



Significance of Library Resources in Enhancing the Productivity of Academic Staff

Priyanka Manikrao Chavhan, Ph.D. Scholar, Dept. of Library and Information Science, RTMNU, Nagpur

Email: priyankachavhan85@gmail.com

Prince Ajaykumar T Agashe, Research Advisor and Librarian, Matru Seva Sangh Institute of Social Science, Nagpur

Sunil N. Gawande, University Librarian, Maharashtra Animal & Fishery Sciences University, Nagpur (M.S., India)

Email: sunilgawande@mafsu.ac.in

Abstract

This study investigates the relationship between library resources and the enhancement of research output among academic personnel at Maharashtra Animal and Fishery Sciences University (MAFSU), Nagpur. This investigation employed the annual reports of MAFSU, Nagpur, together with data from the University Library. The findings revealed that, although only 44.21% of academic staff are available, research productivity has been rising each year. Library resources, including both print and digital items, are rising each year. The study demonstrated that enhancing library resources and offering digital access resulted in increased productivity and efficiency among academic personnel, notwithstanding staffing shortages, as indicated by the quantity of research articles published in national and international journals.

Keywords: Academicians, library resources, productivity

Introduction:

Libraries are essential for research as they furnish the necessary reference materials required to design and execute research projects. Libraries are assemblages of written and non-printed materials that facilitate study and information retrieval. Libraries are crucial in this context as institutions face pressure to enhance research productivity to elevate institutional rankings. Libraries can contribute to enhancing research productivity and elevating the rankings of their affiliated universities (Hollister and Schroeder, 2015). Productivity is an economic measure encompassing both input and output. Numerous scientists have examined the correlation between library resources and a researcher's productivity. Scoulas and Groote (2024) executed a self-reported faculty survey and disseminated data from a faculty activity reporting system to examine the correlations between faculty library utilization, perceptions of the value of library services, and their influence on research output at a public university. The findings indicated that faculty perceptions of library resources for their research were not correlated with faculty research production; nevertheless, a significant correlation was found between the frequency of usage of online journals and databases. The qualitative findings indicated that instructors regarded the library as a provider and purchaser of materials, with librarians and library services being essential to their teaching and research. Fazal and Chakravarty (2019) examined the interaction between researchers and Library Research Support at Bharathiar University, a research-intensive institution in India. The study's data were obtained using a standardized questionnaire. While most researchers were content with conventional services and resources, the majority remained oblivious to contemporary, researcher-oriented services such as bibliometrics and Research Data Management. The authors recommended that libraries engage actively in the research process and advocate for their services. Ugwuona and Dike (2015) conducted a descriptive study to examine the correlation between library resources and research output in five Nigerian health research institutions. The findings demonstrate that the research team's productivity achieved the benchmark established by their service conditions. There were 1,641 articles, exceeding the anticipated 1,307 for the total cohort examined. Journal articles provide the paramount measure of output, applicable to all institutions. The study identified a positive yet non-significant ($P > 0.05$) correlation between print ($r = 0.012$) and non-print ($r = 0.038$) resources and research productivity in the five health research organizations examined. All universities globally integrate research into the educational process. Nevertheless, distinct universities utilize diverse research methodologies. The Maharashtra Animal and Fishery Sciences institution (MAFSU) in Nagpur, a state institution in Maharashtra, is dedicated to extension education, research, and instruction in dairy science, fisheries, and veterinary medicine. The ten constituent institutions are distributed



across the state and comprise one postgraduate institute of veterinary science, two colleges of dairy technology, two colleges of fishery science, and five veterinary colleges. Academic personnel at these institutions are responsible for instruction, research, and outreach; hence, their productivity is essential due to their multifaceted obligations. The evolution of education in a learning environment characterized by swift communication and access to varied materials has been influenced by the growing prominence of the internet and the web (Halima, 2016). Researchers extensively utilize digital information sources throughout their research process, from the creation of ideas to the organization of investigations, functioning as a reinforcing and supportive repository of knowledge to cultivate innovative research outcomes. The academic community acknowledges that digital library resources enhance and expedite information access, while also augmenting the volume and quality of research, publications, and scientific work validation (Aris, 2022). Considering the aforementioned studies, the present research was conducted to assess the contribution of Maharashtra Animal and Fishery Sciences University's library resources to enhancing the research output of its academic personnel.

