

### **Remarks of the reviewer:**

The title doesn't seem to make sense. The word 'of' in the title may be replaced with available. The word university in the title must be plural as there are six universities under study. Abstract should communicate the central idea and contents of the paper. Title uses the concept 'electronic resources' whereas the body of the paper uses 'digital agricultural resources'. Introduction is too general. Necessity of the study does not show the necessity of the where is it represents necessity of the e-resources. In summary researcher has just rewritten the information collected from websites and other sources about the university, its library and available resources. There no uniformity in presentation of information. This paper cannot be said as a research paper as there is no any research. The manuscript is not sufficiently robust and technically sound. There is no suitability and technical standard of the methods. There is no question of sufficient details of the methods/process. The paper lacks in proper results, discussion, relevant and current references, and actual facts and figures.

### **Suggestions:**

Researcher must think and decide what kind of paper he/she would like to write. Just finding availability of e-resources does not have any research value. Even if you want to write paper on availability of e-resources note down parameters and collect the data accordingly. You may find out use of e-resources. Give meaningful title to the research paper. Find out and note down research problems, finalize objectives, hypotheses. Design questionnaire, collect data, present it through tables and figures, analyse, apply statistical test wherever essential and draw conclusions. Write paper in scientific language. Get proper guidance from experts for how to write paper. Best of luck

### **A STUDY OF ELECTRONIC RESOURCES OF AGRICULTURAL UNIVERSITY SPECIAL REFERENCE TO RAJASTHAN, INDIA**

### **Abstract**

The effectiveness of agriculture research and training programmers, which are crucial to the development of a nation's agriculture, depends heavily on convenient access to informational resources. E-Resources are more in demand these days. The library's patrons favour these materials above printed materials. **Digital agricultural resources** are currently widely

employed because of their useful and time-saving qualities. These resources are now preferred over physical resources because of a number of alluring features, such as quick accessibility and various access.

**Keywords:** Digital agricultural resources, agriculture research and training programmers, industrial revolution, Information and communication technology

## **INTRODUCTION**

Since the beginning of the human race, agriculture has played a crucial role in human life. It provides for the fundamental demands of food, clothing, and other necessities for both human and animal existence; as a result, it is crucial to the advancement of human civilization. The main driver of progress that resulted in the rise of civilization was agriculture. Domesticated animal and plant husbandry helped to generate a surplus of food to fulfill the rising demand of highly stratified and densely inhabited cultures. The majority of people worked in agriculture as a profession prior to the industrial revolution.

India is mostly an agrarian nation; hence agriculture is significant there. Singh<sup>1</sup> stated pretty well that India's agriculture. The most important sector for providing food and nutritional security, sustainable development, and the reduction of poverty has existed since ancient times. It is the primary industry in India that creates employment possibilities, especially in rural regions, for the great majority of the population.

The effectiveness of agriculture research and training programmers, which are crucial to the development of a nation's agriculture, depends heavily on convenient access to informational resources.

More over 70% of India's rural population depends on agriculture, making the country basically an agrarian nation. Immediately following Independence, India placed a lot of attention on building an infrastructure for agricultural education and research. The Indian Council of Agricultural Research (ICAR) was reorganized in 1965, shortly after the Department of Agricultural Research and Education (DARE) was established under the Ministry of Agriculture of the Government of India.

## **NECESSITY OF THE STUDY**

One of the world's most extensive agricultural systems is found in India. The country's extensive agricultural sector has benefited greatly from agricultural education and research operations. Information and communication technology (ICTs) applications and its introduction have further improved the system by turning physical papers into digital files and making these resources accessible both offline and online. ICT is currently playing a critical role in enhancing the quality of life for farmers in both rural and urban areas. It aids an Indian farmer in obtaining pertinent information on agribusiness management, market support, crop production technology, agro-processing, and inputs. Through clever exposure of agriculture teachers and virtual classes, the internet can aid in the education of rural farmers.

