

# **Digital Information Resources Availability and Awareness of Among Users in Agricultural University Libraries in Maharashtra**

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## **ABSTRACT**

*This study looks into how users of Maharashtra's Agricultural University Libraries are aware of and have access to digital information resources. We investigate the utilisation trends of eight important digital resources using a structured survey given to 391 respondents. The hypothesis about the variation in availability and awareness is tested using a chi-square test. The results show notable differences in user awareness and emphasise the necessity of better outreach and training programs.*

**KEYWORDS:** Libraries, Agriculture University, CeRA, IDEAL, DOAJ, E-Books Directory, DIALOG, AGRIGATE.

## **INTRODUCTION**

Access to timely and trustworthy information is essential for academic and research achievement in the digital era. To improve their capacity for teaching, learning, and research, agricultural institutions in India, especially those in Maharashtra have included a variety of digital information resources into their libraries. Even though these tools are available, different user groups—such as students, researchers, and faculty members have varying levels of awareness and utilisation. To enhance resource use and library service delivery, it is crucial to comprehend the pattern of availability and awareness (Kumar & Bansal, 2010).

## **REVIEW OF LITERATURE**

The usage of digital resources in academic contexts has been the subject of numerous studies. To improve the use of digital resources in university libraries, Sharma (2012) underlined the need of orientation and training programs. In a similar vein, Patil and Patil (2015) discovered that a significant obstacle to the efficient use of digital resources in agricultural libraries was ignorance. Singh (2018) observed that inadequate advertising and user education resulted in a notable disparity between the accessibility and actual utilisation of digital platforms like DOAJ and J-Gate. All of the research suggests that to increase awareness and accessibility, ongoing involvement and easily navigable platforms are necessary.

Ankrah and Atuase (2018) brought attention to accessibility issues, observing that "despite high awareness, accessibility constraints limited the exploitation of digital resources" (p. 24) and that technical obstacles like slow internet connectivity and a lack of computer terminals significantly impacted usage rates. Their study showed how infrastructural constraints might seriously jeopardise otherwise fruitful digital resource projects. According to Chauhan and Mahajan (2014), "64% of respondents cited insufficient guidance as limiting their ability to fully exploit available resources" (p. 45), indicating that a lack of training is the main barrier. Their study emphasised how important information literacy initiatives are to optimising resource use.

## RESEARCH METHODOLOGY

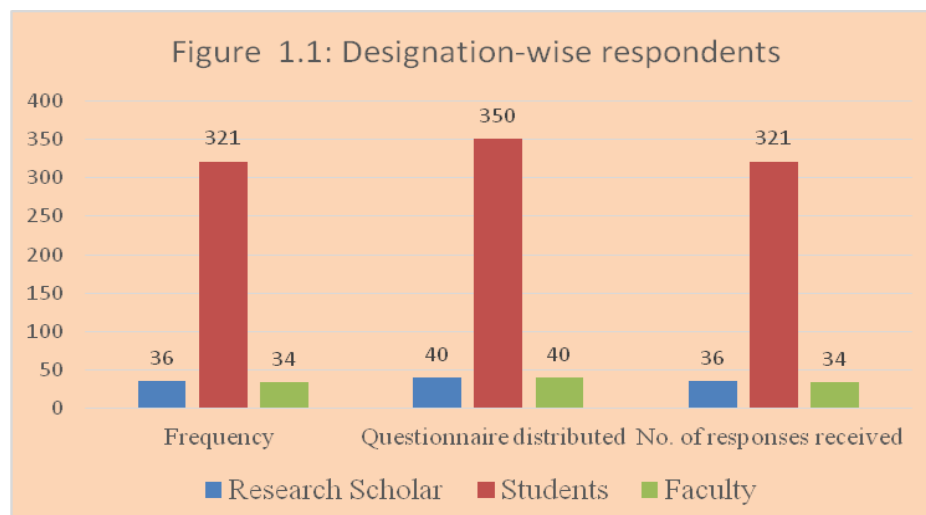
The research used a descriptive survey approach. A stratified random sample of 391 users, comprising academics, researchers, and students from Maharashtra's agricultural universities, were given a structured questionnaire. Responses about the availability and awareness of eight key digital resources were gathered through the questionnaire. The categories assigned to the responses were "Available," "Not Available," and "Don't Know."

