

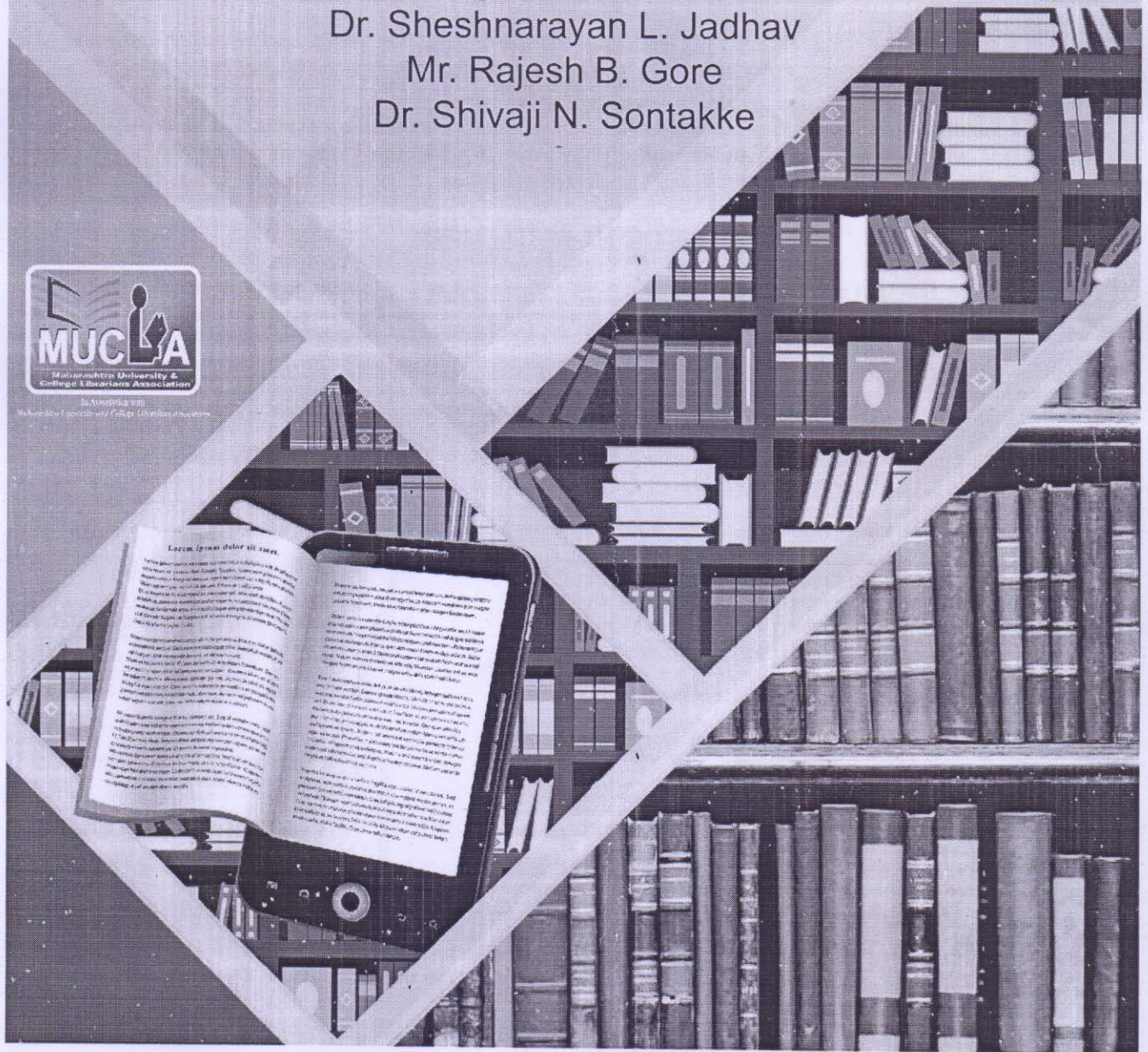
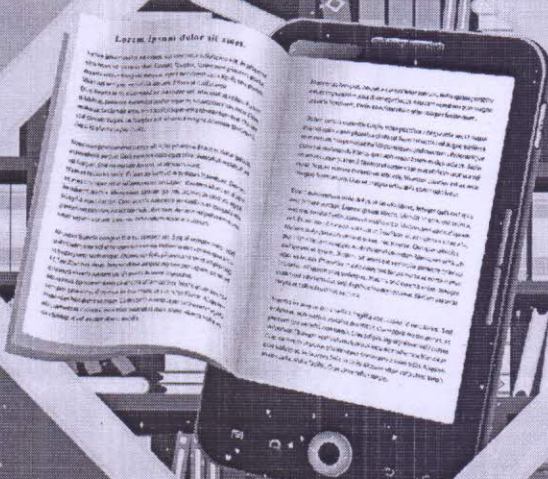
PRESENT AND FUTURE INITIATIVES IN ACADEMIC LIBRARIES

- EDITORS -

Dr. Jagdish N. Kulkarni
Dr. Sheshnarayan L. Jadhav
Mr. Rajesh B. Gore
Dr. Shivaji N. Sontakke



In Association with
Maharashtra Government College Librarians Association



Present and Future Initiatives in Academic Libraries

EDITORS

Dr. Jagdish Narharrao Kulkarni
Mr. Rajesh Baliram Gore

Dr. Sheshnarayan Laxmanrao Jadhav
Dr. Shivaji Narayanrao Sontakke

ASSOCIATE EDITORS

Dr. R. R. Paithankar
Dr. Sachin Narayanrao Chobe

Mr. Ajit Janardan Rangdal
Dr. Vishnu Manohar Pawar



In Association with *Maharashtra University
and College Librarians Association*



Atharva Publications



Atharva Publications

Present and Future Initiatives in Academic Libraries

National Conference Papers

PAFHIAL 2022

Copyright © All rights reserved.

ISBN : 978-93-91712-92-1

Publisher & Printer

Mr. Yuvraj Mali

Atharva Publications

Dhule : 17, Devidas Colony,
Varkhedi Road, Dhule - 424001.

Contact : 9405206230

Jalgaon : Shop No. 2, 'Nakshatra' Apt., Housing Society,
Shahu Nagar, Opp. Teli Samaj Mangal Karyalaya,
Jalgaon - 425001.

