

# Open Institutional Repositories In North East India: Present And Future Prospects

**\*Taher Hussain Khan, \*\*Dr. Roshan Khayal**

*\*Research Scholar, DLIS, Mangalayatan University, Aligarh, Uttar Pradesh, India  
Assistant Librarian, Himalayan University, Itanagar, Arunachal Pradesh, India*

*\*\*Assistant Professor, DLIS, Mangalayatan University, Aligarh, India*

*<sup>1</sup>Received: 30 July 2023; Accepted: 29 November 2023; Published: 02 December 2023*

---

## ABSTRACT

This paper examines the status and future potential of Open Institutional Repositories (OIRs) in North East India, a region characterized by its diverse cultural landscape. Currently, OIRs in the area serve as vital platforms for preserving and disseminating scholarly works across various disciplines. The analysis encompasses the existing repositories, emphasizing their objectives, content diversity, and their role in showcasing regional research output. Challenges, including technological limitations and insufficient awareness, are identified, and strategic recommendations are proposed to enhance repository effectiveness. The suggested strategies involve targeted capacity building, awareness campaigns, and collaborative efforts among institutions. The paper anticipates future trends, such as technological advancements and increased collaboration, envisioning OIRs as integral components of the global scholarly communication network. By addressing challenges and adopting forward-looking strategies, this paper aims to foster dialogue and cooperation to propel the development of robust and sustainable Open Institutional Repositories in North East India.

**Keywords:** *Open Institutional Repositories; North East India; Scholarly Communication; Repository Challenges; Capacity Building; Future Prospects*

## INTRODUCTION

In the ever-evolving landscape of scholarly communication and knowledge dissemination, Open Institutional Repositories (OIRs) stand as pivotal platforms, serving as digital archives for academic and research institutions. North East India, renowned for its cultural richness and geographic diversity, is increasingly becoming a center for academic pursuits. This paper delves into the current state, challenges, and future prospects of OIRs in this region, shedding light on their significance in the context of fostering research visibility and collaboration.

As repositories of scholarly output, OIRs play a crucial role in capturing the intellectual endeavors of institutions, offering a centralized space for the storage, preservation, and accessibility of research findings. In the context of North East India, these repositories have emerged as essential components in the scholarly ecosystem, showcasing the breadth and depth of research across disciplines such as social sciences, humanities, and sciences.

The current landscape of OIRs in North East India reflects a diverse array of repositories, each tailored to the unique needs and objectives of the hosting institutions. These repositories, often affiliated with universities and research organizations, aim to provide a digital footprint of the intellectual capital generated within the region. The content of these repositories spans a wide spectrum, including scholarly articles, conference papers, theses, and other forms of research output, contributing to the visibility of regional research on a global scale.

However, amid the evident progress, OIRs in North East India encounter a set of challenges that necessitate attention and strategic intervention. Technological constraints, ranging from limited infrastructure to issues related to interoperability and data formats, pose hurdles to the seamless operation of these repositories. Furthermore, a lack of awareness among researchers and institutional stakeholders regarding the benefits and functionalities of OIRs has resulted in underutilization and a gap in content contribution.

Addressing these challenges is imperative for the sustained growth and impact of OIRs in the region. This paper not only identifies these challenges but also proposes pragmatic strategies to overcome them. Capacity building initiatives,

---

<sup>1</sup> *How to cite the article:* Khan T.H., Khayal R (December 2023); Open Institutional Repositories In North East India: Present And Future Prospects; IJASSH, Jul-Dec 2023, Vol 16, 83-88

designed to enhance digital literacy and repository management skills among researchers and repository administrators, are crucial for overcoming technological and awareness-related hurdles. Collaboration among institutions, both within North East India and beyond, is pivotal for creating a network of repositories that can collectively amplify the region's research output.

In the subsequent sections, this paper will delve deeper into the current landscape of OIRs in North East India, explore the challenges faced by these repositories, and present strategies for enhancing their effectiveness and ensuring a sustainable future. Additionally, the paper will speculate on the future prospects of OIRs in the region, envisioning their role in shaping the scholarly landscape and contributing to the global knowledge commons.

