Development of Shodhganga Repository for e-theses in West Bengal: a Study

Manash Esh

Information Scientist
University of North Bengal
DT: Darjeeling- 734013,
West Bengal, India
esh.manash@gmail.com

Abstract

THESES is an important part of information resource in any University. In India access to theses are generally limited to the University community. The UGC notification dated 1st June-2009 provides mandate for submission of electronic version of theses and dissertation to the academic community on World Wide Web. Introduce a project called Shodhganga, initiated by the Information and Library network-INFLIBNET, an inter University Centre of the University Grants Commission. This paper aimed to analysis and attempt to find out the status of Universities from West Bengal in Shodhganga.

Keywords: Shodhganga, ETD, Universities in West Bengal

0. Introduction:

Theses and dissertations are known unique source of information, often the only source of research work that does not find its way into various publication channels. Theses and dissertations remain an un-tapped and under-utilized asset, leading to unnecessary duplication and repetition that, in effect, is the anti-theses of research and wastage of huge resources, both human and financial. 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. Online availability of electronic theses through centrally-maintained digital repositories, not only ensure easy access and archiving of Indian doctoral theses but will also help in raising the standard and quality of research. This would overcome serious problem of duplication of research and poor quality resulting from the "poor visibility" and the "unseen" factor in research output. 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

1. Objectives:

- Status of ETD repositories in India.
- ❖ To know Shodhganga repository.
- ❖ Find out the status of Universities in West Bengal in Shodhganga.
- ❖ Make comparative study among the universities of West Bengal about their contribution to Shodhganga.

2. ETD Repositories in India

A recent study reveals that Central Library IIT, Bombay initiated ETD project in 1999 for the first time followed by Vidyanidhi at Mysore University in the year 2000. The information on ETD repositories in the world has mainly been

collected from Registry of Open Access Repositories (ROAR) and Directory of Open Access Repositories (open DOAR). From this study, it has been found that out of 245 e-theses repositories across the world, the number from India is 20 which are registered under ROAR AND Open DOAR respectively.

Table-1 (E-Theses Repositories in India)

S.No	Host	Subject	Repository
1	Information and Library Network (INFLIBNET)	Multidisciplinary	ShodhGanga: a reservoir of Indian theses http://shodhganga.inflib net.ac.in/
2	University of Mysore	Multidisciplinary	DSpace@Vidyanidhi http://dspace.vidyanidh i.org.in:8080/dspace/
3	Mahatma Gandhi University	Multidisciplinary	Mahatma Gandhi University Theses Online http://www.mgutheses. org/
4	Indian institute of science Bangalore	Science and technology	Indian institute of science http://etd.ncsi.iisc.ernet.in/
5	Cochin University of Science & Technology (CUSAT)	Multidisciplinary	Dyuthi (Digital repository of Cochin University of Science & Technology) http://dvuthi.cusat.ac.in
6	National Centre for Catalysis Research (NCCR)	Chemistry and Chemical Technology	EPrints@NCCR http://www.nccr.iitm.ac .in/
7	Central Marine Fisheries Research Institute (CMFRI)	Agriculture, Food & Veterinary; Biology & Biochemistry; Ecology and Environment; Health, Medicine	Eprints@CMFRI http://eprints.cmfri.org. in/
8	Guru Gobind Singh Indraprastha University, India	Multidisciplinary	DSpace @ GGSIPU 14.139.60.216:8080/xm lui/
9	Indian Institute of Management Kozhikode (IIMK), India	Business and Economics	DSpace@HMK http://dspace.iimk.ac.in
10	SDM College Of Engineering and Technology Dharwad.lndia	Chemistry and Chemical Technology; Technology General; Civil, CSE, IT, EEE, MECH, Library and Information Science.	DSpace @ sdmcet http://210.212.198.149: 8080/jspui/

