

# Institutional Repositories in South Asian Countries: A Study on Trends and Development

**S. DHANAVANDAN**

Assistant Librarian

Gandhigram Rural Institute-Deemed University

Gandhigram-624302, Dindigul Dt.TN

E-mail: [dhanavandan@gmail.com](mailto:dhanavandan@gmail.com)

Mobile: 94428 67275

**M. TAMIZHCHELVAN**

Deputy Librarian

Gandhigram Rural Institute-Deemed University

Gandhigram-624302, Dindigul Dt.TN

E-mail: [tamizhchelvan@gmail.com](mailto:tamizhchelvan@gmail.com)

## ABSTRACT

*This paper discussed about the trends and development Institutional Repository (IR) in south Asian countries. And it further deals about the name of the repositories, size, type, content and languages and various software. South Asian countries like India, Pakistan, Nepal, Bangladesh and Sri Lanka have institutional repositories in their respective libraries but Bhutan and Maldives are not having any repositories. Among the 75 institutional repositories it has 3, 46,785 records which consists of 321435(92.69%) records in India, 8540 (2.46%) in Bangladesh, 10027(2.89%) records in Pakistan, 6688(1.93%) records in Sri Lanka and 95(0.03%) records in Nepal.*

**Keywords:** Institutional Repositories; Software; Languages; Contents

**Academic Discipline And Sub-Disciplines:** Library and Information Science: Information retrieval

**SUBJECT CLASSIFICATION:** Z681-681.3 ; Z699-699.5

**TYPE :** Research Paper

## 1. INTRODUCTION

Institutional Repositories are main digital collections for higher educational institutions and research organizations. These repositories are assembled in a directory called The Directory of Open Access Repositories – OpenDOAR. These repositories are open access resources and voluntarily participate in the directory. The contents of the directory are the collections of theses and dissertations and institute publications like journals and magazines and other publications reports, etc. This type of contents are very helpful to the researchers, aspirant researchers and scholars. OpenDOAR has also been identified as a key resource for the Open Access community and identified as the leader in repository directories in a study by Johns Hopkins University<sup>1</sup>. OpenDOAR was one of the services which contributed to SHERPA being awarded the 2007 SPARC Europe Award for Outstanding Achievements in Scholarly Communications.

## 2. INSTITUTIONAL REPOSITORIES

An institutional repository is an online locus for collecting, preserving, and disseminating - in digital form - the intellectual output of an institution, particularly a research institution. Institutional repositories are contents which are created by the institutions. It is otherwise called institutions

knowledge, power and information. Some of the reports of the institutions, developments of various sections, laboratories, new inventions, patents, publications of institute members, etc. The main contents of the institutional repositories are journal articles either pre-printed or author acceptance copies, institutionally developed e-learning materials, course materials, course contents, etc. The Repositories are in many shapes and size depends up on the collection nature it may be small special collection, departmental collection, or every day work diary of the faculty members. Higher Education Institutions, at departmental or institutional level, which implies a certain level of commitment and intention to embed repository use and management into everyday work.

### **3. DEFINITION**

Many institutional repositories initially focused on research outputs and some still limit their collections to this type of content. Others have started to widen the original remit to include learning and teaching materials. The mission of an IR is to be “institutionally defined, scholarly, cumulative and perpetual, open and interoperable” ‘A digital repository is one where digital content, assets, are stored and can be searched and retrieved for later use’<sup>1</sup>. ‘An institutional repository is the collective intellectual output of an institution recorded in a form that can be preserved and exploited. The use of repositories for research materials is now quite common ‘as much of the Institutional Repository work to date has concentrated on research outputs’.

According to Clifford Lynch (2005), “a university-based institutional repository is a set of services that a University offers to the members of its community for the management and dissemination of digital materials created by the institution and its community members. It is most essentially an organizational commitment to the stewardship of these digital materials, including long-term preservation where appropriate, as well as organization and access or distribution.”

