

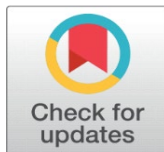
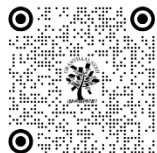
RESEARCH PRODUCTIVITY AT MAHARASHTRA ANIMAL AND FISHERY SCIENCES UNIVERSITY DURING COVID-19 PANDEMIC

Priyanka Manikrao Chavhan ¹✉, Prince Ajaykumar T Agashe ², Sunil N. Gawande ³✉

¹Ph.D. Scholar, Dept. of Library and Information Science, RTMNU, Nagpur, India

²Research Advisor and Librarian, Matru Seva Sangh Institute of Social Science, Nagpur, India

³University Librarian, Maharashtra Animal & Fishery Sciences University, Nagpur, M.S., India



Corresponding Author

Priyanka Manikrao Chavhan,
priyankachavhan85@gmail.com

DOI

[10.29121/shodhkosh.v5.i4.2024.6086](https://doi.org/10.29121/shodhkosh.v5.i4.2024.6086)

Funding: This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Copyright: © 2024 The Author(s). This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).

With the license CC-BY, authors retain the copyright, allowing anyone to download, reuse, re-print, modify, distribute, and/or copy their contribution. The work must be properly attributed to its author.



ABSTRACT

The Maharashtra Animal and Fishery Sciences University, Nagpur focuses on teaching, research, and extension in the faculty of Veterinary, Dairy, and Fisheries Sciences. According to the university's mission, research is an essential component; hence the quantity of research projects completed and research papers published in reputable national and international journals is a key indicator of the university's productivity. Despite having a small staff, this study shows the output of the university's faculties during the COVID-19 pandemic. The study's data came from the yearly reports published on the University's website for the 2020–21 and 2022–23 years. The findings showed that despite the lack of academic personnel during the COVID epidemic, a sizable number of projects were completed and research articles were published. This demonstrates how efficiently and productively the faculty at Maharashtra Animal and Fishery Sciences University is working.

Keywords: Research Projects, Research Papers, Veterinary, Dairy, Fishery, Productivity

1. INTRODUCTION

Maharashtra Animal and Fishery Sciences University (MAFSU) is a state-level university situated in Nagpur that was established on December 3, 2000, by combining five Veterinary colleges, one postgraduate Veterinary institute, and one Dairy technology college from the state's four Agricultural Universities. The University later established two Fishery Colleges, a Dairy Technology College, and a Wild Life Research and Training Center. As a result, it currently has six Veterinary colleges, two Dairy Technology Colleges, two Fishery Science Colleges, and one Wild Life Research and Training Center (WRTC) under its control. By using creative, practical, and efficient methods to teach advanced knowledge in the animal, dairy, and fisheries sciences, MAFSU aims to empower and enlighten its students to generate human resources with expertise in the fields of veterinary medicine, animal science, dairy technology, and fisheries

science. The University also has an objective to create modules on extension approaches and deal with policy concerns pertaining to animal productivity and health as well as service delivery in the state of Maharashtra (MAFSU website).

These days, research is a crucial and necessary component of academic education. New perspectives can be established in universities. It has become increasingly important in the academic setting and is a crucial decision for financial improvement in the twenty-first century. Teaching (transmission of knowledge), research (advancement of knowledge), and community service (application of knowledge) are key duties of academic staff in a modern university, according to Yash Pal (2008)'s assessment. The crucial responsibility of doing scientific research falls on university faculty in addition to teaching. In addition to serving as a fundamental function, knowledge management is crucial to the university's identity. Knowledge management has been the subject of global research in recent years (Gunjal 2019). Problems with knowledge acquisition, creation, storage, sharing, development, diffusion, and deployment by individuals or teams/groups within an organization to increase efficiency have been the focus of research (Naser et al., 2016).

In higher education, research productivity refers to the production and sharing of information through the various types of outreach, teaching, and research activities. Because research productivity makes up a relatively particular portion of colleges, rankings of academic institutions based on this metric have grown in significance. The overall amount of research conducted by scholars at academic institutions and related settings over a specific time period is known as research productivity (Print and Hattie, 1997).

