Collection development in agricultural university libraries in Karnataka: A study

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Abstract

The present study covers on six agricultural universities in Karnataka and focus on professionals, semi-professionals and administrative staff of sample collection. Collection Development contains print media, non print media and budget granted State + ICAR grants and also university-wise expenditure on Books, Journals (Printed) & e-Resources (CeRA) in agricultural university libraries in Karnataka during the year 2011-2016.

Keyword: Collection Development, Agricultural Universities, Library Budget.

Collection development definitions

Many authors have defined the term ‘Collection Development’ in their own ways.

According to Vignau (2005), collection development is “a process which assumes that the information needs of the users are satisfied in economic fashion and inside of a reasonable period of time using resources as much internal as external to the organization”.

According to Encyclopedia of Library and Information Science collection development (CD) “is the sum total of library materials- books, manuscripts, serials, government documents, pamphlets, catalogues, reports, recordings, microfilm reels, micro cards and microfiche, punched cards, computer tapes etc that make up the holdings of a particular library”.

Collection development is a set of interrelated activities involved in building and maintaining a collection of library resources to serve the needs and wants of its clients (Kennedy, 2006).

According to Mosher (2011) "Collection Development is a compelling and convenient determination of library materials, shaping a deliberately built branch of knowledge, or be set at the appropriate time course by bibliographic specialists do the examination important to guarantee the synapses joining many choice delicate materials, the capability to make the parts fit entirety”.

Collection development in university libraries

Collection development can be described as the ways of building up and improving upon a library's information resources (Horava 2005; Lamb 2004) stated that the major benefit of good library collection is that it helps the libraries to review the strength and the weaknesses of their collection. Showing the importance of collection development in libraries, Ranganathan's Fifth Law of Library Science stated that ‘Library is a growing organism’ (Khurshid 2000). This indicates that the library is expected to build its collection to meet the information needs of its various users. Horava (2005) stressed the importance of collection development as an important aspect of library service that promotes libraries. Nnadozie (2006) defined collection development as a planned, continuous and cost effective acquisition of quality and relevant materials to meet the needs of the users and objectives of the university libraries. Collection development is the vehicle through which library the users can measure activities.

University library plays a vital role in education and research programme of a university. Libraries are considered to be the heart of educational institutions. They play a very important role in teaching, learning and research activities environment. The main objective of any library is to support the teaching, learning of the parent institution. The last two decades have dealt with exciting changes and growing importance of information systems and electronic resources. Librarians have made every effort and revised criteria for the selection of materials in new formats while also maintaining traditional collections. Collection development is an important aspect for any library. ICT and electronic information is increasing, along with the printed books on the shelves.

Functionally, collection development involves the efforts like plans, goal to be set, making the decisions, allocation of financial sources and acquisition of materials. Therefore, collection development has been regarded as the most challenging and the most vital activities carried out by academic libraries.

They are three important functions of a library, namely collection, storage and dissemination of information. The collection reflects on the use of the library and effectiveness of other two functions. Libraries today face a challenging task of meeting unlimited information demands of their users with limited financial resources.

E-resources is the wave of future, it will be an ongoing challenge to libraries for years to come. By engaging in careful planning including preparation of e-collection development policy, employing sound selection criteria and monitoring use of resources, libraries will be able to meet the challenge (Vaishnav 2010).

Collection development in the present dynamic environment is a challenge for every university library as various issues like interdisciplinary nature of research, information explosion, production and availability of
information sources, multimedia, automation of library system, physical deterioration of documentary resources, changing concept of ownership to access, library networks, internet services and financial constraints affects their activities and services (Maheswarappa and Tadasad 1997).

Components of collection development

Many authors have differently described the components of collection development. Some authors have explained them as functions of collection development; some elaborated them as elements of collection development and other few have considered them as processes of collection development. Thus, collection development can be cluster of different components, which collectively takes the shape of whole holdings of any library. These components are:

1. Selection
2. Acquisition
3. Resource sharing
4. Collection evaluation
5. Weeding
6. Users’ analysis

Objectives

The main objectives of the study are to investigate the Collection Development in Agricultural University Libraries of Karnataka. The basic objectives are as under:

1. To know the existing book acquisition policy and procedures in university libraries
2. To know the existing Procedures of books and Journals selection and how the libraries are following them in their book acquisition polices and procedure in University libraries;
3. To know the problems involved in book and non-book acquisition programs of University libraries;
4. To find out the differences between their book acquisition policies and procedure of the six Agricultural Universities of Karnataka selected for the study.
5. To know whether the Library Collection is meeting the users’ needs (Students and Faculty members) to meet their academic activities.
6. To know whether the existing Collection Development policies meeting the University requirement.
7. To ascertain whether collection evaluation techniques are adopted to detect any shortfall and limitations in developing a need based and live collection.
8. To know the fund allocation methods for different departments in university libraries under study.
9. To study the collection development pattern book and of non-book material.
10. To suggest measures for improving the collection development

Research Methodology

Comprehensive review of literature covering the period 2006-2016 and Survey method was employed to study existing and previous Collection Development Activities in Agricultural University Libraries in Karnataka.