### **4. NEED FOR THE STUDY**

The growth and development of Institutional Repositories in South Asian Countries has been examined. To find out the repositories in south Asian countries. There is a need to discuss about the Institutional Repositories in South Asian Countries.

### **5. OBJECTIVES OF THE STUDY**

The following objectives are framed

1. To find out strength of IRs in the South Asian Countries
2. To identify the various software using in IRs
3. To find out types of IRs in South Asian Countries
4. To assess the content were used in IRs

### **6. METHODOLOGY**

This study is to find out the Institutional repositories in South Asian Countries in its trends and developments. The relevant data were collected form DOAR. South Asian countries like India, Pakistan, Nepal, Bangladesh and Sri Lanka has the institutional repositories in their respective libraries but Bhutan and Maldives are not having any repositories. For this the required data has been collected from the open access directory from <http://www.openoer.org/> on 5<sup>th</sup> October, 2013. It was analyzed by using statistical tools.



Fig. 1.Home of Directory of Open Access Repositories

## 7. Scope and Limitation of the Study

The present study is only limited to open access Institutional Repositories which are registered in the DOAR. It is only considered in South Asian countries and other countries are not taken for this study

## 8. ANALYSIS AND INTERPRETATION

This study is based on Institutional Repositories in the South Asian Countries are registered in the DOAR. The relevant sources are collected from DOAR directory. India, Pakistan, Nepal, Bangladesh and Sri Lanka have the institutional repositories in their respective libraries but Bhutan and Maldives are not having any repositories in South Asian Countries. The strength of the country wise institutional repositories and the number of records were discussed in the table-1

Table 1: Country wise Growth of Institutional Repositories

Sl. No.	South Asian Countries	No. of Repositories	Percentage	No.of Records	Percentage
1	India	62	82.67	321435	92.69
2	Bangladesh	7	9.33	8540	2.46
3	Pakistan	3	4.00	10027	2.89
4	Sri Lanka	2	2.67	6688	1.93
5	Nepal	1	1.33	95	0.03
	<b>Total</b>	<b>75</b>	<b>100.00</b>	<b>346785</b>	<b>100</b>

The table 1 shows the country wise distribution of institutional repositories in South Asian Countries. It is observed from the table among the total 75 repositories India occupy the first position in the South Asian Countries. Among the 75 institutional repositories it has 3, 46,785 records which consists of 321435(92.69%) records in India, 8540 (2.46%) in Bangladesh, 10027(2.89%) records in Pakistan, 6688(1.93%) records in Sri Lanka and 95(0.03%) records in Nepal. So, it is conclude that in India has the maximum records in theirs repositories.

