

RESEARCH OUTPUT FROM A CONFLICT ZONE, AFGHANISTAN: A CASE STUDY OF KABUL UNIVERSITY

Suhail Ahmad*, Asifa Jan**

*Research Scholar, Department of Political Science, University of Kashmir, Srinagar, Jammu and Kashmir, India.

Email: ahmad7suhail@gmail.com

**Professor, Department of Political Science, University of Kashmir, Srinagar, Jammu and Kashmir, India.

Email: jan.asifa@yahoo.com

Abstract *Measuring the scientific research output is an important activity to showcase the research progress of an individual, an institution, or a nation. Assessing their research productivity helps to analyse the influence of research support policies at various levels. The present study is designed to analyse the research output of one of the important and politically active universities of Afghanistan, Kabul University. The study showcases the real picture of research output from Kabul University. It is based on the research output registered with Elsevier's SciVerse Scopus and provides information on the state of the scientific impact of Kabul University.*

Keywords: *Research Output, Research Performance, Kabul University-Research Output, Afghanistan-Research Output*

INTRODUCTION

Despite positive progress in the number of institutions of higher education in Afghanistan (Baiza, 2013, p.219) the research output from the Afghan Universities is not promising. The reason can be highly attributed to the political disturbance Afghanistan witnessed since a long time. Majority of the higher education institutions located in Kabul are located in the western part of Kabul, an area that has seen the most horrific war during the years 1992-96 during which almost all the higher education institutions were destroyed (Baiza, 2013, p. 217). This resulted in the destruction of all the set-ups which could have led to the better research output from various higher education institutions. The war badly damaged Afghanistan's academic institutions. During the 1960s and '70s, the universities (mainly Kabul University) had been immensely politicised, and due to the preoccupation with survival and the flight of many intellectuals, capacity was further degraded during the war years. Academics with ties to the West were especially suspected, and most with foreign degrees fled the country (Fishstein, Paterson, & Roe, 2012). Even though Afghanistan is significantly rich in a number of natural resources, yet it is among the poorest countries of the world. For its educational reconstruction it is highly dependent on international aids, grants, and loans. Afghanistan has not been able to recover and rebuild its war torn educational set-up and the basic infrastructure

effectively. Higher education is seen as one of the eight strategic pillars for national recovery and movement. The primary vision evident in the policy is to create and maintain a high quality, research driven higher education system that will contribute to the economic growth, social development, nation building, and the stability of the country (as cited in Bagley & Portnoi, 2016). In order to compete with the global research, universities in Afghanistan are in need of a promising research output that can make them global research competitors.

In this context the current study aims to analyse the research output of one of the leading universities of Afghanistan, Kabul University. Kabul University was the first institution in Afghanistan to undergo rapid politicisation during the Constitutional Decade (1964-73). As the only higher education institute in the country, it was swiftly transformed into the country's most active political centre. It became a breeding ground for the emergence of political parties, the main stage for confrontation between the various political ideologies, and a political force which would strongly influence the political process (Bezhan, 2014). So, it is important to gauge the output of a politically important institution like Kabul University.

ABOUT KABUL UNIVERSITY

Kabul University is the oldest and largest institution of tertiary education in Afghanistan. Throughout its long history since 1930, not only it has provided training to a large number of Afghans but has also enjoyed popularity in the region by attracting many students from neighbouring countries. Kabul University (KU) had a rich culture, history, and academic excellence but has been devastated by decades of wars and instabilities in Afghanistan (About Kabul University, n.d).

REVIEW OF LITERATURE

A large number of studies have been carried out to assess the research output of various institutions. Bindon (1981) describes and analyses the scientific output of a cooperative industrial research institute (Pulp and Paper Research Institute of Canada, PAPRICAN). Quraishi (1991) has also analysed the outputs of two prolific research groups: one from Dhaka University, Bangladesh and another from Karachi University, Pakistan. Herbstein (1993) has also measured the publication output of faculty members of chemistry department of a university. Nederhof, Meijer, Moed, and van Raan (1993) have also applied various performance indicators to measure the research performance of an agricultural university and a veterinary university. The research output of the Danish Technical University (DTU) has also been studied by Schwarz, Schwarz, and Tijssen (1998). Jeevan and Gupta (2002) have also carried a scientometric analysis of research output from Indian Institute of Technology, Kharagpur. De Araújo (2008) has also studied the research output in a Brazilian academic department. Yearly publication count of a university has also been carried out by Baskurt (2011). A recent study by Leeuwen, Wijk, and Wouters (2016) has combined the registered output of a whole university in the Netherlands with data retrieved from the Web of Science.

