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Knowledge Organization in Digital Environment in Libraries (KODEL): Introspect and Prospects



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ABSTRACT

The present paper discusses the trend of collection development at the Library & Documentation, Regional Research Laboratory, Jorhat during 1990-91 to 2003-04 and experience of knowledge management in a special library attached to a multidisciplinary Research and Development laboratory with special emphasis to e-journal subscription vs. growth library budget is recorded.

1. INTRODUCTION

As a consequence of the 'digital revolution' in recent years, much research has been conducted upon information organization, representation, with its resulting 'meta-data'; retrieval; and use. However, the extent to which organizing, representing, or retrieving information will benefit information users depends inherently on the collections of content upon which these activities are performed.

The selection process includes decision to include an item of content such as a journal into a library collection. It is a large process of collection development activities which is termed as "gateway phenomena"(Edgar, 2003) because they create and maintain collections of content items which are then organized and catalogued to support search and retrieval by library users.

Here comes the conflict. As a library professional it is ethical to maintain the existing collection and try to add more and more to the current subscription list of journals so as to satisfy the needs of the clientele. But the budgetary restrictions and inflation on the other hand compels librarians to delete journal titles subscribed every year. In fact, Colburn says that "a very strong argument could be made that the theory of librarianship does reside in an undiscovered theory of collection development [of which selection is a part], and that the tardiness of the profession to address collection development matters per se is directly responsible for its inability thus far to give us a satisfactory theory of librarianship" (Edgar, 2000). In the recent years the nature of problem of knowledge management is adding up new vistas due to the growth of information technology. "Newer media are being used for distribution of knowledge and usual procedure followed by libraries for storage, retrieval and processing information become obsolete" (Thakur & Thakur, 2003 and Raza & Eqbal, 2003). "Impact of Internet on knowledge management through electronic storage and retrieval, etc becomes an important issue for the libraries" (Mehta, 2002). Further, along with the proliferation of knowledge and growth of newer multidisciplinary disciplines there has been tremendous growth of publication of both macro and micro documents. "To maintain the role of key player in the new environment the library professionals must understand the IT systems well" (Vyas & Singh, 2004). "Management of digital data needs specific software and hardware and also understanding of their advantages and limitations which the libraries have to acquire" (Murnioli, 2004).

The present paper discusses the trend of collection development at the Library & Documentation, Regional Research Laboratory, Jorhat during 1990-91 to 2003-04 and experiences in the process of knowledge management.

E. LIBRARY BUDGET vs. COLLECTION DEVELOPMENT TREND

Library does not have its own earning sources. The source of money is only the budgetary allocations made by the parent institution every year. Further, since it is not an individual library, all expenditures for building, furniture and fittings, lighting and provisions, binding of books and journals, staff salary and other payments are met from the institution's main budget. So, the budget of the library is meant for purchase of books and journals only.

According to the recommendations of the Good Office Committee, Ministry of Commerce and Industry, Government of India, library should get 10-12% of the institution's annual budget and there should be a regular increase of budget by at least 10-15% over the last year's budget. The price of books and subscription rates of journals are ever increasing due to increasing cost of involved materials, motive of publishers to earn more profit and also fluctuation of foreign exchange rates. The last one is creating problems after 1975 till 1990 due to frequent devaluation of rupee against US Dollar, Pound Sterling and Deutsche Mark mainly to Indian libraries as major portion of books and journals procured by special libraries are from the western developed countries. During 1990 and till present the exchange rates of above currencies are maintaining stability due to change of governmental policies and adaptation of new financial rules. So, to meet the enhanced price of the reading materials the budget of the library should increase by 15-20% every year so that the library can maintain the collection of reading materials volume constantly. But in practice, it is not happening and many a times the library has to delete journals from its regular subscription list due to imposition of budget cut and also non-commensurate increase of budget with the increase of subscription price.

The budget allocated to the library during years 1990-91 to 2003-2004 and their comparison with that of the institution are shown in table 1 and figure 1 below.

Table 1 Budget of the RRL Library, Jorhat and their ratios of increase (Rs. in Lakh)

Years	Library's budget	RRL, Jorhat budget	Ratio of library budget to RRL, Jorhat budget	Proportion of increase of library's budget	Proportion of increase of RRL, Jorhat budget
1990-91	15.00	486.38	3.10%	—	—
1991-92	17.00	455.03	3.75%	13%	7%
1992-93	22.00	597.03	3.70%	17%	31%
1993-94	31.00	607.80	5.10%	41%	2%
1994-95	35.00	736.28	4.75%	13%	21%
1995-96	41.00	871.59	4.70%	17%	18%
1996-97	41.00	823.67	4.95%	0%	-5%
1997-98	50.00	883.96	5.67%	22%	7%
1998-99	50.00	804.02	5.53%	0%	2%
1999-00	51.00	1321.64	3.86%	2%	49%