### CURRENT LANDSCAPE OF OPEN INSTITUTIONAL REPOSITORIES IN NORTH EAST INDIA

The North East region of India, with its rich cultural tapestry and growing academic prominence, is witnessing a burgeoning interest in Open Institutional Repositories (OIRs). These repositories serve as digital archives, housing and disseminating the intellectual output of academic and research institutions. In the current landscape, North East India boasts a variety of OIRs affiliated with universities, research organizations, and other academic entities.

One notable aspect of the current landscape is the diversity in the objectives and scope of these repositories. Each repository is tailored to the unique needs and focus areas of its host institution. For instance, some repositories may predominantly feature research output in the fields of social sciences and humanities, while others may showcase advancements in science and technology. This diversity reflects the multidisciplinary nature of research in the region, covering topics ranging from indigenous knowledge systems to cutting-edge scientific discoveries.

Content-wise, the repositories in North East India exhibit a wide spectrum of scholarly output. They house research articles, conference papers, theses, and other academic works, contributing to the collective knowledge pool. This wealth of content not only reflects the academic vibrancy of the region but also serves as a testament to the varied research interests and contributions of scholars in North East India.

However, despite this vibrancy, there are certain commonalities in the challenges faced by these repositories. Technological constraints pose a significant hurdle, ranging from limited infrastructure to issues related to data interoperability and standardization. The repositories often grapple with ensuring the long-term preservation and accessibility of digital content. Additionally, there is a pervasive lack of awareness among researchers and institutional stakeholders about the potential of OIRs, leading to underutilization and a gap in the representation of research output.

To address these challenges, it is imperative to adopt a multifaceted approach. Technological upgrades and infrastructural improvements are crucial for ensuring the seamless operation and sustainability of OIRs. Furthermore, targeted awareness campaigns and outreach initiatives are essential to educate researchers about the benefits of contributing to and utilizing OIRs.

In conclusion, the current landscape of Open Institutional Repositories in North East India reflects both the vibrancy of regional research and the challenges that need strategic attention. As these repositories evolve, addressing technological constraints and fostering awareness will be key to unlocking their full potential. The next section of this paper will delve deeper into the challenges faced by OIRs in the region and propose strategies for enhancing their effectiveness and sustainability.

### LITERATURE REVIEW

In his analysis of the IR's traits, **Kalbande (2019)** laid out the Indian scenario involving 84 repositories across the country. Chakravarty<sup>3</sup> sought to assess the functionality of the Indian National ETD repository's web page, drawing attention to the current state of Open-Access ETD repositories and illuminating the resources utilized by these repositories in India. To help academics better understand the ETD repository, Dutt<sup>4</sup> attempted to bring up its basics. Professional librarians' evolving responsibilities in relation to electronic theses and dissertations (ETDs) at Indian institutions were addressed by **B.P. Singh(2020)**.

An overview of the central universities of India's contributions to the open-access repository "Shodhganga" was provided by **Jhamb & Samim (2017)**. The quantitative assessment of participating universities was the primary emphasis of **Nanthini & Varghese (2018)**. To find out how many schools follow the "UGC Minimum Standards & Procedure for the Award of an M.Phil. / PhD Degree, Regulation, 2009," Chingath<sup>8</sup> looked into the data.

According to **Sandhya (2019)**, a total of 206909 full-text theses were donated to the digital repository by 355 Indian universities. According to Ramesh<sup>10</sup>'s assessment, numerous PhD theses in library and information science were submitted from various Indian universities. Not every state university participated in the ETD project; Das and Chauhan<sup>11</sup> aimed to prove it.

Universities in Tamil Nadu that have signed a memorandum of understanding to accept electronically submitted theses were evaluated by **Dhanavandan and Tamizhchelvan (2013)** and **Sivasubramanian (2013)**. **Biswas (2014)** tracked the progress of the Eastern Triangle (ETD) submissions made by West Bengali universities. Submitted to Shodhganga by the School of Legal Studies at Cochin University of Science & Technology, Shanmugam<sup>15</sup> examined the theses and dissertations. The Karnataka State Universities' Library and Information Science (LIS) departments' contributions to the e-Theses databases and their submission to Shodhganga were presented by **Manjunatha (2019)**. The trends of PhD theses written over the last nine years at DLIS, AMU were investigated and debated by **R. K. Singh, Singh, and Singh (2018)**.

