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Web Content and Performance Evaluation of Animal Sciences University Library Websites in India : An Analysis

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Abstract

Library Website is considered as one of the most substantial tools to publish and disseminate the information of several activities such as mission vision, library notice, rules and regulations, new arrival, library facilities, e-resources, and services, etc. The present study is based on the information available on the Animal Sciences University Library Websites/Webpage of India. A checklist method was used for content assessment based on an earlier study conducted by several professionals on this particular topic. The findings result of the present study presented that Lala Lajpat Rai University of Veterinary & Animal Sciences, Hisar website has to have highest speed and performance of PageSpeed Insights on Desktop (95) whereas, Maharashtra Animal & Fisheries Sciences University, Nagpur website scores highest performance (84) on mobile among universities. Alexa Traffic Rank shows that Rajasthan University of Veterinary & Animal Sciences, Bikaner was secured on the top with 3,58,832 global ranks whereas Lala Lajpat Rai University of Veterinary & Animal Sciences, Hisar is holding on the first position with 41,590 Indian ranks. It was revealed that Bihar Animal Sciences University, Patna 36 (55.38%) scores the highest number followed by Karnataka Veterinary, Animal and Fisheries Sciences University, Bidar 35 (53.84%) among the Animal Sciences University Websites/Webpages are taken for the study. Further, it is found that Lala Lajpat Rai University of Veterinary & Animal Sciences, Hisar and Rajasthan University of Veterinary & Animal Sciences, Bikaner did not get up to the mark of the total score which further falls under the category “Needs Improvement” and secured the position seven and eight.

Keywords: Web Content, Performance Analysis, Websites, Animal Sciences

1. Introduction

In this digital era, the library website is considered one of the most significant and demanding tools to attract readers. In every institute has developed its own website and is used for disseminating the valuable recent information put together to the target readers in one single

umbrella. In every academic institute, the library is known as a Knowledge Resource Center and sometimes it is known as Information Resource Centre where its users get the information as per their necessities. As per the information needs of the readers, libraries are shifting new shapes and approaches in which libraries are renovating from traditional libraries' journey to Digital-Libraries, Hybrid Libraries, Electronic Libraries, Virtual-Libraries, Green Library, Cloud-Based Libraries, and Mobile-Libraries. In the traditional library system, existing offline/printed information within libraries is transforming into online/virtual information mode i.e.; imparting through several resources and accessible on a 24x7 platform and in different formats. These days, readers can do ask reference questions online mode, find academic journals, Inter-Library Loan requests through online, e-thesis, perform research in databases, and books are available in electronic form. The library website is a window and showcase of every institute to catch up the information in one single platform. It is promoting the library services to online readers as well as they can access and use the availability of library e-resources without physically visiting the library.

2. Background of the Study

In this digital age, agriculture information has become one of the most significant roles playing for the development of the agricultural sector. Agriculture universities, colleges, and research institutes have been playing a dynamic role in teaching, research and extension, and also library activities. Librarians act as a mediator role to disseminate valuable information to voracious readers. The agriculture libraries have dedicatedly served the nation since the initiation of agriculture universities and institutes. At present, there are 63 State Agriculture Universities (SAUs), 03 Central Universities, 04 Deemed Universities, and 64 ICAR Central Research Institutes, 06 National Bureaux, 13 Directorates/Project Directorates, and 15 National Research Centres in India offering education and research facilities for the development of agriculture in India. (Source: <https://icar.org.in/content/state-agricultural-universities-0>) accessed on 19/08/2021.

3. Related Previous Research Work

Chowdhury & Das (2021) evaluated the content of five BRICS countries' National Libraries websites. The researcher set the parameter based on their collection, virtual reference service, a website covering language, Web 2.0 applicability, number of Institutional Repositories (IRs), visitors service, software used (Content Management Software or Digital Library). Further, it was revealed the website security feature and its important role in securing user

