Contribution of BIMSTEC Countries to the Directory of Open Access Journals (DOAJ): A Study

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Abstract

Open access movement has given potential strength to the academic community by providing free and open access to scholarly communication. The Directory of Open Access Journals (DOAJ) is a platform that provides access to millions of articles on various subjects from across the world. In the present paper, the authors have analysed the contribution from The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) countries during 2002-2019. The authors have analysed geographical distribution, cumulative growth, discipline wise distribution, DOAJ seal, Article processing charges (APC), domains, peer reviews, language-wise distribution, formats, frequency of the journals, etc. The present study found that India has contributed the highest number of journals among the BIMSTEC countries, and the highest number of journals were contributed in the field of Medicine.

Keywords: *DOAJ, Open Access, BIMSTEC.*

1. INTRODUCTION

The journals are the primary source of information that offers the latest developments in any field of the study. The researchers will contribute their works, ideas through articles to communicate quickly to the research community. Though many researchers are publishing their innovative studies and researches in e-journals but are not openly accessible for the benefit of other interested researchers. Publishers have commercialised the intellectuals and charging fees for both accessing and publishing the content on their platform. Having seen

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such difficulties in communicating the ideas through the articles, the researchers at the global level have suggested an Open Access (OA) to scholarly journals. As a result, the Budapest Open Access Initiative took place in 2002. The Open Access (OA) journals will offer free and open access to everyone. And, another hand the intellectual property rights (IPR) will also be protected by creative commons license to give an assurance to the ideas of the researchers. The OA movement has seen drastic changes in the 21st century due to the advancement in information communication technology (ICT). In recent years many open-access platforms have emerged in all the fields of the study, the DOAJ is also one among them.

The Directory of Open Access Journals (DOAJ) is an open-access journal platform that offers open access articles for free of charges to the academic community. The DOAJ was launched in 2003 at Lund University, Sweden with 300 open access journals. Today, the DOAJ holds 4354251 articles from 13829 Journals from 130 countries across the world.

2. OBJECTIVES

- To find the contribution of BIMSTEC Countries to open access literature
- To analyse the trend towards the open access publishing in BIMSTEC Countries
- To evaluate article processing charges wise and license model wise distribution of BIMSTEC countries open access e-journals in DOAJ.
- To reveal year-wise growth and discipline wise contribution of BIMSTEC countries for open access e-journals indexed in DOAJ.
- To show discipline wise contribution of BIMSTEC nations for open access e-journals in DOAJ
- To examine top-level domain distribution and the frequency of open access e-journals in DOAJ.
- To measure the geographic and language-wise distribution of open e-journals indexed in DOAJ

3. NEED FOR THE STUDY

Open access is an important policy that has made tremendous changes in the Science and Technology (ST) research which helps the countrymen to read the contribution of the researchers for free of cost. India is also adopted the open access policy to make the scientific knowledge for free to everyone; similarly other countries have also adopted this policy to offer free information to everyone, but still many countries are behind to adopt this policy due to internal reasons. India is a member of many regional as well as international cooperation organisations such as SAARC, BRICS, BIMSTEC, etc. Hence, the researchers have felt to study the contribution of BIMSTEC countries to DOAJ to know the significant contribution of the member countries.

4. SCOPE AND LIMITATIONS

The present study is restricted to the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) countries, which includes Bangladesh, India, Myanmar, Sri Lanka, Thailand, Nepal, and Bhutan.

5. METHODOLOGY

DOAJ has been used to collect the required data to carry out the present study and for analysing the contribution of BIMSTEC countries to the open-access world. DOAJ has been accessed on 8th October 2019 to collect the necessary data of open access e-journals for the period between 2002-2019. The data collected was interpreted and analysed in an excel sheet to get clear information on geographical distribution, cumulative growth, year-wise growth, attributes of the license, review policy, article processing charges, domain, licensing types, etc.

6. BIMSTEC

The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) is a regional organisation that was started on 6th June 1997 through the Bangkok Declaration. The BIMSTEC has seven Member States: five deriving from South Asia, including Bangladesh, Bhutan, India, Nepal, Sri Lanka, and two from Southeast Asia, including Myanmar and Thailand. Initially, the economic bloc was formed with four Member States with the acronym 'BIST-EC' (Bangladesh, India, Sri Lanka, and Thailand Economic Cooperation). Following the inclusion of Myanmar on 22 December 1997 during a special Ministerial Meeting in Bangkok, the Group was renamed 'BIMST-EC' (Bangladesh, India, Myanmar, Sri Lanka, and Thailand Economic Cooperation).