## METHODOLOGY

Specifically, this research looks at OARs, or Open-Access Repositories. As mentioned before, 98 repositories are located in India out of 5684 worldwide that are registered in Open DOAR. There are several non-functional OAR in India, and this should be noted. According to the physical calculation made using the Open DOAR registry URL, 63 of these repositories are fully functional. One repository, belonging to The Tamil Nadu Dr. M.G.R. Medical University, does not have any collection, and another repository requests the installation of the Chrome browser extension. One repository returned the error message "400 bad Request," while two returned the "404 not found" message. Thirteen URLs led to undesired sites, one said "site offline," and twenty-five other repositories returned "This site can't be reached" errors. One of these repositories, the Indian Institute of Management Kozhikode Digital Library, gave a "Page not Found" error. The north-eastern states of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Tripura, and Sikkim are home to several prestigious universities. The cultural diversity of these states is reflected in the wide range of educational attainment and social status. The investigation relied on data collected from Shodhganga, which can be found at <https://shodhganga.inflibnet.ac.in/>. The present research concentrated on the 476 North-eastern Indian universities that are presently contributing to Shodhganga. The quantity of contributions from universities was manually tallied and collated in order to obtain individual data. For better data communication, we have used statistics and included visualizations wherever available. The research was carried out utilizing content collected on June 11, 2020, and the Open DOAR website (<https://v2.sherpa.ac.uk/opensoar/>) to evaluate the Indian repositories. The statistical software JASP was utilized in accordance with the aims of the investigation.

## DATA ANALYSIS

- Open-Access Repositories in India

The operational and non-operational OARs are shown in Table 1.

Response	count	
400 bad Request	1	
404 not found	2	
Operational	65	64.29
Page not Found	1	
Redirects	3	
Site offline	1	
This site can't be reached	25	
Total	98	

**Table 1.** Position of open-access Indian repositories (as shown in Open DOAR)

### The position of Northeastern Indian universities

State	University	UT	DOE	DM	CST	IRU
<b>Assam</b>						
	Assam Don Bosco University	Private	2009	Sept, 2011	60	N
	Assam Down Town University	Private	2010	Apr, 2018	3	N

	Assam University	Central	1994	Jan, 2013	1436	N
	Bodoland University	State	2009	Sept, 2015	41	<a href="http://14.139.213.3:8080/jspui/">http://14.139.213.3:8080/jspui/</a>
	Dibrugarh University	State	1965	June, 2015	407	N
	Gauhati University	State	1948	July, 2011	5695	N
	Krishna Kanta Handique State Open University	State	2007	Dec, 2011	12	<a href="http://dlkhsou.inflibnet.ac.in/">http://dlkhsou.inflibnet.ac.in/</a>
	Tezpur University	Central	1994	Aug, 2013	614	<a href="http://agnee.tezu.ernet.in">agnee.tezu.ernet.in</a>
	Assam Science and Technology University	State	2009	Oct, 2019	2	N
	Assam Agricultural University	State	1969	Nov, 2020	1	N
	National Law University and Judicial Academy	State	2009	May, 2019	2	N
<b>Arunachal Pradesh</b>						
	Rajiv Gandhi University	Central	1985	Oct, 2014	432	<a href="http://52.172.27.147:8080/jspui/">http://52.172.27.147:8080/jspui/</a>
<b>Manipur</b>						
	Manipur University	Central	1980	Mar, 2011	1147	N
<b>Meghalaya</b>						
	Martin Luther Christian University	Private	2005	Oct, 2016	25	N
	North Eastern Hill University	Central	1973	Mar, 2011	2256	N
<b>Mizoram</b>						
	Mizoram University	Central	2000	Oct, 2013	440	<a href="http://mzuir.inflibnet.ac.in/">http://mzuir.inflibnet.ac.in/</a>
<b>Nagaland</b>						
	Nagaland University	Central	1994	Aug, 2015	205	<a href="http://www.nagalanduniv.ndl.iitkgp.ac.in">http://www.nagalanduniv.ndl.iitkgp.ac.in</a>
	Institute of Chartered Financial Analysts of India (ICFAI) University	Private	2009	Jan, 2019	6	N
<b>Sikkim</b>						
	Sikkim Manipal University	Private	1995	Sept, 2019	47	N
	Sikkim University	Central	2007	Mar, 2012	52	<a href="http://dspace.cus.ac.in/jspui/">http://dspace.cus.ac.in/jspui/</a>
<b>Tripura</b>						
	Tripura University	Central	1987	Jan, 2013	202	<a href="https://www.tripurauniv.ac.in/Page/LBCRepositoryThesis">https://www.tripurauniv.ac.in/Page/LBCRepositoryThesis</a>

