

Consortia of Electronic Journals among Veterinary College Libraries in India: A Model

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Abstract

The present approach towards partnership, networking, consortia and resource sharing adopted by Indian libraries need radical changes to evolve responsive partnerships in order to achieve best performance in service. The current practices of journal acquisition in most of the veterinary college libraries in India are print based; in which each library is an island with regard to access of information. Moreover, there is wide disparity in the availability and use of information among different universities and colleges. But, consortia based acquisition and electronic desktop delivery of information can eliminate this gulf and increase the access and use considerably. This paper depicts the benefits of library consortia, analyses the present trend in the formation of consortia in India and suggests a new model of library consortia in which all veterinary college libraries could participate. The formation of such an unique consortia under the direction and full support by the ICAR, New Delhi is stressed. This paper proposes to form consortia of veterinary college libraries in India. Also discusses major consortia initiatives of India, elements of resource consortia and proposed model of consortia. To develop these libraries and to put in to more use at maximum extent there is a need of resources consortia of e-journals for the academic benefit.

Keywords: Consortia Models, E-Journals, Indian Initiatives and Networking, Pricing

1. INTRODUCTION

Veterinary education in Indian subcontinent is as old as human civilization and was much advanced at that time [1]. *Salihotra* from the vedic period was considered as the “*Father of Veterinary Science*”, an expertise in treating diseases of horse, elephant and cow. Veterinary Science was well developed in India as early as Vedic period [2]. Atharava Veda (1500-500 B.C.) has reference to horse management and treatment, elephant management and health care etc. Emperor Ashoka the grandson of Chandra Gupta Maurya who turned to Buddhism, had given Veterinary Science in India a new turn [3]. It is described that world's first veterinary hospital on record, existed in Ashoka's regime.

In order to train personnel in modern veterinary and animal husbandry practices, the first course on veterinary science was organized in 1821 [4]. The first civil veterinary school, the Punjab veterinary school was started in 1882 at Lahore, which subsequently was elevated to college in 1902 with amalgamation of veterinary school of Lahore and Ajmer. In due course of time other veterinary colleges i.e., at Bombay (1886), Calcutta (1893), Patna (1930), Hyderabad (1946), and Mathura (1947) came up. At present, there are seven veterinary universities, 43 veterinary colleges. Out of these, 18 colleges are constituent of seven state veterinary universities and others are part of State Agricultural Universities (SAU's). One is affiliated to

general university (Pondicherry). The establishment of the Indian Council of Agricultural Education under the ICAR was one of the major steps undertaken by the Government of India that helped the development of Agricultural education including Aimal science education in post-independence period [5]. The role of veterinary colleges in India is to enhance the livestock production, health improvements, milk production and strengthening the nation's wealth. Accordingly, Veterinary colleges have been contributing their share in upgrading the quality of veterinary education in the country through quality improvement of academic studies, and faculty improvement programmes. All the existing veterinary and animal science educational institutions come under the purview of Indian Council of Agricultural Research (ICAR), New Delhi.

In the veterinary information world, there are a lot of opportunities to seize new possibilities presented by ICTs to provide relevant information for veterinary practitioners in the most convenient way. In order to really understand the realms of the existing current status and prospects of Veterinary College Libraries in India, the study has been undertaken.

2. NEED FOR THE STUDY

Libraries of Veterinary Colleges have been providing academic support to its members by ensuring quality based library and information service and

assisting in the academic, research and extension activities of the institutions. However, numerous problems are faced by these libraries in the Indian context, viz., financial crunch, lack of adequate infrastructure, technological gadgets, manpower, technical competencies, escalating cost of the literature, ever changing needs of the users, devaluation of Indian currency in the international market etc. Moreover, electronic resources relevant to the profession are developing at an unprecedented pace.