Contact : 0257-2253666, 9764694797

Email : atharvapublications@gmail.com

Web : www.atharvapublications.com

In Association with

Maharashtra University and College Librarians Association

First Edition

17 February 2022

Type Setting

Atharva Publications

Price

Rs. 950/-

Disclaimer: *The authors are solely responsible for the contents of the papers compiled in the volume / book. The publishers or editors / Maharashtra University and College Librarians Association do not take responsibility for the same in any manner. Errors if any purely unintentional and readers are requested to communicate such error to the publishers or editors to avoid discrepancies in future.*

• Initiatives of Academic Libraries During and Post COVID 19 Pandemic Era.....	238
<i>Dr. Kulkarni Jagdish N., Mrs. Zanke Varsha L.</i>	
• कोविड-१९ महामारी आणि ग्रंथालयाचे बदलते स्वरूप.....	243
<i>डॉ. वीणा कांबळे, रजनीकांत अरुण ससाणे</i>	
• महाविद्यालयीन ग्रंथालयातील उपक्रमाचा अभ्यास	247
<i>प्रा. विठ्ठल विश्वनाथ जाधव</i>	
• Institutional Repository: An overview	251
<i>Mr. Ghayal Gajanan B.</i>	
• Institutional Repository in Indian Subcontinent : A Study.....	255
<i>Mr. Krupal D. Shinde, Dr. Jagdish N. Kulkarni</i>	
• A Role of IQAC in College Library.....	260
<i>Mr. Warvate Sadashiv Balasaheb</i>	
• Role of Libraries in NAAC Process.....	263
<i>Mrs. Raykar Durga Suhas, Dr. Sontakke Shivaji Narayanrao</i>	
• Library Professionals Approach toward Faculty Development Programs: A Study.....	266
<i>Dr. Bansod Bhupendra, Dr. Kamble Ajay M</i>	
• Essential Skills for Librarianship.....	271
<i>Dr. Chavan Sharad Suryabhanrao</i>	
• Leadership	273
<i>Dr. Choure Anjali A.</i>	
• Role of the Professional Librarian Associations	276
<i>Dr. Deshpande Aparna</i>	
• आजच्या माहिती तंत्रज्ञानाच्या युगात ग्रंथपालासाठी आवश्यक गुण-कौशल्ये	279
<i>प्रदिप नामदेव मैदकर</i>	
• Changing Role of Librarians in Digital Library Era	281
<i>Dr. Tekale Ramdas B., Dr. Panchal G. N.</i>	
• Social Networking Tools: Good Platform for Public Library.....	285
<i>Mr. Barathe Rahul Papat, Dr. Vikram V. Giri</i>	
• Innovative Technology Application In Libraries	288
<i>Mrs. Maral Pritam Vikas, Dr. Telke Sudhakar B.</i>	
• Evolving Technologies and Transformation of the Libraries.....	292
<i>Dr. Phugnar Prashant L.</i>	
• A Library in the Palm of Your Hand: M-OPAC	295
<i>Prof. Wagh Rajshree D.</i>	
• Web Based Library and Information Services in the Modern Libraries	299
<i>Mrs. Seema V. Pophale, Dr. Vivek Sathe</i>	
• Smartphone Computing : Anywhere, Anytime Information	302
<i>Dr. Rajesh Ganeshrao Bobade</i>	
• शैक्षणिक ग्रंथालयातील भविष्यकालीन उपक्रम	306
<i>डॉ. मधुबाला गंगाधर हुडगे</i>	

Section 4

Initiatives in Higher Education and Library and Information Science Education & Research

• बिब्लिओमेट्रीक्स : एक संशोधन तंत्र	310
<i>श्री किरण रंगनाथ भिसे, डॉ. विक्रम व्ही. गिरी</i>	
• Content Analysis of Articles Published in JILA during January to December 2016.....	315
<i>Mr. B.A. Kamble, Dr. S.N. Sontakke</i>	

A Library in the Palm of Your Hand: M-OPAC

Prof. Wagh Rajshree D.
Librarian, S.S.Girls' College,
Gondia (Maharashtra)

Abstract

This paper present the current study of M-OPAC application at college library of S.S.Girl's College, Gondia (Maharashtra) Library. M-opac facility is provided by LIBMAN mastersoft ,Nagpur. In this paper the author explained all the library services which are provided by this M-OPAC app. There are two parts in M-OPAC 1) the library access for students and library services provided to students 2) library administration part for library staff. These two functions are elaborated in this paper. S.S.Girl's college library implemented M-opac in the year 2021.

Keywords: Academic libraries, OPAC, M-OPAC, Mobile Library services, M-Learning

Introduction:

In Past days we all know that librarians are as custodian for books and books kept in Custody and available for reputed persons of society. But day by day the changes happened, "change is law of Nature" and we all should adopt it. Same is happening with growth of information as the role of library professionals are changing as information scientist, data manager and now becomes M-Librarian/Cyberian. With the new changes there are marvelous alteration in dissemination of information to users, for this new technologies launched viz, OPAC, WEB OPAC and now M-OPAC. "Library in Our Palm" this concept is turn into reality with the M-OPAC.

OPAC this concept is already implemented in web based applications, the main challenges for library professional is to implement the OPAC in mobile Based applications. The Growth of data and information is very fast as rapid fire and also the mobiles devices use are also growing fast. When we think about these two of digital world it is need to cope up with it. So some initiatives are taken and one of them is information retrieval system using Mobile OPAC.(Reddy et al., 2013)

OPAC is doorway to entrée library services remotely, it provides online access to library resources, helps in checking already borrowed resources, it provides facility to reserves resources in advance, these all features are assimilated in M-OPAC and it is possible to borrower "the library in the Palm of your hand"

LIBMAN MASTERSOFT ERP SOLUTIONS:

CLOUD LIBRARY : Library Management System (LIB-MAN) is extremely combined, user friendly, and well-suited system for complete computerization of all the in-house operations of any size and type of library. LIB-MAN is embedded with multilingual fonts, Barcode & QR code fonts.(LIBMAN | Central Library, n.d.)

S. S. Girl's College, Gondia:

S. S. Girls' College Gondia, is a venture of Gondia Education Society's (GES) affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur, Reaccredited 'B' by NAAC, Bangaluru. The Gondia Education Society was founded by great philanthropist and visionary Late Shri Manoharbhai Patel in 1958. At present the society is patronized by Hon'ble Shri Praful Patel and Secretary Hon,ble Shri Rajendra Jain.