data. It has also included the user-friendliness of impaired persons so that they can also access the websites with ease. Finding results showed that the National Library of Brazil, India, and Russia are more progressive than the other two countries namely China and South Africa. S (2021) analysed the content of selected thirty-two colleges of Arts and Science Colleges of Kerala, India. The major findings revealed that the majority of these colleges have a web presence and information regarding library opening hours, information regarding circulation collection information is the popular content in the webpages. Further, it was revealed that most of these web pages do not make available sufficient links to provide access to the subscribed e-resources. Nagpal, & Radhakrishnan's (2021) study objectives are to make available a comprehensive overview of Digital Scholarship. The researcher examines the diverse objects to analyze and interpret the parameters for the pertinence of Digital Scholarship in University Libraries. Limiting to the Central University Libraries in Delhi according to UGC the study recommends a model of Digital Scholarship which could be adopted by the Institutions of National importance. The proposed model places of interest the transformational shift to provision the users in this conjuncture of information & technology. By acquiring and structuring the governance, the concept of Digital Scholarship could be extended and combined to the Digital Scholars to become a part of the initiative to stimulate the concept globally. C & P (2021) assessed the contents of thirteen central university library websites in India and using twenty-nine standard checklists for evaluation. In order to make available the best library services to the readers, library websites must be vibrant and the contents must match the information desires of the readers. Periodic evaluation of library websites will help and guide the authorities to improve the effectiveness of library services. Patel & Vyas (2021) attempts to calculate the Domain age, Domain extension, Internal Link, External Link, Web Impact Factors, Page Speed, WISER Index Ranking, Social media Connectivity, and Alexa Ranking of the websites. The findings result indicated that the most of the time IGNOU and BRAOU have the highest rankings. Further, it was revealed that for ensuring more presence and visibility for their websites, the institution must pay special attention to factors such as WIF, Wiser Ranking, Page Speed, and Alexa Ranking.

4. Research Objectives

The present study is carried out to undertake the following objectives.

- a) To examine the present status of library-related information, e-resources, services, and other facilities existing on the Animal Sciences University Library Websites/Webpage;

- b) To find out whether the Animal Sciences University Library Websites/Webpage makes mobile-friendly website/webpage for searching information through Mobile;
- c) To examine whether the Animal Sciences University Library has a separate website/webpage;
- d) To examine the Alexa Traffic Rank website global and India ranking in website/webpage as well as checking PageSpeed Insights of Mobile and Desktop performance;
- e) To determine the use of Web 2.0 Tools that it has been deployed by Animal Sciences University as revealed on their websites/webpages.

5. Scope and Limitation of the Study

The content presentation of the Animal Sciences University Library website/webpage plays a very significant role to increase visibility and making it more attractive, informative to the information seeker. The scope of the study is to evaluate the content of the existing library services, general information about the library, RSS feeds, collection, library e-resources, contact information, and chats with the librarian, etc. through library websites. The content of Animal Sciences University Library Websites/webpages can be denoted in different forms, the most common and available being text, image, and graphics. However, 08 Animal Sciences University Library Websites were listed under ICAR Website, this study was confined to the eight premier Animal Sciences Universities listed in Table 1. However, the researcher not included Tamil Nadu Veterinary & Animal Sciences University, Chennai Library Website/Webpage due to the non-availability and page under construction of the Website/Webpage during the study period.

Table 1: Name of Animal Sciences University

SL. No.	Name of Animal Sciences University	URL	Library URL
1	Bihar Animal Sciences University, Patna	https://www.basu.org.in/	https://www.basu.org.in/library-e-services/
2	Lala Lajpat Rai University of Veterinary & Animal Sciences, Hisar	https://www.luvas.edu.in//	https://luvas.edu.in/library.html
3	Karnataka Veterinary, Animal and Fisheries Sciences University, Bidar	http://kvafsu.edu.in/	http://kvafsu.edu.in/university_library_profile.pdf
4	Kerala Veterinary and Animal	https://www.kvasu.ac	https://covas-

	Sciences University, Pookode, Wayanand, Kerala	in/	opac.l2c2.co.in/
5	Maharastra Animal & Fisheries. Sciences University, Nagpur	http://www.mafsu.in/	http://library.mafsu.in/
6	Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana	https://www.gadvasu.in/	https://www.gadvasu.in/page/-about-the-library/109/108
7	Rajasthan University of Veterinary & Animal Sciences, Bikaner	https://rajuvas.org/	http://rajuvas.bestbookbuddies.com/
8	West Bengal University of Animal & Fishery Sciences, Kolkata	http://wbuafscl.ac.in/	http://wbuafscl.ac.in/central-library/

6. Research Methodology

There are different ways for data collection tools to execute the research work. To undertake the aforementioned research objectives, the researcher used a survey and observation method for data collection tools. The complete research work was considered and developed with the help of a well structure checklist method. Sixty-five criteria were classified based on the previous studies to accumulate research data from the particular library website and used the checked marked system, i.e., tick mark “√” for Yes (1) and cross sign “X” for No (0) to respectively content and feature provided in the Animal Sciences University Library Websites/Webpages under the present study. The checked marked system of using 0 and 1 makes it easy for data analysis and makes presented a quantitative result.

