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Contribution of Asian Open Access Repositories to OpenDOAR

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Abstract. The study reports the evaluation of open access repositories in the Asia continent, identified through OpenDOAR; Directory of Open Access Repositories (http://www.open doar.org/). The findings of the study indicate that Japan has the maximum number of Open Access Repositories, and following it is India. Most of the repositories fall under the category of institutional repositories being in English language. The most common software for creation and management of these repositories is Dspace. Maximum repositories are multidisciplinary in nature with health and medicine on the top, if seen subject wise.

Keywords: Open Access Repositories, OpenDOAR, Asia.

1 Introduction

The phrase 'Open Access' gained popularity in 2002, when the Open Society Institute (OSI) brought about the Budapest Open Archive Initiative stated that "open access" to literature, indicate towards its free availability on the public internet, permitting any users to read, download, copy, distribute, print, search, or link to the full texts of these articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself (Open Society Institute, 2002). Further, Repository can be defined as networked system that provides services from a collection of digital objects. Repositories include: institutional repositories, learning object repositories, cultural heritage repositories, etc. Nowadays, these Open access repositories have become very famous among researchers all over the world, and significant growth can be seen in the number of repositories as to what it was a decade ago. So, this paper aims to evaluate the 723 Open Access Repositories provided in OpenDOAR by countries from Asia.

2 Review of Literature

The major reason for Open Access Repositories (IR) gaining popularity lies in the advantage that this platform provides the medium to have worldwide audience for an research output. OpenDOAR is a service provider which provides access to the repositories from across the world. Literature on Open Access Repositories with special reference to Asia draws our attention towards a recent study by Elahi and Mezbah-ul-Islam (2018), where he indicated towards the slow progress of open access repositories in Bangladesh. When studying the Indian scenario, it was found that Bansal (2016) noted that India is major contributor with 68 repositories, with most repositories in English language and created using Dspace. As per a study conducted in Pakistan, Bhatt (2009) reflected that Eprints is the most popular platform for hosting repositories. Moreover if we look at the global scenario, study by Bhattacharjee and Samrah (2015) reported that Europe and Unites States are on the top with the highest number of repositories registered on OpenDOAR. Moreover, it is emphasized by Elahi and Mezbah-ul-Islam (2018) that there is a need for public awareness regarding the concept of open access repositories in Bangladesh to support research and development. It is further sad to mention that Bansal (2016) reported that Bhutan and Maldives have made no contribution to OpenDOAR at all. Literature review so far indicate that India's has significant contribution towards growth and development of Open Access Repositories but the same is not the scenario in whole of the continent, there do exist countries with no Open Access repository as well (Bansal, 2016).

3 Objectives

The objectives of the study can be stated as follows:

(i) To find out the country with the maximum number of OA Repositories in the Asia Continent.
(ii) To identify the types of repositories registered at DOAR by Asian Countries.
(iii) To assess the most commonly used language of scontent in such repositories.
(iv) To reveal the most popular software platform used in OA Repositories in Asia Continent.
(v) To map subject wise all the OA repositories of Asia.

4 Scope and Methodology

The scope of the study is restricted to the 723 Open Access Repositories provided by Asian countries registered on the OpenDOAR (Directory of Open Access Repositories) only. The desk based approach was used, touching on the following aspects of OARs in Asia viz., country with maximum number of repositories, type of repository (Institutional or Disciplinary), dominating Language, subject coverage and popular software.

5 Findings

Table-1 shows the country-wise list of OA repositories of Asia. It shows that Japan with 222, followed by India with 81 repositories, hosts the maximum number of repositories while Georgia and Pakistan host the minimum with 03 repositories each. It is important to mention here that it was revealed that Afghanistan, Iraq, Kuwait, Laos, Nepal, Qatar, United Arab Emirates and Viet Nam have 01 repository each, while Bhutan and Maldives do not even have a single OAR.

Table 1: Country wise list of OA Repositories of Asia (n-723)

Country	OARs (No.)	Country	OARs (No.)	Country	OARs (No.)
JAPAN	222 (30.7)	MALAYSIA	22 (3)	SINGAPORE	5 (0.7)
INDIA	81 (11.2)	SRILANKA	13 (1.8)	PHILIPPINES	7 (2)
TURKEY	77 (10.6)	BANGLADESH	12 (1.6)	HONGKONG	4 (0.5)
INDONESIA	70 (9.6)	THAILAND	12 (1.6)	GEORGIA	3 (0.4)
TAIWAN	61 (8.4)	IRAN	11 (1.5)	PAKISTAN	3 (0.4)
CHINA	41 (5.6)	SAUDI ARABIA	9 (1.2)	Others	28 (3.9)
KOREA	35 (4.9)	KAZAKHSTAN	7 (2)	Total	723 (100)

Table 2 represents that 694 (96%) repositories are institutional, followed by 16 Disciplinary (2%), 09 (1%) Aggregating and 04 (0.5%) Governmental type OA Repositories.