The existing literature shows that studies on Veterinary College libraries in Indian context are not carried out exclusively in depth but only very few articles have been published especially on the user behaviour towards use of information sources in Veterinary College Libraries. Further, hardly any effort has been surveyed on the current status of Veterinary College Libraries in India. Continuing veterinary education is gaining momentum in the developing countries including the Indian subcontinent. To keep pace with the information explosion, veterinary professionals need to be informed of the latest development in the field of veterinary science so that they can effectively deliver the goods. To achieve this, library system being integral part of every veterinary college, cannot be overlooked. In this context, the present study occupies much significance in India.

3. OBJECTIVES OF THE STUDY

The consortia being an association of like-minded libraries and in the present context to provide access to e-journals and databases. It can have its own structure of governance and can act as a corporate body on behalf all members with set goals and benefits mentioned below.

- a. Increase the access base - More e-journals
- b. Rational utilization of funds - A little more pays a lot
- c. Ensure the continuous subscription
- d. Qualitative resource sharing - Effective document delivery service
- e. Avoid price plus models - Pay for up-front products not for R&D
- f. Enhanced image of the library - Visibility for smaller libraries
- g. Improve existing library services - Boosting professional image
- h. Harness developments in IT - Facilitate building digital libraries
- i. Cost sharing for technical and training support
- j. Increase user base - Access from desktops of users

A library consortia formation can be at local, state wide, national and inter institutional level for making available the veterinary resources and services available both within the premises of members and outside for the benefit of users.

4. RESEARCH DESIGN AND METHODS

4.1 Study Population

The population of the study consists of Veterinary College Libraries in India. There are 43 veterinary colleges in the country. Out of 43 veterinary colleges, 39 veterinary colleges located in different states of India responded with a response rate of 90.6%. These have been covered in the study, and research data pertaining to the collection development, annual budget, manpower, and technical processing, technological implications on libraries and facilities for resources access to the users have been collected and presented in the study.

4.2 Tool for Data Collection

Survey method has been employed to elicit information from the Veterinary College Libraries in India which has been imparting veterinary and animal science education.

The questionnaire and interview schedule has been pre-tested by conducting a pilot study at Madras Veterinary College, Chennai and based on their feedback and valuable input, the research tool i.e. questionnaire and interview schedule have been finalized.

An attempt has been made in this article to analyze and interpret the research data collected from the Veterinary College Libraries in India in the light of the objectives of the study. For the convenience of the research study, data collected has been analyzed and highlighted the status of consortia with respect to year of establishment of veterinary college libraries in India.

5. DATA ANALYSIS AND INTERPRETATION

The first veterinary college of the country was established in Bombay (Maharashtra) during 1886, which was also the starting point of the first veterinary college library in India. At present, there are 43 veterinary colleges and equal number of libraries established in the country. It is also observed that the Government of India has given more emphasis for establishment of Veterinary Colleges especially during 1950s and 1980s.

Table 1 Establishment of Veterinary Colleges in India

Sl. No.	Block Period	No. of Veterinary Colleges	Percentage
1	Before 1940	04	10.26
2	1941-1950	05	12.82
3	1951-1960	09	23.08
4	1961-1970	03	7.69
5	1971-1980	01	2.56
6	1981-1990	09	23.08
7	1991-2000	06	15.39
8	After 2001	02	5.12
	Total	39	100.00

Data in Table 1 depicts that there has been gradual growth of veterinary colleges in India over a period of time. As per the decade wise break-up, the number of veterinary Colleges established during 1951-60 and 1981-90 is found to be more, accounting to 23.08% (9 Colleges). On the other hand, only one veterinary college has been established during 1970s.

The 39 veterinary colleges, under study are located in different states of India. They have been imparting veterinary and animal science education. The libraries attached to their colleges cater to the information needs of the undergraduates, postgraduates, scientists and faculty members in the field of veterinary and animal husbandry. The state-wise distribution of veterinary college libraries is presented in Table 2.