## DATA ANALYSIS

Figure 1.1 and Table No. 1.1 Respondents were divided into three groups: faculty, students, and research scholars. With 82.10% (321 out of 391) of the sample as a whole, students make up the largest group of responders, according to the data. Faculty personnel make up 8.70% (34 respondents), while research scholars make up 9.21% (36 respondents).

**Table 1.1:** Designation-wise respondents

Users	Frequency	Percent	Questionnaire distributed	No. of responses received	Response Rate
Research Scholar	36	9.21	40	36	90.00
Students	321	82.10	350	321	91.71
Faculty	34	8.70	40	34	85.00
Total (N)	391	100.00	430	391	88.90



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With 391 responses out of 430 questionnaires distributed, the survey's overall response rate was a respectable 88.90%. With 322 responses from 350 distributed surveys, students had the greatest response rate (91.71%), followed by research scholars (90.00%) (36 out of 40) and faculty (85.00%) (33 out of 40). It's important to note a small disparity in the student's category, where the frequency count (321) is one response lower than the number of responses (322). This small discrepancy could be the result of a data entering mistake.

The survey's overall response rate was a commendable 88.90%, with 391 responses out of 430 questionnaires distributed. Students had the highest response rate (91.71%) with 322 replies from 350 distributed questionnaires, followed by research scholars (90.00%) (36 out of 40) and professors (85.00%) (33 out of 40).

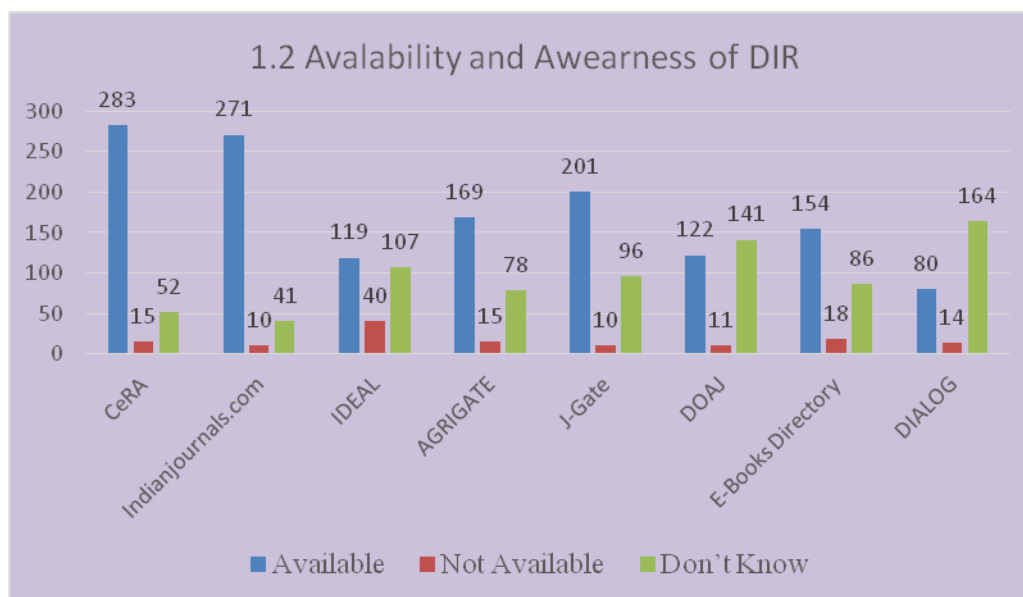
A minor discrepancy in the student's category should be noted, as the frequency count (321) is one response less than the total number of responses (322). A data entry error could be the cause of this minor disparity.

