

## A Study on Awareness & Use of E-Resources by the Users in Environmental Information Systems (ENVIS) Center Libraries in South India

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### Abstract

This paper presents the findings of the study on awareness and use of electronic resources among the users of Environmental Information Systems (ENVIS) Center Libraries in South India. A total 563 number of users from the Students, faculty members, research scholar, Research Associates and Research scientists were selected and their response was obtained with the help of questionnaire. The findings show that majority of respondents (62.87%) visit the library every day, (74.33%) of respondents are Aware & Use electronic resources, (44.56%) respondents are spent less than 1 hour for accessing e-Resources and (30.48%) respondents spent more than 2 hours for accessing e-Resources, (54.36%) of respondents agreed that the e-Resources is helpful as for as access from remote areas is concerned. Again, 45.81% of respondents have strongly agreed access to information is very fast and efficient by accessing e-Resources; (50.09%) of respondents have agreed that they faced the problem of Lack of time to retrieve the huge information and (49.91%) of respondents have disagreed that lack of internet connectivity and slow download are major problem while access information resources and services. 69.88% respondents are satisfied with the electronic resources and 15.69% of respondents are Extremely Satisfied with the electronic resources.

**Keywords:** Library Resources; Eir's; Awareness; Usage; Envis; South India.

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### Introduction

The fast-growing array of electronic information sources and communication environment offers enormous benefits. Information is more near to users mind, and information technology forms the bridge between the ocean of information and user needs. It is highly effective and efficient to provide

instant and comprehensive access to information to the users at their locations irrespective of time and space. Electronic Information Resources (EIR's) are increasingly important to all aspects and all levels of education and research. With the advent of World Wide Web, the EIRs have flourished in unprecedented way and have become the focus of research and academic activities in Universities, colleges and institutions in recent years. These



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Electronic Information Resources (EIRs) provides quick and wider access information to the users by using tools and techniques which are best, easier and user-friendly such as Electronic Journals, Electronic Books, Databases, Blogs, Internet, OPAC, Patents, Standards, Dictionaries, Online Theses and Dissertations, and Consortia. The electronic documents can be stored, accessed, and delivered as and when required; therefore, the services of the libraries are not confined within the four walls but are integrated into local, regional, national, and international networks. Academic libraries too are now becoming hybrid libraries.

### Review of Literature

A review of literature reveals that there is a large amount of literature available on the use of e-resources, but no in depth study has been done on the use of e-resources in Environmental Information Systems (ENVIS) Center Libraries under study. The present study is an attempt to clearly establish and exhibit the awareness & use of e-resources by academics in Environmental Information Systems (ENVIS) Center Libraries.

A study on the attitudes of undergraduate students and staff to the use of electronic learning was conducted by Yebowaah, F.A., & Plockey, F.D. (2017) found that 88.8% of the respondents were users of the Library and 65% were aware of the availability of e-resources in the Library. About 61 of respondents representing 76.3% indicated that they visit the Library to search for books for use while 17 respondents denoting 21.3% visit the Library in search of journals. Another study carried out by Akpojotor, Lucky O (2016) implies that postgraduate library and information science students in Southern Nigeria are highly aware of electronic information resources. It also reported that postgraduate LIS students are skilled in the use of electronic information resources. Based on the findings the study concluded that electronic information resources are essential tools for empowering postgraduate students of library and information science in Southern Nigeria. On other hand Sohail & Shakil Ahmad (2017) study reveals that majority of the users of FNU libraries keep themselves abreast of developments in electronic resources, services and utilize them properly in the field of academic and research. The study indicates that that 92% faculty member and 82.22% students use e-resources for research purpose, where as 494% faculty members and 92.22% students stated that they used e-resources for finding significant

information in the area of specialization, 52% faculty members and 97.77% students used it for keeping up-to-date in subject information. 60% faculty members and 86.66% students use it for getting current information. It is inferred that 43 (86%) of the faculty members and 86 (95.55%) students feel, e-resources are time saving, 38 (76%) faculty members and 81 (90%) students said that e-resources are easy to use. The Acheampong, E.K (2016) investigated student's awareness on the availability of e-resources in UPSA. Study revealed that UPSA students are fairly aware of electronic resources and they fairly used electronic resources to conduct their researches and to answer their assignments. It was further discovered that comparatively, electronic resources significance quite outweighs that of paper-form documents. Some challenges such as overcrowding of the library's electronic resources section by students due to inadequate number of computers and inadequate training on how to use e-resources were discovered.

