USE OF CeRA IN TEACHING AND RESEARCH AT COLLEGE OF FISHERIES, MANGALORE.

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Abstract

The Indian Council of Agricultural Research's (ICAR) National Agricultural Research and Education System (NARES) founded the Consortium for e-Resources in Agriculture (often referred to as CeRA) as an e-Consortium of Agricultural Libraries in November 2007. The Consortium for e-Resources in Agriculture (CeRA) is the first of its kind in providing all researchers, teachers, and students, as well as policy planners, administrators, and extension specialists in National Agricultural Research Systems with 24x7 online access to selected journals in agricultural and allied sciences through IP authentication. The goal of the study is to demonstrate the value of the agriculture



consortium for electronic resources in teaching and research at college of fisheries, Mangalore. For this study, a questionnaire was used. The analysis shows that the majority of responders use open access and CeRA journals.

KEYWORDS: *CeRA, Online Information Resources, College of Fisheries, Electronic journals, Library Consortium.*

1. Introduction :

Electronic journals are now seen as a crucial tool for preserving scholarly dialogue. Due to the development of the internet, specifically the www, a new medium for information storage and distribution, the publishing and information delivery systems are experiencing a revolutionary impact in the twenty-first century. The release of journals and other critical information resources in electronic format has been observed as a significant change in the global information process.

India's largest important sector of the economy is agriculture. The Indian economy is said to be supported by it. About 18% of the nation's GDP is generated by agriculture (Gross domestic product). Regarding agricultural output, India is a significant producer of maize, lentils, rice, spice oils, and spices. 55% of the population gets their food from agriculture. Consequently, it is essential to place a high priority on agriculture education. Recognition of shifting social and economic needs as well as the contributions of scientific and technological knowledge to newly emerging problems are constant components of agricultural education. Education programmes must stay up with the information and skills needed by the teaching profession due to the rapid change and development of new technology. Therefore, it is essential that colleges and the department of agriculture provide their students with the knowledge, abilities, and skills needed to compete in the country's teaching profession.

The way libraries and information centres operate has undergone a fundamental change because of ICT. Every aspect of life is affected by ICT, including the Internet and the World Wide Web. The libraries do not stand out. Electronic publishing has led to the publication of numerous e-resources, including e-books, e-journals, and online and offline databases. Academic libraries, particularly those at colleges and universities, have been acquiring these materials for their collections. Consortia models are being implemented and tested for the acquisition and access to e-resources by the colleges and universities due to the rise in the cost of educational materials, both printed and electronic resources, and financial issues the academic libraries are facing.

2. Consortium For E-Resources in Agriculture (CeRA)

CeRA serves as a catalyst to enhance the activities of the National Agricultural Research and Education System (NARS) institution in agricultural research, education, and extension in order to achieve excellence and set high standards in output and service to society. The Consortium for e-Resources in Agriculture (CeRA), founded in November 2007, is the first organisation of its kind to provide all researchers, teachers, and students, as well as policy planners, administrators, and extension specialists in NARS with 24x7 online access to a select number of journals in the agricultural and allied sciences. The Consortium has 152 members, including State Agricultural Universities, ICAR Institutes, National Research Councils, Directorates, Project Directorates, National Bureaus, etc. Scientists and educators in NARS increasingly use CeRA as their go-to online resource for finding pertinent information.

Through IP authentication, member institutions can access CeRA. The consortia journals can be browsed by title, subject, and publisher name. In addition to a rapid search option, the consortium offers an advanced



search feature that enables users to narrow their search using several fields, such as an author's name, a keyword, the title of the work, the author's institution, etc., by utilizing Boolean operators. A customized option, called "My Journals," is also available on CeRA. Users who use this feature can register for alert emails about the most recent issues of their chosen journals. Users from member institutions of the consortium can request and access hardcopies using this service.The consortium method has reduced the financial strain on individual libraries and allowed them to efficiently and cost-effectively provide stakeholders with access to a massive volume of scholarly literature. This has accelerated flow of information from information creators to end consumers by overcoming obstacles with space, storage, mutilation, missing issues, postal delivery delays, physical maintenance, etc.

