# E-Resource Usage Statistics of The Gandhigram Rural Institute – Deemed to be University: with Special Reference to INFISTATS

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Abstract

*The study of usage of e-resources is available through e-ShodhShiindu (eSS) Consortium at the url https://infistat.inflibnet.ac.in/ for every institute members provided username and password to access them. The objective is to find trends in usage of e-resources and the high and low level of use. To study the usage trends a usage statistics of nine full-text databases during 2012-2019. The study reveals that usage of e-resources is increasing from 2012 to 2016 and decrease afterwards. To increase the usage of e-resources, the remote access facilities extended to faculty members and research scholars from 2019 onwards. Users from science faculty members and researchers in their field are more active in using e-databases when compare to arts. Subject specific databases are highly used than multi-subject databases. This usage study is useful for Library professionals for finding important e-journals and databases for proper implementation of funds*

Keywords

InfiStats, INFLIBNET, Usage of E-resources, eSS Consortia, The Gandhigram Rural Institute – Deemed to be University

Electronic access

The journal is available at www.jalis.in

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## Introduction

It is necessary to evaluate the use of every resources spent by the institute or through consortia. It needs evaluation of the resources by counting the views or counting downloaded resources. Based on the effective use of the resources, it may be continued to subscribe for next year and so on. For this purpose, it needs a system to gather all these views and downloads and gets the usage report. So the INFLIBNET has developed system for this purpose is called InfiStats, Usage Statistics Portal for e-Resources. Through this system, an individual institute can get the usage data on different categories like journals wise, publishers wise, chronological wise, etc. To access the InfiStats, the member institutions can login to this portal for knowing the usage of their respective e-resources. https://infistat.inflibnet.ac.in/[1] for every institute members provided username and password to access them.

## InfiStats

InfiStats[2] is a portal developed by the INFLIBNET Centre for the purpose monitoring the usage statistics of various e-resources accessed to the member institute. Technically it used the "Standardized Usage Statistics Harvesting Initiative (SUSHI)" and the Protocol (ANSI/NISO Standard No. Z39.93-2007). It harvests the usage data automatically from different Web servers. It updates a database on InfiStats for the purposes of analyzing the use of e-resources. The InfiStats interface provides title level COUNTER reports to member institute. The member institutions can also login to this portal for monitoring the usage of their respective e-resources.

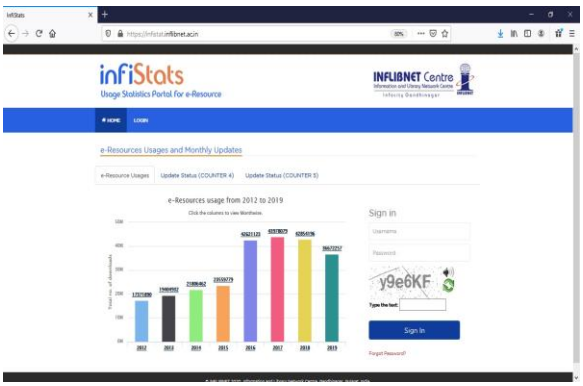



***Fig.1. InfiStats portal home page***

## Benefits for Member Institutions

The INFLIBNET centre has recommended the following benefits and features for using this InfiStats software.

- Helps in saving the time of libraries and consortium in duplication of efforts involved in the process of downloading, aggregating and comparing of the usage statistics enabling them to have more time for analysis of usage;
- Generates monthly alerts in case of low usage of e-resources;
- Facilitates viewing of consolidated usage statistics for all the publishers for every year for individual member institutes as well as for all member institutes;
- Facilitates downloading of journal-level usage statistics for each publisher in COUNTER tsv format;
- Facilitates downloading of journal-level usage for all the journals as a tsv file;
- Facilitates viewing of trends over time for individual publishers; and
- Facilitates creation of customized report for selected journals for comparison.
- Facilitate to decide to continue the subscription of the publications from publisher.

