

## Consortia System and Document Delivery: E-information Services of Banasthali University

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### ABSTRACT

Electronic publishing and telecommunications have enabled the library consortia to expand both in number and functions over the last decade in India. Thus, several consortia have been developed in last few years. The present study summarises the consortia system and document delivery services at Banasthali University under JCCC@UGC-INFONET consortia. The author makes out that the consortia system including document delivery services is quite promising. The study also highlights some recommendations for better utilisation of consortia services.

**Keywords:** Consortia services, UGC-INFONET, document delivery, resource sharing, inter-library landing, e-resources

### 1. INTRODUCTION

In the last few years, so many changes have been seen at different levels in society with undeniable impact on the higher education system. The rapid growth in information technology has made possible paperless communication through digital/electronic resources (e-resources). In higher education system, research work has a significant role and similarly, scholarly journals have the foremost position of research process.

Academic libraries, traditionally, have been building collections of print journals to fulfill the academic and research need but it is not possible for any library to acquire all the required journals needed for its users owing to the continuously increasing subscription cost of scholarly journals.

In the last decade there has been rapid growth in the number of e-journals, whose subscription costs are also beyond the reach of individual libraries. However, to fulfill the academic and research needs of users, the concept and practice of resource sharing and consortia models have become very useful to libraries in subscribing to e-resources in shared manner.

The new consortia-based subscription journals in e-format is very popular among the users because of multi-access, hyperlinks, downloading and printing, high speed accessibility, quick search ability and many more, besides the cost factor. In view of this, University Grant Commission (UGC) forwarded a step ahead by initiating the UGC-INFONET e-journals consortium, which is a landmark in higher education in India.

### 2. E-JOURNALS CONSORTIA: UGC-INFONET

An e-journals consortia is a system of cooperation and coordination among the libraries which come together to share journals electronically. The UGC-INFONET Digital Library Consortium was formally launched in December 2003. UGC-INFONET is an ambitious programme of UGC to interlink all the universities in the country with state-of-art technology. The network is being switched to BSNL w.e.f. 1 April 2010 and renamed as UGC-INFONET 2.0. The UGC-INFONET mainly provides internet bandwidth. The scheme has now been extended to 294 universities. From 1 January 2011, the BSNL 2.0 connectivity has been withdrawn and the entire services have been switched over to NME-ICT/ NKN network. Now, 58 universities shifted under this connectivity project.

### 3. LITERATURE SURVEY

So many studies have been carried out regarding document supplies among libraries. The main purpose of Yang's study<sup>1</sup> was to describe document delivery services between Texas A&M University Libraries (TAMUL) and Texas A&M University at Qatar Library from 2003 to 2008. It was found that document delivery was a popular, accurate, prompt and well appreciated service for students, faculty, researchers and staff to obtain needed curriculum and research materials unavailable at A&M University Qatar due to space limitations. During the survey period, total 2890 requests processed in the form of interlibrary loan (51.7 %) and in-house document delivery (48.3 %) and there was a steady

increase of requests every year. The main aim of Musoke's study<sup>2</sup> was to highlight the development of document supply services in Uganda and the role in increasing access to and use of information resources. The findings of the study showed that improved document delivery services which have led to increased access and usage of information resources in Uganda. It was found that majority of document supply requests were from graduate students and academic staff in a range from 800-1500 annually. The print document supplied in the past three years indicated decreasing trends due to the increase in full-text articles' availability. E-mail, surface mail, and telephone services were used as the mode of request and mode of delivery. The study concluded that document delivery will remain a key strategy in ensuring access to information resources.

Moreno<sup>3</sup> described the role of the National Library of Australia in the Australian interlibrary loan environment, not just in the terms of providing access to National Library collections through the document supply service, but also in providing infrastructure to supported interlibrary loans across Australia. The findings revealed that providing access to library collections was complex and constantly changing. Client expectations were increasing and libraries needed to change traditional practices to meet user needs. The Library was the largest supplier of interlibrary lending as the past 50 years with demand increasing from 8836 interlibrary loan requests in 1960 to 144764 requests in 1994-95. The result of Desale's<sup>4</sup> showed that University of Pune received 161 requests from different universities during June-December 2008 and similarly 109 requests were made by the users of the University of Pune. The study suggested that document delivery service under JCCC should not be free of cost and to increase the speed of the service more documents should be supplied online.