3. College of Fisheries, Mangalore:

A prominent Fisheries Education and Research Institute, the College of Fisheries in Mangalore was established in 1969 by the Bangalore-based University of Agricultural Sciences. The Indian Council of Agricultural Research, New Delhi, established the first fisheries college in India as part of its agricultural university system. The college currently belongs to the newly established Karnataka, Veterinary, Animal and Fisheries Sciences University, Bidar. The mission of the college is to promote understanding of and esteem for the biological, technological, and economic importance of fisheries and related subjects.The mission of the college is to organise and carry out fisheries science-related planning, implementation, support, promotion, and coordination activities. Enhancing fish yield through resource exploitation, modern culture systems, the use of cutting-edge harvesting and post-harvesting techniques, marketing, and social progress of the fishing community are the objectives of fisheries education. The college continues to have a big impact on research and instruction in fisheries at the federal level as a top fisheries institute. The college library holds books-14,000,

back volumes 7500, thesis 928, Pamphlets 1200. Online journals are accessed through Consortium for e-resources in agriculture (CeRA). Due to budget constraints, the college library does not subscribe to journals. But, Students, researchers and teachers are accessing online information through CeRA for academic and research purpose.

4. Review of Literature

Mishra and Panda(2022) conducted a study to assess the availability of e-resources in agricultural institutions in India and the usage patterns of students, researchers, and agricultural scientists. 242 users and 20 librarians at 20 state-run agricultural universities in India completed standardised questionnaires to collect the data. The study discovered that even though library patrons at Indian agricultural universities had fairly utilised e-databases, subject gateways, and e-resources from other organisations, there were still some points that needed to be clarified in order to speed up the use of online information resources through information literacy campaigns and user education programmes.

Pandey and Patel(2021) study focused on the challenges and opportunities associated with using CeRA digital information resources in the IGKV Raipur Chhattisgarh during COVID-19. The results and conclusions are excellent and practical. Although Chhattisgarh's agricultural libraries in rural regions have certain issues, the facilities in urban areas are excellent, with users in Chhattisgarh making the most use of CeRA through DDR. Resources from many disciplines and subject areas are available throughCeRA. **Puneeth(2021) Conducted** a study to determine how acquainted and how frequently library users at Bangalore's University of Agricultural Sciences GKVK used internet information sources. According to the study, 40.9% of respondents are familiar with and often use the online resources offered by the GKVK library. The study also found that



85.5% of respondents used KrishiKosh, an electronic theses repository, and that 54.5% used the CeRA database. The study suggests undertaking user awareness activities, orientation programmes, and training programmes to instruct library patrons on how to use developing online information resources.

Ekanath(2020) carried out a study to investigate how research researchers at the University of Agricultural Sciences, Dharwad, use the CeRA consortium. It covered the access to, and usage of, CeRA as well as the frequency and reason for use. A robust informational foundation has been provided for the teaching, research, and extension of programmes by expanding CeRA services by adding more resources and facilities. The study revealed that among the many accessing places used by research scholars at the University of Agricultural Sciences, Dharwad, the University Library receives the highest percentage of respondents (47.43%) regarding access to CeRA.

Madhu(2018) investigated the behavior and attitudes of researchers at a few Plantation Crops Research Institutes in South India who have access to electronic tools through CeRA Consortium. The study found that most respondents (69.57%) utilisedCeRA consortium resources, while just a small percentage of respondents (30.43%) did not. As a result of the investigation, it was discovered that scientists regularly used the databases Science Direct, Springer Link, and Annual Reviews.

Singh(2014) carried out a study to assess the journal collection made available by CeRA in fields such veterinary science, fisheries and aquaculture, dairy technology, animal husbandry, livestock management, and poultry sciences. Based on the criteria used to assess CeRA, journal collections in fisheries, aquaculture, and feed, animal nutrition, feed additives, and production have a tendency to be higher quality than those in other fields.

Dhingra, N.J.(2013) study examines how frequently faculty members at Punjab Agriculture University, Ludhiana use the electronic journals made available by CeRA and assesses their attitudes concerning them. Data was gathered using questionnaire tool. The study reveals that majority of users have started using electronic journals, which has increased the consumption of e-journals usage in comparison to printed journals.

Francis(2012)study explores the use of consortium based digital information resources by postgraduate and doctorate students at Kerala Agricultural University, Thrissur. The findings indicate that 100% of the students were knowledgeable about using digital information resources that were accessible online, and 87.14% of them used CeRA. Through curriculum-based courses like "library and information services," "research technique," etc., 82% of students were familiar with CeRA and acquired the knowledge and abilities necessary for accessing and using digital information resources. The majority of students want to improve CeRA services by including more resources and facilities.

5. Objectives of the study

- To know the availability of online information resources in the Fisheries College Library
- To study the awareness of CeRA among users
- To examine the purpose of utilization of CeRA
- To identify the challenges in the utilization of CeRA
- To make the suggestions to improve the use of CeRA

6. Methodology

The necessary information has been accumulated from the official website of CeRA. Primary data collected through the questionnaire tool by the respondents. The questionnaire was consisting of both closed-ended and open-ended questions. A total of 65 responses were received comprising the group of M.F.Sc, Ph.D students and Teachers. Descriptive statistics is used to analysis the collected data.