To provide an insight to design the objectives of the study with clear vision to proceed, a pre-structured questionnaire was framed to collect the feedback from the librarians. Personal interviews were also conducted wherever clarification and additional details were needed. Data collected was subjected for statistical analysis to prove objectives and hypotheses.

Hypotheses

Hypotheses are a type of generalized supposition formulated by the researcher by the process of intuitive reasoning. After the formulation of hypotheses, it is tested for validity. Below noted hypotheses have been formulated for the present study on collection development in agricultural university libraries in Karnataka.

1. Collection development of a library depends entirely upon library’s acquisition programme, including its acquisition policy, procedure and its selection methods.
2. All the six universities have a Collection Development policy revised regularly in view of the availability of e-Resources and online resources.
3. All the six university libraries are striving very hard to balance between print and electronic resources.
4. All the six universities are entering into consortia subscription because it is most economical way to acquire e-Resources.
5. Faculty and students of the six universities are familiar with the currency and easy access of e-Resources and prefer to use them for their research activities.

Library of any academic institution can be measured for its quality by considering the collection development, organization, management and use of the library collection/resources by the user community. Library can achieve this by strengthening its collection through proper planning, selection, appropriate budget provision, acquisition, organization, presentation, rendering service and continuous annual evaluation of these activities. There should be no gap between the user needs and relevant collection development.

The need for the study, objectives, methodology, and limitation of the study, overview of “Collection Development” in libraries and review of literature are dealt in the earlier chapters.

The present study gives an analysis and interpretation of data collected through questionnaire and interview survey conducted at the following six agricultural universities of Karnataka.
Table 1.1: List of agricultural universities in Karnataka

| S. No | Name of the University                                      | Year of Establishment | URL                     |
|-------|-------------------------------------------------------------|-----------------------|-------------------------|
| 1.    | University of Agricultural Sciences, Bangalore              | 1965                  | www.uasbangalore.edu.in |
| 2.    | University of Agricultural Sciences, Dharwad               | 1986                  | www.uasd.edu            |
| 3.    | Karnataka Veterinary Animal and Fisheries Sciences University, Bidar | 2005                  | www.kvafsu.edu.in       |
| 4.    | University of Agricultural Sciences, Raichur               | 2008                  | www.uasraichur.edu.in   |
| 5.    | University of Horticultural Sciences, Bagalkote            | 2008                  | www.uhsbagalkot.edu.in  |
| 6.    | University of Agricultural and Horticultural Sciences, Shivamogga | 2012                  | www.uahs.in             |

Table 1.2: Library staff in agricultural universities in Karnataka

| S. No | Name of the University | Professionals | Semi-Professionals | Administrative | Others | Total |
|-------|------------------------|---------------|-------------------|----------------|--------|-------|
| 1.    | UASB                   | 4             | 2                 | 7              | 9      | 23    |
| 2.    | UASD                   | 6             | 6                 | 3              | 8      | 19    |
| 3.    | KVAFSU                 | 1             | 3                 | -              | 2      | 6     |
| 4.    | UASR                   | 5             | 1                 | 2              | 4      | 12    |
| 5.    | UHSB                   | 4             | 1                 | 1              | 2      | 9     |
| 6.    | UAHS                   | 3             | 1                 | -              | 5      | 10    |

Table 1.3: Library users in agricultural universities in Karnataka

| S. No | Users                                      | UAS-B | UAS-D | KVAFSU-B | UAS-R | UHS-B | UAHS-S |
|-------|--------------------------------------------|-------|-------|----------|-------|-------|--------|
| 1.    | Faculties (Teachers & Scientists)          | 616   | 345   | 45       | 202   | 54    | 97     |
| 2.    | Research Scholars                          | 283   | 204   | 15       | 102   | 45    | 45     |
| 3.    | PG Students                                | 475   | 459   | 60       | 261   | 128   | 92     |
| 4.    | UG Students                                | 1159  | 1451  | 350      | 602   | 286   | 455    |
| 5.    | Non-Teaching Staff                         | 252   | 189   | 40       | 272   | 20    | 47     |
| 6.    | Others (Diploma Students)                  | -     | 31    | -        | 66    | -     | -      |
| **Total** |                                         | **2785** | **2679** | **510** | **1505** | **533** | **736** |

Table 1.4: Total Collection details in Agricultural Universities in Karnataka

| S. No | Collection                         | UASB | UASD | KVAFSU | UASR | UHSB | UAHS |
|-------|------------------------------------|------|------|--------|------|------|------|
| 1.    | Books                              | 134653 | 113144 | 12565 | 54707 | 8829 | 20533 |
| 2.    | Gift Books                         | 13215 | 6255 | -      | 4520 | 1205 | 1010 |
| 3.    | Reference Sources (Ency, Dict, Direct, Yearbooks, Almanacs) | -      | -    | 1862   | -    | 38   | 68   |
| 4.    | Indian Journals                    | 200   | 103  | 35     | 110  | 53   | 58   |

Table 1.2 shows the staff position at the six agricultural universities under study. Though UAS (B) has large member (23) of staff UAS (D) has better professional staff position with six professionals and six semi professionals. KVAFSU though established in 2005 has only one professional and three semi-professionals as compared to UAS (R) established in 2008 and UHSB established in 2008 and UAHS established in 2012 have 5, 4 and 3 professionals respectively.