11	Tlwpar University	Multidisciplinary	DSpace@TU http://dspace.thapar.edu
12	Indian institute of Technology, Delhi	Multidisciplinary	:8080/dspace/ EPrints(5>IIT Delhi http://eprint.iitd.ac.in/d space
13	Indian Afirirultural Research Institute (IARI).	Agriculture, Food and Veterinary	EprintS(S)IARI http://eprints.iari.res.in/
14	National Metallurgical	Chemistry and Chemical Technology; Technology	Eprint@NML http://eprints.nmlindia. or8/
15	Indian Institute of Astrophysics	Physics and Astronomy	DSpacetailA http://prints.iiap.res.in/
16	IGIDR Library, Indira Gandhi Institute ot Development Research (IGIDR), India	Multidisciplinary	Kautilya@igidr http://oii.igidr.ac.in:808 0/dspace/index.jsp
17	Documentation Research and Trainini; Centre (DRTC), Indian Statistical Institute, Bangalore Centre	Library and Information Science	Librarians' Digital Library https://drtc.isibanE.ac.i n/
18	Information Centre for Aerospace Science and Technology (ICAST), India	Mathematics and Statistics; Technology General; Mechanical Engineering and Materials	NAL Repository http://nal-ir.nal.res.in/
19	CSilt Unit for Research and Development of Information products	Biological Sciences, Earth Sciences, Physical Sciences, Communications, Education, Philosophy, Arts, Social Sciences	Open Access Repository of Indian Theses http://eprint5.csirexplor ations.com/
20	University of Delhi	Multidisciplinary	DU Eprint Archive http://www.du.ac.in/ind ex.php?

3. Shodhganga:

The Shodhganga@INFLIBNET is set-up using Dspace. It provides platform for research students to deposit their Ph.D. theses and make it available to the entire scholarly community in open access. The repository has the ability to capture, store, disseminate and preserve ETD submitted by the researches. The repository has 38,000 full text theses on May-2015 and 211 universities signed MoU and 213 started contribution to Shodhganga. It is now expected that that Shodhganga repository will grow rapidly if the universities implement the recommendation of UGC Regulation-2009.Shodhganga receives e-India Jury Choice Award for the year 2011 under Digital learning Category.



Fig: Home page of Shodhganga

4. Contribution of Universities of West Bengal to Shodhganga:

Universities in the state of West Bengal are considered to be the most productive and leading institutions of higher education. West Bengal is a multicultural state and its universities play the pioneering role of visualizing its diverse tradition. With excellent faculty and administration, the state universities generate a learning ambiance for the aspirant all across the country. There are total of 22 universities in West Bengal including one Central University (Source from UGC website).

Table-2 List of Universities in West Bengal

Sl. No.	Name of the University (URL)	Year of Establishment	Research work Started	Status	MOU with INFLIBNET	Contribution of THESES in Shodhganga.
1.	Aliah University (http://www.aliah.ac.in)	2008	Yes	State University	No	No No
2.	Bidhan Chandra Krishi Vishwavidyalaya (http://www.bckv.edu.in)	1974	Yes	State University	No	No
3.	Burdwan University (http://www.buruniv.ac.in)	1960	Yes	State University	Yes (23rd November 2012)	Yes
4.	Calcutta University (http://www.caluniv.ac.in)	1857	Yes	State University	No	Yes
5.	Cooch Behar Panchanan Barma University	2012	No	State University	No	No

	(http://cbpbu.ac.in/)					
6.	Jadavpur University (http://www.jadavpur.edu)	1955	Yes	State University	No	Yes
7.	Kalyani University (http://www.klyuniv.ac.in)	1960	Yes	State University	Yes (24th March 2015)	Yes
3.	Kazi Nazrul University (http://www.knuedu.in)	2012	No	State University	No	No
9.	Netaji Shubhash Open University (http://www.wbnsouac.in)	1997	Yes	State University	No	Yes
10.	North Benagal University (http://www.nbu.ac.in)	1962	Yes	State University	Yes (7th June 2011)	Yes
11.	Presidency University (http://www.presiuniv.ac.in)	2010	Yes	State University	No	No
12.	Rabindra Bharati University (http://www.rbu.ac.in)	1962	Yes	State University	No	No
13.	Sidho-Kanho-Birsha University (http://www.skbu.ac.in)	2010	Yes	State University	No	No
14.	The West Bengal National University of Juridical Science (http://www.nujs.edu)	1999	Yes	State University	Yes (4th August 2011)	No
15.	The West Bengal University of Health Sciences (http://www.wbuhs.ac.in)	2003	Yes	State University	No	No
16.	Univesity of Gour Banga (http://www.ugb.ac.in)	2007	Yes	State University	No	No
17.	Uttar Banga Krishi Vishwavidyalaya (http://www.ubkv.ac.in)	2001	Yes	State University	No	No
18.	Vidya Sagar University (http://www.vidyasagar.ac.in/)	1986	Yes	State University	No	Yes
19.	Visva-Bharati University	1921	Yes	Central University	Yes (27th March 2014)	Yes