**Features of InfiStats**

- Saves time of consortium in duplication of efforts involved in the process of downloading, aggregating and comparing of the usage statistics enabling more time for analysis of usage
- Facilitates viewing of usage statistics of all the publishers for each member university for every year
- Facilitates viewing of publisher-wise usage statistics for all the member institutes
- Facilitates periodic updating of the usage statistics using SUSHI Client; and
- Facilitates monthly mails to member institutes whose usage is lower or decrease

**Workflow of InfiStats**

- Uses the php-soap extension to create SUSHI call to publisher server
- Receives Response in COUNTER-XML format
- Read the response using php DOM parser
- Import the data into MySql table
- Match Institution ID of report with consortium member ID
- Presentation of the Data on Portal




***Fig.2. InfiStats Workflow diagram***

**The Gandhigram Rural Institute – Deemed to be University**

The Gandhigram Rural Institute (GRI) is one such institution, was founded in 1956 on Mahatma Gandhiji's call for serving local people in and around Gandhigram and by his disciple couple Dr. G. Ramachandran and Dr.T.S. Soundaram with the aims of promoting classless and casteless society through teaching, research and extension activities. GRI is located in nestling in the breezy and luxuriant landscape in the lower slope of Sirumalai Hill in the rural Tamil Nadu. In recognition of its exemplary services and contributions in the field of rural higher education, the Institute was conferred Deemed to be University status in 1976. The Institute was accredited with Five Star status in February 2002 and re-accredited with 'A' grade status in 2010 and accredited by NAAC with 'A' grade (3rd cycle) 2016. Today, GRI-DU has emerged as a premier Institute for advanced learning and research, perhaps, the best in rural oriented courses and extension. Started in a small way, the Institute has developed a big corpus comprising eight different schools, offering about fifty different programmes.

**Dr. G. Ramachandran Library**

The Gandhigram Rural Institute Library was established in 1956. It moved to the present building in 1987, stocking over 1.7 lakh books. The Library is named after the Founder Vice-Chancellor Dr. G. Ramachandran. The Library has been computerized for circulation and searching of books with KOHA free open source software. The digitization of library documents is also progressing. The Library has UGC-INFONET E-journals access facility with 1 GB connectivity provided by UGC-INFLIBNET Centre, Ahmedabad through ERNET India, New Delhi.[(3)]

**Subscribed e-resources [(4)]**

The Library is subscribing the following e-journals by the institute's printed journals and also online journals. The following companies' e-books have been subscribed as perpetual access mode.

I. E-Books
   i. ASAP
   ii. Informatics
   iii. Oxford University Press
   iv. Pearson
   v. Videeya

II. Online Journals
   i. Indian Journals
   ii. Sage Journals
   iii. ARCC Journals
   iv. NISCAIR Journals
   v. Elsevier Publication
   vi. Indian Academy of Sciences Online Journals
   vii. Other Journals

III. Databases
   i. DELNET
   ii. Indiastat.com
   iii. EPWRF Online Database

**Databases available through eShodhSindhu[(5)]**

The e-ShodhSindu: Consortia for Higher Education E-Resources is to provide access to qualitative electronic resources including full-text, bibliographic and factual databases to academic institutions at a lower rates of subscription through INFLIBNET Centre. The following e-resources currently provided to the Gandhigram Rural Institute for the year 2020.

1. Economic & Political Weekly
2. Institute for Studies in Industrial Development (ISID) Database
3. J-Gate Plus (JCCC)
4. JSTOR
5. Oxford University Press
6. Project Muse
7. Springer Link 1700 Collection and Nature Journal
8. Taylor and Francis
9. Open Access Portal (from eSS Consortia)
   i. National Digital Library
   ii. World e-Book Library
   iii. South Asia Archive

## Review of Literature

Pradhana, D. R., Raib, A. K., & Arora, J. (2012)[(6)] implemented the InfiStat at the INFLIBNET centre. The usage of e-resources is one of the most important parameters to judge effectiveness of a consortium. Manual downloading and analysis of usage statistics is a time-consuming process for a consortium like UGC-INFONET Digital Library Consortium having more than 180 core members. COUNTER and SUSHI standards have the potential to ease the work of a consortium administrator by minimizing the time involved in manual downloading of usage statistics allowing more time for analyzing the usage statistics for better decision making. The article gives a brief of the implication of SUSHI for creating a usage statistics portal at the INFLIBNET Centre for monitoring the usage of the member universities.

