

International Journal of Computer Science and Mobile Computing



A Monthly Journal of Computer Science and Information Technology

ISSN 2320-088X

IMPACT FACTOR: 6.017

IJCSMC, Vol. 6, Issue. 1, January 2017, pg.11 – 22

National Research is Accessible Globally Free, Where SAARC Nations Stand?

Irfan-ul-Haq Akhoo

Research Scholar, Deptt. of L. I. Sc., University of Kashmir

Email: irfanakhoo@kashmiruniversity.net

Abstract: *Open access to scholarly information has been a hot topic for debate among scholarly community i.e. librarians, scholars, and publishers over the last few years. The movement of open access can be seen openly in the present day to day environment. Work published in Open Access mode might be seen, read & used by everyone who is interested, thus allowing academic research to have a greater impact on the world. Open Access journals are relatively new actors in the publishing market, and gaining reputation and visibility day by day in a very complex manner. Open access Journals exist at a promising platform all across the globe.*

The present study measures the current status of Open Access Journals published from different developing and developed countries and then analyzed through different parameters like subject, language, coverage, status, rank, source type etc. Further a comparative study between SAARC Nations had been carried out.

Open access journals show a promising growth across nations and in different fields. SAARC nations are at very initial stage of publishing scholarly journals through open access. India is in a projecting situation with other developed nations in the publishing open access scholarly works.

Keywords: *Open Access Publishing, Open access journals, Open access and SAARC nations, Scopus, Open Access & Scopus and Scopus & SAARC*

I. Introduction

This study was conducted in the early weeks of 2016 leading into the middle of the year 2016, was the first single research conducted throughout entire SAARC countries. I explored the quantitative output of SAARC nations in Open Access publishing and their level of involvement with it. Why did I carry out this survey? My enthusiasm was a sincere interest about the contribution of these countries towards Open Access, with a view to know the status of these countries in comparison to other countries of world. The Open Access atmosphere has been emerging at an unexpected rate, throughout the globe and I wanted to confirm, we had an up-to-date understanding of views and needs of our country in response to these changes, in order to know how much SAARC nations needs to build pace accordingly.

Paying for access to content makes sense in the world of print publishing, where providing content to each new reader requires the production of an additional copy, but online it makes much less sense to charge for content when it is possible to provide access to all readers anywhere in the world. Open Access refers to "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"[1]. Reference [2] defines open access as, "Where the author(s) and copyright holder(s) grant(s) to all users a free, irrevocable, worldwide, perpetual right of access to, and a license to copy, use, distribute, transmit and display the work publicly and to make and distribute derivative works, in any digital medium for any responsible purpose, subject to proper attribution of authorship as well as the right to make small numbers of printed copies for their personal use". Open access (OA) is free, immediate, permanent, full text, online access for any user to digital, scientific and scholarly material. Open access contents are not restricted only to peer-reviewed research articles; they can be in any formats from texts and data to software, audio, video, and multi-media. Although the OA movement focuses on peer-reviewed research articles and their preprints, OA can also apply to non-scholarly content, like music, movies, and novels, even if these are not the focus of most OA activists [3]. The Budapest Open Access Initiative (BOAI) took place in 2001, where the term "open access" was coined and the two strategies of Green OA (self-archiving) and Gold OA (open access publishing) were devised [4]. Open access to scholarly information is a burning issue in web based education and research

today's. Open access has become an increasingly important and potentially divisive issue in recent years as journal inflation rates have increased. For many librarians and scholars, journal price inflation is itself the central problem and open access is the solution [5]. OA is a paradigm shift from the traditional model of scholarly communication to open access. It has a great impact on academic libraries. Due to a strong connection between open access and the mission of libraries, it is not surprising that libraries are involved in a wide range of Open Access-related activities [6].

II. Scope of the Study

This study is providing measurement of the quantitative development of OA publications by SAARC nations. It is because of both financial and time constraints the study was conducted and restricted to the open access journals indexed by Scopus database upto March 2016.