Table 1.3 shows the library users’ community details of the six agricultural universities under study. UAS (B) has the maximum number followed by UAS (D). KVAFSU has the least number. This may be due to the fact that this university was established in 2005. In the university campus, it offers limited course of Bachelor degree, Post-Graduate and Doctoral degree programmes in the specialized subject field of Veterinary and Animal Husbandry, Dairy and Fisheries Sciences. The teaching activities are carried out in seven colleges under the jurisdiction of this University.

Considering the different categories, UAS (B) has the maximum faculty members followed by UAS-D and UAS-R. Likewise, UAS-D has the maximum number of UG Students with UAS-B occupying the second position with UAS-R and UAH-S in the third and fourth position, respectively.

The following table gives the total collection (Books, Journals, and Reports etc.) of all the libraries as on 2016.
Table 1.4 depicts the total library collection both print and non-print formats of the 6 agricultural universities under study. UASB leads in total print collection followed by UASD. UASR occupies the third position. However, in case of non-print media UASB is in first position followed by KVAFSU, UHSB and UAHS, respectively. It is very surprising UASD occupies the last position with only 52 non print media collection.

Table 1.5: Collection Development programme details during the year 2011-16 of Agricultural Universities in Karnataka

| S. No. | Collection                         | UASB | UASD | KVAFSU | UASR | UHSB | UAHS |
|--------|-----------------------------------|------|------|--------|------|------|------|
|        | Print Media                       |      |      |        |      |      |      |
| 1.     | Books                             | 4031 | 18129| 2150   | 15985| 8829 | 6935 |
| 2.     | Gift Books                        | 960  | 553  | -      | 800  | 1205 | 151  |
| 3.     | Reference Sources (Ency, Dict,    | 182  | 485  | 1862   | -    | 38   | 68   |
|        | Direct, Yearbooks, Almanacs)      |      |      |        |      |      |      |
| 4.     | Indian Journals                   | 200  | 103  | 33     | 110  | 53   | 86   |
| 5.     | International Journals            | 218  | 522  | 05     | 65   | 3    | 21   |
| 6.     | Journals (Bound vol.)             | 3961 | -    | 1094   | 8856 | 21   | 210  |
| 7.     | Reports                           | 1338 | 415  | 220    | 239  | 1000 | 57   |
| 8.     | Pamphlets                         | 1849 | 250  | 60     | -    | -    | -    |
| 9.     | Bibliographies                    | 2    | -    | -      | -    | -    | -    |
| 10.    | Standards                         | 78   | -    | 10     | 15   | 15   | 6    |
| 11.    | Theses/Dissertations              | 1316 | 1905 | 76     | 2108 | 181  | 195  |
| 12.    | Maps/Atlases                      | 805  | 281  | 140    | -    | -    | 174  |
| 13.    | Text Book Bank(General)           | 805  | 281  | 240    | -    | -    | -    |
| 14.    | SC/ST Book Bank                   | 597  | 1318 | 124    | 2432 | -    | 2807 |
| 15.    | ST Book Bank                      | 385  | -    | -      | -    | -    | -    |
|        | Total                             | 16727| 24242| 6014   | 30610| 11345| 10710|
|        | Non Print Media                   |      |      |        |      |      |      |
| 16.    | Audio/Video Cassettes             | 235  | -    | 23     | -    | 25   | -    |
| 17.    | CD- ROMs/DVD                      | 319  | 1    | 3      | -    | 215  | 91   |
| 18.    | Microfilms/Microfiches            | 167  | -    | -      | -    | -    | -    |
| 19.    | On line Databases                 | 2    | 2    | -      | 3    | -    | -    |
| 20.    | On line Journals                  | 512  | -    | 100    | 4    | 3    | -    |
| 21.    | Any other (e-books)               | 1089 | 49   | 1000   | 96   | 1100 | 452  |
|        | Total                             | 2324 | 52   | 1126   | 103  | 1343 | 543  |
|        | Grand Total                       | 19051| 24294| 7140   | 30713| 12688| 11253|
Table 1.5 depicts the different resources both print and non-print media added during the years 2011-16. As can be seen in the table UASR leads in total print collection by adding 30610 different print resources; followed by UASD (24242), UASB (16727), and UHSB (11345). UAHS (10710) and lastly KVAFSU (6614). However, in case of non-print media UASB (2324) is in first position followed by UHSB (1343), KVAFSU (1126), UAHS (543), UASR (103) and lastly UASD (52).