2000-01	61.00	1276.09	4.18%	4%	-3%
2001-02	60.00	1337.96	4.49%	53.2%	4%
2002-03	60.00	1210.19	4.39%	0%	-17%
2003-04	60.00	1377.34	4.37%	0%	-12%

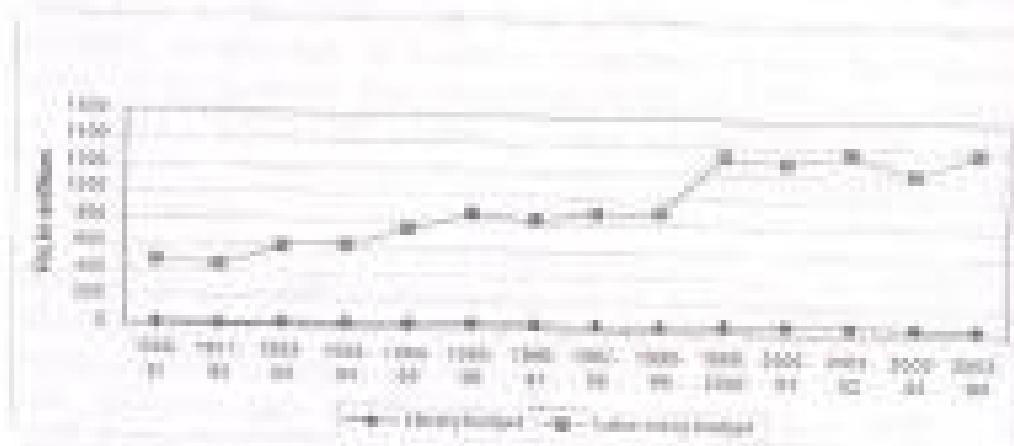


Fig. 1 Trend of budget of IITR Library vs. Laboratory

The allocated budget is used for purchase of books, standards, reference tools, purchase of back volumes of journals and subscription to journals. Being a special library, lion share of the allocated budget is spent for subscription to journals. Fig. 1 shows the trend of increase of library's budget and its correlated with expenditure in purchase of books and subscription to journals. A growing trend of expenditure for purchases of books can be seen during 1990-91 to 1996-97 but it is diminishing in the later part of the period due to sharp increase of subscription rate of journals, which consumed major portion of the total budget of the library.

Now, after 2001, the scenario is further changing. The library has become a member of CSIR E-journal consortium. The consortium is providing on-line e-journal access to 1800 S&T journals published by Elsevier Science. Table 2 presents the list of Elsevier Science journals in 2001 subscription list.

Table 2 List of Elsevier Science journals in 2001 subscription list

SL No	Title of journals	Value of Subscription in 2001 in US\$ / Rs.
1	Cement & Concrete	\$1,761.00 Rs. 82,960.00
2	J Asian Earth Science	\$ 342.00 Rs. 16,816.20
3	Phytochemistry	\$ 3,421.00 Rs. 1,61,159.00

4.	Tetrahedron	\$ 12,406.00	Rs. 5,86,804.00
5.	Tetrahedron Asymmetry		
6.	Tetrahedron Letters	\$ 9,036.00	Rs. 4,27,403.00
7.	Applied Clay Science	\$ 635.00	Rs. 29,914.00
8.	Separation & purification tech	\$ 887.00	Rs. 40,890.70

Eight journal titles shown in table 2 were in the current subscription list journals from Elsevier Science during the year 2001 and the Laboratory agreed to continue these print subscription till 2006, for which library paid an amount of Rs. 21 lakhs as subscription in the year 2001-02. Against this, it is true that library is benefited by getting 1800 important S&T journals on-line for the current year and five year back in full text in stead of only eight titles subscribed by the library. But as a terms and condition of the consortium the library must continue these eight journals in printed form till the year 2006 in spite of increase of subscription price every year as shown in Fig. 2.

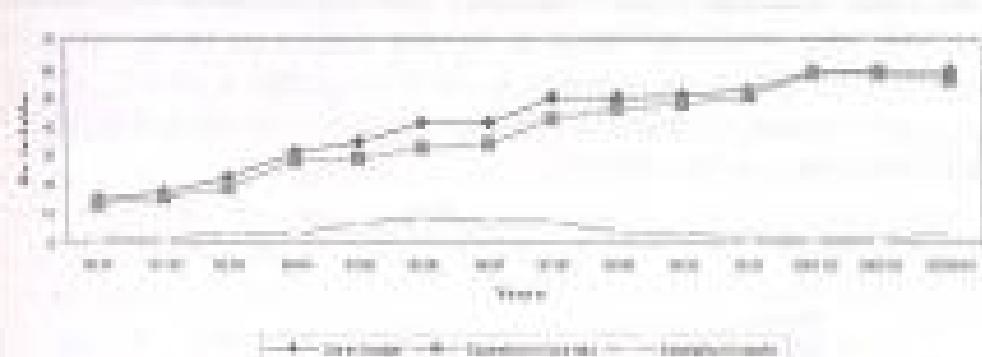


Fig.2 Library budget vs. expenditure in journals and books during 1990-91 to 2003-04

Recently, the library has also signed agreement with the consortium for maintaining following existing print journal subscription to some more important publishers as shown in table 3.

