Electronic Thesis and Dissertations (ETDs) by Indian Universities in Shodhganga Project: A Study

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Abstract

This paper examines the Electronic Thesis and Dissertations (ETDs) deposited at INFLIBNET Shodhganga project by Indian Universities. It is found that 32000+ theses have been deposited on various disciplines by 201 Universities. The study considered only top five Universities ranked by INFLIBNET Shodhganga project. It is found the top five Universities have contributed 3145 theses in the repository.

Keywords

Shodhganga; Electronic Thesis and Dissertations (ETDs); INFLIBNET; University.
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INTRODUCTION

Electronic theses and dissertations (ETDs) are highly valuable resources for research and development in the academic institutions. In early days, the research reports were not available to access in the public domain. The advancement in the ICT has changed the way of organizing, processing and disseminating of information to the end users. The invention of Open Access has made it easy to access any information in the digital environment. The educational institutions have also started to deposit their content in the digital form called "Institutional Repository (IR) and made it available to the users.

The UGC Notification (Minimum Standards & Procedure for Award of M.Phil. / Ph.D Degree, Regulation, 2009) dated 1st June 2009 mandates submission of electronic version of theses and dissertations by the researchers in universities with an aim to facilitate open access to Indian theses and dissertations to the academic community world-wide. As per the Regulation, the responsibility of hosting, maintaining and making the digital repository of Indian Electronic Theses and Dissertation (called "Shodhganga"), accessible to all institutions and universities, is assigned to the INFLIBNET Centre. The main objective of Shodhganga@INFLIBNET Centre is to provide a platform for research students to deposit their Ph.D. theses and make it available to the entire scholarly community in open access.(http://shodhganga.inflibnet.ac.in/)

Lippincott (2006)[4] states "that an ETD program provides a process, standards, and software to automate functions, as well as a digital infrastructure for access and preservation." Sengupta (2012) [5] describes that "Theses and dissertations are often recognized as the only source for research work that does not find its way into various publication channels. Due to the various benefits of electronic theses and dissertations (ETDs), they are gaining importance over their traditional print format". Theses submitted in support of a PhD are difficult to access, as they are only collected by the library of the university that granted the degree. ETDs can be easily located, readily accessible, and delivered over the Web (Vijaykumar and Murthy, 2001)[8].

REVIEW OF LITERATURE

Sheeja and Cherukodan (2011) [6] examined that "the ETD Project of Cochin University of Science and Technology (CUSAT) and Mahatma Gandhi

University (MGU) in India. They found that both institutions have promoted ETDs by organizing workshops, adopting open source software for ETDs, and training library staff". Swain (2010)[7] found that "librarians have not taken the initiative to set up local repositories voluntarily. There are 15 universities and more than 50 business schools in Orissa where students are required to submit theses, but none of these institutions has created an ETD repository. Further, it is found that "the academicians, professors, and institutional administrators are not aware of the utility and growing significance of ETDs, or they are not prepared to abandon the paper thesis, submission, or the librarians of these institutions lack skill and experience in creation and maintenance of ETD repositories, or it may be due to lack of adequate ICT infrastructure. It is strongly recommended that the library community consider these issues seriously and try to find overcome the barriers."Wani, Gul and Rah (2009) [9] studied that "the growth and development of open repositories registered with the OpenDOAR database. The study delved deep into the Asian contributions and brought to light detailed profiles of Asia. Asner and Polani (2008)[1] discussed that "the ETD Project at the Ben-Gurion University, Negev, Israel. They described the status of Israel in the worldwide development of ETDs as reported in literature. Their study examined the attitudes of faculty and publishers towards ETDs". Greig (2005) [2] described that "most university libraries are very enthusiastic about electronic theses, but thesis supervisors and university administrators have sometimes been less keen on the idea. In most cases, it is necessary to change university regulations in order to require students to deposit an electronic copy of their thesis, which can be a time-consuming and frustrating process".

OBJECTIVES OF THE STUDY

The major objectives of the study are

1. To analysis the contributions of Electronic Thesis and Dissertations (ETDs) by top five Universities in Shodhganga project.