Collection development facilitates strategic plans like short medium and long term planning for development of collections to meet organization’s mission and goals and offers appropriate infrastructure for learning, teaching, research programmes in universities.

Periodicals are very essential in institutions of higher learning as they contain recent data on experiments and nascent ideas for further research. They play an important role in communication of scholarly information. However, the currency of content in printed journals is affected by time and space factor.

**Table 1.6: Periodicals subscribed by the Agricultural Universities in Karnataka**

| S. No. | University | Subscribed | Gift | Exchange |
|--------|------------|------------|------|----------|
| 1.     | UASB       | 182        | 82   | 55       |
| 2.     | UASD       | 380        | 44   | 31       |
| 3.     | KVAFSU     | 44         | -    | -        |
| 4.     | UASR       | 187        | 42   | -        |
| 5.     | UHSB       | 71         | 10   | -        |
| 6.     | UAHS       | 125        | -    | 5        |

Data as on December 2016 regarding periodicals subscribed by the six agricultural universities under the study presented in table 1.6 UASD has subscribed 380 journals while UASR taken the second place with 187 journals titles. On the other hand, UASB subscribed to only 182 titles. May be because UASB has well established CeRA consortium for e-journals. Only UASB (55nos.) and UASD (31 No’s), have periodicals exchange programme as they have their own journal publications which has enabled them to enter into exchange programme.

**Table 1.7: Newspapers subscribed by the agricultural universities in Karnataka**

| S. No. | University | English | Kannada | Hindi |
|--------|------------|---------|---------|-------|
|        |            | Subscribed | Subscribed | Subscribed |
| 1.     | UASB       | 5       | 7       | -     |
| 2.     | UASD       | 6       | 9       | -     |
| 3.     | KVAFSU     | 6       | 5       | 1     |
| 4.     | UASR       | 5       | 9       | 1     |
| 5.     | UHSB       | 4       | 11      | -     |
| 6.     | UAHS       | 3       | 6       | -     |

The figures in Table 1.7 reveal that the universities are catering to the general information needs of not only students and faculty even to the non-academic personnel. Newspapers provide day-to-day global current affairs. Much emphasis is given to Kannada being the official state language.

**Library Budget**

Good meaningful collection and efficient library service depends on sound financial resources. University Library does not exist in isolation but blended with the aim and objectives of the parent university. In case of Agricultural Universities, the sources of funds are state government grants, ICAR grants and special grants (if any) from ICAR–World Bank joint ventures.

Table 1.8 and 1.9 gives the break-up of grants received by the individual universities from the State government and ICAR respectively.

**Table 1.8: University-wise State Grants Sanctioned for Agricultural University Libraries in Karnataka (2011-2016)**

| S. No. | University | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 | Total |
|--------|------------|---------|---------|---------|---------|---------|-------|
| 1.     | UAS(B)     | 6695000 | 7000000 | 2500000 | 1000000 | 2815000 | 20010000 |
| 2.     | UAS(D)     | 9300961 | 9982664 | 7007227 | 7696890 | 6100000 | 40887742 |
| 3.     | KVAFSU     | 1500000 | 1200000 | 2000000 | 1500000 | 1000000 | 7200000 |
| 4.     | UAS(R)     | 3000000 | 4000000 | 6000000 | 6000000 | 4540900 | 23540900 |
| 5.     | UHSB       | 7840000 | 2000000 | 5000000 | 1000000 | 2000000 | 4484000 |
| 6.     | UAHS       | 0       | 60512   | 3262300 | 2658500 | 3000600 | 8981912 |

*Budget Allocation is only for collection development of Books, Periodicals and e-Resources*
Table 1.9: University-wise ICAR Grants Sanctioned for Agricultural University Libraries In Karnataka (2011-2016)

| S. No. | University | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 | Total |
|-------|-----------|---------|---------|---------|---------|---------|-------|
| 1     | UASB      | 5719000 | 750000  | 2279016 | 1550000 | 0       | 1029801 |
| 2     | UASD      | 1499771 | 8869000 | 5890136 | 1826499 | 0       | 18085406 |
| 3     | KVAFSU    | 6400000 | 6000000 | 5000000 | 6600000 | 11500000 | 139000000 |
| 4     | UASR      | 3000000 | 1000000 | 8500000 | 3500000 | 1078000 | 642800 |
| 5     | UHSB      | 0       | 3605000 | 3405321 | 2742276 | 2918639 | 9426736 |

*Budget Allocation is only for collection development of Books, Periodicals and e-Resources

It is observed that the State government has given preference to UASD followed by UASR. Not much preference has been given to KVAFSU. On the other hand, ICAR is liberal with KVAFSU to encourage Veterinary, Animal and Fisheries Sciences and being the only university catering to the needs of the whole Karnataka state in these disciplines. Among agricultural sciences, UASR has received higher grants as compared to others. For any university, good quality library resources help to attract and retain academic high flyers and contribute to the prestige of an institution.