METHODOLOGY

The data source for this research is Elsevier's SciVerse Scopus since it provides diverse samples to analyse research output of Kabul University, Afghanistan. Through 'Affiliation search' facility a search was performed through the search phrase – 'kabul university' (proper name of the institution). The search was confined to the works published from 1947 to 2015 (68 years).

The selection of Elsevier's SciVerse Scopus is done because of international visibility and the comparatively unbiased selection of indexed journals.

ANALYSES

Year-wise Output

From 1947 through 2015, Kabul University authors have published a total of 72 documents. In 68 years of study period, authors have published in only 25 years. After a publication in 1947, the second work was published in 1966 and third in the year 1969. It is only from 2006, authors have started to contribute every year. As evident from Table 1, 56.94 articles are published in the last decade of study period and 25 percent are produced between 1967 and 1976.

Table 1: Decade-wise Research Output

Year	Output	%age	Cumulative Score	Growth Rate
1947-1956	1	1.39	1	0.00
1957-1966	1	1.39	2	1794.44
1967-1976	18	25.00	20	442.86
1977-1986	7	9.72	27	-600.00
1987-1996	1	1.39	28	266.67
1997-2006	3	4.17	31	4092.68
2007-2015	41	56.94	72	0.00
Total	72	100		

Source Publications

11.11 percent of the documents are published in Journal of Veterinary Medical Science from Japan followed by ASEE Annual Conference and Exposition, United States Conference Proceedings and Zeitschrift für Physik A Hadrons and Nuclei contributing 11.11 percent documents each. A good score of articles (13.88%) have been published in five sources with two publications each in the five sources from Germany, Belgium, Netherlands, and United States respectively. However 42 sources have published one article each (Table 2).

Table 2: Source Publications

Source Name	No. of papers
Journal Of Veterinary Medical Science	8
ASEE Annual Conference and Exposition, Conference Proceedings	4
Zeitschrift für Physik A Hadrons and Nuclei	4
Acta Horticulturae	2
Animal Reproduction Science	2
Archives Of Toxicology	2
Human Genetics	2
Physical Review D	2
42 sources published one article each	46
Total	72

Authorship Pattern

There are only 18.06 percent publications (13) in which authors have worked at individual level while in the remaining 81.94 percent publications (59) they have worked in groups ranging from two to 15 authors. Among the 59 collaborative publications, 47 publications are result of international collaborative efforts, i.e, Kabul University authors have worked with researchers from institutions of 20 other countries and in 12 publications they have worked with researchers from Afghanistan. In other works, only 20.83 percent publications are indigenous to Afghanistan - in these publications Kabul University authors are not assisted by authors from other countries.

Authors Productivity

A total of 65 authors from Kabul University have remained active during the study period. 55 authors are found to have made contributions in only one work each while 10 authors have worked in two or more publications. M.M. Tawfeeq is most prolific author with seven publications followed by P. Grassberger with five publications. Table 3 enlists the top 10 prolific authors from Kabul University. Other than Kabul University, 18 authors are found to be affiliated with institutions of other countries.

Table 3: Author Productivity

Author	No. of Publications
Tawfeeq MM	7
Grassberger P	5
Rahimi AG	3
Safi Z	3
Breckle SW	2
Habib H	2
Pyarokhil AH	2
Samadi GR	2
Wagner HF	2
Zabuli J	2

Publication Type

Authors from Kabul University have reported their research findings mostly in the form of research articles (83.33%). 9.72 percent are conference papers while a very meagre score of 2.77 percent of the total output score credits to notes and letters each. It is also evident that a single book

chapter has been authored from Kabul University (Table 4). The book chapter, “Voices of parliamentarians: Four women MPs share their thoughts” published in ‘Land of the Unconquerable: The Lives of Contemporary Afghan Women’ is the only document type that falls under “Book Chapter” category.

