

# **Access and Use of Consortium for e-Resources in Agriculture (CeRA) by the Postgraduate Students of the University of Agricultural Sciences, Dharwad**

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## **ABSTRACT**

*The present study aims to investigate the access and use of the Consortium for e-Resources in Agriculture (CeRA) among the postgraduate students of the University of Agricultural Sciences, Dharwad, India. A questionnaire-based survey was conducted on the premises of UAS, Dharwad campus, CoA, Vijayapur campus, and CoF, Sirsi campus. This study indicates that 45.18% of respondents are aware of the Consortium for e-Resources in Agriculture, and 56.85% of respondents use the CeRA consortium primarily for research tasks. The preferred search method is an Author field-based search with a mean score of 4.17 and SD 1.00, 58.88% preferred the CeRA subject area Agriculture and Biological Sciences, the most preferred publishers is CABI with a mean score of 4.17 and SD 0.64, about 34.01% of the respondents faced a problem with the difficulty of finding relevant information and 47.21% of respondents are delighted with e-journals made available via the CeRA consortium. It also provides suggestions for improving the use of the CeRA consortium.*

**KEYWORDS:** CeRA, Consortium, E-Resources, Agriculture, Postgraduate Students

## **INTRODUCTION**

The Consortium for e-Resources in Agriculture (CeRA) emerged in November 2007 as an outcome of the Indian Council of Agricultural Research's (ICAR) strong network with state agricultural universities and other private and public organizations. CeRA's primary goal was to make it easier for researchers and faculty at the National Agricultural Research System to access scientific journals.

## ***Access and Use of Consortium for e-Resources in Agriculture (CeRA) by the Postgraduate Students of the University of Agricultural Sciences, Dharwad***

We are living in the Information and Communication Technology (ICT) era. Due to the rapid changes in information and communication technology and their impact on human endeavors, users want to maintain up-to-date knowledge about their field of interest. Nowadays, information is the most essential element for any nation's society to advance. To survive in this modern and cutthroat world, users require a variety of current information to keep them informed. Additionally, information is extremely important to our professional as well as personal lives. Every nation will be successful if its citizens have access to a wealth of information in various forms. India is an agricultural country. In every aspect of human intervention, information and communication technology (ICT) has been instrumental in changing the way people live their lives in the modern world. In the same way, ICT has changed libraries, transforming how they operate and provide services. Libraries have been required by ICT to transition from traditional libraries to electronic libraries. There are lots of forms of electronic resources that are accessible in all kinds of libraries. The advancement and development of agriculture, which depends on a variety of natural and artificial factors, has a positive and significant impact on the whole country. Good yields of a variety of crops have been generated. Agricultural research is an essential component of the nation's agricultural growth. Research updates information on agricultural trends and revolutions regularly.

The electronic resources available in the library are highly valuable in furnishing scholars with important research data. Additionally, it saves the scholars time by avoiding visiting the library and looking up the necessary materials and books. Several pieces of information are readily searchable, accessible, and lendable from digital libraries. Academic research has witnessed a significant surge in the use of internet-based digital resources. Nowadays, libraries and information centers use it as a technological advancement. The resources can be found in digital and print formats. Every day, more progress will be made in the field of online resources, as their popularity continues to rise.

### **NEED FOR THE STUDY**

The rising cost of print and electronic information resources has given rise to a surge in the popularity of consortiums over the past three decades. However, libraries have little funds to spend on purchasing all the information resources they need to satisfy patron requests. Agricultural libraries depend on consortiums because individual libraries are unable to buy or subscribe to every publication. The primary goal of the library is to give its patrons current and emerging knowledge so they can engage in academic and research endeavors. To share resources, libraries and other institutions must organize into a consortium. Each member has access to all of the resources for which they have paid a subscription.

### **OBJECTIVES OF THE STUDY**

The main objectives of the study are

- ✓ To identify the awareness and the level of satisfaction of respondents while using CeRA consortium.
- ✓ To determine the purpose and frequency of use of the CeRA consortium.
- ✓ To identify the problems faced by the respondents while accessing the CeRA consortium
- ✓ To draw suggestions from the respondents toward improving the accessibility of e-resources through the consortium.