7. REVIEW OF LITERATURE

Many studies have been carried out to know the benefits, impact, and movement of open access across the world. Christian has argued that the researchers and institutions in the developing countries will be most likely to get benefit from the open access initiatives. The libraries and institutions in developing countries have fewer funds to subscribe to many academic journals. This initiative will also help the developing countries to avoid "brain drain" where many scholars would move to developed countries from the developing countries.

Arunachalam has suggested that the researchers and scholars should have the willingness to share and make the knowledge to everyone for free and open, the researchers have to use the technology to distribute the knowledge in an electronic form it does not cost much in terms of money and effort.

Mondal has analysed the open access contribution from SAARC countries using DOAJ during 2002-2013. The study was found that India has contributed 77.12% of the total SAARC countries, a total of 765 journals have been contributed during this period, and the maximum journals were contributed in a health science discipline.

Singh has discussed the contribution of BRICS countries for open access, he has analysed 1750 OA journals and found that Brazil (53.54%) and India (33.94%) alone have contributed 87.48% of the total BRICS, this study is also found that highest number of journals have been contributed in health science.

Kamble, Patil, and Kumbar have analysed the contribution of G7 countries during 2002-2017. This study found that the G7 countries have been contributed to 2478 (22.89 %) journals to DOAJ. All these journals are high-quality journals with double-blind, blind and peer-reviewed journals. This study also reveals that the G7 countries have contributed many open access journals in medicine i.e.794 (32.52%), science, i.e. 313 (12.84%) and Technology 230 (9.43%).

8. DATA ANALYSIS AND INTERPRETATION

8.1 Geographical Distribution

Table-1 shows the contribution of BIMSTEC countries to DOAJ, which contributed 364 (2.63%) journals from 2002-2019. India has contributed the highest number of journals i.e.283 which alone covers 77.74% of the total contribution from BIMSTEC followed by, Thailand 29 (7.97%), Bangladesh 20 (5.49%), Nepal 18 (4.95%), Sri Lanka 14 (3.85%). Besides, Myanmar and Bhutan have not contributed any OA journals to DOAJ.

Table 1: Geographical Distribution of Journals of BIMSTEC Countries

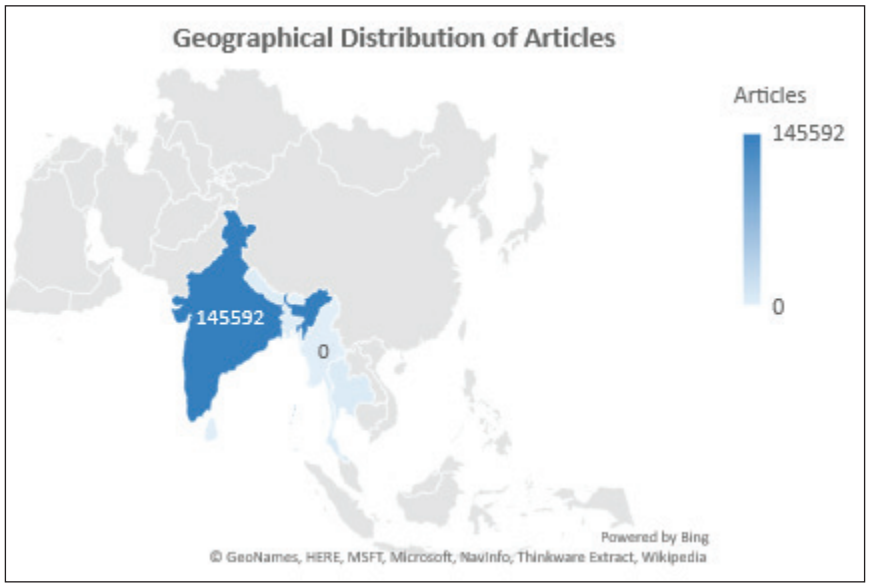
Countries	*Journals*	*% BIMSTEC*	*% World*
Bangladesh	20	5.49	0.14
India	283	77.74	2.05
Myanmar	0	0	0
Sri Lanka	14	3.85	0.1
Thailand	29	7.97	0.21
Nepal	18	4.95	0.13
Bhutan	0	0	0
Total of BIMSTEC	364	100	2.63
Total of World	13780		

8.2 Geographical Distribution of Journals

Table-2 presents the article level contribution of BIMSTEC from 2002-2019. India has contributed the highest number of articles i.e.145592 which shares92.34% of the total contribution of BIMSTEC followed by, Thailand 4889 (3.31%), Nepal 3948 (2.5%), Bangladesh 2691 (0.06%) Sri Lanka 549 (0.35%). There is no contribution from Myanmar and Bhutan for DOAJ.

