

BUILDING DIGITAL LIBRARY IN AGRICULTURAL UNIVERSITIES WITH SPECIAL REFERENCE TO UTTAR BANGA KRISHI VISWAVIDYALAYA CENTRAL LIBRARY: AN INTRODUCTION

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ABSTRACT

This paper explores the development of digital library in agriculture universities. Most of the libraries today, offer a wide range of digital services to their users. The Indian Council of Agricultural Research & Government of India has taken several steps for mobilization of libraries. The paper discusses the different initiatives of digital library and need for effective information system for agricultural researchers and its user. Here an introduction of UBKV, dealing with digital environment has been discussed.

Keywords: *Digital Library, National Digital Library-Initiatives.*

INTRODUCTION

The growth of the World Wide Web has brought significant changes in the way of access to information. Especially, this is true for those online information retrieval systems and digital libraries that aim to offer information access, like Dialog, PubMed, the Network Digital Library of Theses and Dissertations etc. Now-a-days, with the brisk growth of information, it is quite difficult to retrieve the right information at the right time. Recent advances in the field of information technology have contributed to improve the services of libraries and libraries have become major providers of information in all formats.

Digital Library: Need and Purpose

In a library, printed documents are heavily used by users especially during their examinations. Online information platforms improve access to e-resources especially dissertations or thesis in a networked environment. Digital Library play crucial role to enhance the e-resources to the patrons. Here are some advantages of Digital Library-

- Assists students in their project work.
- Anytime availability information resources.
- Multi-user access.
- No need to manage print collection.
- Improved appreciation of image of the library.

Implementing the Criteria of Digital Library

Trained staff: It is necessary to appoint trained staff or to promote existing staff who have the adequate skills for setting a Digital Library Project. That needs to hire new staff or re-assign existing personnel to the digital library project.

IT infrastructure: It is essential for setting up the digital library server, digitization equipment, and network connectivity.

Digital Library Software: Installation of digital library software is identified during the planning of a digital environment. For off-the-shelf digital library software (free or purchased), this will include tasks such as installation, configuration and testing of the software on the digital library server. To develop in-house software, this will require identifying/hiring programming staff and a system analyst to lead the development.

Adequate policies: Making adequate policies and specifications related to source material, selection criteria, copyright, document formats, metadata, and search and retrieval which were identified in the planning stage.

Work flow: It is important to establish digital environment by finalizing workflows and job responsibilities for the digitization and loading of content to the digital library.

Setting up the digital library collection site and user interface: This mainly involves defining and configuring the skeleton digital library collection on the digital library server computer using the installed digital library software and branding the collection by preparing an appropriate

home page, collection description, help pages etc. and finally release of digital library collection for use.

Agricultural Education: Indian perspectives

ICAR, as an apex agency, is responsible for coordinating the research, education, and extension activities in the entire country. In this system three sets of institutions are involved, namely 97 ICAR Institutes, 60 All India Coordinated Research Projects and 69 agricultural universities spread across the country. This is one of the largest national agricultural systems in the world.

Digital Library: An Introduction by ICAR

Digital library is a key driving force for various purposes, such as education, innovation and knowledge economy. It covers the gaps that exist in the wide range from literacy to advanced knowledge discovery and development of knowledge. Digital library enables integrated knowledge gathering on diverse topics on core issues from economic, strategic and social sectors. Users can visit individual websites to access e-resources. Users need to learn retrieval techniques/search techniques separately. Knowledge Repository on most subjects is not yet available for scholars. E-Learning environments promote the access of information from all available sources.

Building Digital Environment in Agriculture Universities

A meeting of Librarians of Agricultural Universities was held at National Agricultural Science Complex, New Delhi. Librarians from 69 Agricultural Universities and other delegates participated and interacted during the one day meeting to enhance the digital environment. In the meeting the concept of LIBRARY was elaborated as Learning Station, Intelligent Tank, Bureau of Knowledge, Reference Centre, Academic Centre, Resource Centre and Yard of Tools and Technology. Here are some issues which are manifested with library-

- The library can be said as powerful knowledge centre and librarians provide access of resources to the users. E-learning is being initiated in all the AUs libraries. The contribution of E-Granth, Krishi Kosh, Krishi Prabha and CeRA is enormously great in development of digital libraries across the country.
- ICAR promotes the activities which are strengthening the submission of documents to ICAR, several issues. Librarians play major role to introduce e-learning i.e. e- courses, e- books and e- journals in their libraries.