Table 1.10: Total University-wise Budget (State Grant + ICAR Grant) in Agricultural Universities in Karnataka (2011-2016)

| S. No. | University | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 | Total |
|-------|-----------|---------|---------|---------|---------|---------|-------|
| 1     | UASB      | 2414400 | 775000  | 4779000 | 4255000 | 2815000 | 32013000 |
| 2     | UASD      | 10800732 | 1885164 | 12897393 | 9523389 | 6100000 | 58173178 |
| 3     | KVAFSU    | 7900000 | 7200000 | 7000000 | 8100000 | 11600000 | 146200000 |
| 4     | UASR      | 9000000 | 12000000 | 12898541 | 9881800 | 58980341 |
| 5     | UHSB      | 784000  | 1200000 | 2350000 | 4500000 | 3078000 | 11912000 |
| 6     | UAHS      | 0       | 421012  | 6667621 | 5400776 | 5919239 | 18408648 |

*Budget Allocation is only for collection development of Books, Periodicals and e-Resources

Table 1.11: University-wise Expenditure on Books in Agricultural University Libraries in Karnataka (2011-2016)

| S. No. | University | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 | Total |
|-------|-----------|---------|---------|---------|---------|---------|-------|
| 1     | UASB      | 2883981 | 2056336 | 1402204 | 677222 | 7359719 |
| 2     | UASD      | 2910700 | 10019000 | 5746100 | 2072500 | 1000000 | 20803300 |
| 3     | KVAFSU    | 5900000 | 6000000 | 6000000 | 6200000 | 67000000 | 308000000 |
| 4     | UASR      | 947026  | 1849056 | 6084493 | 4307064 | 994246 | 14181885 |
| 5     | UHSB      | 720000  | 969633  | 672650  | 215135 | 2563680 | 5141098 |
| 6     | UAHS      | 0       | 2000000 | 3000000 | 1224116 | 1905900 | 3450016 |

Table 1.12: Percentage of amount spent on Books during 2011-2016

| S. No. | University | Total Budget | Spent on Books | Percentage |
|-------|-----------|--------------|---------------|------------|
| 1     | UASB      | 32013000     | 7359719       | 22.98 %    |
| 2     | UASD      | 58173178     | 20803300      | 35.76 %    |
| 3     | KVAFSU    | 4425000      | 3080000       | 69.60 %    |
| 4     | UASR      | 58980341     | 14181885      | 24.04 %    |
| 5     | UHSB      | 11912000     | 5141098       | 43.15 %    |
| 6     | UAHS      | 18408596     | 3450016       | 18.74 %    |

Percentage-wise expenditure made on the purchase of books by the universities out of the total grant sanctioned by the state government and ICAR; it is clear from the above table. KVAFSU has spent highest 69.6% of grant towards purchase of books may be due to meet the organization’s mission and goals and to offer appropriate resources for learning, teaching and research programmes in their respective universities. UHSB has spent 43.15% followed by UASD 35.76 %, UASR (24.04%), UASB (22.98%) and UAHS (18.74%).

The amount of money spent by the higher education institutions to access academic journals is of high interest to the academic community, and academic libraries in particular are responsible for the vast majority of journal purchases.
increasing demand for e-resources the librarians are resistant to go ahead with procurement processes. The consortia efforts like CeRA have come to the aid of librarians to some extent. The indicators for the adequacy of e-resources are easy access to information, high compact storage, ease of multiplication, manipulation of content from one media to another, ease of transmission and storage.

However, the selection of e-resources in academic libraries is more complex as compared to the conventional print resources. The network compatibility, hardware/software strength of search engines, access points including remote access are the chief indicators for the adequacy of e-resources. Because of the soaring, cost of e-resources the librarians are resistant to go ahead with procurement processes. The consortia efforts like CeRA have come to the aid of librarians to some extent. The importance of electronic information resources in the academic libraries continues to grow. The librarians have to give preference to e-resources as the users’ demand is increasing constantly. This affects the procurement of print collections. With the increasing demand for e-resources from the users, communities and the escalating subscription prices and license charges for e-resources, it is a general opinion of all the six university librarians that separate budget be made for e-resource and print collection taking into consideration the users’ demand for information resources.