S. S. Girls' College was established in 1970 and has a beautiful campus located at heart of the rice city Gondia. It is the first and the only women's college in district imparting quality education of global standards for girls to become good citizen of India.(Welcome to S. S. Girls' College Gondia, n.d.)

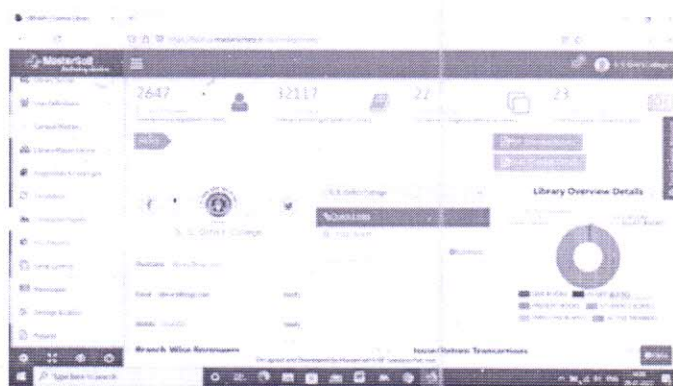
Vision - "We at S. S. Girls' College, Gondia are committed to excellence in women's education empowering personalities intellectually, artistically and emotionally (skills of head, hand and heart) and developing responsible members of society."

S.S.Girls College Library:

Library - An essential part of an educational institution and a society as a whole. Library is not a container of only books but it is a database of knowledge and information in the form of books. Libraries having information in print as well as in digital media also.

Girls College library having collections of total 32117 books on various subject, 22 journals subscribed national and international level, having digital collection in the form of N-LIST. S.S.Girls' College library is computerized with LIB-MAN software since 2008 and from 2019 it turn on cloud

based library management system. In the year 2021 the LIBMAN added new feature in its software it is M-OPAC (Mobile online public access catalogue)



Source: <https://libcloud.mastersofterp.in> (accessed on 29th January 2022)

Concept of M-OPAC:

Mobile phones have gained importance in Covid 19a and also post covid 19. The mobile phone is devices that enable user to converse, connect, manage and innovate, having potential to facilitate the teaching and learning process in a massive way.(Patel & Parekh, 2021)

M-OPAC is the online public access catalogue which is accessible through mobile. The mobile optimized online public access catalogue, should provide simple search facility against, author, title of books, subjects and the search result should be contains information about the holding of library and availability of the same in concise manner. Through the mobile apps borrowers are able to access networked information that linked by the app.

“Mobile OPAC is OPAC system which is implemented over a mobile device as an application.”(Reddy et al., 2013)

“Mobile applications, apps for short, are standalone dedicated pieces of software or web applications/sites that enhance our mobile devices capabilities and access information in an elegant, Consistent ways”(Madhusudhan & Dar, 2017).

M-OPAC in S. S. Girls' College Library:

M-OPAC is implemented in S. S. Girls' College Library in the Year 2021 and it is now in the initial stage. Awareness among the students and faculty there were organized workshop by librarian, live demonstration was taken and still it is continues. All statistics regarding M-OPAC are available in Library Cloud Management system; Librarians can demand the required statistics to online help desk or by putting email to them. Master soft M-OPAC having two Parts as bellows-

- 1) M-OPAC for Users: by this users can access library from any wherewith their smartphones after the login in M-OPAC. Now the “Library Visitor's Management” feature user needs to scan library QR code which is available in entrance of library as Digital entrance in Library.
- 2) M-OPAC for Library staff: This part is only for Library Administration, for library staff. College library is using the cloud based LIBMAN software so all the library software features are available in M-OPAC app.

Features of M-OPAC:

- M-OPAC can used with mobile devices
- In a single click user can search book across all registered libraries
- Amalgamated library data at a single place
- User can search books by different tags like : Title, Author, Publisher, Subject and Keywords
- User would be able to see information regarding the book like Author, Publishers, Publish year, Accession numbers with Series code, ISBN, Call No (Classification Number + Book Number), Quantity of Book
- Above all features are provided by M-OPAC of S. S. Girls College Library
- Now recently the new feature is launched by LIB-MAN is “QR code for Libraries”, “Library Visitor's Management” in Digital form. For which user need to scan QR code through M-OPAC.

- M-OPAC is also worked for Guest Users
- Users can search books from registered colleges and single college also
- Users can search books in Marathi, Hindi, English as Unicode compatibility is there
- Voice search command is available for searching
- Book Reservation Facility is there.
- M-OPAC is fulfilling the 1st law of library science "Save The Time of User" User can search book

part I: M-OPAC for Borrowers:

Screenshots of M-OPAC taken from Android Mobile Phone: Step by Step Screenshots are presented which displays the working of S.S.Girls'College Library OPAC.

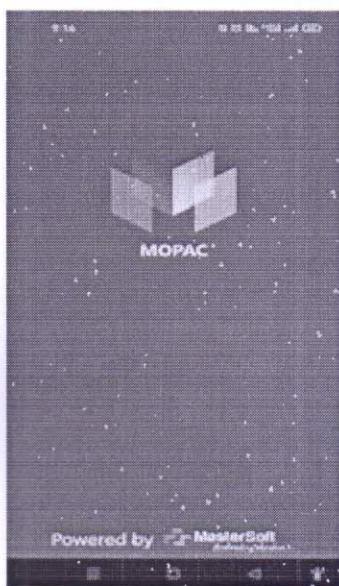


Fig 1: Icon of M-OPAC

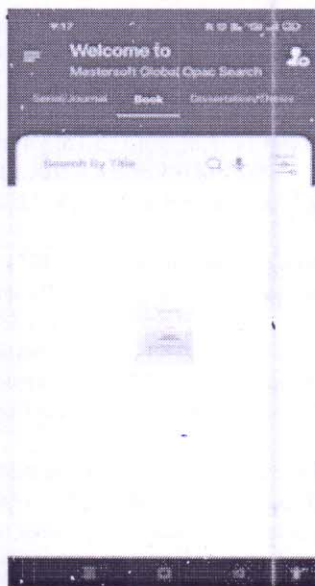


Fig 2: Welcome To Global Opac Search

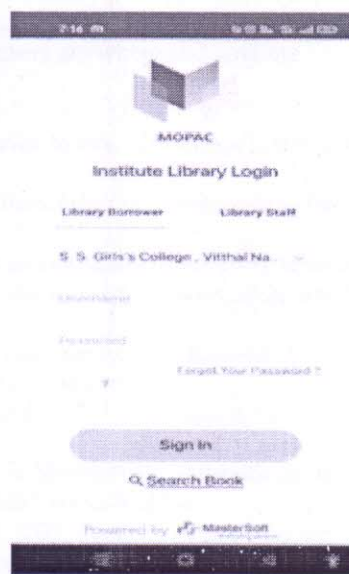


Fig 3: Institute Library login

QR Code - Library Visitor's Management System:

QR code is available in library for check in and check out into the Library. It is useful for marking our attendance / visit in Library to get the benefits of reading room, stack room and all the library facilities. QR code is available at library entrance, Book Issue- return counter, Librarians chamber.