Ganesan, S., and Thirunavukkarasu, N. (2018)[(7)] conducted a study using InfiStats. Technological advancements have made great amounts of information readily available in a digital format, thereby enabling faculty members to easily and remotely access information beyond the books and journals. Therefore, faculty members have reduced their visits to the library and employing information-searching and retrieval processes through the external sources. The service providers focused on journals and databases for variables such as full-text articles, searches and sessions. These usage statistics are important for the preferences of library users. This survey is helpful to learn about the level of effort involved with usage reports, how the data are used and which data are most useful to librarians in managing electronic resources. Two year data (2016 & 2017) of IEEE and Elsevier Science Direct access was downloaded from the publisher website and analyze the data of total number of logins and journal articles download. The study analyzed that the Elsevier Science Direct access is the mostly used online database compared with IEEE and also the number of articles downloaded from the Elsevier Science Direct is the highest one. Keywords: Usage Statistics, Electronic Resources, IEEE, Elsevier Science Direct.

Bhat, M. I. (2009)[(8)] found a large quantity of subscribed e-resources in our libraries and they contain quality information, though expensive. In spite of advantages in terms of access and search capabilities, they are underused. Systematic plan has to be in place for their promotion of use. While a good ICT infrastructure is a prerequisite, it alone will not do. Proactive strategies are required and these need to be adopted imaginatively. Access to e-resources need to be made easier for both on campus and off campus users. As a priority, active users need to be identified and they need to be converted to heavy users of e resources. Secondly, non users be converted to active users Various methods have to be tried in order to grab the attention of the users

towards the e-resources. User training will increase the confidence level of the users.Newer technologies from the Web 2.0 such as RSS alert service, Blogs, Wikis and Facebook make the interaction with the library not only interesting but also add more value. Finally, the effectiveness of various promotional strategies need to be measured by monitoring the usage and user feedback.

Baker, G., & Read, E. J. (2008)[9] made survey was sent to research libraries in the United States and Canada to learn about the level of effort involved in working with vendors' usage reports, how the data are used, and which data are most useful to librarians in managing electronic resources. The results showed that more time was spent acquiring, reformatting, and manipulating the data than on actually analyzing them. The number of full-text downloads was specified as the most useful statistic for assessing the use of electronic resources.

**Objectives of the Study**

These are the major objectives of the study

1. To find out the year wise access of resources.
2. To identify the usage of e-resources through eShodhSindhu.
3. To find the number of downloads /views.
4. To identify the popularity publisher.

**Research Methodology**

The data were collected from InfiStats (Usage Statistics Portal for e-resources) website (https://infistat.inflibnet.ac.in/index.php)[10]. The e-resource access management system (InfiStats) developed by Information and Library Network Centre, Gandhinagar, Gujarat. The 10 databases has accessed through e-ShodhSindhu. The period selected for the study is 2011-2019. The study aims to analyze Year wise access of e-resources, Usage of Cambridge University Press, Institute of Physics, JCCC, Oxford University Press, Royal Society of Chemistry, Springer Link, Taylor and Francis, JSTOR, Nature and Project Muse.

**Data Analysis and Interpretation**

The data has been collected from the www.ruraluniv.ac.in provided e-resources by the INFLIBNET centre and also evolution software also.

**Publisher wise access of e-resources**

For the last eight years usage data has been collected and provided in table 1 with number of individual e-resources and total number of downloads / views with percentage and their rank.

**Table 1:**Publisher wise access of e-resources

| S. No | Name of the Publisher | Total no. of downloads / views | % | Rank |
|---|---|---|---|---|
| 1 | Cambridge University Press | 1084 | 0.61 | 8 |
| 2 | Institute of Physics | 4162 | 2.34 | 6 |
| 3 | JCCC | 10527 | 5.91 | 5 |
| 4 | Oxford University Press | 3429 | 1.92 | 7 |
| 5 | Royal Society of Chemistry | 13336 | 7.48 | 4 |
| 6 | Springer Link | 96176 | 53.96 | 1 |
| 7 | Taylor and Francis | 16902 | 9.54 | 3 |
| 8 | JSTOR | 32242 | 18.09 | 2 |
| 9 | Project Muse | 276 | 0.15 | 9 |
| | | **178134** | **100** | |

Table 1 indicates that year wise access of e-resources. The nine e-journal databases are accessed through e-ShodhSindhu in Gandhigram Rural Institute. The 1,78,134 articles are downloads / views in during the 2012- 2019. It is found that Springer Link database has downloads /views the highest number of 96176 (53.96%) times and placed first rank and it is followed by JSTOR has downloads 32242 (18.09%) times have placed second rank. It is further found that Project Muse has downloads least number of 276 (0.15%) times have placed tenth rank.