- Agriculture Education Division has taken several initiatives to improve the quality of higher education in the country and librarians are taking part to enhance the impact on the student's future with adequate digital aspects.
- MHRD has formed e-ShodhSindhu merging three consortia initiatives, namely UGC-INFONET Digital Library Consortium, NLIST and INDEST-AICTE Consortium. It is building a catalogue of Indian Agricultural Universities and more than 4000 colleges are associated with it. The contribution of e-Sodh Ganga-a repository of thesis, e-Acharya MOOCS etc are quite massive.
- Consortium for e-Resources in Agriculture (CeRA) was established in 2007. It provides the accessibility of scientific resources. 147 institutions in NARS have 24x7 online access to important journals. Thomson Web of Science for Science Citation Index (SCI) has been made available to the Lead Institute (IARI), but the facility is available to all members of CeRA.
- Interconnectivity of the AU libraries may be achieved by using KOHA software.

Uttaranga Krishi Viswavidyalaya Central Library

Uttar Banga Krishi Viswavidyalaya (UBKV), Central Library has undergone a fair and steady growth and development during this span of time (from 2001-February, 2016). Since January, 2015 full-fledged library automation (Circulation) has already been started (with Bar Code Generation). Internet and other e-resources are working satisfactorily. CeRA (Consortium for E-Resource in Agriculture), CABI Journal and Document Delivery Service is working very well which is greatly helped to our students, teachers and scholars. The university central library gradually is becoming very rich to meet the requirements of students, teachers and scholars. At Present library automation is running with the help of LIBSYS Library software. The current status of UBKV central library collection is depicted in Table I.

Table I Current status of UBKV central library

Document Type	Total
Books:	31917
Journals: Bound Volume	4034
Journals: Titles subscribed other than CeRA list)	70
International Journals (Three are subscribed On-line and	

Table I Contd...

rest subscribed as print copy other than CeRA list)	08
CeRA e-Journal consortium (now J-Gate)	2000+ e-journal
On-Line CABI with Full text e-Journals through on-line	one user
Periodicals:	06
CD-ROM	131
CD-ROM Database	08
PhD (Digitized)	65
M. Sc Dissertation (Digitized))	205
Library Security: All area of library under monitoring through CC TV Camera	12 Users
LAN connectivity is established, moreover Wi-Fi system is also available in the central library, UBKV	Multiple users
Book Bank for JRF JRF/NET, UPSC, GMAT, TOEFL, GATE, CAT and for SC/ST Students	1000

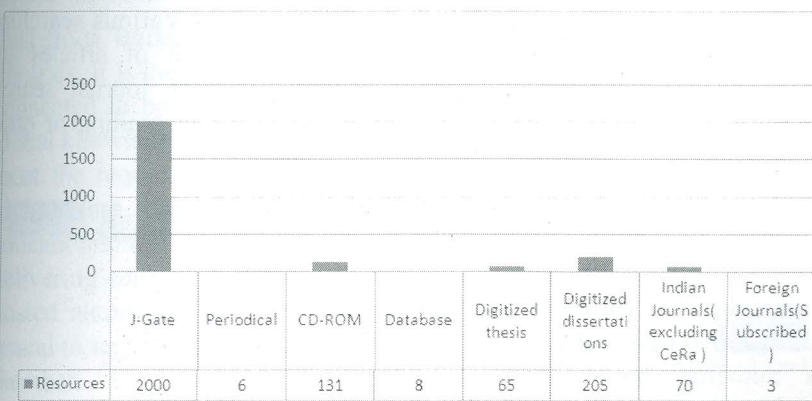


Fig. 1 Graphical presentation of e-resources

Knowledge Dissemination System of UBKV Central Library

Library Services

- Bibliographic service.
- Current Awareness Service.
- Indexing and Abstracting (CABI Abstract).
- DDS: Database Service
- Reprographic Service
- SDI

- Technical enquiry service
- Union Catalogue of Periodical
- Computer Application
- CD-Rom Services
- Extension Services

Consortium for e-Resources in Agriculture (CeRA)

CeRA is a strategic alliance of ICAR network institutions and state agricultural universities. National Agricultural Innovation Project has funded for establishing the CeRA at Indian Agricultural research Institute (IARI), New Delhi, to provide journals, to develop science citation index facility for evaluation of scientific publications (Agri-informatics & crop-informatics) and to promote and e-access culture amongst scientists. UBKV is emerged with 2000+ e-journals i.e J-Gate. Various searching techniques are used by users such as quick search of articles via keywords, advanced search, browse journals and my journal search. Document delivery service is made through library by mailing or other communication.