Part II: M-OPAC for Library Staff:

- Dashboard : On first login librarian or library staff is need to change passwords, on successful login Dashboard is appears, total number of borrowers, total number of books, newspapers, journals present in library appears. Librarians can see News headline on Dashboard, Librarians can see issue –return transaction graph from dashboard facility, task bar is given at the bottom of first window. Librarian can see date wise issue –return and in/out graph of library.
- Issue- Return Tab –
- New Arrivals
- Reservation of Book and Cancel
- Issue –Return Renewal
- Demand Approval Stock Verification Librarians need to create client creation for library staff to operate all library operations on M-OPAC. Then after library staff can perform operations of library. Specific user name and passwords need to set for each staff.

Suggestions:

- Users should ready and interested to adopt new technologies while accessing library facilities.
- Wi-Fi connectivity should be available in Library for users by which users can use all the services which are based on internet or mobile devices.

- Library borrowers should use m-opac as information seeker; it will change their identity as mere borrower to digital information seeker.
- Mobile learning is a exciting and capture the user's attention towards libraries.

Conclusion:

All of us familiar that due to coronavirus most of all things changes and drastic change happened in education, it becomes online learning. Online learning and distance learning is only for distance learners but Covid -19 changes the pattern, libraries exist has changed dramatically. Libraries moves faster, relies on technology and competes more intensely.(Panda, 2020)

Smart phones are used and viewed by most of people as only devices for making phone calls and text messages but smart phones can be used as information searching devices through web, and librarian should develop some services in a mobile friendly way. (Li, 2013) Library professional should starts mobile applications specially m-opac in their respective libraries and starts the mobile librarianship, by which they can improves their services and to connect with library users anywhere and anytime.

References:

1. Li, A. (2013). Mobile Library Service in Key Chinese Academic Libraries. *Journal of Academic Librarianship*, 39(3), 223–226. <https://doi.org/10.1016/j.acalib.2013.01.009>
2. LIBMAN | Central Library. (n.d.). Retrieved January 29, 2022, from <https://libcloud.mastersofterp.in/LibWebsite/Index>
3. Madhusudhan, M., & Dar, S. A. (2017). Mobile information services and initiatives in university libraries: A new way of delivering information. *DESIDOC Journal of Library and Information Technology*, 37(2), 109–118. <https://doi.org/10.14429/djlit.37.2.11116>
4. Panda, S. (2020). Mobile Librarianship: An Initiative of New Normal. *International Research Journal of Multidisciplinary Studies*, 6(September), 15–25. <https://doi.org/10.31235/osf.io/u3rn7>
5. Patel, A., & Parekh, Y. (2021). M-Learning. Towards Excellence. *March*, 422–437. <https://doi.org/10.37867/te130138>
6. Reddy, Y. C., Raju, P. K. S., & Neeraja, K. (2013). E-Library using the Mobile OPAC. *International Journal of Computers & Technology*, 10(5), 1682–1686. <https://doi.org/10.24297/ijct.v10i5.4146>
7. Welcome to S. S. Girls' College Gondia. (n.d.). Retrieved January 30, 2022, from <http://ssgcgondia.org>

**International Conference on
Open Access Sources and
Information Services
during Post-Covid Times:
Challenges and Opportunities**



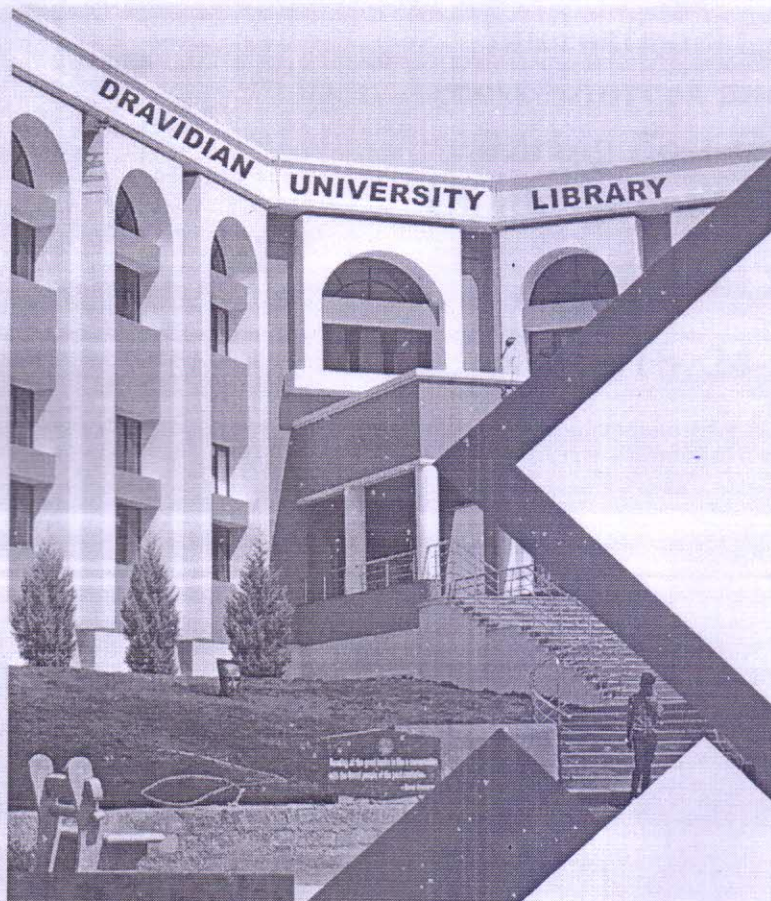
**67th
ILA
CONFERENCE
PROCEEDINGS**

Chief Editor
Prof. B. Ramesh Babu

Editors
Dr. M. Doraswamy
Dr. O. N. Chaubey
Dr. Raavi Sarada

Organised by

Dravidian University Library,
Kuppam, Adhra Pradesh
Indian Library Association (ILA),
New Delhi
Andhra Pradesh Library Association (APLA),
Vijayawada