Table-1: Type of sources of Information

Information Sources	Responses	Percentage (%)
Print Sources of Information	3	4.6
Print and Electronic Sources	62	95.4
of Information		
Total	65	100.0%

Figure-1: Type of sources of Information

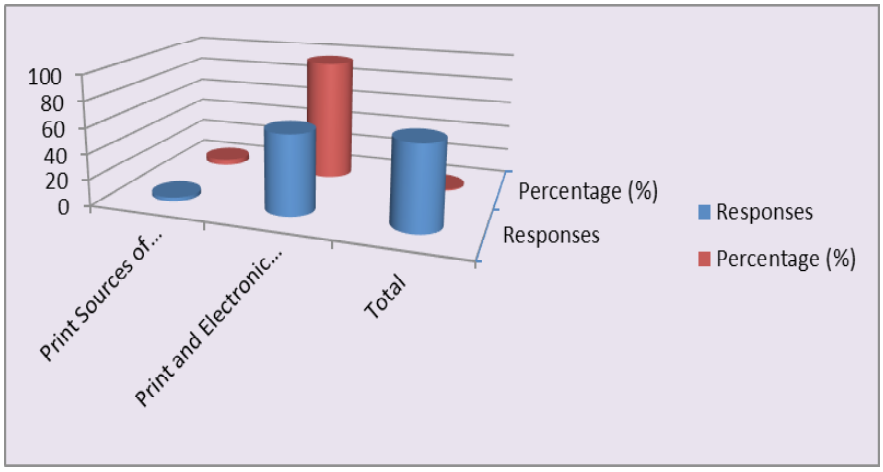


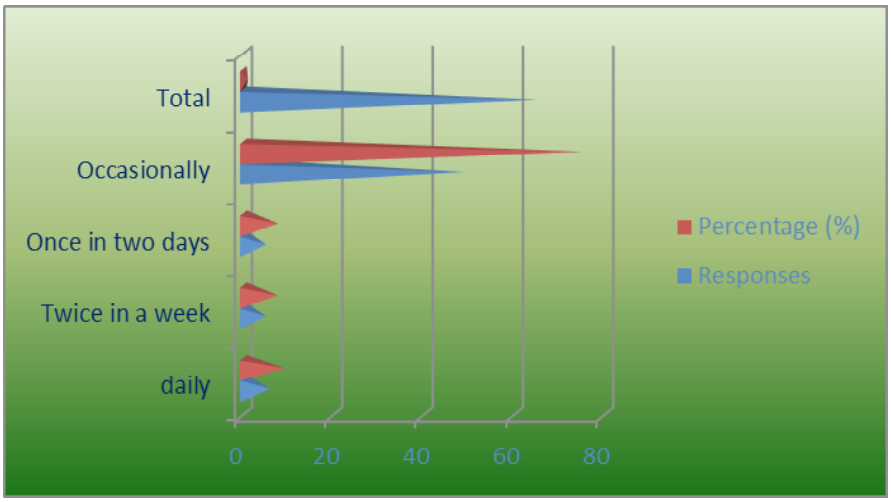
Table-1 and Figure-1 shows that 95.4 % of the respondents are more compatible with the utilization of both print source as well as online information resources. Only 3% of the respondents are more comfortable with the use of print sources of information. Since there is lack of budget and not able to procure sufficient print sources of information, the compatibility of the use of electronic sources of information contribute much in the effective utilization of CeRA.



Table-2: Frequency of use

Frequency	Responses	Percentage (%)
Daily	6	9.2
Twice in a week	5	7.7
Once in two days	5	7.7
Occasionally	49	75.4
Total	65	100.00%

Figure-2: Frequency of use



The data displayed in the Table-2 & fig.-2, reveals that 9.2% of respondents access CeRA every day, whereas 75.4% of respondents only use Consortium on occasionally. 7.7% of those surveyed use CeRA once in two days and 7.7% are using CeRA twice weekly. Since students and teachers are compatible with use of electronic resources, they are accessing the CeRA and other freely available online information resources on the web.

Table-3: Accessibility of CeRA

Place of Accessing CeRA	Responses	Percentage (%)
Library	13	20.0
Department	27	41.5
Computer Centre	24	36.9
Home	1	1.5
Total	65	100.0%

The majority of respondents, as shown in Table-3, accessed CeRAfrom their department. CeRA can be used by any department of the College because it is IP-based. 36.9% of the respondents use a computer centre to access CeRA. 1.5% of the students utilise their j-gate plus user ID and password to access CeRA at home.