From the Table 2, it is evident that maximum numbers of veterinary colleges are established in Maharashtra with six (15.4%) colleges, followed by Karnataka state with four (10.3%) colleges. Andhra Pradesh, state stands 3rd with three (7.68%) colleges. While, Assam, Gujarat, Madhya Pradesh, Uttar Pradesh, Jammu & Kashmir, Kerala and Tamil Nadu rank fourth with each

Table 2 State-wise Distribution of Veterinary Colleges in India

Sl. No.	State	Number of Colleges	Percentage
1	Andhra Pradesh	3	7.68
2	Assam	2	5.13
3	Bihar	1	2.56
4	Chattisgarh	1	2.56
5	Gujarat	2	5.12
6	Haryana	1	2.56
7	Himachal Pradesh	1	2.56
8	Jammu & Kashmir	2	5.13
9	Jharkhand	1	2.56
10	Karnataka	4	10.3
11	Kerala	2	5.13
12	Madhya Pradesh	2	5.13
13	Maharashtra	6	15.4
14	Manipur	1	2.56
15	Orissa	1	2.56
16	Pondicherry	1	2.56
17	Punjab	1	2.56
18	Rajasthan	1	2.56
19	Tamil Nadu	2	5.13
20	Uttar Pradesh	2	5.13
21	Uttaranchal	1	2.56
22	West Bengal	1	2.56
	Total	39	100

state having two (5.12 %) veterinary colleges and the remaining 12 states are having one (2.56%) each. Thus, veterinary colleges are scattered around the country.

Veterinary sciences has occupied significant role emerging as an independent discipline catering to the academic and research needs of the societies in the field of veterinary and animal sciences. Except Maharashtra state, the availability of veterinary colleges in other states is found to be very less. Therefore, keeping in view of the significance of the discipline and its requirements in different states of the country, there is a need for establishment of more veterinary colleges in each state of the country.

Table 3 Access to Library Networks and Consortia among Veterinary College Libraries

Member of Library Consortia	No. of Libraries	Percentage
INDEST	1	2.56
ARIS	9	23.08
CeRA (Consortium for e-Resources in Agriculture)	29	74.36
INFLIBNET	3	7.7
DELNET	1	2.56
MALIBNET	1	2.56

It is observed from the Table 3 that majority of the veterinary college libraries (74.36 %) are subscribing to CeRA consortium accessing online journals and electronic databases available in the field of veterinary and animal sciences, while 23.08% of veterinary collegelibraries form consortia members of ARIS network. It is also observed from the table that only one library is a part of INDEST consortium. About 7.7% of libraries are members of INFLIBNET network and one (2.56%) library is connected to DELNET and one to MALIBNET.

Although three fourth of veterinary college libraries are part of CeRA consortia, and ICT infrastructure is found to be very less for exploring CeRA consortia. Adequate ICT infrastructure with better bandwidth is essential for maximum exploitation of the facilities available.

In order to provide access to various electronic journals and online databases available under national consortia to the users, veterinary college libraries have been following different approaches for accessing e-resources under consortia, which is presented in Table 4.

One third of the (33.33%) libraries are accessing full text e-sources under consortia through Internet, while 30.76% of libraries are getting articles in the form of soft copies and 25.64% of veterinary college libraries are approaching other libraries to fulfill the requirements of users.

Table 4 Methods of Accessing E-resources Under Consortia

Sl. No.	Methods Used for Meeting the Requirement of the Users	No. of Libraries	Percentage
1	Getting articles in the form of soft copies	12	30.76
2	Consultation facility & approach to other libraries	10	25.64
3	Access to full text of publications through Internet resources	13	33.33
4	Exchange of publications	05	12.82

The primary objective of academic libraries is to organize and provide access to information. Under the present scenario of declining budget and higher subscription costs of journals, it is becoming very difficult to meet the demands of library/information users. The only solution to the problem is the pooling and sharing of print as well as electronic resources by way of consortia using latest Information and Communication Technology gadgets.