67th ILA CONFERENCE PROCEEDINGS

**International Conference on
“Open Access Sources and Information Services
during Post-Covid Times:
Challenges and Opportunities”**

(Volume I & II)

March, 24-26, 2022



67th ILA CONFERENCE PROCEEDINGS

International Conference on “Open Access Sources and Information Services during Post-Covid Times: Challenges and Opportunities”

March, 24-26, 2022

Chief Editor

Prof. B. Ramesh Babu

Editors

Dr. M. Doraswamy
Dr. Raavi Sarada
Dr. Pradeep Rai
Dr. Rakesh K. Mohindra

Dr. O. N. Chaubey
Dr. Dharam Kumar
Dr. Rishi Tiwari
Dr. Rupesh Gaur

Associate Editors

Dr. A. Kishore

Dr. M. Anjaiah

Assistant Editors

Dr. C. Kusumakumari
Sri. S. Naresh
Dr. C. Krishna Reddy

Dr. Hairnadha Reddy
Dr. G. Subramanyam
Dr. M. Padmaja

Organised by

Dravidian University Library, Kuppam, Andhra Pradesh

Indian Library Association (ILA), New Delhi

Andhra Pradesh Library Association (APLA), Vijayawada

THEME-2

OPEN ACCESS TOOLS AND SERVICES

23	Open Access Initiative in National Sanskrit University Tirupati Library Dr. Vasanth N and Manjula M	209
24	Open Access Services to Excelate/Support Research in India: with reference to the INFLIBNET Center Perspective V. Srinivasa Rao, K. Siva Prasad and Sobila V R Prabhakar	217
25	Open Access E-Books in Health Sciences – Dr. A. Omkar Murty and Dr. B. Vijay Kumar	228
26	Open Access Publishing Trends and India's Participation in DOAJ: A Study – Dr. S. Srinivasa Raghavan and V. K. Varsha	240
27	Source of Availability and Accessibility of Information and the Use of Library Services in the Affiliated Colleges of Madurai Kamaraj University During Post Covid Times, Tamil Nadu Dr S. Nattar and Dr. R. Regina	251
28	Open Access Sources and Information Services during Post- Covid times in Nimar Region- A Case Study Dr. M. Suresh Babu and Pritee Gulwaniya	264
29	Downloading and installing of Reference Management Tools Dr. Archana N Ladkat and Dr. Shalini R Lihitkar	268
30	A Study on indianmanuscripts.com an Open Access Indian Manuscripts Initiative Nirmala C and Dr. P G Tadasad	277
31	Contribution of Asian Countries in Open DOAR Rajashree D. Wagh and Dr. Shalini R. Lihitkar	290
32	Use and perceptions of Remote Access Services (off-campus) among the users of Sri Padmavati Mahila Visvavidyalayam, Tirupati Dr. N. Harilakshmi, Devaki Devei and Prof. B. Vani	304
33	Open access scholarly communication by the faculty members of Nalsar University of Law: A Study Chidananda M and Mallinath Kumbar	315

Contribution of Asian Countries in Open DOAR

Rajashree D. Wagh

*Librarian, S.S.Girls' College, Gondia,
Maharashtra (INDIA)*

Email: rajashree4422@rediffmail.com

Dr. Shalini R. Lihitkar

*Associate Professor
Department of Library and Information
Science*

*Rashtrasantukadoji Maharaj Nagpur
University, Nagpur*

Abstract:

This study is analytical study of open access repositories in the Asia Continent enrolled in OpenDOAR; Directory of Open Access Repositories. Total 30 Asian Countries are analysed having OARs. The finding disclosed that Japan has the highest number of OARs followed by Turkey, Indonesia and India. It is also come to know that D-space is most popular software for creation and management of Open Access Repositories. By this study it is come to know there are various types of softwares used for creation of Repositories, total 18 softwares found by this study, it is also displayed that Asian countries contribution in OpenDOAR worldwide. Total 5772 Repositories are available in which 1349 Repositories from Asian Continent.

Keywords: *DOAR, Open Access, OpenDOAR, Institutional Repositories, Asia,*

1 Introduction:

The Concept "open" itself disclosed its meaning that it is for sharing for free, and easy access for its users. And open access is is for to share the resources for free, easy access to stakeholders and it avoids restrictive policies. A place where scholarly contents are stores in significant quantities is called "a repository", it is become as knowledge management by individual institution.(Kuri& Singh, 2020). All over the world the big issue is how to manage the research output and now its become necessary and need to manage the scholarly contents in effective way and so on Open Access Institutional Repositories are the best and ultimate option , it will open up the up the research out put to each and every one.

In the Digital World by the growth of information research scholars faces lots of problems and challenges to maintain scholarly contents. Digital world is changing

the modes of Research scholarly communication and so on digital platform provides opportunities for researches to work in collaborative and manner.(Karadia& Sahoo, 2021)

About OAR:

Open Access Repositories gaining popularity because its advantage is that it this platform provides worldwide audience to the scholarly contents. Open Access Repositories: It is Defined as " A Collection of Full Text Documents Available in online databases on the Internet can be accessed freely and instantly", it promote scholarly communication.(Xie& Matusiak, 2016).As per the Wikipedia – An OAR is a digital Platform that maintained research output and provide it free of coast, with immediate and permanent access to research result for anyone to use, download and distribute.(*Open-Access Repository - Wikipedia*, n.d.)

About OpenDOAR :

Open DOAR is global Directory of Open Access Repositories. It is service provider which provides access to the repositories from across the world.OpenDOAR host mostly institutional Repositories that provide open and free access to academic and intellectual outputs and resources. This service is launched in year 2005 – the product of a collaborative project between the University of Nottingham and Lund University, it is funded by OSI, Jisc, SPARC Europe and CURL. OpenDOAR provides help desk for their user we can email at help@jisc.ac.uk.(*About OpenDOAR - v2.Sherpa*, n.d.).OpenDOAR is a UK based website with hosts' academic open access repositories. In which anyone can search repositories by Country Name, Software Used for Repositories, Contents, OAR statistics Alphabetical Directory is available on website and some tools and support facility is provided for the user is there.

Objectives of the Study:

- To find out contribution of Asian Countries in OpenDOAR
- To find out how much Asian countries not enrolled inOpenDOAR.
- Types of Repositories (Asian Countries)
- To find out various types of Software used for building Repositories.