7. Data Analysis and Interpretation

The present study is undertaken based on the availability of library information on 08 Animal Sciences University Library Websites as per ICAR Website by using predefined criteria during a period from 1st May to 15 June 2021 (Source: <https://icar.org.in/content/state-agricultural-universities-0>). The data collection was organized and presented by using MS Excel 2010. The data analysis and interpretation of the collected research data through the checklist method were followed for the study.

7.1 Classification by URL Extension of Animal Sciences University Websites/Webpages

Table 2 represents the different URL extensions used by Animal Sciences University Websites/Webpages for their Library Website/Webpage. 2 (25%) of Animal Sciences University Websites/Webpages URL extension edu.in/ where 2 (25%) Animal Sciences

University Websites/Webpages has ac.in/ for their respective Library Website/Web Page. 2 (25%) of the Animal Sciences University Websites/Webpages used in/ which is followed by org.in/ and org url extension i.e.; 1 (12.5%).

Table 2: Classification by URL Extension of Animal Sciences University Websites/Webpages

Name of Animal Sciences University	URL extension
Bihar Animal Sciences University, Patna	org.in/
Rajasthan University of Veterinary & Animal Sciences, Bikaner	org/
Lala Lajpat Rai University of Veterinary & Animal Sciences, Hisar	edu.in//
Karnataka Veterinary, Animal and Fisheries Sciences University, Bidar	edu.in/
Kerala Veterinary and Animal Sciences University, Pookode, Wayanand, Kerala	ac.in/
West Bengal University of Animal & Fishery Sciences, Kolkata	ac.in/
Maharashtra Animal & Fisheries. Sciences University, Nagpur	in/
Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana	in/

7.2 Accessibility of Library Websites/Webpages

Table 3 represents the information about the availability of the library website/web page of the Animal Sciences University. The researcher has set and categorised into two parameters, viz., the library having a website/web page and the library having a separate website under the heading of the availability of libraries' website/web page. It is found that all 8 (100%) of the Animal Sciences University Library Website/Webpage and 3 (37.5%) of the Animal Sciences University Library has a separate portal/website along with library webpage.

Table 3: Accessibility of Library Websites/Webpages

Name of Animal Sciences University	The library has a website/webpage	The library has a separate website
Bihar Animal Sciences University, Patna	✓	X
Lala Lajpat Rai University of Veterinary & Animal Sciences, Hisar	✓	X

Karnataka Veterinary, Animal and Fisheries Sciences University, Bidar	✓	X
Kerala Veterinary and Animal Sciences University, Pookode, Wayanand, Kerala	✓	✓
Maharashtra Animal & Fisheries. Sciences University, Nagpur	✓	✓
Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana	✓	X
Rajasthan University of Veterinary & Animal Sciences, Bikaner	✓	✓
West Bengal University of Animal & Fishery Sciences, Kolkata	✓	X
Total Score (Max. 8)	8 (100%)	3 (37.5%)

7.3 Basic Information on Mobile-Friendly Test

Mobile-Friendly Test is a tool where anyone can test a respective website to understand whether it is mobile-friendly or not. As per study concern, the researcher used the Mobile-Friendly Test of Google Search Console (<https://search.google.com/test/mobile-friendly>). It is very simple to paste the URL of the particular website into the shown space provided area, and then click test URL within a few seconds, the result will be shown. It is revealed that 7 (87.5%) of Animal Sciences University Library Websites/Webpages are user-friendly to visit websites/webpages.