Table 2: Geographical Distribution of Articles of BIMSTEC Countries

Countries	*Articles*	*% BIMSTEC*	*% World*
Bangladesh	2691	1.71	0.06
India	145592	92.34	3.36
Myanmar	0	0	0
Sri Lanka	549	0.35	0.01
Thailand	4889	3.1	0.11
Nepal	3948	2.5	0.09
Bhutan	0	0	0
Total of BIMSTEC	157669	100	3.63
Total of World	4332927		



8.3 Growth

Table 3presents the cumulative growth trend of open access e-journals at the global level as well as in BIMSTEC countries. An average of 59.67% annual growth of open access journals at global was taken place from 2002-2019, and the BIMSTEC has contributed 39.85 cumulative growth during the period. The cumulative growth of open access journals at the global level was declined to -51.87%in 2014 as DOAJ was removed 3381 journals due to ceased publications, quality issues, editorial suspects, etc. The cumulative trend was increased in 2015 to 217.49% as 1527 journals were added to DOAJ.

Table 3: Cumulative Growth Rate of Open Access Journals

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Global	22	166	192	165	157	187	278	301	562	530	533	879	423	1343	1678	2499	2296	1569
	0	654.50	15.6	-14.06	-4.84	19.1	48.6	8.27	86.7	-5.6	0.56	6.91	-51.87	217.49	24.94	45.94	-6.24	-31.66
BIMSTEC	0	3	8	9	6	4	10	17	17	10	10	16	9	19	45	75	63	43
	0	0	266.66	81.81	30	15.38	33.33	42.5	29.82	13.51	11.9	17.02	8.18	15.96	32.6	40.98	24.41	13.39

8.4 Year Wise Growth

Table-4 depicts the year wise growth of BIMSTEC to DOAJ. India had contributed the first 3 OA journals in 2003 when the world contribution was 166. During the period between 2015 to 2019 majority of the journals, 245 (67.29 %) were added, and 2017 is the most productive year as the highest number of journals, i.e. 75 (20.6%) were added, and the lowest was found in 2003 (0.82%). India had significantly contributed in 2017 with 57 journals.

Table 4: Year-wise Growth of BIMSTEC Countries Journals

Year	*Bangla-desh*	*India*	*Myan-mar*	*Sri Lanka*	*Thai-land*	*Nepal*	*Bhutan*	*Total of BIMSTEC*	*% BIMSTEC*	*World*
2002								0	0	22
2003		3						3	0.82	166
2004		8						8	2.2	192
2005		8			1			9	2.47	165
2006		6						6	1.65	157
2007		4						4	1.1	187
2008		9			1			10	2.75	278
2009	2	12			1	2		17	4.68	301
2010	1	15		1				17	4.68	562
2011	1	5		2		2		10	2.75	530
2012	1	7		1	1			10	2.75	533
2013	3	10		1	2			16	4.39	879
2014		8		1				9	2.47	423
2015	3	14			2			19	5.21	1343
2016	3	33		1	4	4		45	12.36	1678
2017	2	57		3	6	7		75	20.6	2499
2018	3	50		3	7			63	17.31	2296
2019	1	34		1	4	3		43	11.81	1569
Total	20	283	0	14	29	18	0	364		13780

8.5 Discipline Wise

Table-5 reveals the discipline wise contribution from BIMSTEC member counters. DOAJ has categorised 15 subject categories, in which the BIMSTEC member countries have been contributed the highest number of journals, i.e. 254 to Medicine followed by 28 in Technology, 20 in Agriculture, the lowest contribution can be seen Bibliography, Library Science, Information Science category where 1 journal was contributed by India.