III. Objectives

The main objectives of the study were to:

- Discover the total available open access resources in Scopus.
- Find out the country wise contribution of open access journals.
- Determine different subject, status, language, rank, source type, coverage of open access journals publishing throughout the world.
- Ascertain the country wise contribution of open access journals among SAARC nation
- Compare the quantitative output of open access journals by SAARC nations with other contributing countries.

IV. Literature Review

Open access publishing is a different method of publishing that has been employed to varying degrees in the academic community since 1998 [7]. Though the program is quite new, the literature is quite significant. Open access journals and publishing emerged with advances in technology, particularly the Internet. As the Internet has become abundant within the U.S., it has been used by many as a platform to communicate and transfer information economically, rapidly, and precisely, thus making publishing online smooth. This smoothness is especially seen through the concept of accessibility [8]. Internet based published research offers the ability to

include media, graphics, audio, and other visual enhancements (i.e., sound clips, colored charts, interview recordings, etc.) within articles to support research that couldn't otherwise be placed or distributed via hard copy [9]. Printed research was bound to the limitations of the paper, which could cost about \$1.53 per page for the publisher, and this cost was passed on to the author as a fee to pay for publishing within the journal. Using the author-pay model of publishing, even the least expensive journals in the hard science disciplines still had an average minimum cost per article of over a thousand dollars, which was the author's responsibility to pay [10]. Reference [11] shows, as an alternative, publishing online is at least a 70% cost reduction method. Authors have more freedom now that they can choose from more than one medium in which to publish. Open access is considered a "strong vehicle for academic freedom" especially when journals use free publishing software created by Public Knowledge Project specifically for this publishing method [12]. As open access publishing is the inverse of traditional publishing, which is sometimes called toll access (TA) publishing. Open access has changed the publishing method and ways in which people now have access to research without any costs associated with it [13]. As reference [14] author is of the view that open access has the potential to release considerable economic benefits for the research and academic sector. Reference [15] suggests that the benefits of open access can be categorized as extrinsic and intrinsic, extrinsic benefits being accessibility, increased publicity for the research, trustworthiness of documents, recognition for the individual and the institution, and academic reward, all of which may motivate researchers to deposit. Intrinsic benefits, by contrast, relate more to the altruistic intention of the depositor to make their findings available to colleagues and stakeholders, as well as the value of a knowledge management system for the management of research outputs. By and large, however, the benefits appear to have been more readily recognized by institutional managers, librarians, and to be at the institutional level. Protagonists' debate that creating research accessible freely will rise the amount of readers. For a distinct researcher this could mean greater citations for an open access article, which increases the impact of their work [16]. One of the main motives authors make their articles freely accessible is to gain higher research impact. An open access citation impact benefit, and an increasing number of researches have established, with changing degrees of methodological accuracy that an open access article is more likely to be used and cited than one behind payment blockades [17]. An increased access generates increased impact. Open access itself does not necessarily provide more citations. Access only allows the articles to be read by a

large number of scientists, who later on judge the quality of the work. OA makes scientific papers more visible and increases their research impact [18][19][20]. OA articles are cited more often by other researchers, thereby bringing their authors more recognition and prestige, and providing them with incentives to do more research. Recent studies have begun to show that open access increases impact [21].

Progresses and modernizations in scientific journal access and retrieval in the last decade have revolutionized the scientific communication process. The speedy uptake of Open access publishing was strengthened by a literature which emphasized the benefits to institutions and individual researchers, concentrating primarily on revelation, and stewardship. Despite a significant growth in the number of research papers available through open access, principally through authors self-archiving in institutional archives, it is estimated that only 20 per cent of the papers published annually are open access [22]. Field differences and disciplinary cultures have also played an important role in the OA movement since the mid-1990s. Similar concerns made some researchers shy away from self-archiving their contributions through their personal websites or institutional archives. While almost all articles in sciences (e.g. physics and mathematics) have currently been made open access, the percentages are much lower in social sciences and arts and humanities (e.g. 60 per cent in economics, 25-30 per cent in political science, psychology and sociology, and less than 20 per cent in anthropology and geography). Only 5 per cent of social scientists self-archive their papers [23].