Table 2: Type of Repository (n-723)

S.No.	Type of OAR	Number of OARs
1	Institutional	694 (96)
2	Disciplinary	16 (02)
3	Aggregating	09 (01)
4	Governmental	04 (0.5)

It is evident from Table 3 that the most Asian OARs are in English language with 506 repositories, followed by 219 Japanese repositories, 106 Chinese ones, and least is the repositories in Malay and Russian languages with 12 each.

Table 3: Language of Content in Asian OARs (n-723)

S.No.	Language of Content in OAR	Number of OARs
1	English	506
2	Japanese	219
3	Chinese	106
4	Turkish	77
5	Indonesian	50
6	Korean	36
7	Arabic	26
8	Malay	12
9	Russian	12
10	Other	78

Note: Some being multilingual as well.

According to Table 4, Dspace with 397 (55%) is the most popular software among Asian nations for creation and management of OARs, followed by Eprints with 115 (16%), WEKO from Japan by 102 (14%) and least popular are Drupal and CONTENTdm with 02 Repository each (0.4%).

Table 4: Most used software for OARs in Asia (n-723)

S.No	Software	OARs (No.)
1	Dspace	397 (55)
2	Eprints	115 (16)
3	WEKO	102 (14)
4	Earmas;	11(1.5)
5	Greenstone	11 (1.5)
6	XooNlPs	11 (1.5)
7	CONTENTdm	02(0.2)
8	Drupal	02 (0.2)
7	Others	72 (9.9)

As per Table 5, the majority of OA Repositories are multidisciplinary in scope as far as the subject is concerned with 475 (66%) such repositories. 85 Health and Medicine OA repositories are next maximum number with 12%, followed by 66 OA repositories in Technology with 9 %. If we further observe the table, there are 30 OA Repositories in Library and information science and computers with 4% each and further going down, we can see that Architecture and Fine-Performing Arts has least 7 (1%) OA Repositories.

Table 5: Subject wise list of OARs of Asia (n-723)

S.No.	Subject	Number of OARs
1	Multidisciplinary	475
2	Health and Medicine	85
3	Technology	66
4	Business and Economics	55
5	Science	52
6	Law	41
7	Education	39

8	Arts and Humanities	35
9	Agriculture, Food and Veterinary	35
10	Language and Literature	33
11	Computers and IT	30
12	Library and Information Science	30
13	Social Sciences	27
14	Philosophy and Religion	25
15	Biology and Biochemistry	25
16	Chemistry and Chemical Technology	25
17	Ecology and Environment	25
18	History and Archaeology	23
19	Management and Planning	23
20	Physics and Astronomy	21
21	Mechanical Engineering and Materials	16
22	Mathematics and Statistics	16
23	Geography and Regional studies	14
24	Electrical and Electronic engineering	13
25	Earth and Planetary Sciences	13
26	Psychology	11
27	Civil Engineering	8
28	Architecture	7
29	Fine Arts and Performing Arts	7

Note: Repositories being multidisciplinary as well*

6 Conclusion

The study results showed that Japan has the largest number of OA repositories in Asia. India is on 2nd place with 81 repositories, but is sad to mention that the growth of OA repositories is extremely slow in countries like Georgia and Pakistan. It is important to mention here that it was revealed that Afghanistan, Iraq, Kuwait, Laos, Nepal, Qatar, United Arab Emirates and Viet Nam have 01 repository each, while Bhutan and Maldives do not even have a single OAR at all. The majority of OA Repositories are institutional and very few are Governmental. There is a need to take suitable steps to encourage the growth of governmental repositories keeping in view the importance of the documents they include. It was evident that most Asian OARs are in English language. Dspace is the most popular software among Asian nations for creation and management of OARs and Drupal-CONTENTdm being the least used ones. The majority of OA Repositories are multidisciplinary, while Health and Medicine dominates the individual score. There was realized that there is a need to develop more such repositories in the field of Architecture and Fine-Performing Arts.

Reference

Bansal, Sonia. (2006). “Contribution of SAARC countries to the directory of open access repositories (OpenDOAR)”. *International Journal of Library and Information Science*. 14(1).51-55.

Bhatt, Mohammed Hanief. (2009). “Open access repositories in computer science and information technology: an evaluation”. *IFLA Journal*. 35(3). 243-257.

Bhattacharjee Nilratan and Samrah Mukut. (2015). “Open access repositories in global context”. Bilingual International Conference on Information Technology: Yesterday, Today, and Tomorrow, Bangalore. DOI: 10.13140/RG.2.1.1830.6324

Elahi MH and Mezbah-ul-Islam. (2018). “Open access repositories of Bangladesh : An analysis of the present status”. *IFLA Journal.* 44(2).132-142.

Open Society Institute. (2002). “Budapest Open Access Initiative”. http://www.soros.org/openaccess/ read.shtml

OpenDOAR. (2018). http://www.opendoar.org/