
BOOK REVIEWS

Hand book of Libraries, Archives and Information Centres in India. Editors B. M. Gupta, B. Guha, T. N. Rajan, R. Satyanarayana and M. L. Saini. Information Industry Publications, New Delhi; Vol I, pp xvi plus 368, 1984-1985, Rs. 230/-

Information or knowledge is a vital source of modern decision making as well as of socio-economic development. The change in information concepts and technologies has been facilitated by advancement in technology, computers, telecommunication, micro-electronics, printing and reprographic technologies. Thus in the age of information explosion, the publication of the Handbook of Libraries, Archives and Information Centres in India is welcome. This is a series of five volumes. The first two volumes deal with libraries and archives, the next two volumes deal with information systems, services and programmes. The fifth volume deals with professional organisations in India. In the preface the editors have presented a synoptic view of the main themes that will be covered in the five volumes.

The volume one under review covers 24 papers in four sections. It focuses on traditional librarianship and deals with historical evolution, present status and future directions of national level libraries, (3 papers) academic libraries (3 papers) special libraries (10 papers) and professional education, research and manpower (8 papers). This will help in identifying the gaps and the steps to be taken to overcome them.

The first section on national libraries deals with National Libraries (Calcutta), National Medical Library (New Delhi) and Indian Agricultural Research Institute Library (New Delhi). The discussion is centred around the historical evolution, organisation and administrative aspects and services provided by these libraries. There is also a mention about the conservation and preservation programmes and the training programmes organised by them. For the benefit of the reader, the earliest and the significant publications available in these libraries are mentioned. A paper on National Science Library will enhance the utility of the handbook.

The section two on academic libraries deal with University, College and school libraries. University Grants Commission has done a commendable work to develop University libraries. For improving the effi-

ciency of University libraries, the author suggests; the library buildings should be planned keeping in view the type of University; the centralised acquisition and processing should be established; and improving the reader services. The College libraries with a few exceptions suffer from inadequate book stock and annual grants; inadequate staff, poor services and unsatisfactory physical facilities. There is a need for change in emphasis in instructions from class-room centred to library centred.

The importance of school library was stressed by Secondary Education Commission (1952-53). One of the aims of school library is the inculcation of reading habit. The school libraries deserve a sympathetic consideration from the authorities. A book bank is a boon to poor students.

Section three on special libraries deals with agriculture, medical, government, social science, museum, film, USIS, Law and oriental studies libraries. The Indian Council of Agricultural Research has done a good job by providing funds for maintaining and running libraries in agricultural research institutes and universities. Each agricultural library renders service to its own clientele at the local level and virtually nothing exists at the national level. In the field of health, allopathic medical institutions have good collections, while hospitals and indigenous system of medicine institutes are not so fortunate in this respect.

For the Government Libraries which number over 5,000, there is an urgent need for setting up standard norms for the smooth functioning of these libraries. For the use of these libraries by research students co-ordination with universities and research institutions is desirable. The social service documentation centres and libraries had a slow growth, there is an urgent need for resource sharing and information analysis. The authors plead for a national information system in social science.

A museum library supplements and complements the functions of a modern museum. It serves as a living centre for education and research. The information about the value of collections in the museum enliven the interest of the people in the objects of the museum. Films are the media for mass communication, entertainment and education. The audio visual aids play a great role in teaching and learning and so the presentation of quality educational films is imperative.

The schools of library science have to cater for this. The United States Information Service has established a number of libraries which are doing a good job.

The law libraries attached to the Universities, Supreme Court and Bar Council of India are better in comparison to their counter parts in high courts, judiciaries and colleges. This is due to lack of worthwhile services and shortage of funds. The financial support provided to oriental libraries needs to be augmented. There is also the problem of the lack of uniform procedure for classification. Another pressing problem is the preservation of old books and manuscript. A chapter on British Libraries and an other on technological and engineering libraries will be useful addition.

The last section on education, research and man power deals with library and information science education, research in library science including classification, continuing education, user education and man power planning. In the field of education in library science and information science, there has been a rapid growth; there is an urgent need to consolidate and improve the existing programmes. In the area of research, classification research has received the greatest attention, but gradually new problems of management and information processing are receiving attention. A plea is made for setting up of centres for advanced study to carry out research in unexplored areas. There is a predominance of female students in library science courses during the recent years and some measures have to be taken to arrest wastage and drop out. In order to keep abreast with the advances in the discipline of library and information science, the personnel have to keep themselves by reading and by attending seminars and conferences. There is also a need that the users of the library are given some education about the proper utilisation of library facilities. For assessing the manpower demands, there is a need to carry out the surveys emphasising the requirements for the jobs and to reframe the courses in order to meet those requirements.