Research is done by academic staff members, and their output is evaluated in a number of ways. Publications, funds from outside sources, and the quantity of citations received by those publications are the main metrics used by academic institutions to gauge the productivity of their research (Middaugh, 2001). Many researcher has studied the research productivity of various Universities using secondary data particularly with use of methods like bibliometrics, scientometrics etc. Tseng et al., (2013) have highlighted the hunt for evidence that reveals Taiwan's research performance in education by examining approximately 70,000 Web of Science article records from 1990 to 2011. Based on surveys, interviews, and observations, Fulari (2021) investigated the research output of the faculty members of Arts and Commerce College, Taharabad, which is connected to SPP University, Pune. He found that while female faculty members created 33.80% of research activity, male faculty members produced 66.20% of research publications, suggesting that men faculty members produced more research than female faculty members. Common research researchers have published 42.73% of their research in journals, with book chapters accounting for 13.59% of their output. For research publications, the majority of faculty members favored the English language and invested in their own research. The components of research culture that explain faculty research output at a public university were examined by Helen (2021). He measured research productivity by the number of completed studies and research outputs published in peer-reviewed journals. He emphasized the need to boost faculty research productivity, particularly with regard to the volume of research outputs published in peer-reviewed publications. According to regression study, research culture—which is composed of institutional, environmental, and individual factors—may account for 8.1% of the variation in faculty research output. Being a state level large University in the state, the study was conducted to find the research productivity of faculties of MAFSU during COVID-19 pandemic.

2. METHODOLOGY

For this study the required data was collected from the website of MAFSU and some data was collected from Annual Reports (2020-21 to 2022-23) available on website as well as by visiting the University Library located at Seminary Hills, Nagpur. The research papers published in journals were categorized as National and International publications.

3. RESULTS AND DISCUSSION

3.1. AVAILABILITY OF ACADEMIC STAFF MAFSU DURING STUDY PERIOD

Table 1 displays the information gathered regarding the availability of academic staff at the university from 2020-21 to 2022-23. Based on the data, the average availability of academic staff at the university was consistently below 47.69% during 2020-21 which was consistently reduced during 2021-22 (44.03%) and 2022-23 (42.57%) against sanctioned positions. The academic staff needs to teach the students of professional undergraduate degrees (Veterinary, dairy and Fishery science) along with students of post graduate specializations. The table showed that there was a persistent lack of academic staff, which should have had an impact on the activities related to teaching, research, and extension. This suggests that more academic staff members are required at the university. Though the number of

approved positions increased in 2020–21 (more posts were approved for the newly founded three Krishi Vidnyan Kendras under MAFSU), the number of vacant positions also climbed steadily. According to the data, 57.43 percent of academic positions are now vacant (Table 1).

Table 1 Availability of Academic staff MAFSU during 2013-14 to 2022-23.

Sr. No.	Particulars of posts	Year		
		2020-21	2021-22	2022-23
1	Total Sanctioned posts	715	754	754
2	Total Filled in posts	341	332	321
3	Total Vacant posts	374	422	433
4	Per cent Filled in posts	47.69	44.03	42.57
5	Per cent Vacant posts	52.31	55.97	57.43

Data Source MAFSU Annual Reports

4. EXTERNALLY FUNDED RESEARCH PROJECTS COMPLETED BY FACULTIES OF MAFSU:

Despite having a small number of academic faculties, MAFSU's faculties are actively engaged in research projects. As indicated in table 2, all three faculties—Veterinary, Dairy, and Fisheries—have handled and completed externally sponsored research projects during the active COVID-19 term. The faculties at MAFSU have finished 24 externally financed research projects in total during the studied period. Among all faculties, the faculty of Veterinary science has finished 21 external research projects in total. The most externally sponsored research projects (13 totals) were finished during the year 2022-23. The faculties of Dairy and Fishery sciences have completed 1 and 2 projects respectively during the study period. The MAFSU faculty's commitment to research is demonstrated by the 24 research projects they have finished during the active as well as post COVID-19 period.

Table 2 Externally funded research projects completed by faculties of MAFSU during 2010-11 to 2022-23

Sr. No.	Period of study	Faculty			Total of MAFSU
		Veterinary	Dairy	Fishery	
1	2020-21	7	0	1	8
2	2021-22	3	0	0	3
3	2022-23	11	1	1	13
Total		21	1	2	24

Data Source MAFSU Annual Reports

5. FUNDING RECEIVED AGAINST EXTERNALLY FUNDED RESEARCH PROJECTS:

Despite having little academic faculty, MAFSU has raised a handfull amount of funds for research projects. Veterinary, Dairy, and Fisheries all had externally financed research projects totaling Rs. 3279.71 Lakhs during the active COVID-19 term, as shown in table 3. The 21 projects totaling Rs. 3149.42 lakhs were undertaken by the Veterinary Science faculty. The number of tasks handled and finished by the Veterinary faculty has demonstrated optimal productivity. Furthermore, the Nagpur Veterinary College was the first Veterinary College in India to create a COVID-19 Diagnostic Laboratory in order to help humanity during this time by contributing their services. This demonstrated the academic faculty at Nagpur Veterinary College's feeling of duty to humanity.