## **SCOPE, LIMITATIONS AND METHODOLOGY**

The present investigates how postgraduate students at the University of Agricultural Sciences, Dharwad access and use the Consortium for e-Resources in Agriculture (CeRA) to fulfill their academic and research needs. The study covers postgraduate students from the university's main campus and its sub campuses like College of Agriculture, Vijayapura and College of Forestry, Sirsi. As the population of the study consists of postgraduate students only, simple random sampling techniques were used, which formed the population for the study. In addition to the questionnaire method, the interview schedule and observation method were also used to collect required information as a supplement to the questionnaire method to bring more clarity to the data which are essential and used for analysis and interpretation of data. A sample of 225 exclusively postgraduate students, were selected for the study. A total of 225 questionnaires were distributed among the postgraduate students and to receive a positive response, several visits were made. About 197 completed questionnaires are received from the respondents amounting to 87.55%.

## **DATA ANALYSIS AND INTERPRETATIONS**

### **1. Awareness about Consortium for e-Resources**

Table-1 Shows that the majority of 89 (45.18%) respondents are aware of the Consortium for e-Resources in Agriculture, while, 61 (30.96%) respondents are somewhat aware of it, 45 (22.84%) respondents were fully aware, and 02 (01.02%) respondents are not aware of the Consortium for e-Resources in Agriculture.

**Table-1:** Awareness about Consortium for e-Resources in Agriculture

<b>Awareness</b>	<b>Frequency (N=197)</b>	<b>Percentage</b>
Fully aware	45	22.84
Aware	89	45.18
Somewhat aware	61	30.96
Not aware	02	01.02

### **2. Sources of Awareness about CeRA**

Table-2 indicates that the majority of respondents 73 (37.06%) are aware of the Consortium for e-Resources by 'Library Professionals', followed by 55 (27.92%), respondents of awareness from 'Friends or Colleagues', 49 (24.87%) of awareness from the 'Library's Website or Notice Board', 23 (11.68%) of awareness about the Consortium for e-Resources from 'Internet', and 19 (09.64%) sources of respondents are aware about the Consortium for e-Resources through advertisements.

**Table-2:** Source of Awareness about CeRA

<b>Sources of Awareness</b>	<b>Frequency (N=197)</b>	<b>Percentage</b>
Library Website/ Notice Board	49	24.87
Library Professionals	73	37.06
Friends/Colleagues	55	27.92
Internet	23	11.68
Advertisement	19	09.64

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### **3. Places of Access to CeRA**

Table-3 shows that the majority of 114 (57.17%) of respondents access CeRA consortium through the 'Library', followed by 43 (21.83%) access to the CeRA consortium from the 'Department', 39 (19.80%) access from 'Hostel', and only 15 (07.61%) of respondents access the CeRA consortium from 'Home'.

**Table-3:** Places of Access to CeRA

<b>Places of Access</b>	<b>Frequency (N=211)</b>	<b>Percentage</b>
Library	114	57.87
Department	43	21.83
Hostel	39	19.80
Home	15	07.61
<b>Note:</b> Multiple choice options the percentage is exceeded to more than 100%		

### **4. Frequency of Use of CeRA-Consortium**

Table 4 shows that 85 (43.15%) of respondents are using the CeRA consortium 'Every Day', followed by 78 (39.59%) 'Once in a Week, 15 (7.61%) 'Fortnightly', 13 (6.60%) 'Once in a Month' and only 06 (03.05%) of respondents are using the CeRA consortium 'Occasionally'.

**Table-4:** Frequency of Use of CeRA-Consortium

<b>Frequency</b>	<b>Frequency (N=197)</b>	<b>Percentage</b>
Every Day	85	43.15
Once in a Week	78	39.59
Fortnightly	15	07.61
Once in a Month	13	06.60
Occasionally	06	03.05

### **5. Purpose of Use of CeRA-Consortium**

Table-5 shows that 112 (56.85%) of respondents use the CeRA consortium primarily for 'Research tasks', followed by 45 (22.84%) of respondents use the consortium for Publishing books and articles, 29 (14.72%) of respondents use it for 'Knowledge updating', approximately 17 (08.63%) of respondents use it for 'Teaching purposes', and only 12 (06.09%) of respondents use it for 'Writing class assignments'.