Table 4: Accessibility and Mobile-Friendly Test

Name of Animal Sciences University	Mobile-Friendly Test
Bihar Animal Sciences University, Patna	✓
Lala Lajpat Rai University of Veterinary & Animal Sciences, Hisar	✓
Karnataka Veterinary, Animal and Fisheries Sciences University, Bidar	X
Kerala Veterinary and Animal Sciences University, Pookode, Wayanand, Kerala	✓
Maharashtra Animal & Fisheries. Sciences University, Nagpur	✓
Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana	✓

Rajasthan University of Veterinary & Animal Sciences, Bikaner	✓
West Bengal University of Animal & Fishery Sciences, Kolkata	✓
Total Score (8 Max.)	7 (87.5%)

7.4. Alexa Ranking of Animal Sciences University Websites

Website ranking (Alexa) is a tool where everyone can evaluate a particular website to determine the ranking system set by www.alexa.com to calculate by using incorporation of average daily visits to the selected websites and the number of page views on the selected sites over the previous three months universally. As per the study concern, the researcher used the Alexa Ranking System (<https://www.alexa.com/siteinfo>). It is very simple and easy to paste the URL of the particular website into the showing space provided area and then click test URL within a few seconds, the result will be shown. Alexa Traffic Rank shows that Rajasthan University of Veterinary & Animal Sciences, Bikaner was secured on the top with 3,58,832 global ranks followed by Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana 4,36,992 rank, Maharashtra Animal & Fisheries. Sciences University, Nagpur 5,97,695 rank etc. Further, it is observed that Alexa Traffic Rank shows Lala Lajpat Rai University of Veterinary & Animal Sciences, Hisar is holding on the first position with 41,590 Indian ranks, which is followed by Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana 56,744 rank, and Maharashtra Animal & Fisheries. Sciences University, Nagpur 78,925 rank.

Table 5 : Alexa Ranking of Animal Sciences University Websites

Name of University	Alexa Ranking (Global Internet)	Alexa Ranking (India)
Bihar Animal Sciences University, Patna	8,19,642	1,02,312
Lala Lajpat Rai University of Veterinary & Animal Sciences, Hisar	3,31,594	41,590
Karnataka Veterinary, Animal and Fisheries Sciences University, Bidar	13,87,474	1,97,210
Kerala Veterinary and Animal Sciences University, Pookode, Wayanand, Kerala	31,71,711	0
Maharashtra Animal & Fisheries. Sciences University, Nagpur	5,97,695	78,925
Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana	4,36,992	56,744
Rajasthan University of Veterinary & Animal Sciences, Bikaner	3,58,832	3,58,832
West Bengal University of Animal & Fishery Sciences, Kolkata	10,02,837	1,01,032

7.5 Status of PageSpeed Insights Performance

PageSpeed Insights (PSI) information on the presentation of a page on both mobile and desktop devices, and offers suggestions on how that page may be better. At the top of the report, PSI makes available a score that summarizes the page's performance. This score is determined by running Lighthouse to collect and analyze lab data about the page. A score of 90 or above is considered good. 50 to 90 is a score that needs improvement, and below 50 is considered poor. (Source: <https://developers.google.com/speed/pagespeed/insights/>) It is found from Table 6 that the Lala Lajpat Rai University of Veterinary & Animal Sciences, Hisar website has having highest speed and performance on desktop (95) whereas Bihar Animal Sciences University, Patna website having lowest speed (58) among universities. It was observed that the Maharashtra Animal & Fisheries. Sciences University, Nagpur website scores highest performance (84) and Bihar Animal Sciences University, Patna score Lowest (25) on mobile among universities.

Table 6: Status of PageSpeed Insights Performance

Name of University	Mobile Performance	Desktop Performance
Bihar Animal Sciences University, Patna	25	58
Lala Lajpat Rai University of Veterinary & Animal Sciences, Hisar	74	95
Karnataka Veterinary, Animal and Fisheries Sciences University, Bidar	0	0
Kerala Veterinary and Animal Sciences University, Pookode, Wayanand, Kerala	43	0
Maharashtra Animal & Fisheries. Sciences University, Nagpur	84	87
Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana	67	89
Rajasthan University of Veterinary & Animal Sciences, Bikaner	37	78
West Bengal University of Animal & Fishery Sciences, Kolkata	42	68

7.6 Basic Information on General Information

Table 7 denotes the basic information available about mission/vision/aims/objectives statement, library committee, library opening hours, library rules and regulations, contact us, and library sections, etc. The analysis of the study makes known the fact that 5 (62.5%) of the Animal Sciences University Library Websites/Webpages have mentioned information about the library opening hours and copyright which is followed by the information about the library, library rules and regulations, and library membership details with 4 (50%). 3 (37.5%) of the Animal Sciences University Library Websites/Webpages have given information about the domain and contact us. 2 (25%) of the Animal Sciences University Library Websites/Webpages have provided information about library sections, library staffs and visitors counter and site map. It was further observed that 1 (12%) of the Animal Sciences University Library Websites/Webpages have revealed information about the library committee, the latest update, and library achievements.