Table 3 Funding received against externally funded research projects to faculties of MAFSU during 2020-21 to 2022-23

Sr. No.	Period of study	Faculty wise fund received for research projects (Rs. in Lakhs)			Total fund received (Rs. In Lakhs)
		Veterinary	Dairy	Fishery	
1	2020-21	737.41	0	63.99	801.40
2	2021-22	35.98	0	0	35.98
3	2022-23	2376.03	36.71	29.59	2442.33
Total		3149.42	36.71	93.58	3279.71

Data Source MAFSU Annual Reports

6. RESEARCH PAPERS PUBLISHED BY FACULTIES OF MAFSU:

The rise in publications from year to year (Table 4) indicates the productivity of MAFSU's academic personnel. The data showed that throughout the study period, the Veterinary faculty's academic staff published 424 and 305 research papers in reputable national and international journals, respectively. This amounted to 729 research papers amounting 90.22% of the total papers (808) published by the entire MAFSU faculty.

Table 4 Research Papers published by faculties of MAFSU during 2010-11 to 2022-23

Sr. No.	Faculty	Journal type	Period of paper publication			Total
			2020-21	2021-22	2022-23	
1	Veterinary	National	180	209	35	424
		International	26	35	244	305
2	Dairy	National	8	1	13	22
		International	2	6	8	16
3	Fishery	National	4	11	15	30
		International	2	4	5	11
Total papers published		National	192	221	63	476
		International	30	45	257	332
Grand Total			222	266	320	808

Data Source MAFSU Annual Reports

7. CONCLUSION

Based on the findings, it can be said that MAFSU faculty members were at their most productive during the COVID-19 pandemic in terms of research projects, paper publications, and assistance to the public through COVID-19 diagnostics.

CONFLICT OF INTERESTS

None.

ACKNOWLEDGMENTS

None.

REFERENCES

- Gunjal, Bhojaraju (2019) Knowledge Management: Why do we need it for corporates. Malaysian Journal of Library and Information Science, 10(2), 37–50. Retrieved from <https://mjlis.um.edu.my/index.php/MJLIS/article/view/8488> (ISSN: 1394-6234)
- Fulari Arjun Ramdas (2021). Research Productivity of Faculty Members of Taharabad College: A Scientometric Study. Research Review. International Journal of Multidisciplinary. Vol.06 (11), pp. 33-38. DOI: <https://doi.org/10.31305/rrijm.2021.v06.i11.006>
- Helen C. Fuentes (2021). predictors of faculty research productivity. epra International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal, Vol 7 (12) pp 7 – 10 Journal DOI URL: <https://doi.org/10.36713/epra2013>
- Middaugh, M. F. (2001). Understanding faculty productivity: Standards and benchmarks for colleges and universities. San Francisco: Jossey-Bass. (ISBN: 978-0-787-95022-4)

- Naser, S.S.A.; Al Shobaki, M.J.; Amuna, Y.M.A. (2016) Measuring Knowledge Management Maturity at HEI to Enhance Performance-an Empirical Study at Al-Azhar University in Palestine. International. Journal of Commerce. 2 (5), 55–62. DOI: 10.6084/M9.FIGSHARE.3504803.V1
- Print M. and Hattie J. (1997). Measuring quality in Universities: an approach to weighing Research Productivity. Higher Education, 33, 453-469.
<https://doi.org/10.1023/A:1002956407943>
- Tseng, Y. H., Chang, C. Y., Tutwiler, M. S., Lin, M. C., & Barufaldi, J. P.(2013).A scientometric analysis of the effectiveness of Taiwan's EducationalResearch projects. Scientometrics, 95(3), 1141-1166.DOI: 10.1007/s11192-013-0966-z
- Yash Pal. (2008). The Committee to Advise on Renovation and Rejuvenation of Higher Education. New Delhi: Ministry of HRD
- Zachos, G. (1991). Research output evaluation of two University Departments in Greece with the use of bibliometric indicators. Scientometrics, 21(2), 195- 221. DOI <https://doi.org/10.1007/BF02017569>