E-Resources are more in demand these days. Scholarly libraries. The library's patrons favour these materials above printed materials. According to Jewell and Mitchell<sup>2</sup>, these resources "bring the research findings into the researcher's desktop and the time consumed on accessing the desired documents become predominantly less" due to their simple and quick search and display capabilities. The quality of service provided by libraries is further improved by the availability of E-Resources online. As a result, researchers and academic libraries now use E-Resources without hesitation.

The administration of e-resources in academic libraries is challenging due to their exponential growth. Users can lead, guide, and direct in a methodical way in order to accomplish the ultimate goal of a library, which is user happiness, with the help of efficient management of e-resources. In their capacity as managers of e-resources, librarians respond to users' growing demand by adequately addressing their informational demands. He should be well-versed in the numerous e-consortia, as well as how different E-Resources handle the rising demand from their customers by effectively meeting their informational needs. He ought to be well-versed in the various E-Consortia. Various E-Resources that can be accessed for free or that the relevant institution has subscribed to, as well as offline collections that are housed at the library.

## **A SUMMARY OF THE AGRICULTURAL UNIVERSITY LIBRARIES IN RAJASTHAN**

The state government of Rajasthan gave agricultural education, research, and expansion great priority because it recognized the importance of agricultural growth and progress in ensuring the livelihood security of its population. Shri Karan Narendra Singh College of Agriculture

was the first agriculture college recognised in Rajasthan. It was established in 1947 by RawalNarendra Singh at Jobner, District Jaipur, by upgrading an institution known as the "Anglo- Vedic High School (Established in 1893)". It was Rajasthan's sole college with a focus on agriculture education when it was first built. A second college, the Rajasthan College of Agriculture (RCA), was founded in Udaipur in July 1955. There were only a handful of agricultural universities in India when the first one was founded in 1960 at Pantnager (Utter Pradesh)there were only these two agricultural colleges in Rajasthan.

### **RAJASTHAN'S AGRICULTURAL UNIVERSITIES**

There are six Agricultural Universities in Rajasthan, each located in a different region of the state. One university is devoted to veterinary and animal sciences, and five universities are specifically for agriculture education. Swami Keshwanand Rajasthan Agricultural University, Bikaner, which was founded in 1987, is the oldest agricultural university in Rajasthan.

**SWAMI KESHWANAND RAJASTHAN AGRICULTURAL UNIVERSITY,  
BIKANER**

**Former Name: Rajasthan Agricultural University**

**Established : 1987'**

**Chancellor :ShriKalraj Mishra**

## **Vice Chancellor : Prof. Arun Kumar**

Swami Keshwanand Rajasthan Agricultural University (SKRAU), in the Indian State of Rajasthan, is home to Rajasthan Agricultural University (SKRAU), formerly known as Rajasthan Agricultural University. The Rajasthan Agriculture University Bikaner Act, 1987 separated the University, which had previously been a component of the Mohanlal Sukhadia University in Udaipur. In 2009, it was renamed in honour of the social reformer and liberation fighter Swami Keshwanand. In 2019, Raksha Pal Singh was named vice chancellor.

## **CAMPUSES AND COLLEGES**

There are three colleges in the university. Home science, agricultural business management, and a college of agriculture. In 2013, Jobner College of Agriculture was separated from it.

## **CENTRAL LIBRARY**

The Central Library of SKRAU opened its doors in 1987. It has a sizable collection of both physical and digital documents. Agriculture and related subjects are the library's main focus areas. The library is well-equipped with ICT-enabled communication tools like computers, the Internet, CD-ROMs, databases, etc. Students, research scholars, faculty members, scientists, and staff members are primarily its users. Online access to CeRA and Agri Database members is provided by the Krisi Prabha Project.

Through the Consortium of E-Resources in Agriculture (CeRA), the Library Systems of SKRAU can access foreign online journals. KRISHIPRABHA Project offers an internet database for agriculture. Access to online databases and CD-ROMs is also offered.