**Year-wise downloads/views**

The data has further tabulated with Year-wise and their number of downloads and views with percentage with ranking provided in the table 2. It also indicates that year-wise highly used e-resources and overall downloads of the year and publishers.

**Table 2:**Year-wise downloads/views

| S.No. | Year | Total no. of downloads/views | % | Rank |
|---|---|---|---|---|
| 1 | 2012 | 5563 | 3.12 | 8 |
| 2 | 2013 | 24597 | 13.81 | 5 |
| 3 | 2014 | 18100 | 10.16 | 7 |

| | | | | |
|---|---|---|---|---|
| 4 | 2015 | 26373 | 14.81 | 2 |
| 5 | 2016 | 30417 | 17.08 | 1 |
| 6 | 2017 | 24962 | 14.01 | 4 |
| 7 | 2018 | 25162 | 14.13 | 3 |
| 8 | 2019 | 22960 | 12.89 | 6 |
| | **Total** | **178134** | **100.00** | |

Table 2 indicates that in the year 2016, highest downloads from e-resources and followed by 2015 and 2018.

**Usage of Cambridge University Press**

Cambridge University Press publishers journals were subscribed by eSS consortia and it was discontinued the subscription from 2017. The data has further tabulated with Year-wise and their number of downloads and views with percentage with ranking provided in the table 3.

**Table 3:** Usage of Cambridge University Press

| S. No. | Year | Total no. of downloads/ views | % | Rank |
|---|---|---|---|---|
| 1 | 2016 | 191 | 17.62 | 3 |
| 2 | 2015 | 251 | 23.15 | 2 |
| 3 | 2014 | 159 | 14.67 | 5 |
| 4 | 2013 | 309 | 28.51 | 1 |
| 5 | 2012 | 174 | 16.05 | 4 |
| | **Total** | **1084** | **100** | |

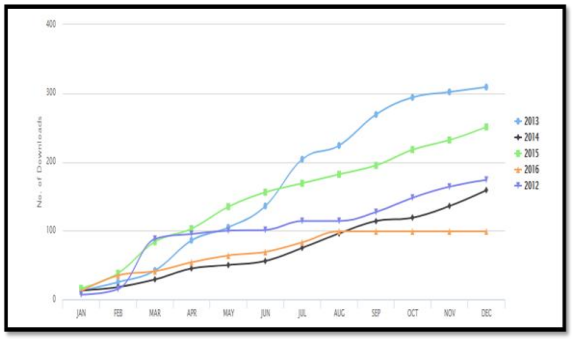



**Fig.3. Monthly wise downloads/views from Cambridge University Press**

Table 3 shows that usage of Cambridge University Press and it is found that 1084 articles were downloaded / viewed from Cambridge University Press in the year 2012 -2016. It is found from table 4 that majority number of 309 (28.51%) articles were downloaded/ viewed in the year 2013 and placed first rank. It is followed by 2015 has accessed 251 (23.15%) articles were downloaded/ viewed and placed second rank. It is further found that less number of 159 (14.67%, Rank 5) publications were produced in the year 2014.

**Usage of Institute of Physics (IoP)**

Institute of Physics is covered Physics subjects and world-leading science publisher and valued voice for the physics community. The data has further tabulated with Year-wise and their number of downloads and views with percentage with ranking provided in the table 4.