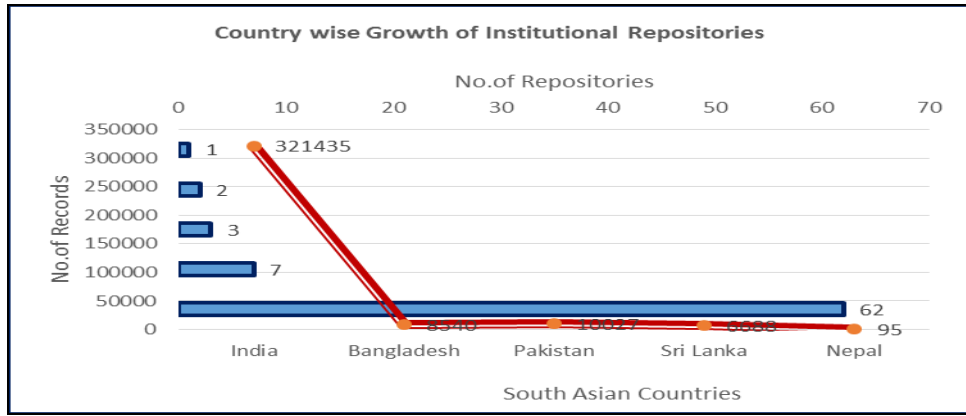


Fig.2. Country Wise No. of Institutional Repositories

Table 2: Places Wise Distribution of IRs in South Asian Countries

Sl. No.	Places	No. of Repositories	Percentage	No. of Records	Percentage
1	Ahmedabad	2	2.67	10452	3.01
2	Bangalore	8	10.67	147494	42.53
3	Chandigarh	2	2.67	1440	0.42
4	Chennai	5	6.67	7903	2.28
5	Cochin	2	2.67	4596	1.33
6	Coimbatore	1	1.33	14	0.00
7	Colombo	2	2.67	6688	1.93
8	Dehradun	1	1.33	454	0.13
9	New Delhi	11	14.67	51824	14.94
10	Dhaka	7	9.33	8540	2.46
11	Dharward	1	1.33	60	0.02
12	Gandhinagar	1	1.33	112	0.03
13	Guragoan	1	1.33	325	0.09
14	Hyderabad	3	4.00	31247	9.01
15	Islamabad	2	2.67	7236	2.09
16	Jamshedpur	1	1.33	5678	1.64
17	Kanpur	1	1.33	1	0.00
18	Karachi	1	1.33	2791	0.80
19	Kashmir	1	1.33	795	0.23
20	Kolkatta	1	1.33	11378	3.28
21	Kottayam	1	1.33	1497	0.43
22	Kozhikode	1	1.33	529	0.15
23	Lalitipur	1	1.33	95	0.03
24	Lucknow	1	1.33	686	0.20
25	Madurai	1	1.33	89	0.03
26	Mumbai	4	5.33	17331	5.00
27	Mysore	2	2.67	5482	1.58
28	Nagaland	1	1.33	9201	2.65
29	Nainital	1	1.33	803	0.23
30	Patiala, Punjab	1	1.33	2451	0.71
31	Pune	2	2.67	4075	1.18
32	Rajkot	1	1.33	1016	0.29
33	Roorkee	1	1.33	1092	0.31

34	Rourkela	1	1.33	1917	0.55
35	Thane	1	1.33	1303	0.38
36	Vadodara	1	1.33	190	0.05
	<b>Total</b>	<b>75</b>	<b>100.00</b>	<b>346785</b>	<b>100.00</b>

The data presented in the table 2 indicates the places wise distributions of repositories and number of records were in South Asian Countries. Out of 75, 11(14.67%) institutional repositories were from New Delhi (India) which consist of 51824 records and it is in the first position in the South Asian Countries. And 8(10.67%) repositories from Bangalore (India) which consist of 147494(42.53%) records, 7(9.33%) repositories from Dhaka (Bangladesh) which consist of 8540 (2.46%) records and 5(6.67%) from Chennai (India) which consist of 7903(2.28%) records were in the collection. It is found that 23 institutional repositories were started from different individual places in South Asian Countries which consist of 346785 records. It is highlighted that when comparing other places among the 36 places in South Asian Countries, 8(10.67%) repositories from Bangalore (India) which consists of 147494(42.53%) records.