In sum, the hand book of libraries, archives and information centres in India is a bold and imaginative endeavour on the part of the editors. Except four papers which have appeared in journals, other papers are original publication for this book. The book is readable and getup is nice. The book will be of interest to teachers and students of library/information services, professionals, general reader and research student. The reviewer hopes that the other Volumes will be free of printing errors. The editors and contributors deserve compliments for their efforts. It is

hoped that this hand book will receive a large audience and other volumes in the series will be out without inordinate delay.

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Advances in Applied Biology, edited by T. H. Coaker, (Published by Academic Press Inc. (London) Ltd, Orlando, Florida 32887, USA), 1984, Vol. X, pp. 300, Price \$85.00, £63.00.

Recent years have witnessed an accelerated pace of research in the field of genetical and physiological improvement of seed stocks. Some noteworthy achievements have been made in this crucial area of biological research. This volume covers five most important topics related to this area of study.

The paper on "Plant somatic hybridization gives an exhaustive account of the current status of this important and challenging area of biological research. During the past couple of years, a number of significant advances have been made in somatic hybridization. Techniques for obtaining reproductivity at high levels of fusion of protoplasts have been developed. Also methods for selection and recovery of somatic hybrids, first between sexually compatible species and then between sexually incompatible species have been evolved. This has lead to the creation of novel interspecific hybrids, tentatively designated as new species.

The second paper "Incompatibility in Angiosperms, Significance in crop improvement" is another article of vital interest to plant breeders, engaged in improvement of crop plants through hybridization. The problem is known to biologists and plant breeders for more than 200 years and has remained a stumbling block to plant breeders interested in transfer of character(s) from one taxon to another as well as to those interested in Phylogeny. The review briefly summarizes a number of methods evolved by Plant Breeders such as grafting, bud pollination, regulation of environmental factors such as temperature, humidity and CO₂ concentration during pollination, application of plant growth regulators, deployment of recognition pollen, use of immuno-suppressants, organic solvents etc. The achievements obtained so far have been highlighted.

The paper on "Cytoplasmic male sterility in pearl millet *Pennisetum americanum* (L.) Luke presents a

clear and comprehensive account of researches carried out in USA and in India during the last two decades on this aspect. The commercial grain hybrid using CMS mechanism was first produced in India in 1965 leading to a spectacular increase in overall production. However, the production suffered a severe set back due to the susceptibility of this hybrid to downy mildew caused by the fungus *Sclerospora graminicola* which resulted in severe epidemics in the following years, and by 1974 the production of this crop dropped from 8 million metric tons to 3.6 million metric tons. Breeders soon realized the need to replace the CMS source Tift-23 which was highly susceptible to the disease with a resistant one, and they were successful in developing resistant CMS lines for producing hybrids. Pearl millet production again picked up and showed an upward trend, a remarkable achievement for the breeders and pathologists!

The paper "The Chenopodium grains of the Andes: Inca crops for modern Agriculture" provides invaluable and extensive information. The evolution, distribution, morphology and ecophysiology, diseases and pests, agronomy, nutrition, processing, breeding methods for the two Chenopodium grain crops Quinoa (*Chenopodium quinoa* Willd.) and Canihua (*Chenopodium pallidicaule* Allen) which have high

potential for exploitation in the dry highland areas of tropical and temperate regions.

The article "Seed quality of grain legumes" by A. A. Powell *et al.* deals with the nature and various aspects of seed quality physiological and pathological changes in storage and mechanical damage in relation to seed quality. The paper presents a critical appraisal of different methods of testing seed quality currently developed and practiced.

The volume provides a wealth of information in the new and fascinating areas of Applied Biology. Various papers presented in the volume are as much a tribute to the editors as to the authors who have collected voluminous literature and have made painstaking efforts in presenting these in a clear and lucid manner. Researchers, teachers, students of Agronomy, Plant Breeding, Seed Science and Technology will find the volume rewarding and tempting to retain the same in their book shelves.

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NEWS

THE IMPORTANCE OF SMALL-SCALE PHYSICS RESEARCH

... "In the US, small-scale research in physics is organized around approximately 1800 independent groups, some as small as a single faculty member with one graduate student, or an experimenter with a few colleagues in a government or industrial laboratory. Many of these groups are relatively free to shift their goals as scientific opportunities unfold, and are flexible enough to move rapidly in new directions. Independence is the hallmark of this flexibility, and the research could reasonably be described as 'independent group research'. . . . To appreciate the impact on society of research in small physics one need only think of what the world would be like if the transistor had

never been developed. It would be a world without microprocessors, computers and the vast network of data-processing equipment on which science, governments and businesses depend, a world without instantaneous global communications and without the countless feedback and control devices that are essential to everything from jetliners to pacemakers."

[(Daniel Kleppner (Massachusetts Inst. of Technology) in *Physics Today* 38(2):78-85, Mar 85) (Reproduced with permission from Press Digest, *Current Contents*®, No. 22, June 3, 1985, p. 13. Published by the Institute for Scientific Information®, Philadelphia, PA, USA.)]