**Table 4:** Usage of Institute of Physics

| S. No. | Year | Total no. of downloads / views | % | Rank |
|---|---|---|---|---|
| 1 | 2012 | 76 | 1.83 | 8 |
| 2 | 2013 | 332 | 7.98 | 7 |
| 3 | 2014 | 403 | 9.68 | 5 |
| 4 | 2015 | 606 | 14.56 | 3 |
| 5 | 2016 | 914 | 21.96 | 2 |
| 6 | 2017 | 973 | 23.38 | 1 |
| 7 | 2018 | 484 | 11.63 | 4 |
| 8 | 2019 | 374 | 8.99 | 6 |
| **Total** | | **4162** | **100** | |

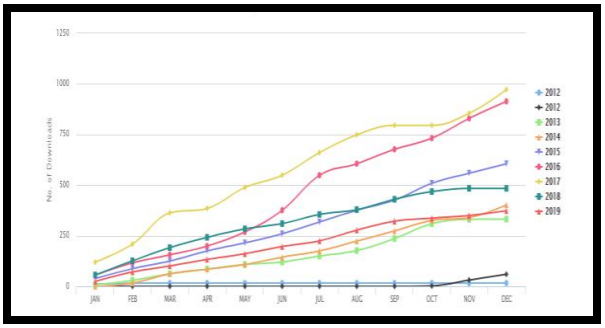



**Fig.2. Monthly wise downloads / views from Institute of Physics**

Table 4 indicates that usage of Institute of Physics. It is found that 4162 articles were downloaded / viewed from Institute of Physics in the year 2012 -2019. It is found from table 3 that majority number of 973 (23.38%) articles were downloaded/ viewed in the

year 2017 and placed first rank. It is followed by 2016 has accessed 914 (21.96%) articles were downloaded/ viewed and placed second rank. It is further found that less number of 76 (1.82%, Rank 8) publications were produced in the year 2012.

**Usage of JCCC**

This (bibliographic only) database provides access to literature from over 56,416 e-journals with links to full text at publisher sites. J-gate is an electronic gateway to global e-journal literature covering all subjects. J-Gate provides access to millions of journal articles from 12,653 publishers linked to full text at publisher sites. It gives Table of Contents (TOC) for 56,392 e-journals. It is also a database and a comprehensive searchable database with 67,999,753 articles. The data has further tabulated with Year-wise and their number of downloads and views with percentage with ranking provided in the table 5.

**Table 5:**Usage of JCCC

| S. No. | Year | Total no. of downloads / views | % | Rank |
|---|---|---|---|---|
| 1 | 2014 | 1065 | 10.12 | 4 |
| 2 | 2015 | 516 | 4.90 | 5 |
| 3 | 2016 | 2701 | 25.66 | 2 |
| 4 | 2017 | 291 | 2.76 | 6 |
| 5 | 2018 | 2274 | 21.60 | 3 |
| 6 | 2019 | 3680 | 34.96 | 1 |
| | **Total** | **10527** | **100.00** | |

Table 5 demonstrates that usage of JCCC and it is found that 10527 articles were downloaded / viewed from JCCC in the year 2014 -2019. It is found from table 5 that majority number of 3680 (34.96%) articles were downloaded/ viewed in the year 2019 and placed first rank. It is further found that less number of 516 (4.90%) publications were produced in the year 2015 have placed last rank.

**Usage of Oxford University Press**

Oxford University Press Publisher is covered the subjects of Language, Literature and Education, etc. The data has further tabulated with Year-wise and their number of downloads and views with percentage with ranking provided in the table 6.

**Table 6:**Usage of Oxford University Press

| S. No. | Year | Total no. of downloads / views | % | Rank |
|---|---|---|---|---|
| 1 | 2012 | 109 | 3.18 | 8 |
| 2 | 2013 | 278 | 8.11 | 7 |
| 3 | 2014 | 363 | 10.59 | 6 |
| 4 | 2015 | 366 | 10.67 | 5 |
| 5 | 2016 | 615 | 17.94 | 2 |
| 6 | 2017 | 509 | 14.84 | 4 |
| 7 | 2018 | 678 | 19.77 | 1 |
| 8 | 2019 | 511 | 14.90 | 8 |
| | **Total** | **3429** | **100.00** | |