Table 5: Discipline-wise Growth of BIMSTEC Countries Journals

Subjects	*Bangla-desh*	*India*	*Myan-mar*	*Sri Lanka*	*Thai-land*	*Nepal*	*Bhutan*
Agriculture	8	5		2	1	4	
Bibliography. Library science. Information resources		1					
Education		3			2	1	
Fine arts					1		
General works		3					
Geography. Anthropology. Recreation					1	1	
Language and Literature		4					
Law		1		1	1		
Medicine	8	225		6	4	11	
Naval Science		1		2			
Philosophy. Psychology. Religion					1		
Political Science					1		
Science	2	20			6		
Social Sciences		6		2	1		
Technology	2	14		1	10	1	
Total	20	283	0	14	29	18	0

8.6 Language Wise Distribution

Since DOAJ is open to the world, the journals are available in different languages. Table-6 reveals the language-wise distribution of BIMSTEC member countries, most of the journals are available in English, i.e. 353, followed by Hindi 3, Thai 3, Turkish 2, Nepali, Arabic, and Sanskrit is one each.

Table 6: Language-wise Distribution of BIMSTEC Countries Journals

Sl. No.	*Language*	*Bangla-desh*	*India*	*Myan-mar*	*Sri Lanka*	*Thai-land*	*Nepal*	*Bhutan*	*Total of BIMSTEC*
1	English	20	276		14	26	17		**353**
2	Hindi		3						**3**
3	Turkish		2						**2**
4	Arabic		1						**1**
5	Sanskrit		1						**1**
6	Thai					3			**3**
7	Nepali						1		**1**
Total		**20**	**283**	**0**	**14**	**29**	**18**	**0**	**364**

8.7 License

The creative commons license has given potential strength to open access journals, the researcher can make it available his/her contribution for free and open to everyone by protecting his/her work from unethical usage.Table-7 presents the data of license wise distributions, most of the journals i.e.218 (59.89%) are available under Attribution-Non Commercial-Share Alike (CC BY-NC-SA), which allows others remix, tweak, and build upon creators work non-commercially, as long as they credit the creators and license their new creations under the identical terms. Followed by, CC BY 54 (14.84%), CC BY-NC-ND 36 (9.89), CC BY-NC 34 (9.34), CC BY-SA 9 (2.47%), and CC BY-ND 4 (1.1%).

Table 7: License-wise Distribution of BIMSTEC Countries Journals

Licensing Attribution	*Bangla-desh*	*India*	*Myan-mar*	*Sri Lanka*	*Thai-land*	*Nepal*	*Bhutan*	*Total of BIMSTEC*	*%*
CC BY	12	20		9	5	8		54	14.84
CC BY-NC-ND	3	16		1	14	2		36	9.89
CC BY-NC	3	17		3	4	7		34	9.34
CC BY-NC-SA	1	215			2			218	59.89
CC BY-SA	1	5		1	1	1		9	2.47
CC BY-ND		2			2			4	1.1
Publisher's license		8			1			9	2.47
Total	20	283	0	14	29	18	0	364	100

8.8 Peer Reviews

A review of the article is very important in scholarly communication to maintain the academic quality of the journals. Table-8 reveals the type of peer reviews, 268 journals of BIMSTEC countries are double-blind peer reviews, followed by Blind peer review 55, Peer review 39, and open peer review is 1. This data shows that India has contributed 213 double-blind peer reviews to maintain the quality of the journals.

Table 8: Peer Reviews Distribution of BIMSTEC Countries

Peer Reviews	*Bangla-desh*	*India*	*Myan-mar*	*Sri Lanka*	*Thai-land*	*Nepal*	*Bhutan*	*Total of BIMSTEC*
Double-blind peer review	12	213		12	20	11		268
Blind peer review	2	43		2	5	3		55
Peer review	6	26			3	4		39
Open peer review		1						1
Editorial review								0
No Information					1			1
Total	20	283	0	14	29	18	0	364

8.9 APC

Article Processing Charge or fee (APC) is a charge from the publisher to publish the articles in the open access journals. Table-9 presents the data of APC distribution, many of the BIMSTEC countries' journals, i.e. 272 will not take any APC charges for publishing the articles in the journals, whereas 91 journals have APC charges to publish the articles.