Jebaraj (2018) conducted a study to determine the knowledge and use of e-Resources; users' skills in handling e-Resources; to reveal the factors which influence the effective use of e-Resources; problems faced by the respondents and their level of satisfaction regarding the use of e-Resources of central library in Alagappa University. On other hand Rafiq, Sadaf (2018) conducted a study on awareness and utilization of e-Resources by Medical Sciences Faculties. The results revealed that faculty members were well aware of e-resources through self-learning and discussion with friends/colleagues. The most famous e-resources were e-books, e-journals and e-magazines in medical sciences faculty. They strongly recommended orientation and training programs to enhance their skills and improve e-resources services. Same similarity study done by Mawere & Sai (2018) described some basic insights in utilization of e-resources in universities of developing countries. Despite the younger generation being described as digital natives, it is, quite evident that their uptake of technological innovations especially in education is quite poor. The study recommend to both researchers and management institutions of higher learning to restructuring some basic infrastructure and find users problems and provide suitable assistance while effective utilization of e-resources and find solution for poor utilizations. Priyanka Manjari Behera (2018) carried out a study on awareness of N-LIST services, source of awareness, place of access, purpose of use, types of e resources used, frequency of use, problem faced

while accessing N-LIST. The results data indicates that majority of the students and faculty members are not aware about N-LIST e resources. Students of both the colleges access the e-books through the college library and faculty members access mainly e-journals from their department. Maximum number of the faculty members and students of both the colleges access N-LIST e resources occasionally only.

### Objectives of the Study

The study the extent use of e-resources by the users of Environmental Information System (ENVIS) Center Libraries in South India.

#### Scope and limitations of the study

The limitation of the present study is consist to selected only 17 south Indian ENVIS center libraries out of 68 ENVIS Focal point centers, which has been engaged in state-of-the-art information acquisition, processing, storage, retrieval and dissemination of information, to support and promote research, development and innovative theoretical and practical thematically information in environmental information. The study focused on use of electronic library resources by ENVIS user's community in within the territorial jurisdiction of the South India.

#### Analysis and Findings of the Study:

The study utilized a descriptive survey method and employed a questionnaire as the data collection instrument. Questionnaire was divided into two sections; the first section collected demographic information such as gender, age and designation; the second section focused on the awareness and use of e-resources. Questionnaire was distributed personally to the respondents. 725 questionnaires distributed, and 563 were returned, making the response rate (77.65%).

**Table 1:** Demographic Characteristics of Respondents

Demography of respondents			
(N=563)	Counts	Percentage	
<b>Gender</b>	Male	333	(59.14)
	Female	230	(40.85)
<b>Age</b>	< 30	181	(32.14)
	31-40	232	(41.20)
	41-50	107	(19.00)
	51>	43	(8.02)
<b>Designation</b>	Faculty Members	116	(20.60)
	Students & Researchers	125	(22.20)
	Research Associates	213	(37.83)
	Research Scientists	109	(19.36)

**Note:** Number given in parenthesis represents the percentage

The data summarized in the table-1 demonstrates the demographic characteristics of respondents. It shows that out of 563 respondents, 59.14% are male respondents and 40.85% are female of respondents from Environmental Information Systems (ENVIS) Center Libraries. 41.20% of respondents are under the age group of 31-40 years. 32.14% of respondents belong to the age group of below 30 years. 19.00% of respondents are under the age group of 41-50. 8.02% respondents comes under the age group of above 51 years. 37.83% of respondents are Research Associates, 22.20% of respondents are Students & Researchers & 20.60% of respondents are Faculty Members. 19.36 of respondents are Research Scientists.

Table 2 shows that the frequency of use of e-Resources. Majority 354 (62.87%) of the respondents used e-Resources everyday followed by 93 (16.51%) of respondents using them atleast once in a Week whereas, 24 (4.28%) respondents use them occasionally used various e-Resources through various accessed platforms. Out of 563 total respondents, 135 (24.68%) of Research Associates, 78 (13.90%) of students, 76 (13.55%) faculty members and 65 (11.59%) of Research Scientist use e-Resources by daily.