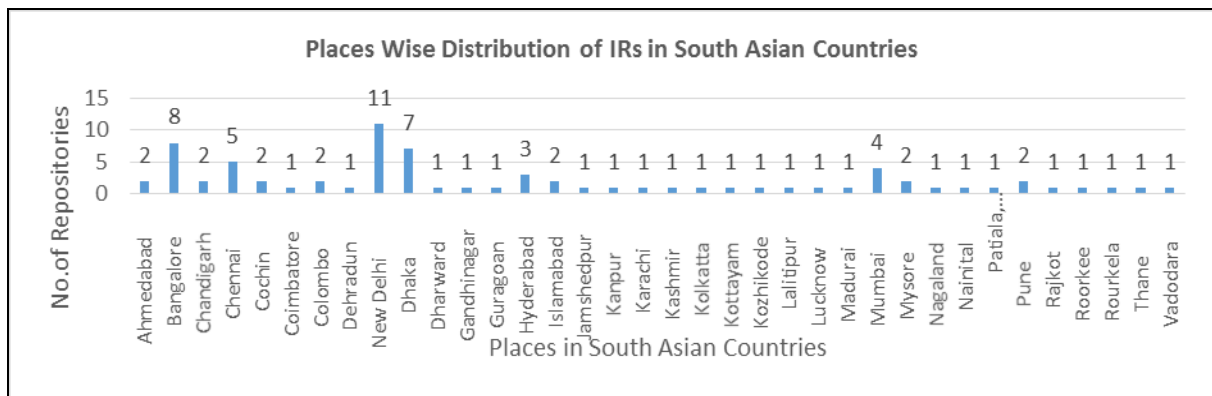


Fig.3. Places Wise Distribution of IRs in South Asian Countries

Table 3: Distribution of Types of IRs in South Asian Countries

South Asian Countries	Aggregating-Operational	Disciplinary-Operational	Institutional - Broken	Institutional - Trial	Institutional-Operational	Others	Total
Bangladesh	0	1(1.33)	0	1(1.33)	5(6.67)	0	7(9.33)
India	3(4.00)	2(2.67)	2(2.67)	3(4.00)	18(24.00)	34(45.33)	62(82.67)
Nepal	0	1(1.33)	0	0	0	0	1(1.33)
Pakistan	1(1.33)	0	1(1.33)	0	0	1(1.33)	3(4.00)
Sri Lanka	0	0	0	0	2(2.67)	0	2(2.67)
<b>Total</b>	<b>4(5.33)</b>	<b>4(5.33)</b>	<b>3(4.00)</b>	<b>4(5.33)</b>	<b>25(33.33)</b>	<b>35(46.67)</b>	<b>75(100)</b>

(Figures in parentheses denote percentage)

Table 3 represented the distribution of type's institutional repositories in South Asian Countries. The types of repositories were classified under five headings like Aggregating-Operational, Disciplinary-Operational, Institutional – Broken, Institutional – Trial an Institutional-Operational by moderator. Among the 75 repositories, 25(33.33%) from Institutional-Operational, 4 (5.33%) from Aggregating-Operational, Disciplinary – Operational and Institutional-Trial and 3 (4.00%) from Institutional-Broken types are identified. In the case of country wise, 18(24.00%) from Institutional-Operational, 3(4.00%) from Institutional-Trial/Aggregating-Operational, 2(2.67%) from Institutional-Broken/Disciplinary-Operational and 34(45.33%) from 'others' type of category from India. From Sri

Lanka has only two repositories in Institutional operational type and Nepal has only institutional repository in Disciplinary operational type. So, it is concluded that 25 institutional repositories are institutional-operational type.

#### Chi-square test

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	53.556	20	.003
Likelihood Ratio	33.418	20	.221
N of Valid Cases	75		

The Chi-square test is applied for further discussion. The computed Chi-square value is 53.556 and the degrees of freedom value is 20 which is higher than its tabulated value at 5 percent level of significance. Hence the difference among the institutional repositories in country wise is statistically identified as significant.

**Table 4: Distribution of Software using IRs in South Asian Countries**

Type of Software	Digital Common	DSpace	Eprints	Greenstone	Inmagic DBTextWorks	Nitya	Not specified	Total
Bangladesh	0	4(5.33)	0	3(4.00)	0	0	0	7(9.33)
India	0	41(54.67)	19(25.33)	0	0	1(1.33)	1(1.33)	62(82.67)
Nepal	0	1(1.33)	0	0	0	0	0	1(1.33)
Pakistan	1(1.33)	0	1(1.33)	1(1.33)	0	0	0	3(4.00)
Sri Lanka	0	1(1.33)	0	0	1(1.33)	0	0	2(2.67)
<b>Total</b>	<b>1(1.33)</b>	<b>47(62.87)</b>	<b>20(26.67)</b>	<b>4(5.33)</b>	<b>1(1.33)</b>	<b>1(1.33)</b>	<b>1(1.33)</b>	<b>75(100)</b>