Open access publishing has presented concerns about opinions of publishing reputation, importance and advancement necessities. Open access publishing has offered competition to customary print journals and offered a purpose to evaluate costs, information accessibility, and the mechanism that journal publishers do or do not hold as related to publishing. In light of these issues, open access publishing remains to gain followers and support throughout the entire globe [24].

V. Methodology

The study was based on data collected from an online survey of open access journals indexed by Scopus. Where the list of open access journals were collected and then analyzed through different parameters by using MS Excel spread sheet software.

VI. Data Analysis and Interpretation

Table I, shows the total no of open access journals indexed by Scopus submitted throughout the world, in which 65% of journals are active in use and updating in regular intervals of time. Whereas about 35% of open access journals either changed their title of journals or ceased to publish.

Table I: Open Access Journals of Scopus

Total no of Journals = 34866

Active = 22460

In-active = 12406

*Source- Scopus

Table II: Special features of Scopus

123 Publishing Countries		27 Main & 335 Sub-Subjects		58 Languages		Coverage from year 1823 to 2016		3 layout of Source.		3 styles of Journal Ranking	
Country	No. of Journals	Subject	No. of Journals	Language	No. of Journals	Year	No. of Journals	Source type	No. of Journals	Rank type	Rank Range
United States	9796	Engineering	4378	English	23566	1823-1922	40	Journal	33070	SNIP	0.313-9.911
United Kingdom	6516	Arts and Humanities	3285	German	2135	1923-1950	711	Book Series	994	IPP	0.406-9.908
Germany	2430	Biochemistry, Genetics and M. Biology	2567	French	857	1951-1970	1197	T. Journal	802	SJR	0.189-9.855

Table II, displays some of the important features and coverage of Scopus and lists the top most three of all features like, contains publication from 123 countries of the world among which United States is leading at top followed by United Kingdom and then by Germany. Containing journals of about 27 main subjects which are leaded by engineering subject by 20% followed by Arts and Humanities by 15% and then by Biochemistry and allied subjects by 12%

of the total number of Journals indexed through Scopus. About 68% of Journals are published in English language followed by German and then by French. Scopus indexes journals published from the year 1823. Open access sources of information is presented in three main layouts in Scopus, in which maximum number is contained in the form of Journals. Three styles of journal ranking had been applied on Open access journals of Scopus database which ranges from 0-10 for all the three Journal ranking System.

In Table III, top 10 countries which are publishing their research output in open access mode and are indexed by Scopus is represented. USA is leading at the top, followed by UK and no country of SAARC nations other than India is categorized under top 10 country list, in fact India is still at the last number

Table III: Top 10 Countries Publishing through Scopus

S. No.	Name of Country	No. of Journals
1	United States of America	9796
2	United Kingdom	6516
3	Germany	2430
4	France	1030
5	China	830
6	Italy	818
7	Japan	766
8	Switzerland	745
9	Spain	642
10	India	579

Table IV, reveals the top level journals in subjects according to the ranking style adopted by the Scopus, where Health Science is at the top followed by Physical Science with a little gap then by social Science then by Life Science.

Table IV: Top level Journals in Subjects

Subject	No. of Journals
Health Sciences	12911
Physical Sciences	11726
Social Sciences	9811
Life Sciences	6318