## **MAHARANA PRATAP UNIVERSTIY OF AGRICULTURE AND TECHNOLOGY, UDAIPUR**

**Vice- Chancellor- Dr. Ajit Kumar Kamatak**

**Location Udaipur, Rajasthan**

**Campur - Urban**

**Website – [www.mpuat.ac.in](http://www.mpuat.ac.in)**

**<https://www.mpuat.ac.in/index.php>**

The then-Rajasthan Agriculture University, Bikaner was divided into the Maharana Pratap University of Agriculture and Technology (MPUAT) on November 1, 1999, thanks to a legislative act passed under the U.G.C. Act. at Udaipur. It is now responsible for finding, creating, and implementing innovative production technologies for the development of agriculture in the southern and southern-eastern regions of the state of Rajasthan. It teaches subjects like horticulture, fishery, agricultural engineering, home science, veterinary science, and animal husbandry. Six component colleges make up the university, five of which are located in Udaipur and one in Bhilwara.

Because the State is large and has various agro climatic areas, it was thought necessary to handle the issues with dry and semiarid agriculture individually. As a result, the State Government established "MaharanaPratapUniverstiy of Agriculture and Technology" in honour of the famous patriot and independence fighter MaharanaPratap. Recognizing horticulture's contribution. Because the State is large and has various agro climatic areas, it was thought necessary to handle the issues with dry and semiarid agriculture individually.

The constituent colleges of Maharana Pratap University of Agriculture and Technology are:

### **CENTRAL LIBRARY**

The central library for the university is located in the Rajasthan College of Agriculture in Udaipur. The university's colleges each have their own, distinct libraries. These libraries operate under an open access policy. Every library occupies a large hall with a square footage of roughly 1000. and provide its readers with around 150 seats. On diverse science and technology topics, these libraries have books, bound journals, standards, and technical reports. These libraries are furnished with cutting-edge technology, including computers, photocopiers, microfilm readers, and colour televisions. Additionally, each of these libraries has a book bank.

Each of the six constituent colleges has an electronic library and offers students free access to the internet. The central library is located in the Rajasthan College of Agriculture in Udaipur. Users can access the Indian Research Institute of Agriculture's online journals. Users have the option of downloading and printing the document. Both [www.mpuat.ac.in](http://www.mpuat.ac.in) and <http://mpuat.digitaluniversity.ac/> are the university's official websites.

Users can access the Library Database's separate CD-ROM Database for references. The CAB CD and AGRIS CD ROM databases are subscribed; however CAB CD is continually renewed. Currently, scientific journals can be accessed online via CeRA in three different ways: RA (Request Article), FT (Full Text), and AL (Available in Library). Only the Abstracts are now accessible through LAN despite the fact that all Doctoral Degree these in this Library have been digitalized and this process is ongoing.

CD Database

CAB CD

CeRA( Consortium for E-Resources in Agriculture)

AGRIS – International System for Agricultural Science and Technology

[https://en.wikipedia.org/wiki/Maharana\\_Pratap\\_University\\_of\\_Agriculture\\_and\\_Technology](https://en.wikipedia.org/wiki/Maharana_Pratap_University_of_Agriculture_and_Technology)

**SRI KARAN NARENDRA AGRICULTURE UNIVERSITY (SKNAU), JOBNER**

**Type – Public**

**Established – 2013**

**Chancellor – Governor of Rajasthan**

**Vice- Chancellor – Balraj Singh**

**Location – Jobner, Rajasthan India**

**Affiliations \_- ICAR**

**Website – [www.sknu.ac.in](http://www.sknu.ac.in)**

- i. According to the Agriculture University, Jobner Act, 20 of 2013, and the name amendment Act, 23, the Government of Rajasthan established Sri Karan Narendra Agriculture University, Jobner-Jaipur in September 2013 with the goal of offering university-level instruction, conducting research, and offering extension education programs in the field of agriculture and related areas. This university's jurisdictional jurisdiction and accountability extend to the districts of Jaipur, Sikar, Alwar, Dausa, Tonk, Ajmer, Bharatpur, and Dholpur. The university covers three agro-climatic Zones:
- ii. IIA- Transitional Plain of Inland Drainage- Sikar
- iii. IIIA- Semi- Arid Eastern Plain Zone- Jaipur, Tonk, Ajmer and Dausa
- iv. IIIB – Flood Prone Eastern Plains- Alwar, Bharatpur and Dholpur.