Table 5 Resource Consortia Activities

Sl. No.	Consortia Activities	No. of Libraries	Percentage
1	Co-operative Acquisition	9	23.07
2	Union Catalogue	9	23.07
3	Document Delivery of Service	6	15.38
4	Exchange of Experience & Expertise	5	12.82

It is observed from Table 5 that 23.07% of veterinary college libraries are carrying out co-operative acquisition activities and have union catalogue; where as 15.38% of libraries are following co-operative document delivery service among the participating libraries. Similarly, 12.82% of libraries exchange their experiences and expertise of the staff through the consortia activities among participating member libraries.

The idea behind resource consortia is to achieve co-operation among libraries in sharing manpower, resources and services assessing maximum benefit spending limited resources. The result from the Table 5 calls for improving and enhancing resource consortia activities among Veterinary College Libraries in India.

Budget estimate for establishing network facilities in a Veterinary College is shown in Table 6, which provides a clear picture about the technical infrastructure and allied components required for campus network in a veterinary colleges.

Table 6 Budget Estimate for Establishing Network Facilities in a Veterinary College

Equipments	Configuration (Minimum)	Students		Departments & Clinical Blocks (20) (1:5)	Quantity	Cost (In lakhs)
		UG (300) (1:10)	PG & PhD (100) (1:5)			
Computer Systems	Pentium IV	30	20	100	150	45.00
Main Servers		-	-	-	2	9.00
OFC Cable & E-CAT Cable	Single & Double core, CAT 6 or higher	-	-	-	2 bundles (based on plinth area)	4.00
Data Optic Switches	CISCO or D-Link (24 port & higher)	-	-	-		1.50
Firewall	Anti-virus (Corporate edition)	-	-	-		0.90
Internet Bandwidth	Leased Line (Min. 2 mbps)	-	-	-		3.70
Manpower for network setup	Technical Personnel	-	-	-		1.00
Total						65.10
Annual Maintenance Contract	Reserve 10% of the total cost of equipments	-	-	-		5.00

The strength of students on an average enrolled in the veterinary colleges in India are between 300 and 400 students comprising of Undergraduates, Postgraduates and Research scholars based on the results of Table 1.

Each veterinary college needs to set up campus network by initial investment of Rs 65.10 lakh, which may vary from one institute to other in the interest of effective information transfer and e-governance. Although the approximated cost (vide Table 1) looks bit high, it should be noted that it is a one time investment for long term benefit.

6. ESTABLISHING VETERINARY LIBRARY NETWORK (VETLIBNET)

The databases of all individual libraries will be merged. This has a major advantage from the user's point of view; it will be easy to veterinarians as well as faculty and students to access /get required information where the centralized databases are available. The unique library software is very much essential for creating the database and accessing the information from central node.

VETLIBNET (Veterinary Library Network) is a proposed network of libraries (Figure 1) under the purview of veterinary council of India covering 43 veterinary colleges in India, whose main mission is to

create a virtual network of library information sources and services to provide effective and efficient access to knowledge through perseverance, innovation and collaboration. In this direction, Indian Veterinary Research Institute (IVRI), being one of the premier research institutions with Deemed University status can take lead in establishing library network for all the veterinary institutes in the country. By establishing campus network in all the veterinary college libraries as proposed earlier, cost on establishing Veterinary Library Network at national level would be easier. By establishing national network, individual libraries will be benefited by the resources available in the veterinary libraries at national level.