Fig. 1.1: Country wise percentage of contribution of journals into Scopus

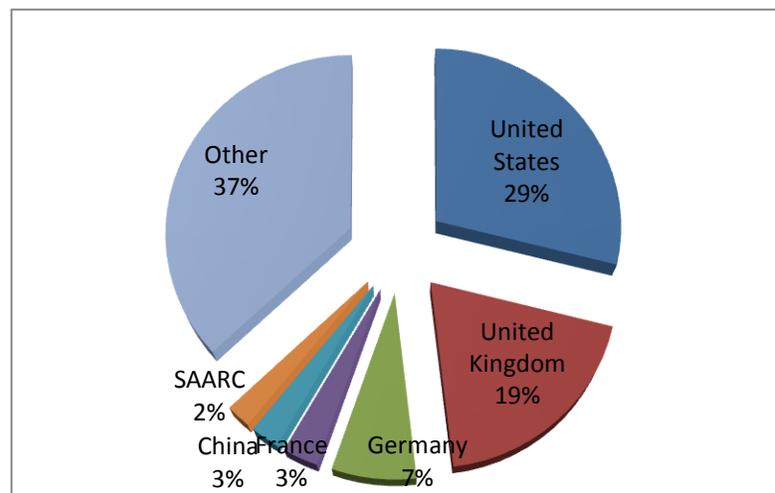


Fig. 1.1 drafts the comparison between SAARC and other countries of world with reference to the percentage of contribution of open access journals into Scopus to the total no of open access journals available in Scopus. Hence it shows that about 48% of Journals are submitted by US & UK and about 13% of journals are from Germany, China, France and only 02% of journals are form SAARC Nations rest 37% are from other countries of the world

In Table V, country wise total number of open access journals published by SAARC nations is reflected. India is leading at the top by 579 journals which is about 79% of SAARC Journals followed by Pakistan by 105 journals i.e. about 15%, then by Bangladesh by 04% and only 02% of journals are published by Srilanka and Nepal. Afghanistan, Bhutan and Maldives had contributed nothing towards open access

Table V: SAARC Nations to Open Access through Scopus

<i>S. No.</i>	Name of Country	No. of Journals
1	India	579
2	Pakistan	105
3	Bangladesh	26
4	Srilanka	09
5	Nepal	06
6	Afghanistan	Nil
7	Bhutan	Nil
8	Maldives	Nil
Total no. of journals		725

VII. Conclusion

Numerous librarians have been uttered and dynamic supporters of open access and consider that open access capacities to eradicate both the price barriers and the permission barriers. Several open access promoters consider that national support will play a very important role in reacting to open access commands from funders. OA is to become the future of academic library interactions all over the globe. More and more academic libraries have been dedicated to contributing in OA. The swift expansion of OA not only has transformed the model of traditional scholarly communication and fetched a free communication atmosphere of scholarly information, but also endures to influence on all aspects of academic libraries, including their services, collections technology and role. There has been a steady recognition of the worth of open access among numerous institutions. Several open access initiatives have been commenced and are working. Many are in the progressive phase.

There are only limited number of open access Journals, archives and Open Access initiatives in SAARC and there is still a long way to consolidation. Academia, of some of the countries of the SAARC however, under the vigorous involvement of government authorities and publishers, has booked a leading step in this direction. Researchers of these countries realizes the significance of Open Access journals and archives particularly in the increased visibility of information, the higher citation rate of articles, and the potential for knowledge to

become usable more quickly. With about 579 open access scholarly journals indexed by Scopus, India has made important contributions towards the growth of Open access publishing. India is in a projecting situation with respect to other SAARC nations in the production of the scholarly literature which is open accessed.

As developing countries, SAARC has an extensive way to go, but the foundation is encouraging and it is expected that the user standpoint may be a contributing factor to the establishment of open access initiatives in the SAARC nations in near future.

References

- [1] Budapest Open Access Initiative (2002), "Declaration after the Open Society Institute meeting in Budapest December 1-2 2001", available at:
<http://www.opensocietyfoundations.org/openaccess/read>
- [2] Bethesda Statement (2003). Bethesda statement on open access publishing. Retrieved from:
<http://www.earlham.edu/~peters/fos/bethesda.htm>
- [3] Suber, P. (2010). Open access overview: Focusing on open access to peer-reviewed research articles and their preprints. Available:
<http://www.earlham.edu/~peters/fos/overview.htm>
- [4] Pinfield, S., Gardner, M. & Mac Coll, J. (2010). Setting up an institutional e-print archive. Retrieved from:
<http://www.ariadne.ac.uk/issue31/eprint-archives>
- [5] Hirwade, M & Rajyalakshmi, D. (2006). Open access: India is moving towards third world super power. Retrieved from:
<http://eprints.rclis.org/archive/00006798/01199107D29.pdf>
- [6] Swan, A., & Chan, L. (2009a). Students' declining access to research. Available at:
http://openoasis.org/index.php?option=com_content&view=article&id=607&Itemid=410
- [7] Still, B. (2010). A dozen years after open source's 1998 birth, it's time for "OpenTechComm". *Journal of Technical Writing and Communication*, 40(2), 219-228. Retrieved from:
<http://search.proquest.com/docview/742869969?accountid=4485>
- [8] Schmidt, P. (2010, February 14). New journals, free online, let scholars speak out. *Chronicle of Higher Education*. Retrieved from:

- <http://chronicle.com.ezproxy1.lib.asu.edu/article/Open-Access-Journals-Break-/64143>
- [9] Bailey, D. S. (2005). Free experimental psychology archive launched. *APA Monitor*, 36(4), Retrieved from:
<http://www.apa.org/monitor/apr05/archive.aspx>
- [10] Odlyzko, A. (1998). Reprint: The economics of electronic journals. *Journal of Electronic Publishing*. 4(1). Retrieved from:
<http://hdl.handle.net/2027/spo.3336451.0004.106>
- [11] Bot, M., Burgemeester, J., & Roes, H. (1998). The cost of publishing an electronic journal. *D-Lib Magazine*. Retrieved from:
<http://www.dlib.org/dlib/november98/11roes.html>
- [12] Schmidt, P. (2010, February 14). New journals, free online, let scholars speak out. *Chronicle of Higher Education*. Retrieved from:
<http://chronicle.com.ezproxy1.lib.asu.edu/article/Open-Access-Journals-Break-/64143>
- [13] Kervin, J. (2010), Open access and interoperable research. *Methods for Business Research*, Harper Collins, New York, NY.
- [14] Odlyzko, A. (2003), “The rapid evolution of scholarly communication”, *Learned Publishing*, Vol. 15 No. 1, pp. 7-19, available at:
<http://docserver.ingentaconnect.com/deliver/connect/alpsp/09531513/v15n1/s2.pdf>
- [15] Kim, j. (2011). Motivating and Impeding Factors Affecting Faculty Contribution to Institutional Repositories. *Journal of Digital Information* 8 (2). Retrieved from:
<http://journals.tdl.org/jodi/article/viewArticle/193/177>
- [16] Stanton, K. and Liew, C. (2011), “OA theses in institutional repositories: an exploratory study of the perceptions of doctoral students”, *Information Research*, Vol. 17 No. 1.
- [17] Lawrence, S. (2001), “Free online availability substantially increases a paper’s impact”, *Nature*, Vol. 411 No. 7263, 31 May, p. 521, available at:
www.nature.com/nature/journal/v411/n6837/pdf/411521a0.pdf.
- [18] Harnad, S. and Brody, T. (2004), “Comparing the impact of open access (OA) vs. non-OA articles in the same journals”, *D-Lib Magazine*, Vol. 10 No. 6, available at:
www.dlib.org/dlib/june04/harnad/06harnad.html.
- [19] Antelman, K. (2004), “Do open access articles have a greater research impact”, *College and Research Libraries*, Vol. 65 No. 5, pp. 372-82, available at:

www.ala.org/ala/mgrps/divs/acrl/publications/crljournal/2004/sep/antelman.pdf.

- [20] Hitchcock, S. (2004), The Effect of Open Access and Downloads ('Hits') on Citation Impact: A Bibliography of Studies, pp. 1-24, available at:
<http://opcit.eprints.org/oacitation-biblio.html>
- [21] Antelman, K. (2006), "Self-archiving practice and the influence of publisher policies in the SocialSciences", *Learned Publishing*, Vol. 19 No. 2, pp. 85-95, available at:
<http://docserver.ingentaconnect.com/deliver/connect/alpsp/09531513/v19n2/s2.pdf>
- [22] Furlough, M. (2010). Open access, education research, and discovery. *Teachers College Record*, 112(10), 2623-2623-2648. Retrieved from:
<http://search.proquest.com/docview/854553645?accountid=4485>
- [23] Harter, S.P. and Kim, H.J. (1996), "Electronic journals and scholarly communication. A citation and reference study", *Information Research*, Vol. 2 No. 1, available at:
<http://informationr.net/ir/2-1/paper9a.html>
- [24] Hitchcock, S. (2004), The Effect of Open Access and Downloads ('Hits') on Citation Impact: A Bibliography of Studies, pp. 1-24, available at:
<http://opcit.eprints.org/oacitation-biblio.html>