## INTRODUCTION

## BY IRWIN WEINTRAUB, GUEST EDITOR

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Many changes have taken place in American agriculture in the past five decades. The number of farms has declined and the percentage of the population living on farms and in rural areas has dropped significantly. Today, only about 2% of the population is engaged in farming as a livelihood. Some receive all their income from farming, others work in off-farm jobs to supplement their income. Despite this decline, food production has continued to rise. New innovations, improved technology, biotechnology and a shift away from a chemical-based agriculture to sustainable agriculture are among the major factors that are keeping our agricultural industry efficient.

Cook College and the New Jersey Agricultural Experiment Station are renowned for their high quality of instruction, and for research in plant and animal sciences, environmental sciences, marine and coastal sciences, food and nutrition, and related disciplines. Graduates of Cook College become the State's farmers, agricultural scientists, consultants, cooperative extension agents, suppliers of agricultural commodities and other professions.

New Jersey's 8300 farmers operate their farm businesses in the Nation's most highly urbanized state. In order to stay in business and to compete in an industry whose numbers are dwindling, farmers must keep up-to-date on the latest developments and new knowledge in agricultural production and farm management. Rutgers Cooperative Extension Service has an extensive system of outreach to the state's rural and urban communities. Farmers and nonfarmers, city dwellers and suburbanites, are all served by an extension service dedicated to improving the quality of life and standards of living for the citizens of New Jersey.

Responsibility for providing information to those involved in the agriculture of New Jersey lies with the Rutgers University Libraries, particularly the Library of Science and Medicine at Busch Campus, Mabel Smith Douglass Library at Douglass Campus, the Bailey B. Pepper Entomology Library at Cook Campus, and the new Agricultural Sciences Library which will open on Cook Campus in Spring, 1995. These libraries serve students, faculty, researchers, extension and experiment station personnel and the general public with current, relevant and easily accessible information for all the departments and programs at Cook College.

This issue of the *Journal of the Rutgers University Libraries* is devoted to agricultural information. The four articles in this issue are intended to give readers a perspective about the range of possibilities for finding agricultural information in a variety of formats both within and outside the library.

The New Jersey Agricultural Experiment Station has been publishing the results of its research since its founding in 1864. In the past, those publications served as a major source of information for New Jersey farmers. NJAES publications kept farmers informed about the latest research and new innovations and played a role in farmer decision making. Ellen Calhoun, Government Documents Librarian at the Library of Science and Medicine, presents the history of those publications and their impact on New Jersey agriculture. She gives details about the growth and decline of the NJAES publications and the influence of change on the topics and formats.

Agricultural Experiment Station publications served as an important information resource for over a century. As agriculture improved and modernized, other resources emerged that allowed those seeking information to pursue a wider choice of options. My paper, "Finding Agricultural Information at Rutgers," introduces readers to the vast array of sources available in both print and electronic formats. The resources described represent some of the major printed and electronic databases that users will consult when seeking information in their disciplines of interest. The paper provides an overview of the options that are available for finding global information both within the library and outside the library walls.

Information dissemination methods are now in a transition from total reliance on the traditional printed sources of information to computerized methods of information dissemination. Publications which used to require large amounts of paper, printing, and processing are being replaced by machine readable formats. Bruce Barbour, a Cooperative Extension Agent in Sussex County, illustrates one aspect of reliance on electronic dissemination in his paper, "The Rutgers Cooperative Extension Bulletin Board." The scope of information that the Board can offer and the ease of accessing and transmitting data make it a practical and efficient way for users to find information from any site at their convenience. Barbour gives readers a sense of what the future will bring in terms of transmitting agricultural information to the homes and offices of rural and urban clients.

Lill Maman educates us on an important aspect of agricultural history with a bibliography of books in the Rutgers Libraries on women in world agriculture. The examination of the history of women in farming in all societies makes women's importance as a mainstay of agriculture clear. The sources cited show the contribution of women in agriculture ranging from the small subsistence plots cultivated in developing countries to the larger more efficient farms in developed countries. It is the editors' hope that this bibliography will excite your curiosity and motivate you to read more about the history of women in agriculture.

Agriculture in its broadest sense encompasses all of the sciences and some of the social sciences. The information needed on a daily basis by those involved in agriculture is enormous. In order to provide this information, Rutgers provides access to databases, libraries, electronic bulletin boards, books and other resources. The future will witness changes which make these sources more efficient, more accessible and economically feasible for all users. The articles in this issue provide examples of how Rutgers is meeting the challenges of the information explosion in agriculture.