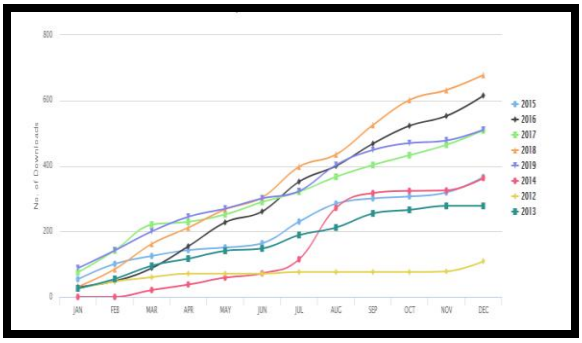



***Fig.4. Monthly wise downloads / views from Oxford University Press***

Table 6 indicates that usage of Oxford University Press and it is found that 3429 articles were downloaded / viewed from Oxford University Press in the year 2012 -2019. It is found from table 6 that majority number of 678 (19.77%) articles were downloaded/ viewed in the year 2018 and placed first rank. It is followed by 2016 has accessed 615 (17.94%) articles were downloaded/ viewed and placed second rank. It is further found that less number of 109 (3.18%, Rank 8) publications were produced in the year 2012.

**Usage of Royal Society of Chemistry**

Royal Society of Chemistry publishers is covering chemistry. The data has further tabulated with Year-wise and their number of downloads and views with percentage with ranking provided in the table 7. The

subscription of the journals is only three years from 2015 to 2016. However, the subscribed period and it allows downloading for that particular year.

**Table 7:**Usage of Royal Society of Chemistry

| S. No. | Year | Total no. of downloads / views | % | Rank |
|---|---|---|---|---|
| 1 | 2015 | 1550 | 11.62 | 4 |
| 2 | 2016 | 4687 | 35.15 | 1 |
| 3 | 2017 | 4160 | 31.19 | 2 |
| 4 | 2018 | 2232 | 16.74 | 3 |
| 5 | 2019 | 707 | 5.30 | 5 |
| | **Total** | **13336** | **100.00** | |

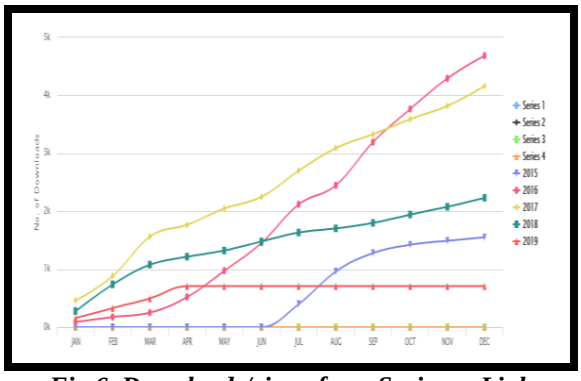


***Fig.6. Downloads/views from Springer Link***

Table 7 shows that usage of Royal Society of Chemistry. The 13336 articles were downloaded / viewed from Royal Society of Chemistry in the year 2015 -2019. It is found from table 6 that majority number of 4687 (35.15%) articles were downloaded/ viewed in the year 2016 and placed first rank. It is followed by 2017 has accessed 4160 (31.19%) articles were downloaded/ viewed and placed second rank. It is further found that less number of 707 (5.30%, Rank 5) publications were produced in the year 2019.

**Usage of Springer Link**

Springer Link publisher covers all the subjects both science and arts. 1722 individual journals access provided to the consortia. The data has further tabulated with Year-wise and their number of downloads and views with percentage with ranking provided in the table 8.

**Table 8:**Usage of Springer Link

| S. No. | Year | Total no. of downloads / views | % | Rank |
|---|---|---|---|---|
| 1 | 2012 | 1884 | 1.96 | 8 |
| 2 | 2013 | 16700 | 17.36 | 1 |
| 3 | 2014 | 10332 | 10.74 | 7 |
| 4 | 2015 | 14070 | 14.63 | 3 |
| 5 | 2016 | 15225 | 15.83 | 2 |
| 6 | 2017 | 13314 | 13.84 | 4 |
| 7 | 2018 | 11802 | 12.27 | 6 |
| 8 | 2019 | 12849 | 13.36 | 5 |
| | **Total** | **96176** | **100.00** | |