Table 1.13: University-wise Expenditure on Journals (Printed) in Agricultural University Libraries in Karnataka (2011-2016)

| S. No. | University | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 | Total |
|--------|------------|---------|---------|---------|---------|---------|-------|
| 1.     | UASB       | 2198163 | 1939160 | 2168768 | 1972389 | 1063350 | 9341830 |
| 2.     | UASD       | 5000000 | 5982700 | 5891300 | 6095900 | 5000000 | 27969900 |
| 3.     | KVAFSU     | 300000  | 300000  | 350000  | 300000  | 350000  | 1600000 |
| 4.     | UASR       | 150000  | 2000000 | 2200000 | 2500000 | 300000  | 7150000 |
| 5.     | UHSB       | 22800   | 72000   | 71000   | 371000  | 375000  | 911800  |
| 6.     | UAHS       | 0       | 0       | 0       | 500000  | 500000  | 1000000 |

Table 1.14: Percentage of amount spent on Journals during 2011-2016

| S. No. | University | Total Budget | Spent on Journals | Percentage |
|--------|------------|--------------|-------------------|------------|
| 1.     | UASB       | 32013000     | 9341830           | 29.18%     |
| 2.     | UASD       | 58173178     | 27969900          | 48.08%     |
| 3.     | KVAFSU     | 44250000     | 1600000           | 3.615%     |
| 4.     | UASR       | 58980341     | 7150000           | 12.12%     |
| 5.     | UHSB       | 11912000     | 911800            | 7.65%      |
| 6.     | UAHS       | 18408596     | 1000000           | 5.43%      |

The above table shows the percentage-wise expenditure made on the subscription of journals. UASD is spending nearly 50% of its total grant (48.08%) towards journal subscription followed by UASB with (29.18%), UASR (12.12%), UHSB (7.65%), UAHS (5.43%) and KVAFSU with only (3.61%).

Table 1.15: University-wise Expenditure on e-Resources in Agricultural University Libraries in Karnataka (2011-2016)

| S. No. | University | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 | Total |
|--------|------------|---------|---------|---------|---------|---------|-------|
| 1.     | UASB       | 4412606 | 3498017 | 158940  | 979758  | 1073978 | 10123299 |
| 2.     | UASD       | 2600000 | 2300000 | 960000  | 1000000 | 1000000 | 7860000 |
| 3.     | KVAFSU     | 200000  | 0       | 0       | 6700000 | 6900000 | 6900000 |
| 4.     | UASR       | 112000  | 315300  | 307000  | 384600  | 434100  | 1553000 |
| 5.     | UHSB       | 0       | 60000   | 160000  | 60000   | 1350000 | 1630000 |
| 6.     | UAHS       | 0       | 0       | 987000  | 0       | 786024  | 1773024 |

It is appreciable that all the six university libraries are making efforts to provide wide access to international information resources in addition to access through CeRA. The characteristic feature of e-resources is easy access to information, high compact storage, ease of multiplication, manipulation of content from one media to another, ease of transmission and storage. However, the selection of e-resources in academic libraries is more complex as compared to the conventional print resources. The consortia efforts like CeRA have come to the aid of librarians to some extent. The importance of electronic information resources in the academic libraries continues to grow. The librarians have to give preference to e-resources as the users’ demand is increasing constantly. This affects the procurement of print collections. With the increasing demand for e-resources from the users, communities and the escalating subscription prices and license charges for e-resources, it is a general opinion of all the six university librarians that separate budget be made for e-resource and print collection taking into consideration the users’ demand for information resources.

Table 1.16: Percentage of amount spent on e-Resources during 2011-2016

| S. No. | University | Total Budget | Spent on e-resources | Percentage |
|--------|------------|--------------|---------------------|------------|
| 1.     | UASB       | 32013000     | 10123299            | 31.62%     |
| 2.     | UASD       | 58173178     | 7860000             | 13.51%     |
| 3.     | KVAFSU     | 44250000     | 6900000             | 15.59%     |
| 4.     | UASR       | 58980341     | 1553000             | 2.63%      |
| 5.     | UHSB       | 11912000     | 1630000             | 13.68%     |
| 6.     | UAHS       | 18408596     | 1773024             | 9.63%      |

The above table shows the percentage of expenditure out of total budget on e-resources in six agricultural university libraries during 2011-2016. These include e-books as well as e-journals subscribed by the libraries in addition to e-journals accessible...
through CeRA. UASB is spending 31.62% of its budget towards e-resources to satisfy its user’s community, which is nearly 3000 members. Budget allocation in libraries varies depending on various factors. Adequacy of allocated funds to meet the expected needs of the users is an important factor in providing effective collections for use. The opinions of librarians on the adequacy of current budget for developing collection are analyzed in the following table.