2. To investigate the theses contributed by top five departments of top five Universities.

METHODOLOGY

The data for the study were collected from INFLIBNET website under Shodhganga@INFLIBNET Centre (http://shodhganga.inflibnet.ac.in/) during Feb 2015. There are about 32000+ theses have been deposited in the repository by 201 Universities. Out of 201 Universities, the top five Universities ranked by INFLIBNET were contributed 3145 theses on various disciplines in the repository. They are Jawaharlal University, New Delhi; Anna University, Chennai; Mahatma Gandhi University, Kottayam; Bundelkhand University, Jhansi and Cochin University of Science and Technology, Cochin.

DATA ANALYSIS

The relevant data were extracted from the project website and analyzed by simple calculation method.

1. ETD Contributions by Top Universities

The contributions made by top five Universities in the Shodhganga project were analyzed and the same is given in Table 1 and Figure1.

Table 1: ETD Contributions by Top Universities

S. No	Institute	Contributions		Rank
		No. of Thesis	%	
1.	Jawaharlal Nehru University	4581	14.05%	1
2.	Anna University	2524	7.74%	2
3.	Mahatma Gandhi University	2012	6.17%	3
4.	Bundelkhand University	1770	5.4%	4
5.	Cochin University of Science and Technology	1428	4.38%	5

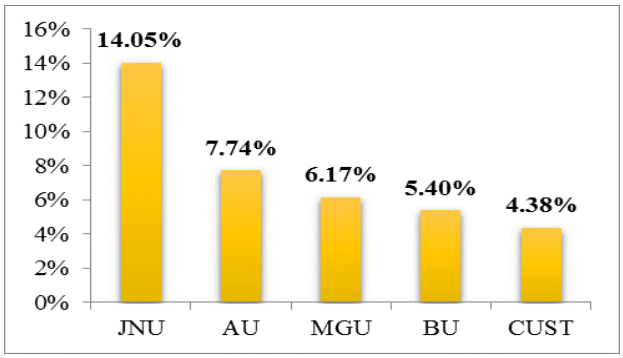


Figure 1. Contributions of Top Universities

It is found from Table 1 and Figure 1 that Jawaharlal Nehru University (JNU) 4581(14.05%) has contributed large number of theses in the Shodhganga and placed first rank among other 201 Universities. It is further found that Anna University (AU) has contributed 2524(7.74%) theses and occupied second rank. It is also indicated that Mahatma Gandhi University (MGU) has contributed 2012(6.17%), which is followed by Bundelkhand University (BU) 1770(5.4%) and Cochin University of Science and Technology (CUST) 1428 (4.38%), placed third, fourth and five ranks respectively. It is inferred that there is a vast gap between these Universities in respect of contribution of theses and it ranges from 14.05% to 4.38%.

2. Contributions of Jawaharlal University

The study was analyzed the contributions of top five departments of Jawaharlal University and the same is given in Table 2.

Table 2: Contributions of Jawaharlal Nehru University

S.No	Department/Institute	Contributions		Rank
		No. of Thesis	%	
1.	School of International Studies	1145	36.40%	1
2.	School of Social Studies	1062	33.77%	2
3.	School of Language Literature and Cultural Studies	510	16.22%	3
4.	School of Environment Studies	218	6.93%	4
5.	National Institute of Immunology	210	6.68%	5
	Total	**3145**	**100%**	

It is found from Table 2 that the School of International Studies were contributed more number of their theses 1145(36.40) in Shodhganga project. It is followed by School of Social Studies 1062(33.77), School of Language Literature and Cultural Studies 510(16.22%) School of Environmental Studies 218(6.93%). National Institute of Immunology has contributed 210(6.68%) of theses and placed fifth rank. It is inferred that there is a vast gap in the contributions among the departments of the university.