The university's mission is to integrate rural development and sustainable agriculture for better livelihoods, economic growth, and secondary agriculture opportunities in the state of Rajasthan.

### **CENTRAL LIBRARY**

With the aim of developing and promoting information resources for students, faculty, trainees, research scholars, scientists, and agricultural officers, the College Library of the College of Agriculture serves as the Central Library of the University. It offers its users comfortable surroundings, well-ventilated reading areas, and ample space.

In the same year that the college was founded, the library was established. More than 50,000 documents in the domains of agricultural sciences, basic sciences, biological sciences, humanities, technologies, veterinary sciences, fisheries, animal husbandry, and other related subjects are available in this library's good physical and digital collections. This library's physical collection consists of books, periodicals, theses, government publications, maps, etc. Additionally, it has databases, CD-ROMs, electronic books, and electronic journals. It has been updated with modern amenities like computers, UPSs, Xerox machines, CCTVs, air

conditioning systems, printers, and scanners. Through the Internet / Intranet Wi-Fi System, internet facilities are provided for online browsing of online E-Journals, E-Books, and E-Databases, among other things.

Users of the SKNAU can access digital resources both online and offline. Users of the off-line service can read CD-ROMs to obtain the information they need on computer monitors. Agriculture Consortiums like CeRA provide online digital services.

The SKNAU Central Library is a well-equipped library that keeps both print and digital documents. It features a section specifically for accessing e-resources. In order to facilitate off-line digital services, it contains 121 CD-ROM databases. Databases like AGRIS, AGRICOLA, CAB-CD, PGR Abstracts, Fish Base Database, and Digital Directory of Periodicals are only a few of the important ones. CeRA Consortium offers a service for online E-Journal access. Krishi Prabha, J-gate, etc. Users of the university get access to the doctoral dissertations published by the CeRA collaboration as well as scholarly journals.

### **IMPORTANT DATABASE**

Member of CeRA (Consortia of E-Resources Agriculture)

AGRIS – International System for Agricultural Science and Technology

AGRICOLA

CAB CD

PGR Abstracts

Fish base Database

Digital Directory of Periodical

Online Access Service

CeRA(Consortium for E-Resources in Agriculture)

J Gate

Cab Abstract

Digital Catalogue (OPAC) of Library Collection

DOAJ (Directory of Open Access Journal)

Open Access Books

AGRICOLA (Agricultural Online Access)

[https://en.wikipedia.org/wiki/Sri\\_Karan\\_Narendra\\_Agriculture\\_University](https://en.wikipedia.org/wiki/Sri_Karan_Narendra_Agriculture_University)

**AGRICULTURE UNIVERSITY, KOTA**

**Type – Public**

**Established – 2013**

**Vice- chancellor – A.K. Vyas**

**Location - Kota**

## **Affiliations – ICAR**

**Website -[aukota.org](http://aukota.org)**

The Rajasthan government paid significant attention to developing agricultural education, research, and extension in the state because it recognized the significance of agricultural growth and development in ensuring the livelihood security of its population. At Bikaner, a separate agricultural university was founded in 1987. This university's service area included all of Rajasthan. Through the bifurcation of the Rajasthan Agricultural University, Bikaner, pursuant to Government of Rajasthan Ordinance No. 6 of 1999, which became an Act in May of 2000, the Maharana Pratap University of Agriculture and Technology, Udaipur (MPUAT), the Second Agricultural University of the State, was established on November 1, 1999.