*(Figures in parentheses denote percentage)*

Table 4 indicates the list of software are using in the institutional repositories in South Asian Countries. Among the 75 repositories, 47(62.67%) repositories are created by using DSpace software, 20(26.67%) repositories are created by using Eprints and 4(5.33%) repositories are created by using Greenstone software. Further, it is followed by remaining three repositories are created by using Inmagic DBTextWorks, Digital commons and Nitya software. Finally one repository is not specified its software in the DOAR. In India among the 47(62.87) repositories, 41(54.67) are using DSpace software, 19(25.33%) are using Eprints software, 1(1.33%) is from Nitya software and 1 did not mention its software. So, it is evident from the table, DSpace software occupied the first position among the institutional repositories in the South Asian Countries.

#### Chi-square Test

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	92.667	24	.000
Likelihood Ratio	40.502	24	.019
N of Valid Cases	75		

The Chi-square test is applied for further discussion. The computed Chi-square value is 92.667 and the degrees of freedom value is 24 which is higher than its tabulated value at 5 percent level of

significance. Hence the difference among the institutional repositories in country wise is statistically identified as significant with respect to software and South Asian Countries

**Table 5: IRs in South Asian Countries Vs No. of Records**

South Asian Countries	Up to 2000	2001-4000	4001-6000	6001-8000	8001-10000	Above 10001	Total
Bangladesh	5(6.67)	1(1.33)	1(1.33)	0	0	0	7(9.33)
India	37(49.33)	8(10.67)	5(6.67)	2(2.67)	3(4.00)	7(9.33)	62(82.67)
Nepal	1(1.33)	0	0	0	0	0	1(1.33)
Pakistan	0	1(1.33)	0	1(1.33)	1(1.33)	0	3(4.00)
Sri Lanka	0	2(2.67)	0	0	0	0	2(2.67)
<b>Total</b>	<b>43(57.33)</b>	<b>12(16.00)</b>	<b>6(8.00)</b>	<b>3(4.00)</b>	<b>4(5.33)</b>	<b>7(9.33)</b>	<b>75(100)</b>

*(Figures in parentheses denote percentage)*

The table 5 indicates the institutional repositories South Asian Countries were classified based on the number of records available in the repositories. The number of records is classified under frequency of 2000 records each. It is classified like that up to 2000, 2001-4000, 4001-6000, 6001-8000, 8001-10000 and above 10001 records. Among the 75 repositories, 43(45.33%) repositories have below 2000 records which includes 5 (6.67%) from Bangladesh, 37(49.33%) from India and one repository from Nepal. In India among the 62 repositories it has 7(9.33%) have more than 10000 records. In the country wise analysis, among 62(82.67%) repositories in India 37(49.33) has in the category of below 2000 records and 8(10.67%) repositories has records 2001to 4000. It is highlighted that among the South Asian Countries, the India is in the top position consist more than 10000 records in their repositories.

**Table 6: Subject Wise Distribution IRs in South Asian Countries**

Sl.No	Subjects	Frequency	Percentage
1	Multidisciplinary	42	56.00
2	Agriculture, Food and Veterinary; Biology and Biochemistry; Ecology; Health and Medicine	6	8.00
3	Chemistry and Chemical Technology	6	8.00
4	Physics and Astronomy	4	5.33
5	Biology and Biochemistry	3	4.00
6	Agriculture, Food and Veterinary	2	2.67
7	Biology and Biochemistry; Health and Medicine	2	2.67
8	Health and Medicine	2	2.67
9	Mathematics and Statistics	2	2.67
10	Business and Economics	1	1.33
11	Library and Information Science	1	1.33
12	Mathematics and Statistics; Technology General; Mechanical Engineering and Materials	1	1.33
13	Multidisciplinary; Business and Economics	1	1.33
14	Science General	1	1.33
15	Technology General	1	1.33
	<b>Total</b>	<b>75</b>	<b>100.00</b>