Table 7: General Information on Website/Webpage

General Information/ Criteria	1	2	3	4	5	6	7	8	%
About Library	X	✓	X	✓	X	✓	X	✓	4 (50%)
Mission/Vision/Aims/Objectives Statement	X	✓	✓	X	X	X	X	X	2 (25%)
Library Committee	X	X	✓	X	X	X	X	X	1 (12.5%)
Library Opening Hours/Working Hours/ Holidays	✓	X	✓	✓	X	✓	✓	X	5 (62.5%)
Library Rules and Regulations	✓	X	✓	✓	X	✓	X	X	4 (50%)
Library Membership Details	✓	X	✓	✓	X	✓	X	X	4 (50%)
Library Sections	✓	X	X	X	X	✓	X	X	2 (25%)
Domain	X	X	X	✓	✓	X	✓	X	3 (37.5%)
Copyright	✓	✓	X	✓	X	✓	X	✓	5 (62.5%)
Visitors Counter/Hits	✓	X	X	X	X	X	X	✓	2 (25%)
Last/ Latest Update	✓	X	X	X	X	X	X	X	1 (12.5%)
Library Achievements	X	X	✓	X	X	X	X	X	1 (12.5%)
Library Staff/Team	X	✓	✓	X	X	X	X	X	2 (25%)
Site Map /Google Map	X	X	X	✓	X	X	X	✓	2 (25%)
Contact Us	✓	✓	X	✓	X	X	X	X	3 (37.5%)
Total Score (Max. 15)	8	5	7	8	1	6	2	4	

7.7 Library Collection Information on Websites/Webpages

The study makes an effort to evaluate the availability of information about library collection on the Animal Sciences University Library Websites/Webpages, and the data are shown in Table 8. Only 5 (62.5%) of the Animal Sciences University Library Websites/Webpage have provided information about printed books, and 4 (50%) of Animal Sciences University Websites/Webpages have given information about CDs/DVDs/CD ROM, Theses & Dissertations. Further, it was observed that Printed Journals and Back/Bound Volume of Journals 3 (37.5%). Only 2 (25%) of Animal Sciences University Library Websites/Webpages mentioned information General Magazines/Periodical, and only 1 (12.5%) of Animal Sciences University Library Websites/Webpages has given information about Reference Sources/Books and Reports.

Table 8: Library Collection Information on Website/Webpage

Library Collection	1	2	3	4	5	6	7	8	%
Printed Books	✓	✓	✓	X	✓	X	X	✓	5 (62.5%)
CD/DVDs / CD ROM	✓	X	✓	X	✓	✓	X	X	4 (50%)
Theses & Dissertations	✓	X	✓	X	✓	✓	X	X	4 (50%)
Printed Journals	X	X	✓	X	✓	X	X	✓	3 (37.5%)

Back/Bound Volume of Journals	✓	X	✓	X	✓	X	X	X	3 (37.5%)
General Magazines/Periodical	✓	X	✓	X	X	X	X	X	2 (25%)
Reference Sources/Books	X	X	X	X	✓	X	X	X	1 (12.5%)
Reports	✓	X	X	X	X	X	X	X	1 (12.5%)
Total Score (8 Max.)	6	1	6	0	6	2	0	2	