**Table-5:** Purpose of Use of CeRA-Consortium

<b>Purpose o use</b>	<b>Frequency (N=197)</b>	<b>Percentage</b>
Research task	112	56.85
Publishing Books and Articles	45	22.84
For Teaching	17	08.63
Updating knowledge	29	14.72
Writing class assignments	12	06.09
<b>Note:</b> Multiple choice options the percentage is exceeded to more than 100%		

## 6. Preferred Search Methods

Table 6 indicates the preferred search strategies for searching CeRA resources, the ‘Author’ field search is preferred with a mean score of 4.17 and an SD of 1.00, followed by the preferred search methods ‘Subject’ with a mean score of 4.00 and SD of 1.05, ‘Title’ field search with a mean score of 3.94 and SD of 1.06, ‘Keyword’ field search with a mean score of 3.84 and SD of 1.06, and ‘Publisher’ field based search with a mean score of 3.72 and an SD of 1.06.

**Table-6:** Preferred Search Methods

Preferred Search Methods	Mean	SD
Author	4.17	1.00
Title	3.94	1.02
Keyword	3.84	1.06
Subject	4.00	1.05
Publishers	3.72	1.06

The statistical test statistic in this instance comes out to be 788. The problem instructed us to use a 0.05 alpha level, and the degrees of freedom are equal to 16. Therefore, 26.296 is the test's critical value, based on the Chi-Square distribution table. Hence, the alternative hypothesis is accepted.

## 7. Preferred Subject Areas in CeRA

Table-7 reveals that 116 (58.88%) of respondents preferred ‘Agriculture and Biological Sciences’ subject area the CeRA, followed by 38 (19.29%) respondents preferred ‘Basic Sciences’, 19 (09.64%) of respondents prefer ‘Engineering and Technology (JET)’, 15 (7.61%) of respondents preferred ‘Arts and Humanities’, 13 (06.60%) of respondents preferred ‘Biomedical Sciences’ and just 12 (06.09%) of respondents preferred the area of ‘Social and Management Sciences’.

**Table-7:** Preferred Subject Areas in CeRA

Preferred Subject Areas	Frequency (N=197)	Percentage
Agriculture and Biological Sciences	116	58.88
Arts and Humanities	15	7.61
Basic Sciences	38	19.29
Biomedical Sciences	13	6.60
Engineering and Technology (JET)	19	9.64
Social and Management Sciences	12	6.09
$X^2=232.04$ , Df=5 critical value =11.07, $\alpha=0.05$ <b>Note:</b> Multiple choice options the percentage is exceeded to more than 100%		

The statistical test statistic in this instance comes out to be 232.04. The problem instructed us to use a 0.05 alpha level, and the degrees of freedom are equal to five. Therefore, 11.07 is the test's critical value, based on the Chi-Square distribution table. Hence, the alternative hypothesis is accepted.

**8. Publishers Preferred to Access E-Journals / Databases**

Table 8 indicates publishers preferred by the respondents to access e-journals/databases, 'CABI' is preferred with mean score 4.17 and SD 0.64, followed by 'CSIRO', with a mean score 3.99 and SD 0.92, 'Nature', with mean score 3.93 and SD 0.94, 'Indian journals', with a mean score 3.93 SD 1.08, 'AAAS', with a mean score of 3.92 and SD 1.05, 'Oxford University Press, with a mean score of 3.93 and SD of 0.96, 'BioOnBe', with a mean score 3.91 and SD 0.92, 'IWA Publishing', and 'Taylor and Francis', mean score 3.85 and SD 0.98 respectively.