The Maharana Pratap University of Agriculture & Technology, Udaipur (MPUAT) and Swami Keshwanand Rajasthan Agricultural University (SKRAU), Bikaner (previously known as Rajasthan Agriculture University, Bikaner), were split on September 14, 2013, and Government of Rajasthan act No. 22 of 2013 was then promulgated, creating the Agriculture University, Kota (AUK). This has been done in light of the significant variances in Physiography in the biggest state in the nation, including crops, cropping patterns, climate, soil characteristics, etc., and it offers the location-specific plans for South Eastern Rajasthan new life. With the addition of the Honble Vice-Chancellor on September 23, 2013, this university, which has its administrative headquarters in Kota, began operating in full force. The Jurisdiction of the University covers all the campuses including Constituents College ARS, ARSS and KVKs distributed over six Districts of the South- East Rajasthan. These Districts are Kota, Baran, Bundi, Jhalawar, Karauli and SawaiMadhopur.

## **AGRICULTURE UNIVERSITY, JODHPUR**

**Motto - Working for the welfare of Farmers**

**Type - Public**

**Established - 2013**

**Chancellor - Governor of Rajasthan**

**Vice- Chancellor -**

**Location - Jodhpur, Rajasthan**

**Affiliations - ICAR**

**Website - [aujodhpur.ac.in](http://aujodhpur.ac.in)**

The Government of Rajasthan established the Agriculture University, Jodhpur on September 14, 2013, in accordance with the Agriculture University, Jodhpur Act 21 of 2013, with the goal of focusing on the holistic development of the state's arid and semi-arid regions. These regions span 6 districts (Jodhpur, Barmer, Nagaur, Pali, Jalore, and Sirohi), making up 28% of the state's total geographical area and supporting 20.8% of its human and 28. The three agro-ecological zones of the state are covered by the districts within the university's jurisdiction. These are Transitional Plain of Inland Drainage Zone II A (Nagaur District), Transitional Plain of Luni Basin Zone IIB (Jalore, Pali, and Sirohi Districts), and Arid Western Plain Zone IA (Jodhpur and Barmer Districts).The Government of Rajasthan established the Agriculture University, Jodhpur on September 14, 2013, in accordance with the Agriculture University, Jodhpur Act 21 of 2013, with the goal of focusing on the holistic development of the state's arid and semi-arid regions. These regions span 6 districts (Jodhpur, Barmer, Nagaur, Pali, Jalore, and Sirohi), making up 28% of the state's total geographical area and supporting 20.8% of its human and 28. The three agro-ecological zones of the state are covered by the districts within the university's jurisdiction. These are Transitional Plain of Inland Drainage Zone II A (Nagaur District), Transitional Plain of Luni Basin Zone IIB (Jalore, Pali, and Sirohi Districts), and Arid Western Plain Zone IA (Jodhpur and Barmer Districts).The Headquarter located at Mandor, Jodhpur, coordinates to methodically run the many units of teaching, research, and extension.

Member of

CeRA( Consortium for E-Resources in Agriculture)

J-Gate Access

Cab Abstract

AGRIS – International System for Agricultural Science and Technology

AGRICOLA (Agricultural Online Access)

<https://www.ujodhpur.ac.in/>

**RAJASTHAN UNIVERSITY OF VETERINARY AND ANIMAL SCIENCES,  
BIKANER**

According to Sub-Section (3) of Section 1 of the Rajasthan University of Veterinary and Animal Sciences Act, 2010, the Rajasthan University of Veterinary and Animal Sciences (RAJUVAS), Bikaner, is a constituted body corporate. The University officially began operations on May 18, 2010. Bikaner serves as the headquarters for the Rajasthan University of Veterinary and Animal Sciences.

The Rajasthan University of Veterinary and Animal Sciences, Bikaner, was founded with the goal of developing veterinary and animal sciences both nationally and in the state of Rajasthan specifically by ensuring proper and systematic instruction, training, research, and extension in modern veterinary and animal sciences and their allied sciences. The University is matching up ahead to give technical and scientific support for improving the sustainability of state animal husbandry. With the aid of scientific and technological innovations, a supportive policy environment, and increased production in conjunction with productivity surges, the State has become one of the leaders in the nation for the production of milk, meat, and wool.