**Table 2:** Frequency of Use of e-Resources

Respondents	Daily	Weekly	2-3 times a week	Fortnightly	Occasionally	Never
Faculty Members (n=116)	76 (13.49)	23 (4.08)	11 (1.96)	3 (0.53)	3 (0.53)	0 (0.00)
Students & Researchers (n=125)	78 (13.85)	17 (3.01)	19 (3.39)	5 (0.88)	5 (0.88)	1 (0.17)
Research Associates (n=213)	135 (24.68)	37 (6.57)	22 (3.92)	9 (1.59)	9 (1.59)	1 (0.17)
Research Scientists(n=109)	65 (11.54)	16 (2.85)	16 (2.84)	5 (0.88)	7 (1.24)	0 (0.00)
Total (n=563)	354 (62.87)	93 (16.51)	68 (12.07)	22 (3.90)	24 (4.26)	2 (0.35)

**Note:** Number given in parenthesis represents the percentage

**Table 3:** Awareness & Use of e-Resources among respondents  
**Note:** Number given in parenthesis represents the percentage

Respondents	Types of e-Resources													
	Level of Agreement	a	b	c	D	E	F	g	h	i	j	k	l	m
Faculty Members	Aware	24 (4.28)	22 (3.92)	3 (6.42)	27 (4.81)	50 (8.91)	65 (11.59)	50 (8.91)	67 (11.94)	72 (12.83)	70 (12.48)	62 (11.05)	60 (10.70)	34 (6.06)
(n=116)	Aware & Use	92 (16.40)	93 (16.58)	76 (13.55)	89 (15.86)	65 (11.59)	34 (6.06)	63 (11.23)	45 (8.02)	11 (1.96)	26 (4.63)	24 (4.28)	22 (3.92)	82 (14.62)
	Not Aware & Use	0	1	4	0	1	17	3	4	33	20	30	34	0
Students & Researchers	Aware	31 (5.53)	31 (5.53)	46 (8.20)	43 (7.66)	66 (11.76)	77 (13.73)	66 (11.76)	59 (10.52)	88 (15.69)	75 (13.37)	74 (13.19)	75 (13.37)	46 (8.20)
(n=124)	Aware & Use	93 (16.58)	93 (16.58)	78 (13.90)	81 (14.44)	57 (10.16)	32 (5.70)	57 (10.16)	60 (10.70)	7 (1.25)	32 (5.70)	24 (4.28)	20 (3.57)	77 (13.73)
	Not Aware & Use	0	0	0	0	1	15	1	5	29	17	26	29	1
Research Associates	Aware	56 (9.98)	52 (9.27)	83 (14.80)	61 (10.87)	103 (18.36)	117 (20.86)	95 (16.93)	134 (23.89)	130 (23.17)	134 (23.89)	119 (21.21)	120 (21.39)	74 (13.19)
(n=212)	Aware & Use	156 (27.81)	160 (28.52)	124 (21.10)	147 (26.20)	106 (18.89)	64 (11.41)	112 (19.96)	65 (11.59)	22 (3.92)	39 (6.95)	34 (6.06)	32 (5.70)	133 (23.71)
	Not Aware & Use	0	0	5	4	3	31	5	13	60	39	59	60	5
Research Scientists	Aware	33 (3.88)	28 (4.99)	35 (6.24)	30 (5.35)	57 (10.16)	48 (8.56)	57 (10.16)	56 (9.98)	55 (9.80)	54 (9.63)	44 (7.84)	45 (8.02)	37 (6.60)
(n=109)	Aware & Use	76 (13.55)	81 (14.44)	68 (12.12)	78 (13.90)	50 (8.91)	50 (8.91)	45 (8.02)	43 (7.66)	12 (2.14)	28 (4.99)	30 (5.35)	22 (3.92)	64 (11.41)
	Not Aware & Use	0	0	6	1	2	11	7	10	42	27	35	42	8
Total(n=561)	Aware	144 (25.67)	133 (23.71)	200 (35.65)	161 (28.70)	276 (49.20)	307 (54.72)	268 (47.77)	316 (56.33)	345 (61.50)	333 (59.36)	299 (53.30)	300 (53.48)	191 (34.05)
	Aware & Use	417 (74.33)	427 (76.11)	346 (61.68)	395 (70.41)	278 (49.55)	180 (32.09)	277 (49.38)	213 (39.97)	52 (9.27)	125 (22.28)	112 (19.96)	96 (17.11)	356 (63.46)
	Not Aware & Use	00 (0.00)	1 (0.18)	15 (2.67)	5 (0.89)	7 (1.25)	74 (13.19)	16 (2.85)	32 (5.70)	164 (29.23)	103 (18.36)	150 (26.74)	165 (29.41)	14 (2.50)
Mean		2.49	2.52	2.21	2.40	1.98	1.51	1.96	1.70	1.89	1.26	1.13	1.05	2.24