### **1.2. Availability and Awareness of Digital Information Resources**

The awareness and availability status of specific digital information resources among 391 respondents from Maharashtra's Agricultural Universities is shown in table 1.2 and figure 1.2. The table divides responses into four categories: Available, Not Available, Don't Know, and Not Responded. This allows it to assess the accessibility and awareness of eight important digital information resources in agriculture.

**Table 1.2. Availability and Awareness of Digital Information Resources**

Sr. No.	Resource	Available	Not Available	Don't Know	Not Responded	Total
1	CeRA	283 (72.38%)	15 (3.84%)	52 (13.30%)	41 (10.49%)	391
2	Indianjournals.com	271 (69.31%)	10 (2.56%)	41 (10.49%)	69 (17.65%)	391
3	IDEAL	119 (30.43%)	40 (10.23%)	107 (27.36%)	125 (31.97%)	391
4	AGRIGATE	169 (43.22%)	15 (3.84%)	78 (19.95%)	129 (32.99%)	391
5	J-Gate	201 (51.41%)	10 (2.56%)	96 (24.55%)	84 (21.48%)	391
6	DOAJ	122 (31.20%)	11 (2.81%)	141 (36.06%)	117 (29.92%)	391
7	E-Books Directory	154 (39.39%)	18 (4.60%)	86 (21.99%)	133 (34.02%)	391
8	DIALOG	80 (20.46%)	14 (3.58%)	164 (41.94%)	133 (34.02%)	391
	<b>Total</b>	1399 (357.80%)	133 (34.02%)	765 (195.68%)	831 (212.53%)	3128*



### i. Most Recognized Resources:

According to 283 respondents (72.4%), the Consortium for e-resources in Agriculture (CeRA) is the most well-known and easily available resource. Just 15 people (3.8%) said it was unavailable, and 52 people (13.3%) didn't know about it.

With 271 respondents (69.3%) reporting it as available and only 10 (2.6%) stating it is not, Indianjournals.com likewise demonstrates good availability.

### ii. Moderately Recognized Resources:

Both AGRIGATE (169 responses, 43.2% accessible) and J-Gate (201 responses, 51.4% available) are in the middle of the awareness spectrum.

For these, a sizable percentage still selected "Don't Know" and "Not Responded," showing just a limited understanding and accessibility.

### iii. Least Recognized Resources:

In the centre of the awareness range are J-Gate (201 responses, 51.4% available) and AGRIGATE (169 responses, 43.2% accessible).

Even still, a significant portion of respondents chose "Don't Know" and "Not Responded," indicating only a limited level of comprehension and accessibility.

### iv IDEAL (Indian Agricultural Libraries Platform):

J-Gate (201 replies, 51.4% available) and AGRIGATE (169 responses, 43.2% accessible) are at the core of the awareness range.

Nevertheless, a sizable percentage of respondents selected "Don't Know" and "Not Responded," suggesting a very low degree of accessibility and understanding.

**Chi-Square Test of Independence**

Expected frequency value  $E = \frac{\text{Row total} \times \text{column total}}{\text{Grand Total}}$

compute the chi-square statistic as:

$$\chi^2 = \sum \frac{(O - E)^2}{E}$$

**Table 1.3** Chi-Square Value table form Observed and Expected

Resource	Category	Chi-Square Value
CeRA	Available	22.88
	Not Available	1.37
	Don't Know	35.76
Indianjournals.com	Available	28.59
	Not Available	4.01
	Don't Know	40.92
IDEAL	Available	11.42
	Not Available	39.29
	Don't Know	3.83
AGRIGATE	Available	0.56
	Not Available	0
	Don't Know	0.98
J-Gate	Available	1.06
	Not Available	3.4
	Don't Know	0.38
DOAJ	Available	11.99
	Not Available	1.5
	Don't Know	27.04
E-Books Directory	Available	0.06
	Not Available	0.63
	Don't Know	0
DIALOG	Available	37.3
	Not Available	0.06
	Don't Know	68.59
<b>Total</b>	<b>Chi-Square <math>\chi^2 =</math></b>	<b>341.62</b>