**Table-8:** Publishers Preferred to Access E-Journals / Databases

Publishers	Mean	SD
Nature	3.93	0.94
AAAS (American Association for the Advancement of Science)	3.92	1.05
ASA (American Society of Agronomy)	3.82	1.06
ISHS (International Society for Horticultural Science)	3.84	1.01
Annual Reviews	3.72	1.06
CABI	4.17	0.64
CSIRO	3.99	0.92
Elsevier	3.75	1.06
Indian journals	3.93	1.08
Informatics	3.8	1.17
Oxford University Press	3.93	0.96
Springer	3.67	1.09
Taylor and Francis	3.85	0.98
BioOnBe	3.91	0.92
IWA Publishing	3.85	0.98

**9. Preferred Format for Downloading of Resources form CeRA**

Table-9 depicts that 143 (72.58%) of respondents prefer 'PDF' format for downloading resources form CeRA, followed by 97 (49.23%) of respondents prefer 'HTML', and 02 (01.01%) of respondents prefer other formats like TXT.

**Table-9:** Preferred Format for Downloading of Resources form CeRA

Format	Frequency (N=197)	Percentage
PDF	143	72.58
HTML	97	49.23
Any other like TXT	02	01.01
<b>Note:</b> Multiple choice options the percentage is exceeded to more than 100%		

**10. Problems Encountered while Using CeRA**

Table-10 depicts that the majority of 67 (34.01%) of the respondents faced the problem due to the difficulty in finding relevant information, followed by 63 (31.8%) face problem because there are a lot of necessary resources missing, 55(27.92%) inadequate speed of internet, 35 (17.77%) lack of knowledge about the steps involved in using CeRA, 32 (16.24%) lack of sufficient e-journals, 29 (14.72%) access restrictions, 28 (14.21%) slow responses to requested articles, 12 (14.21%) inadequate support from the library staff and only 02 (01.02%) of respondents opine as a lack of awareness about accessing e-resources.

**Table-10:** Problems Encountered while Using CeRA

<b>Problems</b>	<b>Frequency (N=197)</b>	<b>Percentage</b>
Lack of awareness about accessing e-resources	02	01.02
Access restrictions	29	14.72
There are a lot of necessary resources missing.	63	31.98
Difficulty in finding relevant information	67	34.01
Inadequate internet speed	55	27.92
Lack of sufficient e-journals	32	16.24
Inadequate support from the library staff	12	6.09
Slow response to requested articles	28	14.21
Lack of knowledge about the steps involved in using CeRA	35	17.77
<b>Note:</b> Multiple choice options the percentage is exceeded to more than 100%		

**11. Usefulness of E-Journals available on CeRA**

Table-11 reveals that the majority of the respondents, 153 (77.66%) respondents opined as ‘Useful’ towards availability of e-Journals in CeRA, followed by 127 (64.47%) respondents opine as ‘Highly Useful’, 17 (8.63%) respondents opine as ‘Somewhat Useful’.

**Table-11:** Usefulness of E-Journals available on CeRA

<b>Usefulness</b>	<b>Frequency (N=197)</b>	<b>Percentage</b>
Highly Useful	127	64.47
Useful	153	77.66
Somewhat Useful	17	8.63

**12. Level of Satisfaction for Accessing E-Resources in CeRA**

Table 12 also shows that about 93 (47.21%) of respondents opined as ‘Highly satisfied’, with e-resources available in CeRA, followed by 57(28.93%) of respondents are ‘Satisfied’, 45 (22.84%) are ‘Somewhat satisfied’, and only 02 (01.02%) of respondents are ‘Not satisfied’ with e-resources available through the CeRA consortium.

**Table-12:** Level of Satisfaction for Accessing E-Resources in CeRA

<b>Level of satisfaction</b>	<b>Frequency (N=197)</b>	<b>Percentage</b>
Highly satisfied	93	47.21
Satisfied	57	28.93
Somewhat satisfied	45	22.84
Not satisfied	02	01.02

### 13. Suggestions for Improving the Use of CeRA

Table 13 also reveals that 87 (44.16%) of respondents suggested that 'More computers with the latest configuration should be enhanced' to use CeRA, followed by 64 (32.47%) respondents suggested that a 'Fast Internet connection' is required, about 62 (31.47%) of respondents suggested that 'Campus Wi-Fi Amenities', 55 (27.19%) of respondents suggested 'Extend the period for Internet use', 43 (21.87%) of respondents suggested that 'Printing facility establishment', and only 12 (06.09%) of respondents suggested that 'Frequently occurring training facilities'.