	(www.visvabharati.ac.in)					
20.	West Bengal State University (http://www.wbsubregistration.org)	2008	Yes	State University	No	No
21.	West Bengal University of Animal and Fishery Sciences (http://wbuafscl.ac.in)	1995	Yes	State University	No	No
22.	West Bengal University of Technology (http://www.wbut.net)	2000	Yes	State University	No	Yes

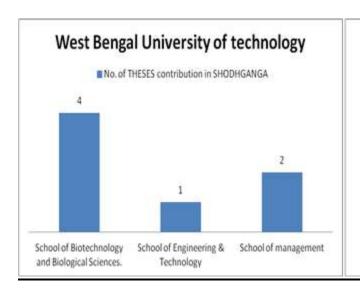
From the Table-2, it is that among the 22 universities of west Bengal, there are 2 universities where research work has not yet progress. But the important point that can be noticed from the Table is that though 20 universities of West Bengal have been carrying out the research work still 9 universities have been contributing where 5 universities signed MoU with Shodhganga@INFLIBNET.

- 5. Comparative study among the universities of West Bengal about their contribution to **Shodhganga:**
- 5.1. West Bengal University of Technology

Table-3

S.No.	Department	No. of THESES contribution in SHODHGANGA
1.	School of Biotechnology and	4
	Biological Sciences.	
2.	School of Engineering &	1
	Technology	
3.	School of management	2
	Total:	7

Source: http://shodhganga.inflibnet.ac.in/handle/10603/6380 (dated: 27/05/2015)



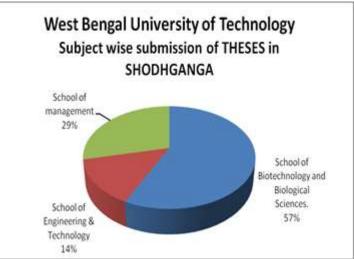


Fig: 2

This university yet not signed MoU with Shodhganga@INFLIBNET but contributing e-theses to Shodhganga. Total 7 theses have been submitted where 57% highest theses from department of Biotechnology & Biological Science has contributed.

5.2. University of North Bengal

Table-3

S.No.	Department	No. of THESES contribution in SHODHGANGA
1.	Biotechnology	3
2.	Botany	7
3.	Economics	1
4.	Geography & applied Geography	1
5.	Hindi	2
6.	History	2
7.	Law	2
8.	Mathematics	4
9.	Physics	4
10.	Political Science	1
11.	Chemistry	8
12.	Zoology	4
13.	Computer Science & Application	1
	Total	40

Source: http://shodhganga.inflibnet.ac.in/handle/10603/11749 (dated: 27/05/2015)

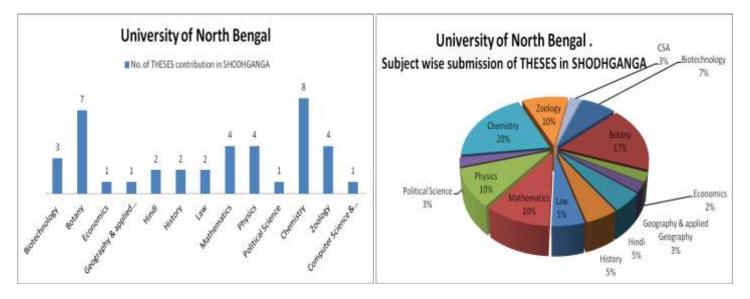


Fig: 3

This university has signed MoU on 2011 and has been submitting 40 e-theses to Shodhganga yet. 13 departments are starting contribute.

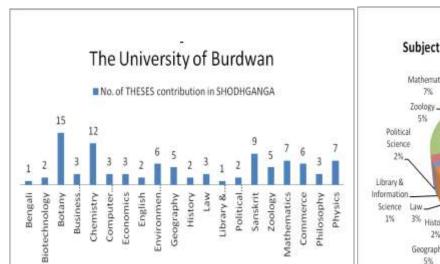
5.3. The University of Burdwan

Table-4

S.No.	Department	No. of THESES contribution in SHODHGANGA
1.	Bengali	1
2.	Biotechnology	2
3.	Botany	15
4.	Business administration	3
5.	Chemistry	12
6.	Computer Science	3
7.	Economics	3
8.	English	2
9.	Environmental Science	6
10.	Geography	5
11.	History	2
12.	Law	3
13.	Library & Information Science	1
14.	Political Science	2