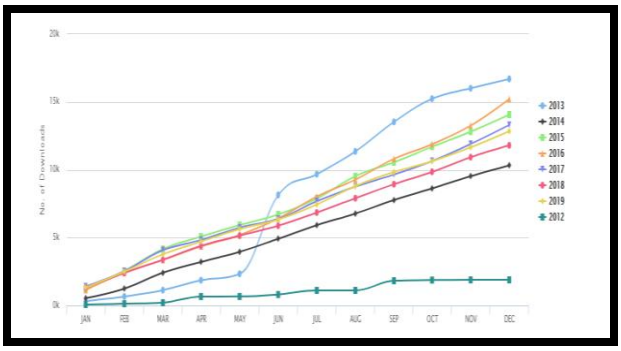


***Fig.6.Monthly wise downloads / views from Springer Link***

Table 8 demonstrates that usage of Springer Link and it is found that 96176 articles were downloaded / viewed from Springer Link in the year 2012 -2019. It is found from table 8 that majority number of 16700 (17.36%) articles were downloaded/ viewed in the year 2016 and placed first rank. It is followed by 2016 has accessed 15225 (15.83%) articles were downloaded/ viewed and placed second rank. It is further found that less number of 1884 (1.96%, Rank 8) publications were produced in the year 2012.

**Usage of Taylor and Francis**

Taylor and Francis cover all the subjects and provided with 1078 individual journals. The data has further tabulated with Year-wise and their number of downloads and views with percentage with ranking provided in the table 9.

**Table 9:**Usage of Taylor and Francis

| S. No. | Year | Total no. of downloads / views | % | Rank |
|---|---|---|---|---|
| 1 | 2012 | 817 | 4.83 | 8 |
| 2 | 2013 | 2186 | 12.93 | 5 |
| 3 | 2014 | 1548 | 9.16 | 7 |
| 4 | 2015 | 2798 | 16.55 | 2 |
| 5 | 2016 | 2390 | 14.14 | 4 |
| 6 | 2017 | 1645 | 9.73 | 6 |
| 7 | 2018 | 2558 | 15.13 | 3 |
| 8 | 2019 | 2960 | 17.51 | 1 |
| | | **16996** | **100.00** | |

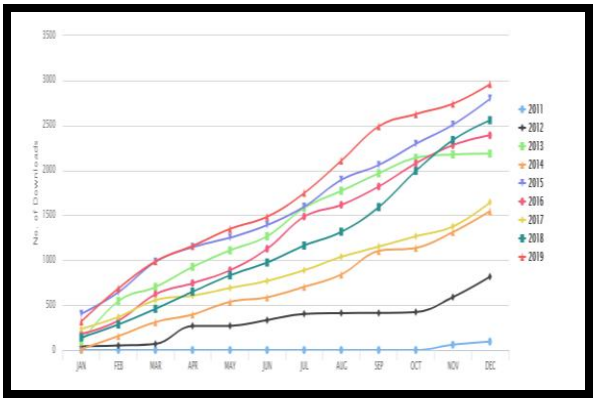



***Fig.7. Monthly wise downloads / views from Taylor and Francis***

Table 9 shows that usage of Taylor and Francis. It is found that 16996 articles were downloaded / viewed from Taylor and Francis in the year 2011 -2019. It is found from table 7 that majority number of 2960 (17.42%) articles were downloaded/ viewed in the year 2019 and placed first rank. It is followed by 2015 has accessed 2798 (16.46%) articles were downloaded/ viewed and placed second rank. It is further found that less number of 94 (0.55%, Rank 9) publications were produced in the year 2011.

**Usage of JSTOR**

3165 individual journals covered to provide in consortia access. The data has further tabulated with Year-wise and their number of downloads and views with percentage with ranking provided in the table 10.