Table 4: Publication Type

Type	No.	%age
Article	60	83.33
Conference Paper	7	9.72
Note	2	2.77
Letter	2	2.77
Book Chapter	1	1.38
Total	72	

Subject-wise Output

Majority of the publications (17) represent the subject “Agriculture and Biological Sciences” followed by “Environmental Science”, “Medicine”, and “Veterinary” scoring 12 documents each. “Biochemistry, Genetics & Molecular Biology” ranks fourth with a total score of 11 documents. “Social Sciences” rank fifth with a score of nine documents. However, disciplines like “Arts and Humanities”, “Decision Sciences”, “Immunology and Microbiology”, “Materials Science”, “Mathematics”, “Multidisciplinary”, and “Psychology” score very less as they have only one document each to their credit (Table 5).

Table 5: Subject-wise Output

Subject	Output*
Agricultural and Biological Sciences	17
Environmental Science	12
Medicine	12
Veterinary	12
Biochemistry, Genetics and Molecular Biology	11
Social Sciences	9
Engineering	7
Physics and Astronomy	7
Earth and Planetary Sciences	5
Pharmacology, Toxicology and Pharmaceutics	4
Chemistry	3
Computer Science	2
Energy	2
Neuroscience	2

Arts and Humanities	1
Decision Sciences	1
Immunology and Microbiology	1
Materials Science	1
Mathematics	1
Multidisciplinary	1
Psychology	1

*No. of publications exceeds the actual score, i.e. 72 since a single publication can be a representative of more than one subject

Documents by Affiliation

Kabul University authors have worked with researchers from 68 other institutions. A maximum of eight articles each are published in collaboration with authors from Obihiro University of Agriculture and Veterinary Medicine, Japan and Gifu University, Japan. Seven articles are with authors from Tokyo University of Agriculture and Technology, Tokyo and four articles are with authors from Universitat Kassel, Germany. Table 6 presents a detailed outlook of the top affiliations.

Table 6: Top Affiliations

Affiliations	No. of Documents
Obihiro University of Agriculture and Veterinary Medicine	8
Gifu University	8
Tokyo University of Agriculture and Technology	7
Universitat Kassel	4
Miyagi Prefectural Federation of Agricultural Mutual Aid Association	3
Universitat Bonn	3
Iwate University	3
Universidade Federal do Rio Grande do Sul	2
Washington State University	2
Asian Institute of Technology Thailand	2
Universitat Duisburg-Essen	2
Medizinische Hochschule Hannover MHH	2
United States Military Academy at West Point	2
Johannes Gutenberg Universitat Mainz	2

CONCLUSION & DISCUSSION

The study evolves with some interesting facts with the application of various research output indicators about the

research players from Kabul University of Afghanistan. Though not an Olympic participant or globally recognised player in the research domains, yet Kabul University shows a progress as is evident from the chronological growth of the research articles published. Kabul University has still a long way to go to compete with the global players in the field of research.

Authors from Kabul University need to explore more publishing platforms to disseminate their scholarly works. They need to look for more publications to enhance the readability and visibility of their research which can be achieved if they increase the quantitative scores of their scholarly works which also scores less. One promising thing about the author works from Kabul University is that they have their works published on international platforms from leading publishers like Japanese Society of Veterinary Science, Elsevier, Springer Verlag, and American Physical Society. One worrying fact is that one is not able to trace a single publication among the top publishers published from Afghanistan. Publishers need to have an academic tie up with leading academic institutions of Afghanistan in general and Kabul University in particular to bring them on the publishing platforms with leading publishers of the globe.

Authors apart from publishing their works as research articles should also explore other types of possibilities like conference proceedings. One of the reasons for less score of conference proceedings may be the lack of funds granted to the scholars to attend conferences which can boost their scholarly output in the form of conference proceedings. Books and Books Chapters, an important form of scholarly communication also need to be considered because they hold an important and significant place especially in disciplines like Social Sciences.