International Conference on “Open Access Sources and Information Services during Post-Covid Times: Challenges and Opportunities”

- Compare the Contribution of Asian Repositories with Worldwide repositories available on OpenDOAR.

Scope: This Study is limited to only Asian Countries’ Open Access Repositories (OAR) available on Directory of Open Access Repositories (OpenDOAR).

Methodology:

This Study is based on Quantitative Data from websites of OpenDOAR, Data were collected between 15th January to 24th January 2022. Data were collected by internet searching and it is analysed on selected parameters – Asian countries distributed by their sub regions, contribution of their in OpenDOAR, Software used to build OARs, Type of Repositories, Quantity of Repositories and Comparison of contribution of Asian Countries with all OARs available in OpenDoar. For these study Asian countries details are taken from two websites and verified. Total 48 Asian Countries are listed in the study.(Shavili, n.d.) which are identified on OpenDOAR websites. <https://www.worldatlas.com/articles/how-many-countries-are-in-asia.html> and <https://www.worldometers.info/>(Worldometer, n.d.)

Data Analysis:

Table 1 :List of Asian Countries & their contribution in the OPEN DOAR

Source: <https://v2.sherpa.ac.uk/view/repository/by/country/>(Browse by Country and Region - v2.Sherpa, n.d.)

Sr.No.	Asian Countries Name	Presence in Open DOAR	Regions	Quantity OAR
1	Afghanistan	YES	Southern Asia	1
2	Armenia	YES	Western Asia	2
3	Azerbaijan	YES	Western Asia	2
4	Bahrain	No	Western Asia	0
5	Bangladesh	YES	Southern Asia	15
6	Bhutan	No	Southern Asia	0
7	Brunei	No	South- Eastern Asia	0
8	Cambodia	No	South- Eastern Asia	0

**International Conference on "Open Access Sources and
Information Services during Post-Covid Times: Challenges and Opportunities"**

9	China	YES	Eastern Asia	64
10	Cyprus	YES	Western Asia	6
11	Georgia	YES	Western Asia	4
12	India	YES	Southern Asia	102
13	Indonesia	YES	South- Eastern Asia	163
14	Iran	YES	Southern Asia	18
15	Iraq	YES	Western Asia	3
16	Israel	No	Western Asia	0
17	Japan	YES	Eastern Asia	681
18	Jorden	No	Western Asia	0
19	Kazakhstan	YES	Central Asia	12
20	Kuwait	YES	Western Asia	1
21	Kyrgyzstan	YES	Central Asia	1
22	Labanon	YES	Western Asia	4
23	Laos(Peoples' Democratic Republic)	YES	South- Eastern Asia	1
24	Malaysia	YES	South- Eastern Asia	25
25	Maldives	No	Southern Asia	0
26	Mongolia	No	Eastern Asia	0
27	Myanmar	YES	South- Eastern Asia	3
28	Nepal	YES	Southern Asia	1
29	North Korea	No	Eastern Asia	0
30	Oman	No	Western Asia	0
31	Pakistan	YES	Southern Asia	4
32	Philippies	YES	South- Eastern Asia	9
33	Qatar	YES	Western Asia	1
34	Saudi Arabia	No	Western Asia	0
35	Singapore	YES	South- Eastern Asia	7
36	South Korea	No	Eastern Asia	0
37	Sri Lanka	YES	Southern Asia	16
38	State of Palestine	YES	Western Asia	8
39	Syria	No	Western Asia	0
40	Tajikistan	No	Central Asia	0

International Conference on "Open Access Sources and Information Services during Post-Covid Times: Challenges and Opportunities"

41	Thailand	YES	South- Eastern Asia	17
42	Timor-Leste	No	South- Eastern Asia	0
43	Turkey	YES	Western Asia	172
44	Turkmenistan	No	Central Asia	0
45	United Arab Emirates	YES	Western Asia	5
46	Uzbekistan	No	Central Asia	0
47	Vietnam	YES	South- Eastern Asia	1
48	Yemen	No	Western Asia	0
Total				1349

Table 1 a) Analysis of Asian Countries as per sub region and quantity of OAR

Sr. No	Sub Region	Country Having repository	Country having No Repository
1	Central Asia	2	3
2	Southern Asia	7	2
3	Eastern Asia	2	3
4	South- Eastern Asia	8	3
5	Western Asia	11	7
Total		30	18

Interpretation: Table 1 and Table 1a shows directory of Asian countries, with their sub regions of countries. Total 48(Forty eight Countries are divided into 5 Sub regions as Central Asia having 5 countries in total 2 (Two) with OARs, Southern Asia having 10 countries in total and 7(seven) having OARs, Eastern Asia stands with 5 countries and 2(Two) countries with OARs, South-Eastern Asia having 11 countries and 8(eight) countries having OARs and Western Asia having 19 countries in total, 11 (Eleven) having OARS.. In the above table Quantity of OARs are displayed as it is found that total 30 Asian Countries out of 130 countries are contributed in OpenDOARworldwide. Having the Contribution in OpenDOAR.

International Conference on "Open Access Sources and Information Services during Post-Covid Times: Challenges and Opportunities"

Table 1 shows that Japan with 681 OARs, India with 102 OARs, Indonesia stands with 163 OARs, Turkey stand with 172 OARs.