7.8 Library Services Information on Websites/Webpage

Library website makes affords offered to the patrons by the particular libraries to fulfill exploitation of the resources available in that library through online resources. and easy access to the library resources without any hindrance. Table 9 shows the information available about library services of the Animal Sciences University Library Websites/Webpages. It is observed from the study that the majority 1 (12.5%) of the Animal Sciences University Library Websites/Webpages page has given information on the library website/webpage about SDI, digital library, literature search services, reading rooms facilities, newspaper, thesis repository, Q R Code Facility, consultancy service and orientation programme which is followed by 2 (25%) of the Animal Sciences University Library Websites/Webpages has given information on the library website/webpage about circulation services, CD Service (CD-ROM Search), CAS, database access, library display, user guidance services, newspaper clippings, reservation of books, video library and Library and Information Science Course for PG and Ph.D. Students. 5 (62.5%) of the Animal Sciences University Library Websites/Webpages has mentioned information about OPAC facilities and Resource Sharing (CeRA) which is followed by 4 (50%) of the Animal Sciences University Library Websites/Webpages has revealed the information about reference/information service, internet-based services, reprographic service and (SC/ST) Book Bank Facility. It is further observed that 3 (37.5%) of the Animal Sciences University Library Websites/Webpages have given information about referral service, CCTV Camera, ILL/DDS, and Wi-Fi facility.

Table 9: Library Services Information on Websites/Webpages

Library Services	1	2	3	4	5	6	7	8	%
OPAC Facilities	X	X	✓	✓	✓	✓	X	✓	5 (62.5%)
Resource Sharing (CeRA)	✓	X	✓	X	✓	✓	X	✓	5 (62.5%)
Reference/Information Service	✓	X	✓	✓	X	X	X	✓	4 (50%)
Internet-Based Services/Internet Browsing Service/ Internet Surfing Facility	✓	X	✓	✓	X	X	X	✓	4 (50%)
Reprographic/ Photocopying/Xerox Service	✓	X	✓	X	X	✓	X	✓	4 (50%)
(SC/ST) Book Bank Facility	✓	X	✓	X	✓	X	X	✓	4 (50%)

Referral Service	X	X	✓	✓	X	X	X	✓	3 (37.5%)
CCTV Camera	X	X	✓	X	✓	X	X	✓	3 (37.5%)
ILL/DDS	✓	X	X	✓	X	X	X	✓	3 (37.5%)
Wi-Fi Facility	✓	X	X	X	✓	X	X	✓	3 (37.5%)
Circulation Service/Functions	X	X	✓	✓	X	X	X	X	2 (25%)
CD Service (CD-ROM Search)	✓	X	✓	X	X	X	X	X	2 (25%)
CAS	X	X	✓	✓	X	X	X	X	2 (25%)
Database Access/Database Search/Database Service	✓	X	X	X	X	✓	X	X	2 (25%)
Library Display/ New Arrivals Display	X	X	✓	X	X	X	X	✓	2 (25%)
User Guidance Services	X	X	✓	✓	X	X	X	X	2 (25%)
News Paper Clippings	X	X	✓	X	X	X	✓	X	2 (25%)
Reservation of Books/Service	X	X	✓	X	X	✓	X	X	2 (25%)
Video Library	X	X	✓	X	X	X	✓	X	2 (25%)
Library and Information Science Course for PG and Ph.D. Students	✓	X	✓	X	X	X	X	X	2 (25%)
SDI	X	X	X	✓	X	X	X	X	1 (12.5%)
Digital Library	X	X	✓	X	X	X	X	X	1 (12.5%)
Literature Search Services	X	X	X	✓	X	X	X	X	1 (12.5%)
Reading Rooms/Halls Facilities	✓	X	X	X	X	X	X	X	1 (12.5%)
Newspaper	✓	X	X	X	X	X	X	X	1 (12.5%)
Thesis Repository	✓	X	X	X	X	X	X	X	1 (12.5%)
Q R Code Facility	X	X	X	✓	X	X	X	X	1 (12.5%)
Consultancy Service	X	X	X	✓	X	X	X	X	1 (12.5%)
E-Library	✓	X	X	X	X	X	X	X	1 (12.5%)
Orientation Programme	X	X	✓	X	X	X	X	X	1 (12.5%)
Total Score (30 Max.)	14	0	19	12	5	5	2	11	

7.9 E-Resources Information on Websites/Webpages

E-resources are the most important sources at the present situation of Covid 19 restriction (SOP) where the users can browse and download the e-resource of their requirement from at any place and at any time. Table 10 shows the availability of diverse e-Resources facilitated for the users by the Animal Sciences University Library Websites/Webpages which is further reflected in their respective libraries' websites. The present study discloses that 4 (50%) of the Animal Sciences University Library Websites/Webpages subscribed to E-Database/Online Database and Consortia Resources which is followed by the information about the availability of E-Books with 7 (87.5%). Only 6 (75%) of the Animal Sciences University Library Websites/Webpages have mentioned information about the availability of

E-Journals and 3 (37.5%) of Animal Sciences University Library Websites/Webpages having Institutional Repository. 2 (25%) of Animal Sciences University Library Websites/Webpages have mentioned information about the availability of E-Newspaper which is followed by CD-ROM Database with 1 (12.5%).