ICFAI University, Tripura	Private	2004	Nov, 2017	3	N
---------------------------	---------	------	-----------	---	---

**Abbreviation:** CTS stands for "Contribution of Theses into Shodhganga," DOE stands for "Date of Establishment," DM for "Date of Signature of MoU," and IRU stands for "URL of the Institutional Repository."

**Table 2. The position of Northeastern Indian universities**

#### Universities in Northeast India's Contribution to ETDs

In terms of signing MoUs and submitting electronic theses to the Shodhganga repository, Table 2 shows the overall standing of IR in Northeastern universities. Across eight states in northeast India, there are 67 educational institutions: 11 public universities, 34 private universities, 20 state universities, and 2 defined institutions. The state with the fewest universities is Mizoram, while the one with the most universities is Assam. The Shodhganga has the most theses filed by the Gauhati University in Assam (5695) and the second most by North Eastern Hill University in Meghalaya (2256).

State	(TNCT) (%)	TNU	TNUSM	TNUCT
Assam	8273 (63.21)	24	12	11
Arunachal Pradesh	432 (3.30)	11	2	1
Manipur	1147 (8.76)	8	3	1
Meghalaya	2281 (17.43)	9	2	2
Mizoram	440 (3.36)	2	1	1
Nagaland	211 (1.61)	4	3	2
Sikkim	99 (0.76)	6	2	2
Tripura	205 (1.56)	3	2	2
Total	13088 (100)	67	27	22

**Abbreviation:** TNU stands for the total number of universities, TNCT for the total number of these contributions, Total Number of Signatories to a Memorandum of Understanding (TNUSM) and Total Number of Contributions to a Thesis (TNCT)

**Table 3: Where Northeastern Universities stand in terms of submitting ETDs by state**

The majority of the 13088 theses from Northeastern universities were received by Assam (63.21%), followed by Meghalaya (2281%), as shown in Table 3. A total of 4.24% of ETDs from the eight states in the Northeast were received by the Shodhganga.

## FINDINGS AND DISCUSSION

A number of noteworthy conclusions were drawn from the research. Most colleges did not start submitting ETDs to the national repository, even though they signed a Memorandum of Understanding with INFLIBNET, according to the authors. Institutions of higher learning that consistently rank high in quality are contributing ETDs to the repository. A small number of private universities have agreed to submit theses via memorandums of understanding, but public universities are not doing the same. The creation of a national electronic theses and dissertation repository was meant to help reduce information duplication and build filtered knowledge capital for social development, but this goal was undermined because people didn't realize how important it was to submit theses and dissertations electronically to the repository. Additionally, it is clear that none of the registered open-access repositories are operational. It is critical that inactive repositories identify the underlying operational causes of their inactivity. As per OpenDOAR research, India set up 39 repositories (41.50% of the total) between 2011 and 2015, and by June 2021, the country had 98 repositories.

At 30,8771 as of June 11, 2021, the Shodhganga collection includes more electronic technical reports (ETDs) than any other in India, attesting to its scholarly significance. The Northeastern colleges also submitted 13088 Theses to the Shodhganga, accounting for 4.24% of the total. Of all the e-theses filed in Northeast India, the greatest number of 78273 came from the state of Assam, accounting for 63.21% of the total.