Table-4: Purpose of utilisation

Purpose	Responses	Percentage (%)
For research/Project work	30	46.1
For teaching	23	35.3
For publishing articles/books	1	1.5
To get current information	2	3.0
To find full text articles	5	7.6
For retrospective search of literature	4	6.1
Total	65	100.0%

Table-4 depicts that the majority of respondents (46.1%) are using CeRA for their research and project work. 35.3% of the respondents use CeRA for educational purposes.1.5% of respondents use it for article publishing. 3.0% of respondents use CeRA to access the most recent data on research projects. 7.6% of those surveyed said they read full text articles on CeRA.



Table-5: Search Strategy

Search strategy	Responses	Percentage (%)
Browse by author	1	1.5
Browse by journals	9	13.8
Browse by title	22	33.8
Browse by subject	3	4.6
All the above	30	46.1
Total	65	100.0%

Figure-3: Search strategy used by the respondents

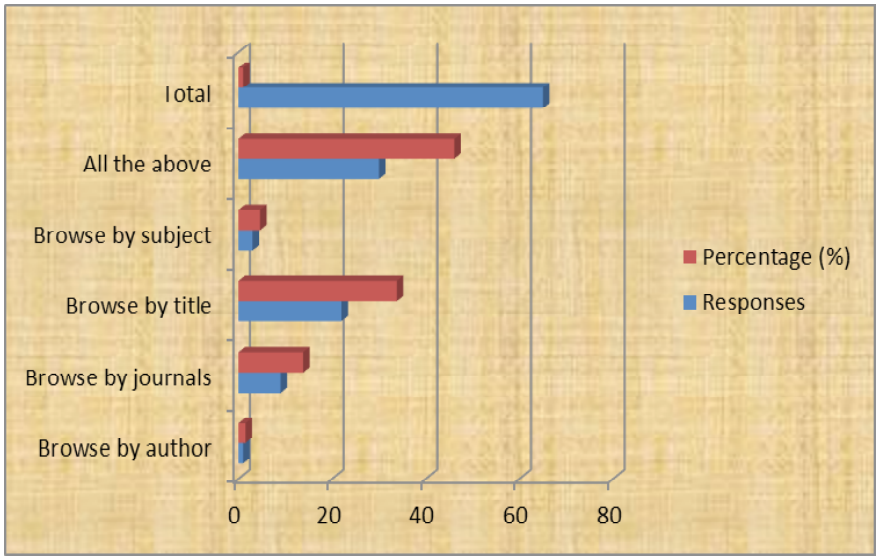


Table-5 and Figure-3 shows that, the majority (41.5%) of respondents , search at CeRA by author, journals, title, and subject. 36.9% of CeRA visitors search by title. 13.8 percent browse journals and tiny number (4.6%) of respondents are using subject filter.

Table-6: Extent of use

Extent of use	Responses	Percentage (%)
Less than one year	24	36.9
Between 1-2 years	17	26.2
Between 2-3 years	21	32.3
Between 3-4 years	3	4.6
Total	65	100.0%

Table -6 shows that 36.9% of the respondents had been using CeRA for less than a year. 26.2% of respondents have been using CeRA for one to two years. 32.3% of users have been using CeRA for two to three years. 4.6% of respondents have been using CeRA for more than three years.

Table-7: Challenges faced

Challenges	Responses	Percentage (%)
Limited computer terminals	16	24.6
Lack of training programme	6	9.2
Slow internet speed	5	7.6
Lack of knowledge to use	7	10.7
Technical problems	3	4.6
No challenges faced	28	43.0
Total	65	100.0%