Method of data collection

The data for this study was obtained from visits to the University Library of MAFSU, Nagpur, and from the Annual Reports of the University (MAFSU) covering the last four years (2020-21 to 2023-24). The comprehensive material has been methodically arranged in tabular style.

Results and Discussion:

Faculty Positions:

Table 1 presents the quantity of sanctioned posts and the corresponding percentage of those filled at the university's affiliated colleges and institutions. A strong faculty is essential to the overall productivity of any university or institution. Filling faculty positions is crucial to guarantee the fulfillment of designated responsibilities without reallocating resources to supplementary tasks. A staff deficit might result in faculty overwork, thus diminishing their productivity. Table 1 show that the university employed 44.21 % of its sanctioned academic positions.

Table1. Faculty positions in Maharashtra Animal and Fishery Sciences University

Sr. No.	Year	Total Sanctioned posts	Total Filled in posts	Total Vacant posts	Percent Filled in posts	Percent Vacant posts
1	2020-21	715	341	374	47.69	52.31
2	2021-22	754	332	422	44.03	55.97
3	2022-23	754	321	433	42.57	57.43
4	2023-24	754	321	433	42.57	57.43
Average		744.25	328.75	415.5	44.21	55.78

Source: MAFSU Annual reports

Library Resources:

The availability of library resources is crucial for enhancing a researcher's productivity, since they offer necessary readings pertinent to the investigated subject, hence facilitating the development of the study topic. The resources available in the library of Maharashtra Animal and Fishery Sciences University consists of 291,363 print books, 810 print journals, 2,900 e-books, 118 e-journals, and 37,767 miscellaneous publications. The library offers several digital resources intended to assist users in obtaining information and study materials. This encompasses Grammarly and MyLOFT (My Library on Finger Tip), together with Remote Access Technology services that provide access to electronic materials. This includes 68 databases, 1,995 e-journals, and 3,141 e-books, all available remotely through a web application for university patrons, in addition to online OPAQ and other services. The library also includes the following: KOHA LMS (cloud-based library management systems and services for constituent colleges); RFID System (application of RFID technology for the security and circulation of library resources); Self-Checkout (a station for patrons to check out resources independently); Bio-Informatics Center (a dedicated facility for bioinformatics

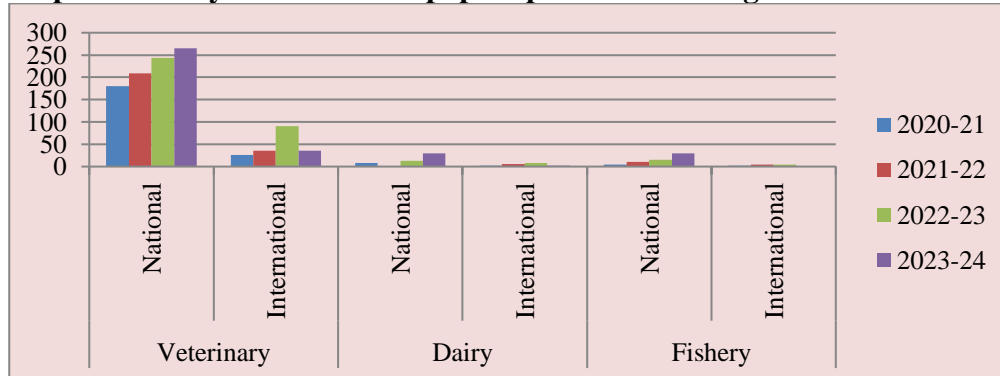
International Advance Journal of Engineering, Science and Management (IAJESM)



applications in veterinary, dairy, and fishery); a designated Teacher Reading Room; and a 24/7 reading room accessible to patrons, equipped with WiFi year-round.