Table 10: E-Resources Information on Website E-resources

E-resources	1	2	3	4	5	6	7	8	%
E-Books	X	✓	✓	✓	✓	✓	✓	✓	7 (87.5%)
E-Journals	X	✓	✓	✓	✓	X	✓	✓	6 (75%)
E-Database/Online Database	✓	X	X	✓	X	X	✓	✓	4 (50%)
Consortia Resources	✓	X	✓	✓	X	X	✓	X	4 (50%)
Institutional Repository	✓	X	X	✓	✓	X	X	X	3 (37.5%)
E-Newspaper	X	X	X	X	X	X	✓	✓	2 (25%)
CD-ROM Database	✓	X	X	X	X	X	X	X	1 (12.5%)
Total Score (7 Max.)	4	2	3	5	3	1	5	4	

7.10 Use of Web 2.0 Tools in Animal Sciences University Websites

Web 2.0 tools make dynamic library websites and disseminate the information instantly. It was observed that the majority 4 (50%) of the Animal Sciences University Websites/Webpages have incorporated Web 2.0 tools such as Facebook and YouTube which is followed by LinkedIn and Instagram with 1 (12.5%). Only 3 (37.5%) of the Animal Sciences University used Twitter.

Table 11: Use of Web 2.0 Tools in Animal Sciences University

Social Networking Tools	1	2	3	4	5	6	7	8	%
Facebook	✓	✓	X	X	X	✓	X	✓	4 (50%)
YouTube	✓	✓	X	X	X	✓	X	✓	4 (50%)
Twitter	✓	✓	X	X	X	X	X	✓	3 (37.5%)
LinkedIn	X	✓	X	X	X	X	X	X	1 (12.5%)
Instagram	✓	X	X	X	X	X	X	X	1 (12.5%)
Total Score (5 Max.)	4	4	0	0	0	2	0	3	

7.11 Rating Scale for Animal Sciences University Library Websites/Webpages

The five-point rating scale was fixed equally based on the maximum score of 65 of Content features (Table 7 to 11 with 65 points) to rank the Animal Sciences University Library Websites/Webpages, the rating scale was considered to rank "Outstanding" to "Needs Improvement" based on the five-point scale below (Table-12):

Table-12: Rating Scale for Animal Sciences University Library Websites/Webpages

Range (Score)	Rank
53-65	Outstanding
40-52	Very Good
27-39	Good
14-26	Average
01-13	Needs Improvement

7.12 Total Score and Ranking of Animal Sciences University Websites/Webpages

The total score of study Animal Sciences University Library Websites/Webpages is presented in Table 13.

Table 13: Total Score and Ranking of Animal Sciences University Websites/Webpages

Name of the University	T 7	T 8	T 9	T 10	T 11	Total Score (Max 65)	Grade	Rank
Bihar Animal Sciences University, Patna	8	6	14	4	4	36 (55.38%)	Good	1 st
Karnataka Veterinary, Animal and Fisheries Sciences University, Bidar	7	6	19	3	0	35 (53.84%)	Good	2 nd
Kerala Veterinary and Animal Sciences University, Pookode, Wayanand, Kerala	8	0	12	5	0	25 (38.46%)	Average	3 rd
West Bengal University of Animal & Fishery Sciences, Kolkata	4	2	11	4	3	24 (36.92%)	Average	4 th
Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana	6	2	5	1	2	16 (24.61%)	Average	5 th
Maharashtra Animal & Fisheries. Sciences University, Nagpur	1	6	5	3	0	15 (23.07%)	Average	6 th
Lala Lajpat Rai University of Veterinary & Animal Sciences, Hisar	5	1	0	2	4	12 (18.46%)	Needs Improvement	7 th
Rajasthan University of Veterinary & Animal Sciences, Bikaner	2	0	2	5	0	9 (13.84%)	Needs Improvement	8 th