15.	Sanskrit	9
16.	Zoology	5
17.	Mathematics	7
18.	Commerce	6
19.	Philosophy	3
20.	Physics	7
	Total:	97

Source: http://shodhganga.inflibnet.ac.in/handle/10603/20736 (dated: 27/05/2015)



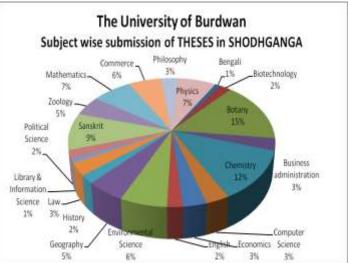


Fig: 4

The university of Burdwan signed MoU on 2012 and has been submitting total numbers of 97 e-theses to Shodhganga which is the highest number of these send from West Bengal up-to May-2015. There are 20 departments contribute theses to the repository.

5.4. Visva-Bharati University

Table-5

S.No.	Department	No. of THESES contribution in SHODHGANGA
1.	Bangla	7
2.	Centre of Mathematics Education	1
3.	Crop improvement, Horticulture & Agril. Botany CIHAB	1
4.	Agriculture ESS	6
5.	Arabic, Persian, Islamic studies	1
6.	ASEPAN	2
7.	Botany	9
8.	Chemistry	8
9.	English and OMEL	2

10.	Geography	11	
11.	Hindi	6	
12.	History	1	
13.	Mathematics	3	
14.	Philosophy & Region	1	
15.	Physical Education	5	
16.	Physics	5	
17.	Social Work	3	
18.	Statistics	1	
19.	Zoology	3	
20.	Anthropology	1	
	Total 77		

Source: http://shodhganga.inflibnet.ac.in/handle/10603/19453 (Dated: 27/05/2015)

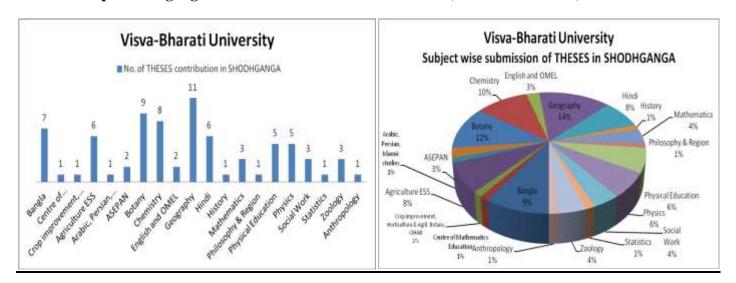


Fig: 5

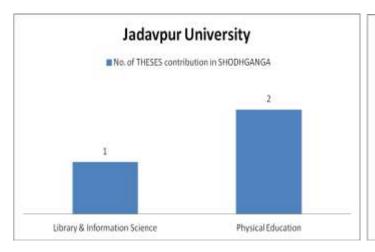
The central university Visva-Bharati signed MoU on 2014 and has been contributing 77 theses with 20 different subjects to Shodhganga.

5.5.Jadavpur University

Table-6

S.No.	Department	No. of THESES contribution in SHODHGANGA
1.	Library & Information Science	1
2.	Physical Education	2
	Total:	3

Source: http://shodhganga.inflibnet.ac.in/handle/10603/2812 (Dated: 27/05/2015)



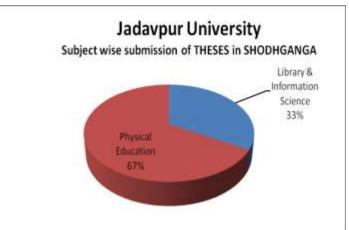


Fig:6

Jadavpur University has not registered to Shodhganga yet but has been contributing theses.

Table-7

Sl. No.	Universities which are contributing single theses to Shodhganga	Department	No. of THESES contribution in SHODHGANGA	Source: Dated 27/05/2015
1.	Netaji Subhas Open University	Sociology	1	http://shodhganga.inflibnet.ac.in/handle/10603/2968
2.	University of Kalyani	Faculty of Education	1	http://shodhganga.inflibnet.ac.in/handle/10603/4152
3.	Vidysagar University	English	1	http://shodhganga.inflibnet.ac.in/handle/10603/33715
4.	University of Calcutta	All Indian Institute of Hygiene & Public health	1	http://shodhganga.inflibnet.ac.in/handle/10603/2852

In Table-7, there are 4 universities which has contributed single theses each to Shodhganga where University of Kalyani signed MoU on 2015 and other 3 universities yet not signed MoU to Shodhganga.