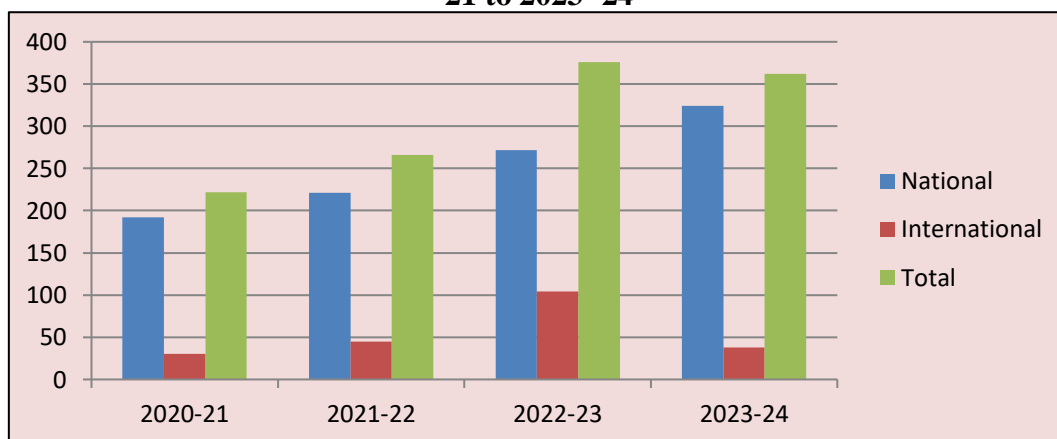
Research Paper publications:

Graph1: Faculty wise research papers published during 2020-21 to 2023-24



Despite insufficient faculty, academic professionals at MAFSU are exhibiting remarkable productivity by publishing high-quality research papers to esteemed national and worldwide scientific journals. The Faculty of Veterinary Science had significant production in article publication, as seen by the research articles generated (Graph 1). The yearly rate of paper publishing has been rising (Graph 2). The quantity of research articles published by all faculties demonstrated an increasing trend. This signifies that staff productivity has risen annually in relation to research articles. Concurrently, there was an upward trend in the publication of research papers in both national and foreign journals (Graph 2). This signifies a correlation between the rise in staff productivity and the improvement of library resource availability over this timeframe. Reports by Ugwuona and Dike (2015) and Aris Nurohman (2022) have been published in accordance with the discussions outlined in the opening of this article. Fazal and Chakravarty (2019) similarly endorsed the proactive engagement of libraries in the research process and the advocacy of their services. Libraries ought to actively participate in the research process and promote their services, as indicated by Fazal and Chakravarty (2019).

Graph2: Research papers published in National and International journals during 2020-21 to 2023- 24



Conclusion:

The study concluded that by improving library resources and making them digitally available, academic staff productivity and efficiency increased despite a staffing shortage.

Acknowledgement:

The author expresses gratitude to the authorities of Maharashtra Animal and Fishery Sciences University, Nagpur, for granting permission and providing essential information for the study, as well as to the Mahatma Jyotiba Phule Research and Training Institute (MAHAJYOTI), Government of Maharashtra, for financial support through the Mahatma Jyotiba Phule Research Fellowship for this research.



References:

Aris Nurohman (2022) The Impact of Using Digital Library Resources on The Productivity of Researchers at The State Islamic Institute of Purwokerto. *Jurnal Kajian Informasi dan Perpustakaan*. 14 (2): 126-145

Fazal, Fathima Azra and Chakravarty, Rupak (2019) Role of Library in Research Support: a Study of Bharathiar University. *Library Philosophy and Practice* (e-journal). 2780. <https://digitalcommons.unl.edu/libphilprac/2780>.

Halima Sadia Egberongbe (2016) Digital Resources Utilization by Social Science Researchers in Nigerian Universities. *Library Philosophy and Practice* (e-Journal). 2.

Hollister, C. V. and Schroeder, R. (2015) The impact of library support on education faculty research productivity: An exploratory study. *Behavioral & Social Sciences Librarian*, 34 (3), 97-115.

Scoulas, Jung Mi and Groote, Sandra L. De (2024) Use and Importance of Library Resources to Support Faculty Research and Productivity. *College & Research Libraries*. 669-694

Ugwuona, Chigozie Simeon and Dike, Virginia Winsell (2015) Relationship between Library Resources and Research Productivity in Five Nigerian Health-based Research Facilities. *Library Philosophy and Practice* (e-journal). 1267. 1-23
<http://digitalcommons.unl.edu/libphilprac/1267>