**Table-13:** Suggestions for Improving the Use of CeRA

Suggestions	Frequency (N=197)	Percentage
More computers with the latest configuration should be enhanced.	87	44.16
A fast Internet connection	64	32.48
Extend the time period for Internet use.	55	27.91
Campus Wi-Fi amenities	62	31.47
Printing facility establishment	43	21.82
Frequently occurring training facilities	12	06.09
<b>Note:</b> Multiple choice options the percentage is exceeded to more than 100%		

## CONCLUSION

In India, the issue of declining funding and concurrently skyrocketing journal prices is plaguing agricultural libraries. In significant initiatives on a national and worldwide scale, libraries must be actively involved. The consortium approach's path is electronic publishing. There are multiple models available for organizing library consortia. Only through networks or consortiums is it possible to share resources and knowledge from different libraries and information centers. Within the agricultural domain, CeRA is a valuable consortium that functions as an information center, offering end users access to a vast array of electronic resources, including online journals, articles, reviews, abstracts, and other materials. The students are frequently utilizing the ICAR's CeRA resources. The core purpose of the CeRA is to enhance member oral resource sharing while lowering the cost per unit of e-information. However, the respondents acknowledged that they had trouble finding pertinent information and were unaware of how to use e-resources. Accordingly, the study recommends that the relevant authorities to organize conferences, seminars, and workshops on subjects about the significance and application of the CeRA consortium, so the usability of these resources can be enhanced for better academic and research outputs.

## REFERENCES

- [1] Francis, A. T. (2012). Evaluation of Use of Consortium of e-Resources in Agriculture in Context of Kerala Agricultural University. *DESIDOC Journal of Library & Information Technology*, 38-44
- [2] Hadimani, Manjunath B. and Bankapur, Vinayaka M (2023). Access and Use of Consortium for eResources in Agriculture (CeRA) by the Research Scholars and Post Graduate Students of the KRC College of Horticulture, Arabhavi, UHS Bagalkot, *Library Philosophy and Practice (e-journal)*. 7603. Retrieved form <https://digitalcommons.unl.edu/libphilprac/7603>



- [3] Kalbande, D.T and Syed, Fayyaz.M (2012). Use of consortium for e-resources in Agriculture (CeRA): A case study. *International Journal of Library and Information Studies*.2(1).33-41.
- [4] Krishna, K. (2019). Use of CeRA Journals and their Impact on Agriculture Scholars A Case Study of S. K. N. Agriculture University, Jobner (Rajasthan). *KLA Journal of Information Science & Technology*, 1(2), 47–51.
- [5] Subramanian, N. and Priyadharshini. R. (2017). Use Pattern of Consortium of E-Resources Among Users at Forest College and Research Institute, Mettupalayam: A case study. *International Journal for Innovative Research in Multidisciplinary*.1-135.
- [6] Nabi, Hasan (2012). Web-based Agricultural Information Systems and Services under National Agricultural Research System. *DESIDOC Journal of Library and Information Technology*, 32(1), 24-30.
- [7] Nagaraju, B. G. and Sujatha, H. R. (2018).Awareness and use of CeRA among faculties and research scholars at the college of Agriculture, Hassan. *International Journal of Creative Research Thoughts (IJCRT)*, 6(1), 1189-1196.
- [8] Neogi, Priyanka and Partap,Bhanu (2022).Awareness and use of CeRA consortium among the students of Uttar Bangakrishiviswavidyalaya, Pundibari, Cooch Behar (w.b.), India: a case study. *Journal of Indian Library Association*, 58(4), 36-52.
- [9] Priyadharshini, R. Janakiraman, A. and Subramanian, N. (2015). Awareness in usage of e-Resources among users at Agricultural College and Research Institute, Madurai: A case study. *European Academic Research* , 14816-23.
- [10] Veeranjanyulu, K., and Ravi Kumar N.P. (2008).**CeRA** Usage Statistics of ANGRAU and PJTSAU from 2009 To 2013 : A Study. *Envisioning the Library of the Future*. Retrieved form <https://www.researchgate.net/publication/324966271>
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