The objective of the Jamali's<sup>5</sup> study was to evaluate the use and costs of AMIN, the interlibrary service in Iran. The statistics collected from six libraries showed that 514 items were loaned, of which 49% were journals articles and 43% were books. Surface mail was used maximum to deliver the requested documents. The average time spent dealing with each request was about 7.1 days. Appleyard's<sup>6</sup> study sought to provide an overview of recent developments within the British Library's document supply service and offer an insight into future plans. It was found that British Library Document Supply Centre had made tremendous gains in optimising the service in its current guise. Some new services like UK Research Reserve, Electronic Theses Online, etc., were adopted to run alongside the document supply service. Kelsall's<sup>7</sup> study described the interlibrary loan services of Library & Archives Canada. The

study observed that there were so many offers to access to a broad range of Canadian documents and also services that support resource sharing in Canada. Demand for the institution's traditional ILL services was declining and its focus was turning to digital access. The number of requests peaked for Library & Archives Canada's interlibrary loan services in the early 1990s at nearly 1.50 lacs requests per year, and in 2009 the requests were down to a little over one-third of the peak volume with almost 0.53 lacs. Singh<sup>8</sup> found that there was an upward trend in the usage of e-resources in Manipur University. Total 34302 downloaded showing the 41 % increase as compared to previous years.

Madhusudhan<sup>9</sup> showed that not only current e-journals were required, but research scholars and students needed to be provided the use of significant electronic back runs as well at Delhi University. There was an ever increasing demand for subscriptions of more e-journals. Manalan<sup>10</sup> found that e-journal consortia had already come up in India and some others were in the offing. Libraries had really understood that consortia based subscription was cost effective and also avoids redundant expenses and duplicate subscriptions. Kaur's<sup>11</sup> study describes the use of e-resources and services provided at IIT Delhi. It was found that the usage of e-journals was increasing due to awareness among the users about the library e-resources and services. Bhatt<sup>12</sup> showed the genesis, e-resources facilities and usage of e-resources available through UGC-INFONET consortium. It was observed that this consortium was the most important platform for providing access to a large array of e-resources to all academic universities and colleges in India.

Naushad Ali's<sup>13</sup> study determined the extent to which research scholars at University of Delhi were aware and made use of e-journals. The findings clearly revealed that more than 60 % of the users were using e-journals weekly for the research purpose. Keyword was the most popular research method for searching e-journals. However, it was found that slow downloading of Pdf files was the major problem that would discourage users while using e-journals.

The findings of Chirra's<sup>14</sup> study showed that UGC-INFONET Digital Library Consortium had a very positive impact in meeting the research needs of doctoral students at Goa University. The consortium had significantly enhanced the quality of research & publications, and had created multidisciplinary opportunities.

#### 4. JCCC@INFONET

The year 2008 witnessed another landmark initiative in the history of higher education in India, the J-Gate Custom Content for Consortium (JCCC) which is a virtual library of journal literature created

as customised e-journals access gateway and databases solution for the UGC-INFONET Digital Library Consortium. It acts as one-point access to journals that are available online and subscribed by the consortium as well as 22 university libraries that are designated as 'ILL Centers (Inter-library-landing-centers)'. The Information Library Network (INFLIBNET) has initiated inter-library loans and document delivery services from the comprehensive collection of subscribed journals under JCCC@UGC-INFONET. INFLIBNET has designated 22 university libraries to fulfill ILL requests from the users, affiliated to more than 250 universities covered under UGC. The ILL libraries together subscribe for many journals which are not available through consortia. Universities can request for articles from the journal holdings of those libraries wherever they find useful articles in JCCC search, that are not available in borrowing library. The following 22 universities were identified as Document Delivery/ILL Centres by the INFLIBNET at the time of starting JCCC:

1. Annamalai University, Annamalai Nagar (Tamil Nadu)
2. Assam University, Silchar (Assam)
3. Banaras Hindu University, Varanasi (Uttar Pradesh)
4. Banasthali University, Banasthali (Rajasthan)
5. Bangalore University, Bangalore (Karnataka)
6. Jadavpur University, Kolkata (West Bengal)
7. Jawaharlal Nehru University, New Delhi
8. Kurukshetra University, Kurukshetra (Haryana)
9. Maharaja Sayajirao University of Baroda, Baroda (Gujarat)
10. Nagpur University, Nagpur (Maharashtra)
11. North Eastern Hill University, Darjiling (West Bengal)
12. Pandit Ravishankar Shukla University, Raipur (Chhattisharh)
13. Pondicherry University, Pondicherry
14. Punjab University, Chandigarh
15. Punjabi University, Patiala (Punjab)
16. Tata Institute of Social Sciences, Mumbai (Maharashtra)
17. University of Calcutta, Kolkata (West Bengal)
18. University of Delhi, Delhi
19. University of Hyderabad, Hyderabad (Andhra Pradesh)
20. University of Madras, Chennai (Tamil Nadu)
21. University of Pune, Pune (Maharashtra)
22. University of Rajasthan, Jaipur (Rajasthan)

#### 4.1 JCCC@UGC-INFONET at Banasthali University

The Banasthali Vidyapith (University) established in 1935 and name 'Banasthali Vidyapith' was adopted

in 1943. The institution was granted the status of a deemed university in 1983 by the UGC. At present, it is the only residential campus in the country that provides education to girls from the pre-primary stage up to the Doctoral level. The Banasthali University was included in the second phase under UGC-INFONET Consortia by the INFLIBNET.

#### 4.2 ILL Centre at Banasthali University

The INFLIBNET has designated the ILL centres for providing articles to various universities in India. A list of core and unique journals subscribed by the ILL centres has been compiled by the INFLIBNET. All the university libraries in India can request the articles from those unique journals as identified by the INFLIBNET to particular ILL centre. All the ILL centres are supposed to deliver the articles either by e-mail or surface mail to the other borrowing universities. A portal of the identified journals with ILL centre, free online journals is available in form of JCCC. The Banasthali University has been identified as one of the ILL centre under JCCC. A number of 135 unique journals from its collection have been selected for ILL centre from which other universities in India can request for the articles. The JCCC was launched by INFLIBNET on 23 June 2008 and the ILL centre, started working at Banasthali University in August 2008.

**Table 1. E-resources accessible under UGC-INFONET consortia**

S. No.	Publishers/database
1.	American Chemical Society
2.	American Institute of Physics
3.	American Physical Society
4.	Annual Reviews
5.	Wiley-Blackwell Publishing
6.	Cambridge University Press
7.	Emerald
8.	Economic & Political Weekly
9.	Institute of Physics
10.	J-STOR
11.	JCCC
12.	Oxford University Press
13.	Project Muse
14.	Royal Society of Chemistry
15.	Springer Link
16.	Taylor & Francis
17.	Web of Science

##### 4.2.1 E-Resources Uses

The online links of publishers and portals provided by the INFLIBNET to the Banasthali University are shown in Table 1.

Over 7500 journals are presently accessible across the campus. The University has given access

from all the important publishers and societies.

Table 2 shows the data which has been taken through INFLIBNET's Electronic Access Management (E-RAMS) which belongs to only Banasthali University. The access of UGC-INFONET Consortia is fully based on IPs addresses in main university campus and its Jaipur campus. The statistics of in the form

**Table 2. Monthly average downloads**

S. No.	E-journals' publishers/providers	Average downloads/hits (per month)		
		2008	2009	2010
1.	American Chemical Society (ACS)	949	1885	765
2.	American Institute of Physics (AIP)	24	20	16
3.	Annual Reviews	54	28	47
4.	Blackwell Publishing	31	73	210
5.	Cambridge University Press (CUP)	47	49	30
6.	Emerald	92	58	55
7.	Institute of Physics (IOP)	54	50	78
8.	JCCC	518	1167	3837
9.	JSTOR	727	671	952
10.	Oxford University Press (OUP)	247	139	260
11.	Project Muse	16	13	90
12.	Royal Society of Chemistry (RSC)	53	62	50
13.	Springer Link	408	378	632
14.	Taylor & Francis	117	168	126

of number of hits and/or downloads showing quite promising picture of e-journals uses by the users of Banasthali University.

#### 4.2.2 Document delivery

During the period of three years i.e., from August 2008 to July 2011, the Document Delivery Centre of Banasthali University received the requests of 1704 articles from different university as shown in Table 3. The overall percentage of document delivery is 74.94 % but the ratio of increasing per year which is quite promising. The maximum articles were fulfilled by the journals related to pharmaceutical chemistry, mathematics, computer science, management, home science and, biotechnology.