The College of Veterinary and Animal Science, Bikaner (Established in 1954) and its precincts, covering an area of 200 acres of land, are housed in the Heritage and Palatial Building of the once Ganga Avenue, where the University is situated. As the home for his son Prince Bijey Singh, Maharaja Ganga Singh (1881–1942) commissioned Sir Swinton Jacob to create the majestic red sandstone BijeyBhavan Place. Construction began in 1927. Two additional structures were constructed recently, including the State Library and the State Museum, also known as SadulSadan. These majestic structures serve as a prime example of Rajput style architecture. Numerous large rooms, lounges, cupolas, and pavilions are present. Richly carved fire mantles, Italian colonnades, and other exquisite pillars may be found in the exotic palatial buildings.

The University is made up of three constituent colleges: PGIVER in Jaipur, Navania-Vallabh Nagar in the district of Udaipur, and Bikaner. The College of Veterinary and Animal Sciences in Bikaner, which was founded in 1954, is the oldest of these institutions.

## **COLLEGE LIBRARY**

In 1954, the College of Veterinary and Animal Science's library was founded. It has both physical and digital versions of a good selection of essential text and reference books. In this library, automated services began in the year 2005. Computers, the Internet, CD-ROMs, and closed-circuit cameras are all well-equipped. In the campus network, every computer is interconnected. The library premises also offer reprographic services. Animal nutrition, veterinary medicine, veterinary animal breeding & genetics, veterinary biochemistry,

livestock production & management, veterinary physiology, veterinary gynecology& obstetrics, veterinary preventive medicine, veterinary surgery & radiology, veterinary public health, veterinary pathology, veterinary parasitology, veterinary microbiology, and veterinary anatomy & histology are among the major subject areas of the library collection. All of the college's students, research scholars, faculty members, and other staff members have access to the library's services.

The Central Library of RAJUVAS, Bikaner offers its users both offline and online digital services. Users can retrieve data from the CD-ROM database when using off-line services. To improve the CD-ROM Database Access facility, the library purchases crucial CD-ROM databases. Access to many CD-ROM databases is available. Additionally, several CD-ROMs related to veterinary and animal sciences have been acquired and are preserved in the library for use as references. Currently, the library has a CD-ROM database available. The University is a participant in the CeRA: Consortium for E-Resources in Agriculture, Agri Cat (World Cat), Krishiprabha (On-line Database of Theses), and Krishikosh Library Consortiums.

Member of Four Consortia

CeRA ( Consortium for E-Resources in Agriculture)

AgriCat (World Cat)

Krishiprabha (Online Database)

Krishi Kosh

## **AGRICULTURAL DATABASE**

- ▶ **AGRICOLA DATABASE: Agriculture Online Access Database is a bibliographic database. The National Agriculture Library was founded in 1970.**
- ▶ Since 1970, the Agriculture On-line Access (AGRICOLA) database has been created by the National Agriculture Library in the United States. With abstracts to journal articles, books, theses, reports, patents, and other A-V resources, it now has over 33

lakh citations, and it adds more than 1 lakh records annually. In terms of bibliographic citations, it now holds the largest collection for a variety of agricultural and related subjects, such as forestry, aquaculture, nutrition, and veterinary sciences. The database at NAL is fully computerized and accessible via the internet, CD-ROM, and magnetic cassettes. The AGRICOLA database is accessible in print under the heading "Bibliography of Agriculture".

**Bibliographic database for the AGRIS database Agriculture Sciences and Technology International Information System AO, ROM:1985, developed the programme.**

The Database's monthly service is offered in print under the Title Agrindex.

### **WORLD WIDE DATABASE**

- ▶ An organized group of data that has been gathered for one or more reasons is referred to as a database. Several Key Veterinary and Agricultural Databases - CAB International Database

### **International Data Base for CAB**

CAB International London is the largest professionally created database covering international issues in veterinary science, animal dairy, agriculture, forestry, and nutrition, among other disciplines. It has produced an electronic bibliographic database with 3 million records' worth of abstracts since 1973. Since 1973, CAB International has released 5 volumes of its data bases on CD-ROM. It has also launched distinctive database CD-ROMs under its Spectrum Series in addition to its commodity-based specialist abstracts by product, namely:

### **CD Ag Econ**

The CD offers comprehensive coverage of the agricultural economics literature that has been released since 1973. The database contains 2.4 lakh abstracts on socioeconomic aspects of agriculture, forestry, and rural development. Agricultural economics, policy and planning, the food business, marketing and

distribution, trade and finance, and other subjects are all covered in these abstracts.