Table-9: APC Distribution of BIMSTEC Countries Journals

	Bangla-desh	*India*	*Myan-mar*	*Sri Lanka*	*Thai-land*	*Nepal*	*Bhutan*	*Total of BIMSTEC*
Yes	6	79	0	1	5	0	0	91
No	14	204	0	13	23	18	0	272
No Information	0	0	0	0	1	0	0	1
Total	20	283	0	14	29	18	0	364

8.10 DOAJ Seal

The DOAJ Seal is a mark of certification for open access journals, awarded by DOAJ to journals that achieve a high level of openness, adhere to Best Practice and high publishing standards. Table-10 presents the distribution of DOAJ seal of BIMSTEC journals, the data shows that many of the journals, i.e. 361 doesn't have DOAJ seal. But, the DOAJ has clarified that "No Seal DOES NOT mean low quality, non-peer reviewed, questionable, 'dodgy', 'scammy'"

Table 10: Distribution of DOAJ Seal of BIMSTEC Countries Journals

DOAJ Seal	*Bangla-desh*	*India*	*Myan-mar*	*Sri Lanka*	*Thai-land*	*Nepal*	*Bhutan*	*Total of BIMSTEC*
Yes	1	2	0	0	0	0	0	3
No	19	281	0	14	29	18	0	361
Total	20	283	0	14	29	18	0	364

8.11 Format

The advent of information communication technology (ICT) has made an impact on e-publishing, as a result, many of the journals are being published online first. Table-11 shows that the many journals i.e.299 from the BIMSTEC countries are available in print and online both, whereas 65 journals are available in print.

Table 11: Format Distribution of BIMSTEC Countries Journals

	Bangla-desh	*India*	*Myan-mar*	*Sri Lanka*	*Thai-land*	*Nepal*	*Bhutan*	*Total of BIMSTEC*
Print + Online	15	231	0	11	25	17	0	299
Print	5	52	0	3	4	1	0	65
Total	20	283	0	14	29	18	0	364

8.12 Domain

Table 12 reveals the top-level domain distribution of journal websites of BIMSTEC countries. The maximum number i.e.133 journals are available in the organisational domain (.org), followed by 91 are from country-code domain, 88 journals are from commercial(.com) domain. India has contributed the highest number of journals, i.e. 109 in the organisational domain (.org) and 85 in commercial (.com) domain, while the highest contribution i.e.9 from Nepal and Sri Lanka in information (.info) domain.

Table 12: Format Distribution of BIMSTEC Countries Journals

Domain	*Bangla-desh*	*India*	*Myan-mar*	*Sri Lanka*	*Thailand*	*Nepal*	*Bhutan*
.com	2	85		1			
.org	4	109		1	17	2	
.info	7			9		9	
.net	6	20					
.edu					1		
country code domain	1	69		3	11	7	
Total	20	283		14	29	18	

8.13 Frequency

Table 13 reveals the frequency of the journals of BIMSTEC countries, the highest number of journals, i.e. 151will publish quarterly, followed by bi-annually 103, bi-monthly 32, and 11 journals each will publish monthly and annually respectively.

Table 13: Frequency of Journals of BIMSTEC Countries

Countries	*Weekly*	*Monthly*	*Semi-quarterly*	*Bi- monthly*	*Quar-terly*	*Tri-annually*	*Bi- annually*	*Annually*	*No Info.*	*Total*
Bangladesh					8	5	7			20
India	1	11	1	27	130	29	66	4	14	283
Myanmar										
Sri Lanka					2	1	11			14
Thailand				4	9	2	12	2		29
Nepal				1	2	3	7	5		18
Bhutan										
Total	1	11	1	32	151	40	103	11	14	364

9. MAJOR FINDINGS

- There are 13780 journals available in DOAJ, but the BIMSTEC has contributed only 364 which is 2.63% of the total contribution.
- India has contributed the highest number i.e.283 journals among the BIMSTEC countries which cover 77.74% of the total contribution from the member countries.
- Maximum journals i.e.353 are available in English language, and 268 journals are double blind peer review journals.
- A good number of journals, i.e. 254 have been contributed to the field of Medicine, followed by Science and Technology which covers 28 journals each respectively.

10. SUGGESTIONS

- The BIMSTEC member countries are developing countries, hence the contribution is very minimal compared to contribution from the rest of the world. However, India has contributed to the highest number of journals among the member countries. There is no contribution from Myanmar and Bhutan to DOAJ. However, the EIFL project was started in 2013 in Myanmar to support open access to the country.
- Since India has contributed the highest number of journals to DOAJ, hence, it suggested that India can take the lead to help and encourage the

other member countries from BIMSTEC to contribute more to open access platforms.

- The BIMSTEC countries have contributed a maximum number of journals, i.e. 254 in the field of Medicine which covers 69.78% of the total contribution, hence it is suggested that these countries also should contribute to another discipline to make the resources available for free and open to everyone.