Table 2 : Software Used for Developing Repositories

Sr. No	Country	Name of Software																		
		CONTENTd	Cyberis	CRIS	D-Space	Digital Commons	Drupal	Digitool	E-Print	Earnas	Fedora	GreenStone	Invevio	Omeka	Other	Open Repositories	Unspecified	WEKO	XOONIPS	
1	Afganistan	X	X	X	X	X	X	X	X	X	X	X	X	X	X	√	X	X		
2	Armenia	X	X	X	X	X	X	X	√	X	X	√	X	X	X	X	X	X		
3	Azerbaijan	X	X	X	√	X	X	X	X	X	X	X	X	X	X	X	X	X		
4	Bangladesh	X	X	X	√	X	X	X	X	X	√	X	X	X	X	X	X	X		
5	China	X	X	X	√	X	X	X	X	X	X	X	X	√	X	√	X	X		
6	Cyprus	X	X	X	√	X	X	X	X	X	X	X	X	X	X	X	X	X		
7	Georgia	X	X	X	√	X	X	X	X	X	X	X	X	X	X	√	X	X		
8	India	X	X	√	√	X	√	X	√	X	√	X	X	√	X	√	X	X		
9	Indonesia	X	X	X	√	√	√	X	X	X	X	X	√	√	√	X	√	X		
10	Iran	X	X	X	√	X	X	X	√	X	√	X	X	X	X	X	X	X		
11	Iraq	X	X	X	X	X	X	X	√	X	X	X	X	√	X	√	X	X		
12	Japan	X	X	X	√	X	X	X	√	√	√	X	X	X	√	X	√	√		
13	Kazakhstan	X	X	X	√	X	X	X	X	X	X	X	X	X	X	X	X	X		
14	Kuwait	X	X	X	√	X	X	X	X	X	X	X	X	X	X	X	X	X		
15	Kyrgyzstan	X	X	X	√	X	X	X	X	X	√	X	X	X	X	X	X	X		
16	Labanon	X	X	X	√	X	X	X	√	X	X	X	X	√	X	X	X	X		
17	Laos (Peoples' Democratic Republic)	X	X	X	√	X	X	X	X	X	X	X	X	X	X	X	X	X		
18	Malaysia	X	X	X	√	X	X	X	√	X	√	X	X	X	X	√	X	X		
19	Myanmar	X	X	X	√	X	X	X	X	X	X	X	X	X	X	X	X	X		
20	Nepal	X	X	X	√	X	X	X	X	X	X	X	X	X	X	√	X	X		
21	Pakistan	√	X	X	√	X	X	X	X	X	√	X	X	√	X	X	X	X		
22	Philippies	X	X	X	√	X	X	X	X	X	√	X	X	√	X	X	X	X		
23	Qatar	X	X	X	√	X	X	X	X	X	X	X	X	X	X	X	X	X		
24	Singapore	X	X	X	√	X	X	X	X	X	X	X	X	√	X	X	X	X		
25	Sri Lanka	X	X	X	√	X	X	X	X	X	X	X	X	√	X	X	X	X		
26	State of Palestine	X	X	X	√	X	X	X	X	X	X	X	X	X	X	X	X	X		
27	Thailand	X	X	X	√	X	X	X	X	X	X	X	X	√	X	X	X	X		
28	Turkey	√	√	√	√	X	√	√	√	X	X	√	X	√	X	X	X	X		
29	United Arab Emirates	X	X	X	√	√	X	X	X	X	X	X	X	X	X	X	X	X		
30	Vietnam	X	X	X	√	X	X	X	X	X	X	X	X	X	X	X	X	X		

Table 2a : Analysis of software used for developing Repositories

Sr. No.	Software	No.of Countries using the Software	%
1	CONTENTdm	2	6.66 %
2	Cybersis	1	3.33 %
3	D-space CRIS	2	6.66 %
4	D-Space	27	90 %
5	Digital Commons	2	6.66 %
6	Drupal	3	10 %
7	Digitool	1	3.33 %
8	E-Print	8	26.66 %
9	Earmas	1	3.33 %
10	Fedora	1	3.33 %
11	Greenstone	8	26.66 %
12	Invenio	1	3.33 %
13	Omeka	1	3.33 %
14	Other	12	40 %
15	Open Repositories	1	3.33 %
16	Unspecified	7	23.33 %
17	WEKO	3	10 %
18	XOONIPS	1	3.33 %
Total		82	

Interpretation: Table 2 shows the data collected for software used by OARs and it is tabulated, it is found that there various types of software are used by OARs around 18 types were collected. Data is collected by and analysed in Table 2a which shows that 90% OARs used "D-Space", 40% OARs used software as "Other", 26.66% OARs used "Greenstone and E-Print", followed by 23.33% is noted as "Unspecified", 10% OARs used software "Drupal"

"CONTENTdm", "D-space CRIS", "Digital Commons" these Software's used by 6.66% OARs followed by 3.33% OARs used XOONIPS, Open Repositories, Invenio, Fedora, Earmas, Digitool, Cybersis.

Table 2a shows that "D-Space" is most popular software among the OARs in Asian Countries OARs

Table 3: Statement of Software used by Asian Country wise (Only taken highest range of Software used as per Table 2a)

Sr, No.	Software	No. Of OARs	%	Name of Countries
1	D-Space	27	90%	Azerbaijan, Bangladesh, China, Cyprus, Georgia, India, Indonesia, Iran, Japan, Kazakhstan, Kuwait, Kyrgyzstan, Labonan, Laos, Malaysia, Myanmar, Nepal, Pakistan, Phillipies, Qatar, Singapore, Sri Lanka, State of Palestine, Thailand, Turkey, UAE, Vietnams
2	Other	12	40%	China, India, Indonesia, Iraq, Japan, Labanon, Pakistan,

International Conference on "Open Access Sources and Information Services during Post-Covid Times: Challenges and Opportunities"

				Philippines, Singapore, Sri Lanka, Thailand, Turkey
3	E-Print	8	26.66%	Armenia, India, Iran, Iraq, Japan, Lebanon, Malaysia, Turkey
4	Greenstone	8	26.66%	Armenia, Bangladesh, India, Iran, Kyrgyzstan, Malaysia, Pakistan, Philippines
5	Unspecified	7	23.33%	Afghanistan, China, Georgia, India, Iraq, Malaysia, Nepal
7	Drupal	3	10%	India, Indonesia, Turkey
6	WEKO	2	7%	Indonesia, Japan,
8	D-space CRIS	2	6.66%	India, Turkey
9	CONTENTdm	2	6.66%	Turkey, Pakistan
10	Digital Commons	2	6.66%	UAE and Indonesia

Interpretation: Table 3 shows the Asian countries having maximum software used for building OARs to contribute in OpenDOAR. Total 27 (90%) countries are using D-Space followed by 12 (40%) countries using "other" softwares which are not specified in the websites.