Table 3 Publisher wise lists of journals agreed to be continued subscription in printed form till 2006

ROYAL CHEM.UK	SOC.ORGANIC & BIOMOL CHEM	Rs 168563
	CHEM COMM	80991
	DELTON TRANS	128113
AMER. CHEM. SOC. USA	ANALYTICAL CHEM	64825
	CHEMICAL ENGG NEWS	13130

	CHEM REV	44769
	JEC RESEARCH	78552
	J AM CHEM SOC	147094
	J CHEM ENGG DATA	40210
	JRC PROC RES DEVELOP	35064
	J NAT PROD	50000
	J ORG CHEM	100460
	ENERGY & FUELS	48007
	JRC LETT	140105
SPRINGER	PLANT CELL REPORT	80064
	J IND MICROBIOL & BIOTECH	60690
MACMILLAN	NATURE	61838

In view of the above agreements, the library became handicapped for renewing subscription to journals for the year 2005. It is because, it is observed that even with the same budget of 2003-04 the library will be able to renew subscription to only those journals for which we agreed to continue (table 2 and 3) and quite a good number of important foreign journals will face deletion. Fig. 3 shows the position clearly.

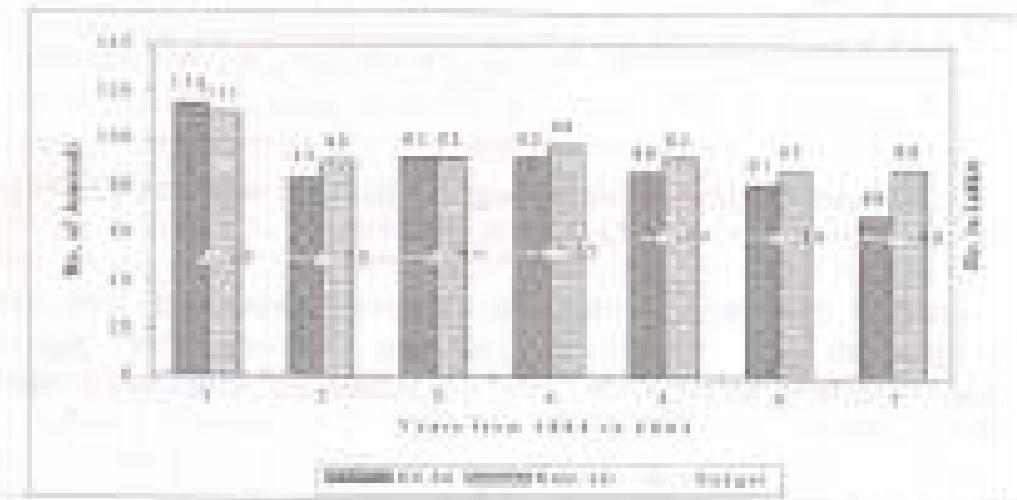


Fig. 3 Growth of budget vs. No. of National and International Journals.

Since the cost of subscription to Indian journal is very less so the library is trying maintaining it at per but the number of international journal is regularly diminishing in spite of increase of library's budget. Due to this, in a multidisciplinary Laboratory like RRL, Journal some R&D areas like paper technology, applied civil

engineering, geo-science, etc where there is dearth of electronic journal will face problem.

Being a member of the consortium it is also getting e-journal access published by M/S Cambridge University Press and M/S Bentham Inc although RRL Jorhat library do not subscribe to any printed journal from these two publishers. The consortium is negotiating with some other important S&T publishers and it can be expected that it will succeed in providing access to 4500 electronic journals to S&T community of CSIR soon. This will be surely a very good step as our reader will be getting access to many more journals.

3. CONCLUSION

Therefore, there is a need for a proper guideline for selecting materials for library, which provides direction as to the composition of a theory of collection development through a synthesis of literature and analysis of empirical data. It will support establishing such a theory capable of guiding librarians as they direct their organizations to meet people's information needs. The phenomena like geographical location of the library, availability of a dependable on-line network, systems for maintenance of hardware and software facility used quickly to keep the (Mean Time Between Failure) MTBF at lowest possible level, etc should get priority while deciding to switch-over to an on-line system completely. The E-journal consortium should ascertain supply of archival CD-ROM disc to the participating libraries for all the e-journals made available on-line now for future use. The need for a system for allowing libraries to select e-journal according to the needs of the users instead of compelling to accept what is offered by the individual publisher. Further, the process of growth of the library's budget should be continued, as usefulness of printed form cannot be questioned.

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