It is found from the study that based on the total score obtained by Bihar Animal Sciences University, Patna and Karnataka Veterinary, Animal and Fisheries Sciences University, Bidar has become a “Good” cursory glance securing the position first, and second respectively as

per the ranking score of Table 13. Kerala Veterinary and Animal Sciences University, Pookode, Wayanand, Kerala, West Bengal University of Animal & Fishery Sciences, Kolkata, Guru Angad Dev Veterinary, Animal Sciences University, Ludhiana, and Maharashtra Animal & Fisheries. Sciences University, Nagpur has secured average grade and hold third, fourth, fifth and 6th position respectively. Further, it is observed from the study that Lala Lajpat Rai University of Veterinary & Animal Sciences, Hisar & Rajasthan University of Veterinary & Animal Sciences, Bikaner did not get up to the mark of the total score which further falls under the category “Needs Improvement” and secured the position seventh and eighth.

8. Major findings of the Study

- a) Bihar Animal Sciences University, Patna and Kerala Veterinary and Animal Sciences University, Pookode, Wayanand, Kerala University Library Websites/Webpages 8 (53.33%) have provided the highest number of information namely Library Opening Hours/Working Hours/ Holidays, Library Rules and Regulations, Library Membership Details, Copyright and Contact Us.
- b) Bihar Animal Sciences University, Patna, Karnataka Veterinary, Animal and Fisheries Sciences University, Bidar and Maharashtra Animal & Fisheries. Sciences University, Nagpur 6 (75%) have revealed the highest number of information on the Websites/Webpage such as Printed Books, CD/DVDs/CD ROM, Theses & Dissertations and Back/Bound Volume of Journals.
- c) Karnataka Veterinary, Animal and Fisheries Sciences University, Bidar University Library Websites/Webpages have mentioned the highest number of library services i.e; OPAC Facilities, Resource Sharing (CeRA), Reference/Information Service, Internet Based Services, Reprographic Service, (SC/ST) Book Bank Facility, Referral Service and CCTV Camera etc. i.e.; 19 (63.33%).
- d) Maharashtra Animal & Fisheries. Sciences University, Nagpur, and Rajasthan University of Veterinary & Animal Sciences, Bikaner has the highest number of e-Resource information facilities provided on their respective library website.
- e) Bihar Animal Sciences University, Patna and Lala Lajpat Rai University of Veterinary & Animal Sciences, Hisar University Websites/Webpages 4 (80% has mentioned the highest number of information viz. Facebook, YouTube, and Twitter, etc.

9. Conclusions

Due to rapid advancement of ICT has brought and changed to thinking of users as well as libraries to integrate for promoting the best library services. Now, today’s users want information such as library collection, services facilities available in the library at their fingertips instead of physically visiting the library. Librarians could fulfill the meet requirement of their information with the help of the website. The finding results showed that none of the Animal Sciences University Websites/Webpages comes under the “Outstanding” score criteria which reflects the grade point 53-65”. It was revealed that Bihar Animal Sciences University, Patna 36 (55.38%) scores the highest number followed by Karnataka Veterinary, Animal and Fisheries Sciences University, Bidar 35 (53.84%) among the Animal Sciences University Websites/Webpages are taken for the study. Kerala Veterinary and Animal Sciences University, Pookode, Wayanand, Kerala obtained the third rank with 25

(38.46%) scores. Further, it is found that Lala Lajpat Rai University of Veterinary & Animal Sciences, Hisar and Rajasthan University of Veterinary & Animal Sciences, Bikaner did not get up to the mark of the total score which further falls under the category “Needs Improvement” and secured the position seven and eight.

10. Suggestions

- a) Library Science Professional must ensure that a direct homepage link/submenu for the library is provided on the home page of the particular parent institutions.
- b) Library Science Professional must convince the higher authorities about the importance of library website and actively participate in the development of it rather than administration information.
- c) Library Science Department must organise training and workshop/ continuing education programmes/seminar to train the LIS Professionals on Library Website designing and several evaluation techniques;
- d) Library Science Department must assess to analyse & evaluate the performance of the websites and changes may be made accordingly.

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