Table 1.17: Sample population and response details of the Faculty

| University | Total Population of Faculty | Sample Size | Sample selected And Questionnaire distributed | Response Received (No) | Response Rate |
|------------|-----------------------------|-------------|-----------------------------------------------|-------------------------|---------------|
| UASB       | 616                         | 20%         | 123                                           | 116                     | 94.30%        |
| UASD       | 345                         | 20%         | 69                                            | 63                      | 91.30%        |
| KVAFSU     | 45                          | 20%         | 10                                            | 10                      | 100.00%       |
| UASR       | 202                         | 20%         | 40                                            | 32                      | 80.00%        |
| UHSB       | 54                          | 20%         | 12                                            | 12                      | 100.00%       |
| UAHS       | 97                          | 20%         | 19                                            | 15                      | 78.94%        |
| Total      | 1359                        |             | 273                                           | 248                     | 90.84%        |

Table 1.17 shows that there are totally 1359 faculty members in six Agricultural Universities of Karnataka who are members of their respective university libraries. For the present study 20% of the population of (273) from each university were selected randomly to whom questionnaires were distributed; and 248 responded (90.84%)

Table 1.18: Sample population and response details of Research Scholars

| University | Total Population of Research scholars | Sample Size | Sample selected And Questionnaire distributed | Response Received (No) | Response Rate |
|------------|----------------------------------------|-------------|-----------------------------------------------|-------------------------|---------------|
| UASB       | 283                                    | 20%         | 56                                            | 51                      | 91.07%        |
| UASD       | 204                                    | 20%         | 40                                            | 36                      | 90.00%        |
| KVAFSU     | 15                                     | 20%         | 10                                            | 8                       | 80.00%        |
| UASR       | 102                                    | 20%         | 20                                            | 16                      | 80.00%        |
| UHSB       | 45                                     | 20%         | 10                                            | 10                      | 100.00%       |
| UAHS       | 45                                     | 20%         | 9                                             | 9                       | 100.00%       |
| Total      | 694                                    |             | 145                                           | 130                     | 89.65%        |

Table 1.18 shows that there are totally 694 research scholars in six Agricultural Universities of Karnataka who are members of their respective university libraries. Out of this 20% (145) from each university was selected randomly for the present study; and 130 (89.65%) research scholars have responded.

Table 1.19: Sample population and response details of Post Graduate students

| University | Total Population of Post Graduate Students | Sample Size | Sample selected And Questionnaire distributed | Response Received (No) | Response Rate |
|------------|--------------------------------------------|-------------|-----------------------------------------------|-------------------------|---------------|
| UASB       | 475                                        | 20%         | 95                                            | 81                      | 85.26%        |
| UASD       | 459                                        | 20%         | 92                                            | 78                      | 84.78%        |
| KVAFSU     | 60                                         | 20%         | 12                                            | 12                      | 100.00%       |
| UASR       | 261                                        | 20%         | 52                                            | 46                      | 80.46%        |
| UHSB       | 128                                        | 20%         | 26                                            | 25                      | 96.15%        |
| UAHS       | 92                                         | 20%         | 20                                            | 19                      | 95.00%        |
| Total      | 1475                                       |             | 297                                           | 261                     | 87.87%        |

Table 1.19 shows that there are totally 1475 Post Graduate students in six Agricultural Universities of Karnataka who are members of their respective university libraries. Out of this 20% (297) from each university was selected randomly for the present study; and 261 (87.87%) have responded.

Collection development aims at developing academic library to acquire most important intellectual resources.
Library extends importance to all its readers and encourages them to develop a lifelong habit of good reading. In the present study, in addition to the structured questionnaire, personal interviews were also conducted, wherever needed, with the respondents, seeking clarification regarding certain trends observed while analyzing the data.

An overview of the present study, observations of the Researcher and suggestions for improving the collection development process are presented in this chapter. Efforts are made to present a draft model of Collection Development Policy Document.

**Suggestions of the researcher**

A review of the collection development management undertaken by the present researcher at the six agricultural universities in Karnataka and the views of the users on the strength and utility of the collection and accessibility have helped to identify the areas where improvement is required. The below noted areas may be considered for this purpose.

1. University Librarians have to redefine their collection development policy and give more emphasis on e-resources. Ratio between print and electronic documents needs to be defined to strike a balance, as a large majority of university libraries are hybrid libraries.
2. A separate electronic resource management section to be created in the library. The e-Resources procurement is a complex process with its puzzling licensing agreements.
3. Library staff must be knowledgeable and approachable by the user to meet latest information requirements. Library staff has to take initiatives to install confidence and trust among the user community. This presupposes continuous training programmes for the library staff in the use of digital library soft wares, CD-ROM collections and utilization of software to manage e-Resources.
4. Libraries must play a vital role in respect of Open Access Initiatives (OAI) by way of arranging awareness programmes. With this, the scientific community can publish in Open Access Journals and expand their visibility.
5. The present study revealed that all six-university libraries provide their services mostly through manual means. They concentrate on conventional services. In order to gain maximum efficiency and provide better service with available resources to the clientele the principles of Total Quality Management (TQM) be implemented.
6. Faculty and research scholar also can aid the efforts of library staff by actively participating in the collection management activities. This will encourage non-users also to become regular users.
7. There is growing demand for e-Publications over print format both books and journals. Such branches of disciplines are to be identified and efforts made to strike a balance in the print and e-format collections. The library budget must be enhanced in proportion to the rising costs of books and e-publications and journal subscriptions.
8. Grey literature like thesis and dissertations, conference/seminar proceedings, research/technical reports and bulletins etc. are of immense value to scientists and research scholars. Librarians have to give special attention to procure such publications.
9. Power failure and low speed of internet are the main problems faced by the users while accessing e-resources. Therefore, powers-that-be have to take necessary measures to increase the speed of internet broadband as well as physical facilities provided in the libraries.
10. Though the users of University Libraries i.e., faculty, research scholars and postgraduate students are an elite group, their knowledge levels of e-information resources are generally superficial. They need in-depth knowledge to make better use of e-resources in the library. For this, Information Literacy programmes basic and advanced – are to the designed and implemented.
11. Libraries have to take advantage of latest technologies like blogs, wikis, podcasting, RSS to publicize about their information resources and services. This will ensure sharing of resource and create ‘libraries beyond borders’.
12. There is a deep gap to achieve a desirable level of knowledge exchange, knowledge management, saving costs, time management and correct information flow. The librarian obligations should pay more attention to them and fulfill their professional activities with more efficiency effectiveness, correctness and accuracy.
13. In depth studies on duplication of e-journal titles and databases between different types of consortia must be undertaken.