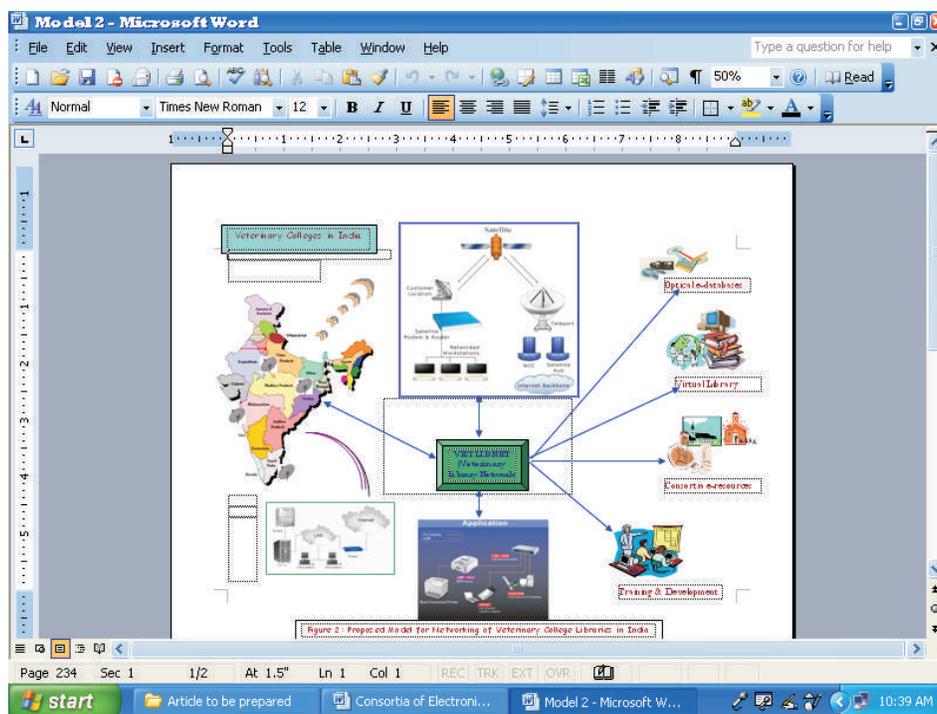


Fig. 1 Proposed veterinary library network (VETLIBNET)

The major activities and functions of this proposed VETLIBNET (Veterinary Library Network) are to strive to devise and execute the following:

- a. Database management should be of high priority insisting on library automation in each and every veterinary college library and thereby creating databases of books, serials holdings, current

serials, theses, experts and research projects. To achieve this, national policy be framed in selecting a uniform library software for consistency and compatibility so that union catalogue of participating libraries can be established acting as a national gateway to the veterinary information resources to the world at large.

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- b. Developing standards and uniform guidelines in techniques, methods, procedures, computer hardware and software, services and promote their adoption in actual practice by all libraries, in order to facilitate pooling, sharing and exchange of information towards optimal use of resources and facilities.
- c. National consortium exclusively in the field of veterinary sciences should be worked out to identify core journals and databases of relevance to support academic and research activities of veterinarians / scientists in the country.

As such, regular education and training should be imparted to the library professionals working across the country so that the emerging technologies could be properly implemented in their respective libraries. Further national meets/ conferences are organized every year as a platform for exchange of ideas/skills and keeping up-to-date in the development of the library and information science.

7. CONCLUSION

Veterinary libraries are at infant stage. Any planning can be easily adopted and implemented in the initial stage and therefore the veterinary libraries can be developed on modern lines to suit the changing needs of users and technological developments, so that investments will be less and the output efficiency will be optimum to meet the organizational goals.

The proposed model of service delivery needs to be implemented with sound ICT infrastructure with innovative library services to manage electronic resources and develop opportunities using technology for the desktop delivery of services and continuing to manage efficiently and effectively the print collections in the knowledge age.

With this changes, library staff can spend significantly less time on collection management tasks and technical tasks such as document delivery, cataloguing, acquisitions, inter-library loans etc., which are now undertaken by the Knowledge Resource Centre, and more time on proactive service delivery and the development of value added information products. More specifically, the veterinary libraries have to work on current awareness services, assistance to patrons with bibliographic searching, need based training, development of virtual libraries, develop and access consortia based e-resources, promotion and training in use of knowledge management tools, online collaboration tools and maintenance and updating.

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