The image shows the home page of UBKV in CeRA. At the top, it says "Consortium for e-Resources in Agriculture" and "Uttar Banga Krishi Viswavidyalaya". Below that, there is a "J-Gate" logo and a navigation menu with options: "Basic Search", "Journal Finder", "Author Finder", "Advanced Search", "Search History", and "View Marked Results". A search box is present with the text "Q Basic Search" and a "Search" button. Below the search box, there are checkboxes for "Peer-Reviewed/Scholarly Journals" and "Professional & Industrial Journal". On the left, there is a "J-Gate Subjects" section with checkboxes for "Select All", "Agricultural & Biological Sciences", "Arts & Humanities", and "Basic Sciences".

Picture 1 Home page of UBKV in CeRA

KrishiPrabha - Indian Agricultural Dissertations Repository

KrishiPrabha is established as a sub-project under NAIP, mainly to develop, organize and sustain knowledge base of Indian Agricultural Dissertations in digital form and make it accessible on-line. The

repository is created by Chaudhary Charan Singh Haryana Agricultural University, Hisar, (Haryana), and is targeting archive of 10,000 electronic thesis and dissertations (ETDs) submitted to state agricultural universities and agricultural deemed universities of the country since the year 2000.

Open Access Initiatives

e-Granth/ Krishkosh

Strengthening of Digital Library & Information Management under NARS, e-Granth is the first ever initiative by ICAR designed with 'Open Access' as one of its objectives. The consortium, sponsored by NAIP (ICAR), has 12 partner institutions. They will be using New GenLib or Koha software (towards KOHA) for implementing web online public access catalogue (OPAC).

Best Book Buddies

Best Book Buddies is a SaaS platform of globally connected automated libraries. It is great place for book lovers, authors, publishers and anyone connected to books in any way. Through networking, it facilitates the global knowledge for all. The platform is a result of 4 years research will meet the requirements of libraries, it will provide free automation and maintenance, free tech-issues. BBB creates a transforming effect on education and thinking process, creating possibilities of new methods of delivering education. BBB gives the facility of having free of cost Cloud hosted automated libraries. All Agricultural Libraries under ICAR are bound to register the library on BBB platform. UBKV also is a registered member. So, that will save money for hardware, software and maintenance of library automation. KOHA library software can also be shifted to BBB Cloud. All the bibliographic databases have been converted to KOHA Library management system and a repository of books databases will be established centrally. All library management activities including circulation are running through KOHA.

Elsevier Science Direct eBooks through CERA Consortium

Elsevier Science currently provided access to a huge collection of e-books through IP authentication. All the State Agricultural universities (SAU) are accessing more than 1700+ e-books. Monitoring and analyzing the world's research output. Elsevier eBooks help researchers explore unfamiliar subject matter, branch into related disciplines and test novel theories, giving rise to those serendipitous moments of discovery that are often key turning points in research.

<http://www.indiaagrstat.com/default.aspx>

Consortium for e-Resources in Agriculture (CeRA), ICAR - DKMA has initiated important socio-economic information through [Indiaagrstat.com](http://www.indiaagrstat.com). It is accessible for SAU's (from March, 2017) existing registered static IP addresses. [Indiastat.com](http://www.indiastat.com) was launched on 14th November 2000, which was inaugurated by the Minister of State, Dept. of Statistics, Planning and Public Grievances, Govt. of India, **Shri Arun Shourie** at New Delhi. [Indiastat.com](http://www.indiastat.com) serves with authentic and perhaps the most comprehensive compilation of secondary level socio-economic statistical information about India and its states on various socio-economic parameters. These parameters are: General Info, Demographics, Economy, Agriculture, Civil Supplies and Consumer Affairs, Environment and Forest, Industries, Infrastructure, Companies, Education, Health, Housing, Labour & Workforce, Polity, Media, Insurance, Tourism, Crime & Law, Social Welfare & Developmental Schemes etc.

[Indiastat.com](http://www.indiastat.com) provides secondary level socio-economic statistical information about India, its states, regions and sector. [Indiastat.com](http://www.indiastat.com) is a cluster of 56 associate websites wherein 19 websites are sector-specific, 6 are regional websites and 31 websites are state-specific. Subscribing [Indiastat.com](http://www.indiastat.com) will give an automatic access of its 56 associate sites. [Indiastat.com](http://www.indiastat.com) contains all the statistical information available on its 56 associate websites. However data is made available separately on these 56 associate sites just for an ease of navigation. If require, subscription to these associate can also be taken separately.

CONCLUSION

The Information needs of the users are also changing rapidly. NewAge completely depends on internet and digital contents. Green library concept already emerged throughout the world. Therefore, it is very essential for the librarian to improve the digital concept and techniques. The process of digitization requires highly specialized professionals. Digital library is a costly affair which involves a huge amount of budget. By working together or with consortia, institutions with common goals can gain greater efficiencies and reduces the overall cost involved. The digital library concept will help the information professional to provide more accurate and relevant information to their users.

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