The table 6 stated the subject wise distribution of the institutional repositories in South Asian Countries. Among the 75 repositories, 42(56.00) are mentioned these in multidisciplinary in subject. And 6(8.00%) repositories equally from mentioned their subject Agriculture/Food/Veterinary/Biology/Biochemistry/Ecology/Health /Medicine and Mathematics/Statistics/Technology General/Mechanical Engineering and Materials. But in only one repository mentioned especially for library and information science subject.

**Table 7: Distribution of Languages using IRs in South Asian Countries**

Sl. No.	Languages	Bangladesh	India	Nepal	Pakistan	Sri Lanka	Total
1	English	6(8.00)	51(68.00)	0	3(4.00)	2(2.67)	62(82.67)
2	English/Arabic	0	1(1.33)	0	0	0	1(1.33)
3	English/Bengali	1(1.33)	1(1.33)	0	0	0	2(2.67)
4	English/Gujarati	0	1(1.33)	0	0	0	1(1.33)
5	English/Hindi/Arabic / Persian	0	1(1.33)	0	0	0	1(1.33)
6	English/Hindi/Kannada	0	2(2.67)	0	0	0	2(2.67)
7	Hindi/English	0	3(4.00)	0	0	0	3(4.00)
8	Marathi	0	1(1.33)	0	0	0	1(1.33)
9	Nepali/English	0	0	1(1.33)	0	0	1(1.33)
10	Sanskrit/Malayalam/Hindi/English	0	1(1.33)	0	0	0	1(1.33)
	<b>Total</b>	<b>7(9.33)</b>	<b>62(82.67)</b>	<b>1(1.33)</b>	<b>3(4.00)</b>	<b>2(2.67)</b>	<b>75(100)</b>

*(Figures in parentheses denote percentage)*

Table 7 stated the languages wise collections of institutional repositories in South Asian Countries. Among the 75 repositories, 3(4.00%) repositories are English and Hindi, 2(2.67%) are English and Bengali and 2(2.67%) are English, Hindi and Kannada. Further, it is followed by English and Arabic, English and Gujarati, English, Hindi/Arabic and Persian, Marathi, Nepali and English and Sanskrit/Malayalam/Hindi/English are equally single repository in respective languages. In India among 62(82.67%) 51(68.00%) institutional repositories are in English, 3(4.00%) in Hindi/English., 2(2.67%) from English; Hindi; Kannada and 1(1.33%) from English/Arabic, English/Bengali, English/Gujarati, English/Hindi/Arabic/ Persian, Marathi and Sanskrit/Malayalam/Hindi/English language are used. In Nepal only one institutional repository is created from Nepali/English languages. In is concluded that, all the repositories are also English is one of the languages but only one repository are generated by Marathi language only.

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	81.076	36	.000
Likelihood Ratio	16.626	36	.998
N of Valid Cases	75		

The Chi-square test is applied for further discussion. The computed Chi-square value is 81.076 and the degrees of freedom value is 36 which is higher than its tabulated value at 5 percent level of significance. Hence the difference among the institutional repositories in country wise is statistically



identified as highly significant with respect to languages wise institutional repositories Vs South Asian Countries.