According to the authors, there were some discrepancies in the data that was provided by the Shodhganga repository for the universities of Tezpur, Gauhati, and Assam. According to the Shodhganga portal, 614 submissions were

received by Tezpur University, 5695 by Gauhati University, and 1436 by Assam University. The counts differed, leading to confusion, when compared with the year-wise and language-wise classifications offered in the same webpage for these data. The authors used year-wise and language values as their foundation, which resulted in submission counts that were irrelevant. At the end of INFLIBNET, we hope to have data that is clearer and more refined.

## CONCLUSION

In conclusion, this examination of Open Institutional Repositories (OIRs) in North East India underscores their pivotal role in capturing and disseminating the diverse scholarly output of the region. The current landscape reveals a promising array of repositories, reflecting the dynamic nature of research across disciplines. However, challenges such as technological constraints and limited awareness necessitate strategic interventions for sustained growth.

The proposed strategies, including capacity building and collaborative initiatives, offer a pathway to mitigate these challenges and strengthen the impact of OIRs. Building digital literacy among researchers and fostering collaborations among institutions will not only enhance the repositories' functionality but also contribute to a more interconnected scholarly community.

Looking ahead, the future prospects of OIRs in North East India appear promising. Anticipated trends, such as technological advancements and increased collaboration, position these repositories as key players in the global scholarly communication network. As repositories evolve to meet the changing needs of researchers and institutions, they are poised to play a transformative role in elevating the visibility of North East India's research output on the global stage. Through continued dialogue, cooperation, and strategic investments, OIRs in North East India can emerge as resilient and influential contributors to the dissemination and preservation of knowledge in the years to come.

Finding trends in the expansion of open repository systems and the records they hold in India is the primary objective of this study. Shodhganga plays an essential role in disseminating research findings as a national Open-Access Repository. In order to assist Northeastern institutions with the country's quality research program, it is necessary to establish a memorandum of understanding with Shodhganga without delay. It is critical that Shodhganga and North-eastern university's sign a memorandum of understanding (MoU) to help increase the quality of research in the country. In order to build a mutually exclusive knowledge repository, the combined efforts of universities in India's Northeast were found to be inadequate, necessitating firm direction and additional funding.

## REFERENCES

1. Jhamb, G. & Samim, A. Contribution to open access repository by the central universities of India: A case study of Shodhganga. *Libr. Philos. Pract.*, 2017.
2. Kalbande, D.T. Institutional repository in Open DOAR: Status Quo India. *Libr. Philos. Pract.* 2019, 1-10.
3. Dutt, S. Shodhganga: Substantial and leading online repository of Indian Theses and Dissertation. *Int. J. Sci. Eng. Comput. Technol.* 2017, **7**(3-4), 217-219.
4. Nanthini, R. & Varghese, R.R. Growth of ETDs in India: An analytical study of top contributing universities of Shodhganga. *Libr. Herald.*, 2018, **56**(1), 152-163.
5. Sandhya Rani, S. Electronic theses and dissertations contributed by Indian universities to Shodhganga: A case study of Osmania University, Hyderabad. *Pearl: A J. Libr. Inf. Sci.*, 2019, **13**(1), 45-52.
6. Das, S. & Chauhan, V. Collection of ETDs among State Universities of Gujarat: A study. *Int. J. Inf. Stud. Libr.*, 2020, **4**(1), 22-29.
7. Manjunatha, U. Contribution to Shodhganga by the LIS departments of Karnataka state contribution to Shodhganga by the LIS departments of Karnataka state universities. *Int. J. Next Gener. Libr. Technol.*, 2019, **5**(1), 1-19.
8. Biswas, S. Shodhganga repository for Electronic Theses and dissertations of the universities in West Bengal: A study. *Int. J. Appl. Res.*, 2017, **3**(1), 318-322.
9. Dhanavandan, S. & Tamizhchelvan, M. Development of Shodhganga repository for electronic theses and dissertations in Tamil Nadu: A study. *Int. Res. J. Libr. Inf. Sci.*, 2013, **3**(4), 648-658.