### **CD CAB Pest**

Entomology, plant pathology, weed science, hematology, agricultural chemicals, pesticides, and environmental concerns are all covered in the databases on the CD.

### **Crop CD**

Some of the subjects addressed in the database on the CD include agronomy, botany, biochemistry, crop physiology, crop production, farming systems, legumes, oilseeds, root crops, sugarcane, fiber plants, tobacco, etc.

### **E-CD**

- ▶ Access databases on environmental quality on this CD, which cover topics like soil erosion and control, bio-remediation, bio-degradation, biological waste treatment, environmental issues like deforestation, the effects of tourism on the environment, and various socio-economic aspects of agriculture, forestry, food, and rural development. The CD contains more than 5.2 million references that date back to 1973.

### **The Hort CD**

- ▶ The 0.45 million records on this CD include abstracts from as far back as 1973 on a variety of subjects, including ornamental plants, vegetables, tree fruits and nuts, and minor industrial crops, as well as information on their cultivation, propagation, planting, soils and fertilisers, nutrition, crop management, plant breeding and genetics, post-harvest technology, and the fruit industry, among others.

### **Plant Gene CD**

- ▶ This CD provides bibliographic citations and abstracts for crops used in horticulture, agriculture, and forestry. These references cover a wide range of topics, including cytogenetics, plant tissue culture, taxonomy, and biotechnology. These references also

cover other sorts of agriculture, such as edible fungi, ornamental plants, and forest trees, as well as intellectual property rights. 4.6 lakh bibliographic references with abstracts from 1973 are included on this CD.

### **Soil CD**

- ▶ The themes included on this CD—soil, irrigation, agricultural meteorology, crop management, the environment and pollution, land, soil, and nutrient management, and agronomic concerns—are all covered in-depth.

### **Tree CD**

- ▶ The Tree CD contains roughly 36 lakh records about forestry, agriculture, the environment, tree pests, etc. The CD offers bibliographic citations and Forestry Abstracts going all the way back to the original edition's 1939 release. Additionally, it provides abstracts from works published in Forest Products Abstracts and Agroforestry Abstracts.

### **Vet CD**

On the CD are bibliographic records for literature on veterinary-related subjects. Farm animals, wild pigs, shellfish, zoo animals, wild animals, pets, and protozoa are some of the themes covered on the CD. 5.75 lakh bibliographic records on the Vet CD go as far back as 1973.

### **BIOSIS Database: Created by Bio-Science Information Service, Philadelphia since 1985.**

Bibliographic Data-base in the field of Bio-Sciences, including Life Sciences, Toxicology, Genetics and Zoological Literature .The Data-base contains over 7 million Bibliographic records with abstracts. The Data-base is fully computerised which is available on CD-Rom and is also accessible on Internet. In CD-Roms, BIOSIS Data-base is available in

#### **▶ Biosis Gen Ref on CD**

The Database is the only comprehensive source of knowledge on multidisciplinary genetics that addresses human, animal, plant, and microbial genetics. More than a million bibliographic references are included, and an abstract has been available since

1985. The CD provides the most comprehensive compilation of scientific discoveries, including approximately 75000 gene sequences from Gene Bank, EMBL, and DDBJ libraries, from 1985 to the present. Every year, more than 100,000 abstracts on topics like biology, biotechnology, genetics, DNA, government regulations, medicine and health sciences, business news, and marketing are added to the database.