**Conclusion**

Library collection Development is one of the most important and challenging activities of the library profession. This survey study has proved all the six Agricultural Universities of Karnataka are striving very hard to balance its collection development activities by providing quality and useful resources to its user community. Library committee plays an important role in framing the LCBD by framing polices and formulating programmes to implement them for effective execution. The main major functions of LCBD are:

1. Identify procedure to acquiring new materials.
2. Allocating budget to meet various needs,
3. Frequent review of acquisition polices in order to meet changing needs,
4. Storage planning,
5. Stock verification,
6. Weeding and preservation polices

Strict implementation of LCBD implies building up of quality collection to meet the objectives of the parent body / University.
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Conflict of Interest
None.

References
1. Abe, Marijana. Inventory of library collections: Introductory overview. Knjiznica 2014;58(4):13-39.
2. Booth, Austin H. and O‘brien, Kathleen. Demand-driven cooperative collection development: Three case studies from the USA. Inter lending and Document Supply 2011;39(3):148-55.
3. Chandela A.S and Saikiab, Mukesh. Challenges and opportunities of e-resources. Ann Libr Inf Stud 2012;59(Sep):148-14.
4. Dempsey, Lorcan; Malpas, Constance and Lavoie, Brian. Collection directions: The evolution of library collections and collecting. Libraries Acad 2014;14(3)(Jul):393-423.
5. Fought, Rick L; Gahn, Paul and Mills, Yvonne. Promoting the library through the collection development policy: A case study. J Electron Resour Med Libr 2014;11(4):169-78.
6. Gohel1, (B.M) and Parmar (R.D). Collection development in the university libraries of Gujarat State: An evaluative and comparative study: PEARL - A J Libr Inf Sci 2013;7(2):128-32.
7. Hendler, Gail Y and Gudenas, Jean. Developing collections with Get It Now: A pilot project for a hybrid collection. Med Reference Ser Quarterly 2016;35(4):363-71.
8. Kannapanavar B.U and Praveenkumar K. Manpower planning in Agricultural Science university libraries in India. J Med Commun Stud 2010;2(3):062-6.
9. Kirkwood, Rachel Joy. Collection development or data-driven content curation? An exploratory project in Manchester. Libr Manag 2016;37(4/5):275-84.
10. Lehman, Kathleen A. Collection development and Management. Libr Resour Technical Serv 2014;58(3)(Jul):169-77.
11. Maddison, Tasha. E-resource discovery: A collection development strategy for engineering e-books. Issues in Sci Technol Librarianship 75(2014).
12. Mahapatra, R.K. Use of Consortium of e-resources in Agriculture (Cera) in Central Library of Odisha University of Agriculture & Technology: A study. Asian J Libr Inf Sci 2013;5(3-4):39-47.
13. Pandita R and Singh S. Collection building trend among the institutes of higher learning in India: A preferential race between print and electronic resources. Collection Building 2016;35(4):119-216.
14. Patel S. Collection development in academic libraries, Int J Libr Inf Sci 2016;8(7): 62-7.
15. Saunders L. Academic libraries and apos; Strategic plans: Top trends and under-recognized areas. J Acad Librarianship 2015;41(3):285-91.
16. Vandale, Susan and Minchew, Tessa. It is not just about budget cuts: A study of print periodical usage and a subsequent cancellation project at a small academic library. Serials Rev 2014;40(3):203-6.
17. Weiss Andrew. Examining massive digital libraries (MDLs) and their impact on reference services. Reference Libr 2016;7(4)(Oct/Dec): 286-306.
18. Yang, Daryl. Collaboration in a time of change. Serials Libr 2014;5(1-4):303-13.

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