6. Comparative study among the universities of West Bengal.

Table-8

Sl. No.	University	No. of THESES SUBMISSION IN SHODHGANGA
1.	West Bengal University of Technology	7
2.	Vidysagar University	1

3.	University of North Bengal	40	
4.	The University of Burdwan	97	
5.	Visva-Bharati University	77	
6.	Netaji Subhas Open University	1	
7.	University of Kalyani	1	
8.	University of Calcutta	1	
9.	Jadavpur University	3	
	Total:	228	

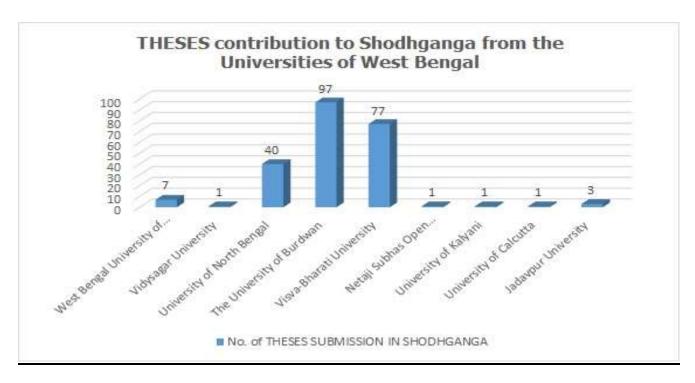


Fig: 7

The Table-8 and Fig: 7 shows that the University of Burdwan has submitted highest number of theses (97), the Central University Viswa-Bharati contributed second highest (77) number and third highest number (40) of theses has submitted by University of North Bengal.

7. Finding

From the analysis, it is clear that the Shodhganga@INFLIBNET provides a platform for research student to deposit their Ph.D. theses and make it available to the entire scholarly community in open access. Shodhganga is also helping to avoid duplication of research work and ensure quick retrieval of information. Through West Bengal has twenty two universities but only five universities have been registered in Shodhganga and nine universities have contributed theses in total number of 228 which is very fewer than submission of total 38000 theses in shodhganga from other states of India . The reason

behind this situation is still unknown. It may be due to lack of interest of the universities or lack of awareness of the research scholars/guides.

8. Suggestion

Some suggestion regarding the study has been put forwarded.

- More workshop and training programmes for both researches and faculty needs to be conducted on issues of copyright which will encourage the researchers to submit their theses online.
- ➤ University coordinator of Shodhganga is allowed for giving lecture to the faculties/researchers about the needs of e-theses.
- Articles/Seminars papers regarding Shodhganga should be publishes in media and discussion should be made among the readers.

9. Conclusion

A number of universities have now begun to accept electronic submission of theses & dissertation and then post these documents to Shodhganga. ETD repositories are becoming a major resource for in all subject and avoiding duplication in research work, ensuring quick retrieval of information, promoting resource sharing. INFLIBNET has started developing a complete national union catalogue of ETDs in India. ETDS repositories in India in near future by making it mandatory to deposit a soft copy of theses to its database.

References

- 1. National Knowledge Commission libraries brochure. Available: http://www.knowledgecommission.gov.in/downloads/documents/NKC_Library.pdf
- 2. Universities of West Bengal from University Grants Commission website at: http://www.ugc.ac.in/stateuniversitylist.aspx?id=35&Unitype=2, Web. 27 May 2015
- ShodhGanga: a reservoir of Indian theses, Available:

http://shodhganga.inflibnet.ac.in, Web. 27 May 2015

4. AL SALMI, Jamal. Factors Influencing the Adoption and Development of Electronic Theses and Dissertations (ETD) Programs, with Particular Reference to the Arab Gulf States. Information Development, 2008, 24 (3), pp 226-236.

- 5. Rabindra K. Maharana; Ashok Kumar Das and Subrat Pati (2013) Evaluating the Awareness and Usage of Ugc-Infonet Digital Library Consortium by the Faculty Members: A Case Study of Odisha State Universities. International Research Journal of Library and Information Science, 3(2),287-298
- 6. Krishna Das; Naba Kumar Saikia (2014) Shodhganga Repository: A Comparative Study with Special Reference to the Universities of Assam. 9th Convention PLANNER-2014 Dibrugarh University, Assam, pp: 348-368.
- 7. Shantashree Sengupta (2013) Current Status of Shodhgangotri: Repository of Indian Research in Progress. Library Philosophy and Practice (e-journal), pp. 2-12

Follow us on: IRJLIS, Facebook, Twitter