**Table 10:**Usage of JSTOR

| S. No. | Year | Total no. of downloads / views | % | Rank |
|---|---|---|---|---|
| 1 | 2012 | 2503 | 7.76 | 7 |
| 2 | 2013 | 4792 | 14.86 | 3 |
| 3 | 2014 | 4230 | 13.12 | 4 |
| 4 | 2015 | 6216 | 19.28 | 1 |
| 5 | 2016 | 3627 | 11.25 | 6 |
| 6 | 2017 | 3993 | 12.38 | 5 |
| 7 | 2018 | 5047 | 15.65 | 2 |
| 8 | 2019 | 1834 | 5.69 | 8 |
| | **Total** | **32242** | **100.00** | |

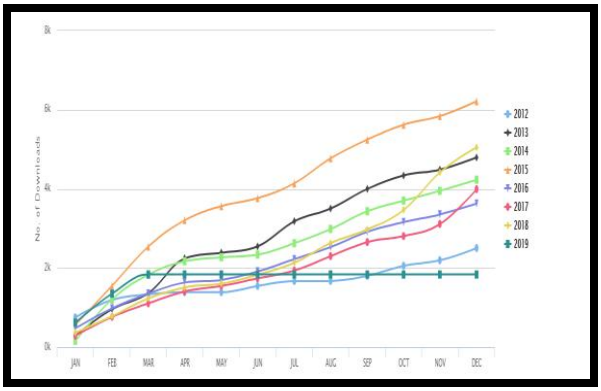



***Fig.8. Monthly wise downloads/ views from JSTOR in Gandhigram Rural Institute***

Table 10 indicates that usage of JSTOR and it is found that JSTOR has accessed 32242 articles downloaded / viewed in the year 2012 -2019. It is found from table 10 that majority number of 6216 (19.28%) articles were downloaded/ viewed in the year 2015 and placed first rank. It is followed by 2018 has accessed 5047 (15.65%) articles were downloaded/ viewed and placed second rank. It is further found that less number of 1834 (5.69%, Rank 8) publications were produced in the year 2019.

**Usage of Project Muse**

Project Muse publishers provided with 676 journal resources. The data has further tabulated with Year-wise and their number of downloads and views with percentage with ranking provided in the table 11. The subscription is started from 2016 onwards.

**Table 12:**Usage of Project Muse

| S. No. | Year | Total no. of Downloads / views | % | Rank |
|---|---|---|---|---|
| 1 | 2016 | 67 | 24.28 | 3 |
| 2 | 2017 | 77 | 27.90 | 2 |
| 3 | 2018 | 87 | 31.52 | 1 |
| 4 | 2019 | 45 | 16.30 | 4 |
| | **Total** | **276** | **100.00** | |

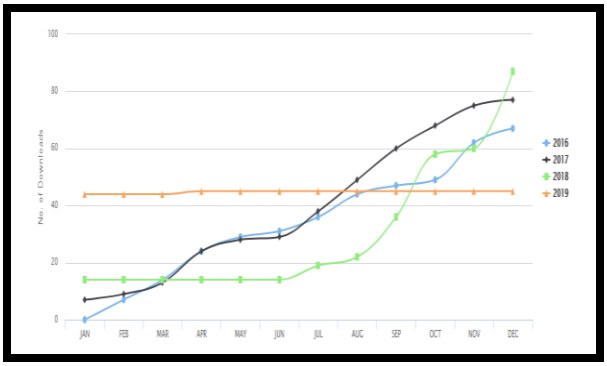



***Fig.9. Monthly wise downloads/ views from Project Muse in Gandhigram Rural Institute***

Table 11 demonstrates that usage of Project Muse. The 276 articles were downloaded / viewed from Project Muse in the year 2016-2019. It is found from table 11 that majority number of 87 (31.52%) articles were downloaded/ viewed in the year 2018 and placed first rank. It is further found that less number of 45 (16.30%, Rank 4) publications were produced in the year 2019.

## Conclusion

Modern libraries are subscribing to more e-resources. It appears that lots of funds are utilized on subscribing these e-resources therefore, it is important to find the usage of these resources. In the Gandhigram Rural Institute – Deemed to be University, Gandhigram, usage of e-resources is increasing day-by-day. Users from chemistry field are more active in using e-databases that may be due to more research is on-going in Chemistry. Some databases contain very less titles, but the usage of these databases was very high. Subject specific databases are highly used than multi subject databases. In depth study of usage is not possible due to unavailability of titles-wise usage data. To increase the usage of e-resources, the remote access facility extended to the faculty members and research scholars.

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