- a. e-Books
- b. e-Journals
- c. e-Conference proceedings
- d. e-Reports
- e. e-Maps, globs & atlases
- f. CD-ROM databases
- g. Reference resources
- h. e-Thesis and Dissertations (ETDs)
- i. Library Consortia e-resources
- j. Photographs and Slides
- k. Audio-Visual resources
- l. Rare collection archives
- m. e-Government publications

The awareness level with respect to different types of e-resources among the users under study varies widely. Table 3 illustrates Awareness & Use of e-Resources among the respondents. It is clear from table highest 427 (76.11%), 417 (74.33) and 395 (70.41%) of respondents are aware & use of e-Journals, e-books, and e-Reports (annual, statistical, research, survey & technical). Followed by, 345 (61.50%), 333 (59.36%) and 316 (56.33%) of respondents are being aware of Library Consortia e-resources and Photographs and Slides (experts & researcher presentations) and Electronic Thesis and Dissertations (ETDs). However 164 (29.23%) of respondents are Not Aware of & Use of Library Consortia e-resources in their respective libraries.

Table 4 shows that 44.56% respondents spent less than 1 hour for accessing e-Resources and 30.48% respondents spent More than 2 hours for accessing e-Resources. The analysis clearly indicates that the majority of the respondents spent Less than 1 hour for accessing e-Resources.

**Table 4:** Time Spent on Accessing e-Resources

Respondents	Duration of accessing e-Resources		
	Less than 1 hour	1 to 2 hours	More than 2 hours
Faculty Members (n=116)	57 (10.16%)	33 (5.88)	26 (4.63)
Students & Researchers (n=124)	61 (10.87)	23 (4.10)	40 (7.13)
Research Associates (n=212)	96 (17.11)	56 (9.98)	60 (10.70)
Research Scientists (n=109)	36 (6.42)	28 (4.99)	45 (8.02)
Total(n=561)	250 (44.56)	140 (24.96)	171 (30.48)

**Note:** Number given in parenthesis represents the percentage

There are several prominent benefits of accessing e-resources electronically. It not only provides access to huge base of information but also facilitate 24X7 accesses to all the information. Excellent search and retrieval features helps in getting the right resources at right time. Table 5 summarizes the perceived benefits that the respondents feels while accessing e-Resources for their teaching, research, study and other academic activities. From the analysis it is evident that majority 257 (45.81%), 252 (44.92%) of them are strongly agreed with that the access to information is very fast and efficient

and can access resources from anytime, anywhere (24x7). Followed by (54.36%) of respondents agreed with the e-Resources is helpful for them to access information from remote areas, than (56.33%) of them are agreed that e-Resources helps to access in multilingual languages, (50.98%) of respondents agreeing with e-Resources reduces the time & subscription cost of contents. It is also found that (22.28%) of respondents are uncertain with the benefit that e-Resources helps gets huge amount of information resources.