**Table 8: Distribution of Languages using IRs in South Asian Countries**

Software	Not specified	Nitya	Inmagic DBTextWorks	Greenstone	Eprints	DSpace	Digital Commons	Total
English	1(1.33)	0	1(1.33)	3(4.00)	18(24.00)	38(50.67)	1(1.33)	62(82.67)
English/Arabic	0	0	0	0	1(1.33)	0	0	1(1.33)
English/Bengali	0	0	0	1(1.33)	0	1(1.33)	0	2(2.67)
English; Gujarati	0	0	0	0	1(1.33)	0	0	1(1.33)
English/Hindi/Arabic/Persian	0	0	0	0	0	1(1.33)	0	1(1.33)
English/Hindi/Kannada	0	0	0	0	0	2(2.67)	0	2(2.67)
Hindi/English	0	0	0	0	0	3(4.00)	0	3(4.00)
Marathi	0	0	0	0	0	1(1.33)	0	1(1.33)
Nepali/English	0	0	0	0	0	1(1.33)	0	1(1.33)
Sanskrit/Malayalam/Hindi/English	0	1(1.33)	0	0	0	0	0	1(1.33)
<b>Total</b>	<b>1(1.33)</b>	<b>1(1.33)</b>	<b>1(1.33)</b>	<b>3(4.00)</b>	<b>20(26.67)</b>	<b>47(62.67)</b>	<b>1(1.33)</b>	<b>75(100)</b>

Table 8 stated languages versus software in the institutional repositories in South Asian Countries. Among the 75 repositories, 3(4.00%) repositories are English and Hindi which using the Dspace software, 2(2.67%) are English/Bengali which includes each one Greenstone and Dspace software and 2(2.67%) repositories are English/Hindi/Kannada which using Dspace. Further it is followed by 1(1.33) repository each from English/Arabic an English/Guajarati which using Eprints software. The English/Hindi/Arabic/Persian is combine using in only Dspace. In is concluded that, all the repositories are also used English is one of the languages but only one repository are generated by Marathi language only which using the Dspace.

#### Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	93.552	54	.001
Likelihood Ratio	27.354	54	.999
N of Valid Cases	75		

The Chi-square test is applied for further discussion in distribution languages are used in the types of digital library software in the institutional repositories in South Asian Countries. The computed Chi-square value is 93.552 and the degrees of freedom value is 54 which is higher than its tabulated value at 5 percent level of significance. Hence the difference among the institutional repositories in country wise is statistically identified as highly significant with respect to languages wise institutional repositories Vs digital library software.

**Table 9: Mode of Languages using IRs in South Asian Countries**

Mode of Language	Not specified	Nitya	Inmagic DBTextWorks	Greenstone	Eprints	DSpace	Digital Commons	Total
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Mono Lingual	1(1.33)	0	1(1.33)	3(4.00)	18(24.00)	39(52.00)	1(1.33)	63(84.00)
Bi lingual	0	0	0	1(1.33)	2(2.67)	5(6.67)	0	8(10.67)
Tri lingual	0	0	0	0	0	2(2.67)	0	2(2.67)
Tetra Lingual	0	1(1.33)	0	0	0	1(1.33)	0	2(2.67)
<b>Total</b>	<b>1(1.33)</b>	<b>1(1.33)</b>	<b>1(1.33)</b>	<b>4(5.33)</b>	<b>20(26.67)</b>	<b>47(62.67)</b>	<b>1(1.33)</b>	<b>75(100)</b>

Table 9 indicates languages were categorized like monolingual, Bilingual, Tri lingual and Tetra lingual versus software in the institutional repositories in South Asian Countries. Among the 75 repositories, 63(84.00) repositories are in Mono lingual, 8(10.67%) repositories are in Bilingual, 2(2.67) repositories are from equally from Tri Lingual and Tetra Lingual.