11. CONCLUSION

No doubt that the open-access trend is increasing across the world. The Budapest Open Access Initiative (2002), Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities (2003), Bethesda Statement on Open Access Publishing (2003) have made an impact on open access to scholarly communication. The DOAJ has become a directory for the world scholars and users to access the open-access scholarly communication in a single platform. Though the effort is being made, many countries across the world are not a part of this initiative due to the internal policies of open access. Hence, the countries that are contributing more to open access to scholarly communication have to come together to help and encourage open access in other countries, because open access is the only way to bridge the gap between information have's, and information have not's.

REFERENCES

1. Arunachalam, Subbiah. "Open Access to Scientific Knowledge." *DESIDOC Journal of Library & Information Technology* 28, no. 1 (January 1, 2008): 7–14. https://doi.org/10.14429/djlit.28.1.147.
2. Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation. Accessed October 20, 2019. https://bimstec.org/.
3. Bethesda Statement on Open Access Publishing. Accessed October 20, 2019. http://legacy.earlham.edu/~peters/fos/bethesda.htm
4. Budapest Open Access Initiative | Budapest Open Access Initiative. Accessed October 20, 2019. https://www.budapestopenaccessinitiative.org/
5. Christian, Gideon. "Open Access Initiative and the Developing World." *African Journal of Library, Archives and Information Science* 18, no. 2 (November 21, 2008). https://ssrn.com/Abstract=1304665.
6. Creative Commons. Accessed October 20, 2019. https://creativecommons.org/
7. Doaj. Directory of Open Access Journals. Accessed October 8, 2019. https://doaj.org/
8. EIFL. Accessed October 20, 2019. https://www.eifl.net/country/myanmar
9. Islam, Md. Anwarul and Rowshon Akter. "Institutional Repositories and Open Access Initiatives in Bangladesh: A New Paradigm of Scholarly Communication." *LIBER Quarterly* 23, no. 1 (2013): 3. https://doi.org/10.18352/lq.8245.
10. Kamble, Shivanand D., Rohit R. Patil, and B D. Kumbar. "Contribution of G7 Countries to the Directory of Open Access Journals (DOAJ): An Analytical Study." *Library Philosophy and Practice (e-Journal)* 7, no. 28, (2018). https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=5303&context=libphilprac

11. Kumar, Mamatha P, and Dr M. K. Bhandi., "Directory of Open Access Journals: Initiatives in Nursing Science Research Publications." *Indian Journal of Applied Research* 4, no. 6 (January 2011): 1–3. https://doi.org/10.15373/2249555x/june2014/180.
12. Mondal, Dhiman. "Open Access Journals in SAARC Countries with Special Reference to DOAJ: A Study." *International Journal of Information Dissemination and Technology* 6, no. 2 (2016): 73–76. https://www.ijidt.com/index.php/ijidt/article/view/6.2.1/295.
13. Muruli. "Status of Open Access Journals in the Field of Chemistry as Indexed in Directory of Open Access Journals (DOAJ): A Study." *SRELS Journal of Information Management* 54, no. 6 (2018): 311–17. https://doi.org/10.17821/srels/2017/v54i6/110651.
14. Pandita, Ramesh, and B. Ramesha. "Global Scenario of Open Access Publishing: A Decadal Analysis of Directory of Open Access Journals (DOAJ) 2003-2012." *Journal of Information Science Theory and Practice* 1, no. 3 (2013): 47–59. https://doi.org/10.1633/jistap.2013.1.3.4.
15. Singh, Nirmal. "Role of BRICS in Open Access Movement: With Special Reference to DOAJ and OpenDOAR." *Chinese Librarianship: An International Electronic Journal*, no. 38 (2014): 50–59. http://www.iclc.us/cliej/cl38singh.pdf.
16. Sivakumaren, K. S. "Analysis of Open Access Journals on Social Science in DOAJ: A Study." *ScieXplore: International Journal of Research in Science* 1, no. 2 (January 2014): 124. https://doi.org/10.15613/sijrs/2014/v1i2/67551.
17. Solomon, David J., and Bo-Christer Björk. "A Study of Open Access Journals Using Article Processing Charges." *Journal of the American Society for Information Science and Technology* 63, no. 8 (June 2012): 1485–95. https://doi.org/10.1002/asi.22673.
18. The Berlin Declaration on Open Access (Berlin 9 Open Access Conference 2011). Accessed October 20, 2019. http://www.berlin9.org/about/declaration/.