Table 4 shows the articles' delivery to 90 universities' users in India by Banasthali University. Maximum requests were received from the southern and eastern region of India and few requests also received from northern and central region.

Table 5 highlights the articles' request status of Banasthali University's users. During August 2008 to July 2011, the users of Banasthali University requested of total 891 articles to different universities'

**Table 4. Status of articles delivered during August 2008 to July 2011**

S. No.	University name	Articles
1.	Acharya Nagarjuna University	13
2.	Alagappa University	23
3.	Anna University	18
4.	Annamalai University	28
5.	Bangalore University	14
6.	Bharathiar University	58
7.	Bharati Vidyapeeth	13
8.	Bharatidasan University	17
9.	Cochin University of Science & Technology	22
10.	Devi Ahilya Vishwavidyalaya	21
11.	Dibrugarh University	10
12.	Goa University	36
13.	Gulbarga University	24
14.	Jiwaji University	13
15.	Kakatiya University	18
16.	Kannur University	22
17.	Kuvempu University	44
18.	Madurai Kamraj Univeristy	47
19.	Manipur University	13
20.	North Eastern Hill University	14
21.	Osmania University	17
22.	Pondicherry University	87
23.	Punjabi University	35
24.	Sardar Patel University	13
25.	Sri Sathya Sai University	16
26.	Sri Venkateswara University	16
27.	Swami Ramanand Teerth Marathwada Univ.	22
28.	University of Calicut	84
29.	University of Delhi	17
30.	University of Kerala	42
31.	University of Mysore	60
32.	University of North Bengal	31
33.	Veer Narmad South Gujarat University	152
34.	Vikram University	19
35.	Other Universities (55 universities)	198
<b>Total</b>		<b>1277</b>

**Table 3. Articles delivered by Banasthali University to different universities' users**

Period	Request of articles				
	Received	Fulfilled	Unfulfilled	Pending	Fulfillment (%)
August 08-July 09	692	460	232	0	66.47
August 09-July 10	525	408	117	0	77.71
August 10-July 11	487	409	73	5	83.98
<b>Total</b>	<b>1704</b>	<b>1277</b>	<b>422</b>	<b>5</b>	<b>74.94</b>

**Table5. Articles delivered to Banasthali University by different universities**

Period	Request of articles				
	Received	Fulfilled	Unfulfilled	Pending	Fulfillment (%)
August 08-July 09	172	55	36	81	31.98
August 09-July 10	451	294	67	90	65.19
August 10-July 11	268	162	53	53	60.45
<b>Total</b>	<b>891</b>	<b>511</b>	<b>156</b>	<b>224</b>	<b>57.35</b>

document delivery centres and out of these 511 articles delivered which shows the 57.35 % of overall document delivery scenario of different document delivery centres.

## 5. CONCLUSIONS

The JCCC@UGC-INFONET has made possible to access a vast range of research knowledge available with the different universities to the academics, researchers and students. It has given a new dimension to the university higher education by providing a wide range of e-resources through resource sharing. The study shows that the usages of online resources are increasing day by day and the findings of the study show that the users of Banasthali University are using UGC-INFONET Consortia services in good manner as the total downloads increased as compared to last year and it is expected to be improved in forthcoming years. The researchers now have reasons to perform quality research output as most of the peer reviewed journals can be accessible through JCCC.

Being a document delivery or ILL Centre, the performance of Banasthali University is excellent. The turnaround is normally within three working days from the time of receipt of request. Documents are delivered as a link in, or as an attachment to, an e-mail. Copies are delivered through surface mail when article not available online. It can be said that nearly 70 % of requests are fulfilled within 48 hours. However, on the matter of requests fulfilled by other universities, the users of Banasthali University are not too much satisfied. So many requests are pending and this discourages the users' not to make request for articles.

## 6. RECOMMENDATIONS

The consortia service is started in phase manner and the distribution of e-resources is also based on phase system but it is suggested that all the e-resources should be available to each member university:

- Being an IP-based service, sometime the IPs of one university clash with other university and this results in non accessibility of some journals.
- Delivery of articles through surface mail is sent to the respective university librarian instead of

the user directly. It may be reason of delay or non-delivery of document to users. It is suggested to make a provision to deliver the articles to users' residential address.

- There should be some incentive scheme for document delivery centres to enhance the speed of services.

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