**Table 5:** Benefits of accessing e-Resources

Respondents	Level of Agreement	Benefits of e-Resources									
		a	B	c	d	e	f	g	h	i	
Faculty Members (n=116)	Strongly Agree	43 (7.66)	58(10.34)	52(9.27)	48(8.56)	27(4.81)	30(5.35)	39(6.95)	41(7.31)	42(7.49)	
	Agree	64(11.41)	44(7.84)	56(9.98)	54(9.63)	59(10.52)	45(8.02)	60(10.70)	60(10.70)	50(8.91)	
	Uncertain	6(1.07)	11(1.96)	6(1.07)	13(2.23)	27(4.81)	39(6.95)	15(2.67)	12(2.14)	15(2.67)	
	Disagree	1(0.18)	2(0.36)	2(0.36)	0(0.00)	1(0.18)	1(0.18)	1(0.18)	2(0.36)	8(1.43)	
Students & Researchers (n=124)	Strongly Disagree	2(0.36)	1(0.18)	0(0.00)	1(0.18)	2(0.36)	1(0.18)	1(0.18)	1(0.18)	1(0.18)	
	Strongly Agree	42(7.49)	57(10.16)	51(9.09)	58(10.34)	36(6.42)	32(5.70)	40(7.13)	41(7.31)	43(7.66)	
	Agree	72(12.83)	57(10.16)	61(10.87)	52(9.27)	55(9.80)	57(10.16)	70(12.48)	63(11.23)	56(9.98)	
	Uncertain	7(1.25)	7(1.25)	10(1.70)	12(2.14)	32(5.70)	34(6.06)	12(2.14)	19(3.39)	11(1.96)	
Research Associates (n=212)	Disagree	3(0.53)	1(0.18)	0(0.00)	1(0.18)	0(0.00)	0(0.00)	0(0.00)	0(0.00)	13(2.32)	
	Strongly Disagree	0(0.00)	2(0.36)	2(0.36)	1(0.18)	1(0.18)	1(0.18)	2(0.36)	1(0.18)	1(0.18)	
	Strongly Agree	76(13.55)	92(16.40)	94(16.76)	98(17.47)	53(9.45)	71(12.66)	74(13.01)	76(13.55)	87(15.51)	
	Agree	118(21.03)	108(19.25)	106(18.39)	89(15.86)	107(19.07)	80(14.26)	121(21.57)	111(19.79)	90(16.04)	
Research Scientists (n=109)	Uncertain	18(3.2)	11(1.96)	8(1.43)	23(4.10)	50(8.91)	57(10.16)	17(3.03)	23(4.10)	21(3.74)	
	Disagree	0(0.00)	0(0.00)	1(0.18)	2(0.36)	1(0.18)	2(0.36)	0(0.00)	1(0.18)	14(2.50)	
	Strongly Disagree	0(0.00)	1(0.18)	3(0.53)	0(0.00)	1(0.18)	2(0.36)	1(0.18)	1(0.18)	0(0.00)	
	Strongly Agree	44(7.84)	45(8.02)	49(8.73)	53(9.45)	34(6.06)	36(6.42)	30(5.35)	43(7.66)	49(8.73)	
Total(n=561)	Agree	51(9.09)	60(10.70)	55(9.80)	48(8.56)	57(10.16)	45(8.02)	65(11.59)	52(9.27)	51(9.09)	
	Uncertain	14(2.50)	4(0.71)	4(0.71)	5(0.89)	16(2.85)	27(4.81)	11(1.96)	11(1.96)	6(1.02)	
	Disagree	0(0.00)	0(0.00)	0(0.00)	1(0.18)	1(0.18)	0(0.00)	2(0.36)	1(0.18)	2(0.36)	
	Strongly Disagree	0(0.00)	0(0.00)	1(0.18)	2(0.36)	1(0.18)	1(0.18)	1(0.18)	2(0.36)	1(0.18)	
Mean	Strongly Agree	205(36.54)	252(44.92)	246(43.85)	257(45.81)	150(26.74)	169(30.12)	182(32.44)	201(35.83)	221(39.39)	
	Agree	305(54.36)	269(47.95)	278(49.55)	243(43.32)	278(49.55)	227(40.46)	316(56.33)	286(50.98)	247(44.03)	
	Uncertain	45(8.02)	33(5.88)	28(4.99)	53(9.45)	125(22.28)	157(27.99)	55(9.80)	65(11.59)	53(9.45)	
	Disagree	4(0.71)	3(0.53)	3(0.53)	4(0.71)	3(0.53)	3(0.53)	3(0.53)	4(0.71)	37(6.60)	
Total	Strongly Disagree	2(0.36)	4(0.71)	6(1.07)	4(0.71)	5(0.89)	5(0.89)	5(0.89)	5(0.89)	3(0.53)	
	Mean	1.74	1.64	1.65	1.67	1.99	2.02	1.81	1.80	1.85	

**Note:** Number given in parenthesis represents the percentage

- a. It is helpful to access from remote areas
- b. It is helpful to access resources from anytime, anywhere
- c. Easy to search & retrieve required information
- d. Access to information is very fast and efficient
- e. To get huge amount of information resources
- f. To get variety of information resources
- g. To access in multilingual languages
- h. It reduces the time & subscription cost of contents