**Table 10: Distribution of Contents in IRs in South Asian Countries**

Sl.No	Contents	Bangladesh	India	Nepal	Pakistan	Sri Lanka	Total
1	Articles	0	8(10.67)	0	0	0	8(10.67)
2	Articles, conference, Thesis	6(8.00)	26(34.67)	0	0	2(2.67)	34(45.33)
3	Articles; Conferences	0	1(1.33)	0	0	0	1(1.33)
4	Articles; Conferences; Books	0	1(1.33)	0	0	0	1(1.33)
5	Articles; Conferences; Multimedia	0	1(1.33)	0	0	0	1(1.33)
6	Articles; Conferences; Theses; Multimedia	0	1(1.33)	0	0	0	1(1.33)
7	Articles; References	0	1(1.33)	0	0	0	1(1.33)
8	Articles; References; Theses	0	2(2.67)	0	0	0	2(2.67)
9	Articles; Theses	0	1(1.33)	0	0	0	1(1.33)
10	Articles; Theses; Books	0	1(1.33)	0	1(1.33)	0	2(2.67)
11	Articles; Theses; Learning Objects	0	9(12.00)	0	1(1.33)	0	10(13.33)
12	Articles; Theses; Multimedia	0	1(1.33)	0	0	0	1(1.33)
13	Books	0	2(2.67)	0	0	0	2(2.67)
14	References; Unpublished; Special	0	1(1.33)	0	0	0	1(1.33)
15	Special	0	0	1(1.33)	0	0	1(1.33)
16	Theses	0	5(6.67)	0	1(1.33)	0	6(8.00)
17	Theses; Unpublished; Special	1(1.33)	0	0	0	0	1(1.33)
18	Unpublished; Books; Multimedia	0	1(1.33)	0	0	0	1(1.33)
	<b>Total</b>	<b>7(9.33)</b>	<b>62(82.67)</b>	<b>1(1.33)</b>	<b>3(4.00)</b>	<b>2(2.67)</b>	<b>75(100)</b>

*(Figures in parentheses denote percentage)*

Table 10 indicates distribution types of contents listed in the institutional repositories in South Asian Countries. Among the 75 repositories, 62(82.67) from India, 7(9.33%) from Bangladesh 3(4.00%) Pakistan, 2(2.67%) from Sri Lanka and 1(1.33%) from Nepal were established. Among the 62 repositories in India, 26(34.67) repositories for Articles/conference/ Thesis and 9(12.00) repositories for Articles/Theses/Learning Objects were generated. Nearly 18 types of content were created in institutional repositories among the south Asian Countries, Out of 75, 34(45.33%) IR created for Articles/conference/ Thesis and 8(10.67%) created for only. It is found that most institutional repositories are holding the article is the major contents.

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	110.535	68	.001
Likelihood Ratio	38.473	68	.999
N of Valid Cases	75		

The Chi-square test is applied for further discussion. The computed Chi-square value is 81.076 and the degrees of freedom value is 68 which is higher than its tabulated value at 5 percent level of significance. Hence the difference among the institutional repositories in country wise is statistically identified as highly significant with respect to content wise institutional repositories Vs South Asian Countries.

## 9. FINDINGS

- India, Pakistan, Nepal, Bangladesh and Sri Lanka have the institutional repositories in their respective libraries but Bhutan and Maldives are not having any repositories from South Asian Countries.
- Among the 75 institutional repositories it has 3, 46,785 records which consists of 321435(92.69%) records in India, 8540 (2.46%) in Bangladesh, 10027(2.89%) records in Pakistan, 6688(1.93%) records in Sri Lanka and 95(0.03%) records in Nepal.
- When comparing other places among the 36 places in South Asian Countries, 8(10.67%) repositories from Bangalore (India) which consist of 147494(42.53%) records.
- Among the 75 repositories, 25(33.33%) from Institutional-Operational, 4 (5.33%) from Aggregating-Operational, Disciplinary – Operational and Institutional-Trial and 3 (4.00%) from Institutional-Broken types are identified.
- All the repositories are also used English is one of the languages but only one repository are generated by using Marathi language only which using the Dspace.

## 10. CONCLUSION

The library professionals are responsible for creating and maintaining the Institutional Repositories. They have to learn more on the developing and strengthening the collections and at the same time have to add more collections with different types. From this study it is found that Bhutan and Maldives countries are not established any institutional repositories in their respective libraries but remaining five countries were started institutional repositories in the South Asian Countries. Almost all the collections are in English language only. It is need to add the repositories in the directory regularly when new repositories are created then and there.

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