discussions of the present and future status of agricultural information networks. A careful reading of their articles enables one to begin to diagram the evolution of the information structure, list the qualities of more advanced systems, and suggest elements needed for progress to be made.

The articles in this issue document a large number of changes that have occurred in recent years in the agricultural information system. Such changes include a variety of sophisticated cooperative ventures in bibliographic control, technology development, networking, and other areas. Another change is the increase in both the number of individuals

and organizations that focus on the world picture of agricultural information and the intensity of their efforts. The current roles and activities of many organizations are different from what they were a few years ago: the U.S. Agricultural Information Network (which did not exist until 1988), the Consultative Group on International Agricultural Research, the International Association of Agricultural Librarians and Documentalists, the Food and Agriculture Organization of the United Nations, CABI, and the Technical Center for Agricultural and Rural Cooperation, among others. The pressures toward cooperation, the increased number of players and their increased inclination to cooperate, and the development of technologies that facilitate communication and cooperation all seem to have changed the current scene. The time appears to be right for agricultural information services to enter a new elevated phase of activity.

This issue of *Library Trends* presents the visions of various authors. It is hoped that there exist common elements in these visions that can serve as guidelines for future actions.