Table 7: Problems in Accessing e-Resources

Respondents	Level of Agreement	a	B	C	d	e	f	g	h	i	j
Faculty Members (n=116)	Strongly Agree	4(0.71)	22(3.92)	60(10.70)	46(8.20)	1(0.00)	1(0.18)	32(5.70)	28(4.99)	2(0.36)	61(10.87)
	Agree	30(5.35)	36(6.42)	52(9.27)	31(5.53)	33(5.88)	14(2.50)	82(14.62)	31(5.53)	17(3.03)	54(9.63)
	Uncertain	32(5.70)	32(5.70)	2(0.36)	26(4.63)	23(4.10)	48(8.56)	2(0.36)	52(9.27)	29(5.17)	1(0.18)
	Disagree	38(6.77)	19(3.39)	2(0.36)	9(1.60)	45(8.02)	36(6.42)	0(0.00)	5(0.89)	43(7.66)	0(0.00)
Students & Researchers (n=124)	Strongly Disagree	12(2.14)	7(1.25)	0(0.00)	4(0.71)	14(2.50)	17(3.03)	0(0.00)	0(0.00)	25(4.46)	0(0.00)
	Strongly Agree	3(0.53)	21(3.74)	75(13.37)	44(7.84)	3(0.53)	1(0.18)	28(4.99)	33(5.88)	2(0.36)	57(10.16)
	Agree	19(3.39)	41(7.31)	42(7.49)	41(7.31)	31(5.53)	17(3.03)	94(16.76)	36(6.42)	12(2.14)	63(11.23)
	Uncertain	40(7.13)	22(3.92)	4(0.72)	25(4.45)	27(4.81)	49(8.73)	2(0.36)	46(8.20)	33(5.88)	2(0.36)
Research Associates (n=212)	Disagree	51(9.09)	26(4.63)	2(0.36)	9(1.60)	52(9.27)	40(7.13)	0(0.00)	9(1.60)	60(10.70)	2(0.36)
	Strongly Disagree	11(1.96)	14(2.50)	1(0.18)	5(0.89)	11(1.96)	17(3.03)	0(0.00)	0(0.00)	17(3.03)	0(0.00)
	Strongly Agree	5(0.89)	41(7.31)	125(22.28)	74(13.19)	5(0.89)	5(0.89)	37(6.60)	54(9.63)	5(0.89)	104(18.54)
	Agree	39(6.95)	71(12.66)	80(14.26)	68(12.12)	48(8.56)	39(6.95)	164(29.23)	60(10.70)	20(3.57)	103(18.36)
Research Scientists (n=109)	Uncertain	61(10.87)	70(12.48)	5(0.89)	43(7.66)	52(9.27)	75(13.37)	10(1.78)	85(15.15)	45(8.02)	4(0.71)
	Disagree	91(16.22)	18(3.21)	2(0.36)	21(3.74)	87(15.51)	77(13.73)	1(0.18)	13(2.32)	114(20.23)	1(0.18)
	Strongly Disagree	16(2.85)	12(2.14)	0(0.00)	6(1.07)	20(3.57)	16(2.85)	0(0.00)	0(0.00)	28(4.99)	0(0.00)
	Strongly Agree	1(0.18)	26(4.63)	75(13.37)	42(7.49)	2(0.36)	2(0.36)	19(3.39)	21(3.74)	4(0.71)	48(8.56)
Total (n=561)	Agree	10(1.78)	37(6.60)	34(6.06)	39(6.95)	26(4.63)	19(3.39)	89(15.86)	24(4.28)	10(1.78)	61(10.87)
	Uncertain	31(5.53)	22(3.92)	0(0.00)	20(3.57)	25(4.46)	32(5.70)	1(0.18)	57(10.16)	18(3.21)	0(0.00)
	Disagree	56(9.98)	14(2.50)	0(0.00)	4(0.71)	48(8.56)	43(7.66)	0(0.00)	7(1.25)	63(11.23)	0(0.00)
	Strongly Disagree	11(1.96)	10(1.78)	0(0.00)	4(0.71)	8(1.43)	13(2.32)	0(0.00)	0(0.00)	14(2.50)	0(0.00)
Mean	Strongly Agree	13(2.32)	110(19.61)	335(59.71)	206(36.72)	11(1.96)	9(1.60)	116(20.86)	136(24.24)	13(2.32)	270(48.13)
	Agree	98(17.47)	185(32.98)	208(37.08)	179(31.91)	138(24.60)	89(15.86)	429(76.47)	151(26.92)	59(10.52)	281(50.09)
	Uncertain	164(29.23)	146(26.02)	11(1.96)	114(20.32)	127(22.64)	204(36.36)	15(2.67)	240(42.78)	125(22.28)	7(1.25)
	Disagree	236(42.07)	77(13.73)	6(1.07)	43(7.66)	232(41.35)	196(34.94)	1(0.18)	34(6.06)	280(49.91)	3(0.53)
Mean	Strongly Disagree	50(8.91)	43(7.66)	1(0.18)	19(3.39)	53(9.45)	63(11.23)	0(0.00)	00(0.00)	84(14.97)	00(0.00)
		3.38	2.57	1.45	2.09	3.32	3.38	1.82	3.31	3.65	1.54