3. Contributions of Anna University

The study was also analyzed the contributions made by the first five departments of Anna University and the same is given in Table 3

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Table 3:Contributions of Anna University

S.No	Department/Institute	Contributions		Rank
		No.of Thesis	%	
1.	Faculty of Information and communication Engineering	705	30.82%	1
2.	Faculty of Science and Humanities	645	28.20%	2
3.	Faculty of Mechanical Engineering	451	19.72%	3
4.	Faculty of Electrical and Electronic Engineering	302	13.20%	4
5.	Faculty of Civil Engineering	184	8.06%	5
	Total	**2287**	**100%**	

Table 3 describes that the Faculty of Information and Communication Engineering has placed in the first rank with 705(30.82%) contributions, which is followed by Faculty of Science and Humanities 645(28.20%), Faculty of Mechanical Engineering 451(19.72%). The Faculty of Civil Engineering has contributed less number of theses 184(8.06%).The results of the study clearly indicate that other departments should also be encouraged to deposit in the repository.

4. Contributions of Mahatma Gandhi University

The study was also analyzed the contributions made by the first five departments of Mahatma Gandhi University and the same is given in Table 4.

Table 4:Contributions of Mahatma Gandhi University

S.No	Department/Institute	Contributions		Rank
		No.of Thesis	Percentage	
1.	School of Chemical Sciences	107	22.02%	1
2.	Department of Malayalam Literature	99	20.37%	2
3.	School of Pure and Applied Physics	95	19.55%	3
4.	St. Thomas College	93	19.13%	4
5.	Department of Hindi	92	18.93%	5
	Total	**486**	**100%**	

It is witnessed from Table 4 that School of Chemical Sciences were contributed 107 (22.02%) theses and placed in the first rank. Further, it is found that the remaining four departments were contributed less than 100 theses and it ranges from 99 to 92(20.37% to 18.93%).It is inferred that there is no vast gap in respect of contributions among the departments.

5. Contributions of Bundelkhand University

The contributions made by the first five departments of Bundelkhand University is given in Table 5.

Table 5: Contributions of Bundelkhand University

S.No	Department/Institute	Contributions		Rank
		No.of Thesis	**Percentage**	
1.	Maharani Lakshmi Bai Medical College	499	56%	1
2.	Institute of Language	148	16.6%	2
3.	Institute of Chemistry	87	9.76%	3
4.	Institute of Education	80	8.9%	4
5.	Department of Botany	77	8.6%	5
	Total	**891**	**100%**	

Table 5 shows that Maharani Lakshmi Bai Medical College has contributed 499 (56%) theses, which is followed by Institute of language 148 (16.6%), Institute of Chemistry 87(9.76%), Institute of Education 80(8.9%) and Department of Botany 77(8.6%). It is inferred that the last four department/institutes were contributed less than 10%, whereas the first institute has contributed more number of theses compared to other institutes/departments.

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6. Contributions of Cochin University of Science and Technology

The study further analyzed the contributions made by the first five departments of Cochin University of Science and Technology and the same is given in Table 6

Table 6: Cochin University of Science and Technology

S.No	Department/Institute	Contributions		Rank
		No. of Thesis	**%**	
1.	Department of Physics	155	26.49%	1
2.	Department of Applied Chemistry	137	23.42%	2
3.	Department of Applied Economics	81	13.85%	3
4.	Department of Mathematics	81	13.85%	3
5.	Department of Polymer Science & Rubber Technology	66	11.28%	5
6.	Department of Biotechnology	**65**	11.11%	6
	Total	**585**	**100**%	

Table 6 indicates that the Department of Physics has contributed good number theses 155(26.49%), it is followed by Department of Applied Chemistry 137(23.42%). It is further found that both the Department of Applied Economics 81(13.85%), Department of Mathematics 81(13.85%) were placed in third rank. It is inferred that there is a less difference in the contributions between Department of Polymer Science & Rubber Technology 66(11.28%) and Department of Biotechnology 65(11.11%).

CONCLUSION AND RECOMMENDATIONS

Electronic Thesis and Dissertations (ETDs) forms an important source for research in the academic institutions. It helps the researchers to know the research works carried out in the past years. When the research output is available in open access platform, it would be widely used for research and teaching. Most importantly, it helps to avoid duplication of research in many disciplines. The Universities must come forward voluntarily to deposit their research content (Thesis) in the Shodhganga project. Based on the study, the following are recommended,

1. All Universities including private universities should deposit their research reports in Shodhganga projects, and
2. The Library professionals should organize workshops to create awareness on ETD Repository.

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