▶ **Biological Abstracts on CD**

Agriculture, botany, biochemistry, ecology, the environment, microbiology, neurology, pharmacology, and public health are all covered in the most complete life science journal database available on CD. It is monitoring references from over 65,000 journals in the Life Science discipline. It is available in a set of 19 CDs, containing about 5 million records. 3.6 lakh records are being added to the database annually.

**CDs of Food Intelligence music**

- ▶ This CD offers the most thorough information on the food industry, which is particularly helpful to researchers, academics, food technologists, and the business community. It includes topics including government restrictions, aquaculture, genetics, nutrition, engineering, and food. Since 1985, it has more than 4.5 lakh abstracts.

▶ **Biological Abstract Review, Records and Meetings (BARRM) on CD**

- ▶ Similar to Biological Abstracts and Provides Literature on Life Sciences related reports, meeting literature, books, patents, etc., these records are kept in a similar manner. Since 1989, it has provided almost 1.6 million records, and 2.16 thousand records are added annually.

▶ **Zoological Data-base on CD Toxline Plus on CD**

The Database offers the most thorough coverage of the zoological literature available anywhere in the world. Since 1985, 12.3 bibliographic records have been added, and 72,000 records are added annually. For inclusion in Biosis, there are 6.5 thousand international journals, monographs, annual reviews, proceedings volumes, and reports. The Database includes information on all major areas of zoology, including

evolution, habitat, nutrition, parasitology, reproduction, zoogeography, and animal and dairy sciences.

#### **Toxline Plus on CD:**

- ▶ More than 4 million bibliographic records, spanning back to 1985, are included on the CD from Biosis and other sources. Every year, 1.7 lakh records are added. It offers details on drug interactions, environmental pollution, hazardous and waste materials, health and safety, toxicology, and other topics.

- ▶ **Food and Human Nutrition Database-**

This bibliographic collection, which covers subjects including nutrition, health sciences, and food and agriculture, has been compiled by FAO of the United Nations since 1975. 3.11 lakh records and 25,000 new abstracts are added annually.

- ▶ **Food Science and Technology Data-base (FSTD)**

- ▶ International Food Information Service (IFIS), which has a leading food science and technology database worldwide, established this bibliographic database from 1969. In addition to a CD-ROM and print copy, it is also available online under the name "Food Science and Technology Abstracts." For every commodity, the database includes information on biotechnology, economics, manufacturing, law, and packaging. It also covers a wide range of topics related to food processing, food products, and food science. The database presently has approximately 5 lakh abstracts, and 37 thousand abstracts are added each year, according to data from 2000 scientific magazines.

- ▶ **CD-ROM on Food and Human Nutrition**

The FAO's AGRIS Co-ordinating Group created this bibliographic database and also offers bibliographic literature on food, nutrition, and health on CD. The Database is updated twice a decade.

#### **CONCLUSION**

Along with agricultural education, electronic resources are now preferred in other areas of education. Every discipline, including agriculture, is now developing e-resources. These facts are predicated on the existence of digital documents. Due to its many appealing advantages, such as quick and easy delivery, multiple access, a large

potential for availability, multimedia compatibility, low cost, little need for storage space, thorough archiving, etc., electronic resources are preferred over print resources.

All of the topic areas now have access to electronic resources. The development of ICT has made it mandatory for agricultural universities' and colleges' libraries to utilise electronic resources. The innovative library services powered by IT are rapidly taking the place of traditional library services in libraries. These cutting-edge library services make advantage of digital information. The necessity for digitization and the acquisition, archiving, dissemination, and retrieval of information in digital form has resulted from this.

Digital agricultural resources are currently widely employed because of their useful and time-saving qualities. These resources are now preferred over physical resources because of a number of alluring features, such as quick accessibility and various access. Low storage requirements, quick delivery times, affordable prices, full archiving, multi-media compatibility, and a wide range of availability. The use of electronic resources in agriculture is popular despite its several disadvantages, including its need on electricity, usability issues, technological limitations, reliance on internet speed, and copyright restrictions.

All areas of agriculture, including horticulture, dairy science, veterinary science, fisheries, etc., now have access to electronic resources. These resources are offered as electronic books, journals, and databases.

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