Figure-4: Challenges faced in the utilisation of CeRA

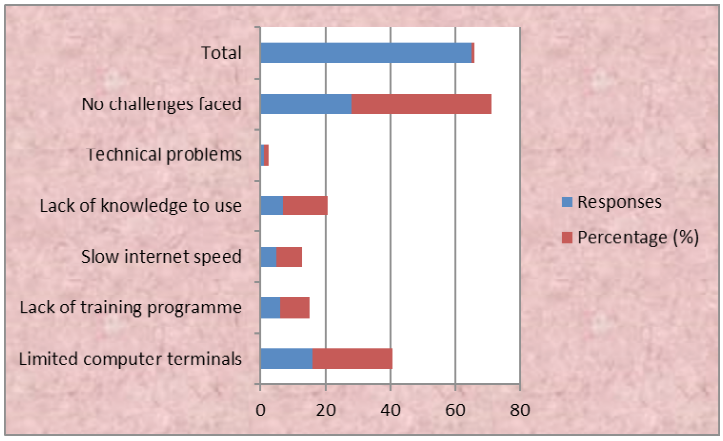


Table -7and figure-4 depicts that the majority of responders (43.0%) are not having any issues using CeRA in the College. Positive CeRA utilisation is evident from this. According to 24.6% of those surveyed, a lack of computer terminals is the primary factor in the decline in CeRA usage. According to 9.2% of respondents, the use of CeRA has decreased due to a shortage of training programmes. The usage of CeRA is hampered, according to 7.6% of respondents, by sluggish internet speeds. 10.7% of respondents said that the decrease in CeRA use was also caused by a lack of information about its use. 4.6% of respondents said they have occasionally been influenced by technical issues like network and system failures.

Table-8: Satisfaction Level

Satisfaction level	Responses	Percentage (%)
Fully satisfied	45	69.2
Partially satisfied	19	29.2
Least satisfied	1	1.5
Not satisfied	Nil	Nil
Total	65	100.0%

When the respondents were asked about their satisfaction level of the information resources available on CeRA, majority of the survey respondents are (69.2% as shown in table 8) completely pleased with the electronic information resources offered by CeRA. One-fifth of respondents, or 1.5%, respondents having the least satisfaction with the CeRA, while 29.2% of respondents indicate they are just moderately happy.

Table 9: Opinion about overall facilities at CeRA

Opinion	Responses	Percentage (%)
Good	17	26.1
Very Good	44	67.6
Satisfactory	4	6.1
Total	65	100.0%

Figure-5: Opinion about the overall facilities of CeRA

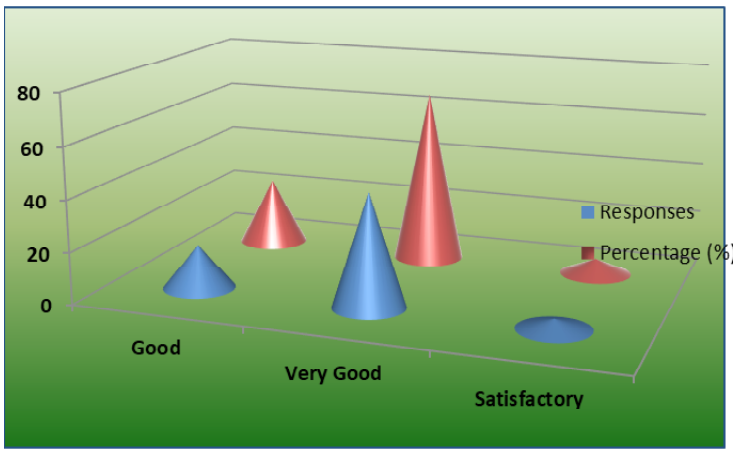


Table -9 and figure-5 reveals that 67.6 % of respondents opine that CeRA's facilities are generally excellent, whereas 26.1% think well and the least number of respondents are just satisfied.

7. Major Findings of the study :

The following are the key observations based on the study:

- The study found that, 95.4% of the respondents are more receptive to using both print and online sources of information.
- According to the study, 75.4% of the respondents occasionally use CeRA.
- The study observed that 41.5% of the respondents are accessing from their department.
- The study found that the majority of respondents (46.1%) use CeRA for research and project work.
- According to the study's findings, CeRA's search choices are quite user-friendly, as seen by the fact that 46.1% of respondents use all of them.
- According to the study, 43.0% of users have no trouble using CeRA. It is clear from this that CeRA is being used effectively.
- The study discovered that the main barriers to using CeRA are a shortage of computer terminals, a lack of training programmes, a lack of understanding of how to use them, and sluggish internet speeds.
- According to the study, 69.2% of survey respondents are extremely satisfied with the electronic information resources provided by CeRA.
- The vast majority of survey participants (67%) believe that CeRA's facilities are generally outstanding.

8. Suggestions :

- College should conduct training programme every year to educate the staff and students in utilizing CeRA sources effectively.
- Number of computer system should be increased in the college library as well as in the computer centre to give access to CeRA.



- ICAR should provide all the journals in a full text mode so that the problem facing in document delivery system can be avoided.

9. Conclusion :

CeRA is a vital initiative on the part of the Indian Council of Agricultural Research (ICAR) to provide academics, research scholars, scientists, and students of Agricultural Universities across India with a single window access to e-journals. Because of this, the libraries of these institutions and universities are now able to give their readers straightforward access to intellectual content without being constrained by local funding issues. This study concludes that majority of academics and researchers are well-versed in using and accessing CeRA e-journals since the college is conducting orientation programme occasionally.

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