Apart from Science disciplines, authorities as well as authors at Kabul University need to take other disciplines seriously. Efforts should be taken to highlight the research output from other disciplines also. Proper orientation to the authors from other disciplines about publishing with leading publishers will help in bringing the scholarly aroma from them also.

Though international affiliations are vivid at Kabul University, but higher education in Afghanistan needs to tie strong bonds with international academic players from different countries for a more promising affiliation. This will ensure sharing of various types of resources between international institutions and Kabul University which will ensure an increase in research from Kabul University both qualitatively as well as quantitatively.

REFERENCES

About Kabul University. (n.d). *About Kabul University*. Retrieved from <http://ku.edu.af/en/page/751>

- Baiza, Y. (2013). *Education in Afghanistan: Developments, influences and legacies since 1901* (p.219). London, Abingdon, Oxon: Routledge
- Bagley, S. S., & Portnoi, L. M. (2016). Examining the discourse on global competition. In Joseph Zajda & Val Rust (Eds.). *Globalisation and higher education reforms* (p. 34). Switzerland: Springer
- Baskurt, O. K. (2011). Time series analysis of publication counts of a university: what are the implications?. *Scientometrics*, 86(3), 645-656. DOI: 10.1007/s11192-010-0298-1
- Bezhan, F. (2014). Kabul University and political dynamics in Afghanistan, 1964-1973. *South Asia Research*, 34(3), 225-239. DOI: 10.1177/0262728014549133
- Bindon, G. (1981). Output measures of cooperative research: The case of the Pulp and Paper Research Institute of Canada. *Scientometrics*, 3(2), 85-106. DOI: 10.1007/BF02025632
- De Araújo, A. F. P. (2008). Increasing discrepancy between absolute and effective indexes of research output in a Brazilian academic department. *Scientometrics*, 74(3), 425-437. DOI: 10.1007/s11192-007-1817-6
- Fishstein, P., Paterson, A., & Roe, A. (2012). *Mapping of research capacity in Afghanistan*. United Kingdom: Department for International Development. Retrieved from http://r4d.dfid.gov.uk/pdf/outputs/mis_SPC/60911-Afghanistan_research_mapping_consolidated_version_24_Jul_2012_P1.pdf
- Herbstein, F. H. (1993). Measuring “publications output” and “publications impact” of faculty members of a university chemistry department. *Scientometrics*, 28(3), 349-373. DOI: 10.1007/BF02026515
- Jeeva, V. K. J., & Gupta, B. M. (2002). A scientometric analysis of research output from Indian Institute of Technology, Kharagpur. *Scientometrics*, 53(1), 165-168. DOI: 10.1023/A:1014896206968
- Leeuwen, T. N. V., Wijk, E. V., & Wouters, P. F. (2016). Bibliometric analysis of output and impact based on CRIS data: a case study on the registered output of a Dutch university. *Scientometrics*, 106(1), 1-16. DOI: 10.1007/s11192-015-1788-y
- Liu, W., Hu, G., Tang, L., & Wang, Y. (2015). China’s global growth in social science research: Uncovering evidence from bibliometric analyses of SSCI publications (1978–2013). *Journal of Informetrics*, 9(3), 555-569. DOI: 10.1016/j.joi.2015.05.007
- Nederhof, A. J., Meijer, R. F., Moed, H. F., & van Raan, A. F. J. (1993). Research performance indicators for university departments: A study of an agricultural university. *Scientometrics*, 27(2), 157-178. DOI: 10.1007/BF02016548
- Quraishi, M. M. (1991). Publication-rate and size of two prolific research groups in departments of inorganic chemistry at Dacca University (1944-1965) and Zoology at Karachi University (1966-1984). *Scientometrics*, 20(1), 79-92. DOI: 10.1007/BF02018146
- Schwarz, A. W., Schwarz, S., & Tijssen, R. J. W. (1998). Research and research impact of a technical university - A bibliometric study. *Scientometrics*, 41(3), 371-388. DOI:10.1007/BF02459052