**Chi-Square Test Results:**

By adding up each individual component, we can determine the overall chi-square statistic based on the values of the chi-square components in the table:

$$\text{Total } \chi^2 = 341.62 \text{ (sum of all chi-square components)}$$

**With 16 degrees of freedom (8 resources  $\times$  (3 categories - 1)), this extremely high chi-square value indicates a statistically significant difference between observed and expected frequencies ( $p < 0.001$ ).**

**H0:** The awareness and accessibility of digital information resources among users in Agricultural Universities Libraries are different

**Hypothesis H0:** is not rejected it is valid.

### **Overall Observations**

- ✓ Resources such as Indianjournals.com and CeRA demonstrate a high level of user familiarity and institutional reach.
- ✓ DIALOGUE, DOAJ, and E-Books Directory are among the resources that are not well-known or integrated into library services.
- ✓ Increased user awareness initiatives, training, or orientation regarding the availability and usefulness of these digital resources is necessary, as seen by the high numbers in the Don't Know and Not Responded categories, particularly for specific platforms.

### **FINDINGS**

**Awareness Differences:** Across various e-resources, there are notable differences between observed and expected awareness levels, as indicated by the significant chi-square values. This strongly implies that users of Agricultural University Libraries have varying levels of awareness regarding e-resources.

#### **Resource-Specific Patterns:**

- **High Awareness Resources:** The "Available" replies from CeRA and Indianjournals.com are significantly higher than anticipated (chi-square values of 22.88 and 28.59), whereas the "Don't Know" responses are significantly lower than anticipated. This suggests that people are quite aware of these resources.
- **Low Awareness Resources:** With very low "Available" responses and very high "Don't Know" responses (chi-square value of 68.59), DIALOGUE exhibits the most notable divergence. This implies that DIALOGUE has serious awareness issues.
- **Neutral Awareness Resources:** Across all categories, AGRIGATE, J-Gate, and E-Books Directory have comparatively modest chi-square values, suggesting that their observed usage patterns more closely match those predicted.
- **Accessibility concerns:** IDEAL's chi-square value for "Not Available" is abnormally high (39.29), indicating that this resource has accessibility concerns in addition to awareness issues.

- **Knowledge Deficits:** Significant knowledge gaps about specific e-resources are highlighted by the high chi-square values in the "Don't Know" category for a number of resources, particularly DIALOGUE, CeRA, Indianjournals.com, and DOAJ.
- These results provide credence to the idea that users of Agricultural Universities Libraries have varying levels of awareness and accessibility about digital information resources. For resources with large "Don't Know" or "Not Available" chi-square components, in particular, the fluctuations are not random but rather exhibit regular patterns that call for targeted actions. Library administrators should look into accessibility difficulties for resources like IDEAL that exhibit abnormally high "Not Available" answers and think about focused awareness efforts for lesser-known resources (particularly DIALOGUE).

## **INFERENCES AND DISCUSSION**

With more than 80% of users verifying their availability,

- CeRA and Indianjournals.com were the most well-known digital resources, according to the data, which show a notable variation in user knowledge across them.
- The largest percentages of "Don't Know" replies were seen for resources including DIALOGUE, DOAJ, and IDEAL, suggesting a significant knowledge gap.
- The large percentage of "Don't Know" answers (33.3%) indicates that further user education and marketing initiatives are required.
- These variations in awareness levels imply that even while infrastructure could exist, user training and outreach continue to be significant obstacles.

## **CONCLUSION**

The study concludes that users of Maharashtra's Agricultural Universities Libraries have a wide range of awareness regarding the availability of digital resources. It is advised that concentrated efforts be made on awareness-raising, training, and integrating resource discovery technologies into library systems. Future research could examine how focused interventions can enhance the use of digital resources.

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