Note: Number given in parenthesis represents the percentage

a. Assigned computers speed is very low

- b. Available e-Resources may not adequate
- c. Copy protected electronic contents
- d. In consistency of document formats
- e. Lack of availability of computers to access e-Resources
- f. Lack of knowledge & expertise in search and retrieve
- g. Lack of single window platforms to access e-Resources
- h. Lack of skilled library professionals to assists
- i. Lack of internet connectivity and slow downloading
- j. Lack of time to retrieve the huge information

Though there are a number of benefits, quite a few problems are also associated with of accessing e-resources as well. Problems such as lack of information literacy and infrastructure unavailability are prominent It can be inferred from Table 7 that accessing e-Resources is not free from problems. From the table 7 it can be observed that 335 (59.71%) and 270 (48.13%) of respondents strongly agreed that the copy protected electronic contents and lack of time to retrieve the huge information respectively are major problems in accessing electronic information. Further 429 (76.47%) of respondents agreed the lack of single window platforms to access e-Resources, 240 (42.78%) of them are uncertain with skilled library professionals to assists. However 280 (49.91%), 84 (14.97%) of respondents have disagreed and strongly disagree that they faced the problem of Lack of internet connectivity and slow downloading.

The level of satisfaction with respect to accessing electronic resources is measured using a 5 point rating scale and is presented in Table 8. The table shows that 69.88% respondents have satisfied with the availability of electronic resources in their respective libraries and further 15.69% of respondents are Extremely Satisfied with the electronic resources, however only few 4.63% of respondents have not at all satisfied with available e-Resources in libraries as well on internet.

### Conclusion

Electronic resources are increasingly important to all aspects and all levels of education and research. With the changing environment, conventional resources are being streamlined with ICT touch. The hybrid library system is promoted by integrated with both print and electronic resources and services and are becoming essential part of all types of libraries. For effective utilization of e-Resources and services, some basic knowledge of computer, ICT, search skills and competencies are require to search and accessed in effectively and efficiently, but knowledge of e-resources is associated with user's attitude, practice and usage.

The users of Environmental Information Systems (ENVIS) Center Libraries are quite aware of e-resources available and use them for their learning, teaching and research benefits. Their perception towards these e-resources are encouraging as they have resource in their fingertip they can have right information at right time with less effort. Yet there are some problems as they

**Table 8:** Distribution overall satisfaction of electronic resources

Respondents	Overall Satisfaction				
	Extremely Satisfied	Satisfied	Uncertain	Not satisfied	Not at all satisfied
Faculty Members (n=116)	16 (2.85)	82 (14.62)	5 (0.89)	8 (1.43)	5 (0.89)
Students & Researchers (n=124)	17 (3.03)	85 (15.15)	8 (1.43)	7 (1.25)	7 (1.25)
Research Associates (n=212)	37 (6.60)	143 (25.49)	7 (1.25)	14 (2.50)	11 (1.96)
Research Scientists (n=109)	18 (3.21)	82 (14.62)	6 (1.07)	0 (0.00)	3 (0.53)
Total(n=561)	88 (15.69)	392 (69.88)	26 (4.63)	29 (5.17)	26 (4.63)



feel sometime uncomfortable with the Assigned computers speed is very low; Available e-Resources may not adequate; Copy protected electronic contents; In consistency of document formats; Lack of availability of computers to access e-Resources; Lack of knowledge & expertise in search and retrieve; Lack of single window platforms to access e-Resources; Lack of skilled library professionals to assists; Lack of internet connectivity and slow downloading; Lack of time to retrieve the huge information. The concerned department/People should think seriously to improve on these lacunas and provide a seamless access to information for their learning, teaching and researchactivities.

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