Table 4: Country wise Statement of Type of Repositories

Sr. No.	Country	Aggregating	Institutional	Disciplinary	Governmental
1	Afghanistan	X	√	X	X
2	Armenia	X	√	X	X
3	Azerbaijan	X	√	X	X
4	Bangladesh	X	√	√	√
5	China	√	√	√	X
6	Cyprus	X	√	X	X

International Conference on "Open Access Sources and Information Services during Post-Covid Times: Challenges and Opportunities"

7	Georgia	√	√	X	√
8	India	X	√	√	√
9	Indonesia	√	√	X	X
10	Iran	X	√	√	X
11	Iraq	X	√	X	X
12	Japan	X	√	X	X
13	Kazakhstan	X	√	√	√
14	Kuwait	X	√	X	X
15	Kyrgyzstan	X	√	X	X
16	Labanon	X	√	X	X
17	Laos(Peoples' Democratic Republic)	X	√	X	X
18	Malaysia	X	√	X	X
19	Myanmar	X	√	X	√
20	Nepal	X	X	√	X
21	Pakistan	√	√	X	X
22	Philippines	X	√	X	X
23	Qatar	X	√	X	X
24	Singapore	X	√	X	X
25	Sri Lanka	X	√	X	X
26	State of Palestine	X	√	X	X
27	Thailand	X	√	√	√
28	Turkey	X	√	X	X
29	United Arab Emirates	X	√	X	X
30	Vietnam	X	√	X	X

International Conference on "Open Access Sources and Information Services during Post-Covid Times: Challenges and Opportunities"

Table 4a : Analysis of type of Repositories

Sr. No	Type of Repository	No. Of Countries	Total Countries	%
1	Aggregating	4	30	13 %
2	Institutional	29	30	97 %
3	Disciplinary	7	30	23 %
4	Governmental	6	30	20 %
	Total		46	

Interpretation: Table 4 and Table 4a shows the statement of Types of Repositories, Repositories categorized in four types, Aggregating, Institutional, Disciplinary, Governmental. And it is found that There are 97% (27) repositories are Institutional, 23% (7) are comes under Disciplinary type, followed 20% (6) of Governmental Repositories and 13% (4) repositories are Aggregating type.

Table 4 shows that China, Georgia, Indonesia, Pakistan these countries having "Aggregating" Repositories. Only Nepal doesn't have Institutional Repository rest of all 29 Countries having "Institutional" type Repositories.

Bangladesh, Georgia, India, Kazakhstan, Myanmar, Thailand these 6 (six) countries having "Governmental" Repositories.

Bangladesh, China, India, Iran, Kazakhstan, Nepal, Thailand these 7(Seven) countries having "Disciplinary" type Repositories.

Table 5 Country wise Descending order of Repositories (Quantity wise)

Contribution of Asian Countries on Worldwide and Asia Level						
Sr. No.	Country	Quantity of OR	Open DOAR Quantity in Asia Region	%	Open DOAR Quantity in World	%
1	Japan	681	1349	50.48	5772	11.79
2	Turkey	172		12.75		2.97
3	Indonesia	163		12.08		2.82
4	India	102		7.56		1.76
5	China	64		4.74		1.1
6	Iran	18		1.33		0.31
7	Thailand	17		1.26		0.29
8	Sri Lanka	16		1.18		0.27
9	Bangladesh	15		1.11		0.25
10	Kazakhstan	12		0.88		0.2
Total		1260	1349		5772	

Source :https://v2.sherpa.ac.uk/view/repository_by_country/ Accessed on 25th January 2022

Interpretation: Table 5 shows the percentage of their contribution in OpenDOAR on World level and Asia Level. It is found that Japan having highest contribution in Asian level, top with 50.48% of Contribution and 11.79% contribution on over all Open DOAR.

Turkey is on 2nd place with 12.75 % (172) of contribution in Asia level and 2.97 % on worldwide same with the Indonesia is on 3rd place 12.08 % on Asia level and 2.82% on World level. India is on 4th Place highest contribution on Asia level with 7.56% and having 1.76 % contribution on world level.

Conclusion: This study findings shows that Japan has the largest 681 Open Access Repositories listed in Asian Continents. Turkey is on 2nd position with 172 repositories, 3rd position Indonesia with 163 and India is on fourth with 102 repositories. It is also observed that and pointed out seriously with 18 Asian countries which don't have their presence in Open DOAR. There are mostly institution repositories and less number of aggregating, and governmental repositories, we should think over it and their is need to encourage the growth of aggregating and governmental repositories.

References:

- About OpenDOAR - v2.sherpa. (n.d.). Retrieved January 25, 2022, from <https://v2.sherpa.ac.uk/opendoar/about.html>*
- Browse by Country and Region - v2.sherpa. (n.d.). Retrieved January 21, 2022, from https://v2.sherpa.ac.uk/view/repository_by_country/India.html*
- Kalbande, D. T. (2019). Institutional repository in Open DOAR: Status Quo India. Library Philosophy and Practice, 2019(June).*
- Karadia, A., & Sahoo, J. (2021). A Comparative Study of India and Australia Open Access Repositories in OpenDOAR. Library Philosophy and Practice, 2021, 1–8. <https://doi.org/10.18231/j.ijlsit.2021.013>*
- Kuri, R., & Singh, M. (2020). Indian Institutional Repositories (IRs) reflected in the Directory of Open Access Repository (DOAR): A Case Study. 2020). Library Philosophy and Practice(e-Journal ..., November. https://www.researchgate.net/profile/Ramesh-Kuri-2/publication/347842257_Indian_Institutional_Repositories_IRs_reflected_in_the_Directory_of_Open_Access_Repository_DOAR_A_Case_Study/links/5fe4bd1ca6fdccdc8f8e443/Indian-Institutional-Repositories-IRs-refl*
- Open-access repository - Wikipedia. (n.d.). Wikimedia Foundation. Inc. Retrieved January 25, 2022, from https://en.wikipedia.org/wiki/Open-access_repository*
- Parabhoi, L., & Dey, S. (2019). Open Access Repositories: A Global Perspective with a Special Emphasis on India and China. Library Herald, 57(3), 342.*

International Conference on "Open Access Sources and
Information Services during Post-Covid Times: Challenges and Opportunities"

<https://doi.org/10.5958/0976-2469.2019.00020.4>

Shavili, J. (n.d.). *How Many Countries Are There In Asia? - WorldAtlas. World Facts.* Retrieved January 22, 2022, from <https://www.worldatlas.com/articles/how-many-countries-are-in-asia.html>

Welcome to OpenDOAR - v2.sherpa. (n.d.). Retrieved January 25, 2022, from <https://v2.sherpa.ac.uk/opensoar/>

Worldometer. (n.d.). *How many countries in Asia? - Worldometer.* Retrieved January 21, 2022, from <https://www.worldometers.info/geography/how-many-countries-in-asia/>

Xie, I., & Matusiak, K. K. (2016). *Introduction to digital libraries. In Discover Digital Libraries (pp. 1–35). Elsevier.* <https://doi.org/10.1016/B978-0-12-417112-1.00001-6>