CHAPTER 5
FINDINGS, SUGGESTIONS AND CONCLUSION

5.1 Introduction

The present study was to find out the practices and procedures of collection development in the university libraries in Kerala and to analyse the student community’s assessment of the university library resources. This chapter includes summary of the findings of the analysis, tenability of hypotheses, suggestions for improvement, suggestions from users and conclusion.

5.2 Summary of findings

The data collected were analysed in the previous chapter. The analysis revealed a number of useful findings from the librarian’s and users’ perspectives and they are summarised below:

5.2.1 General information

- All four surveyed university libraries are headed by University Librarians-in-charge, when compared to seniors with experience above 20 years, those with less professional experience of 11-20 years have Ph.D. Also only the University Librarian-in-charge of University of Calicut has research experience other than Ph.D.

5.2.2 Manpower

- The post of University Librarian is vacant in all the Universities. KUL has the highest number of professionals in all categories except Professional Assistant Gr.II. KUL and MGUL have two Deputy Librarians whereas CHMKL and KUCL have one each. CHMKL has the highest number of Professional Assistants Gr.II. In the case of other category, CHMKL has one Information Scientist and KUCL has two non-professionals.

5.2.3 Library resources

- Collections in the four libraries include a variety of materials ranging from books, journals, bound volumes, periodicals, theses & dissertations, newspaper collection, reference collection, e-Resources etc. Patents and
standards are available only in KUL, special collection is available in Kerala and Kannur university libraries and rare collection in Kerala and Calicut university libraries. A small collection of manuscripts (Thaliyola) is available in Kannur University Central Library, reports are available in university libraries of Kerala and Kannur and conference proceedings and institutional repository are available in all the four libraries.

5.2.4 Budgets & Grants

- KUL had the highest annual budget of about three crores in 2010-11, reached about six crores thirty three lakhs in 2014-15 followed by MGUL with about two crores sixty eight lakhs in 2010-11, hiked to about five crores twenty three lakhs in 2014-15. CHMKL showed a steady and gradual increase of budget from about one crore thirty three lakhs to about two crore sixty one lakhs and KUCL had about sixty one lakhs in 2010-11, increased to about three crores twenty lakhs in 2014-15.

- KUL received five lakhs in 2010-11 and received ten lakhs in 2012-13 as UGC grants whereas MGUL received 125 lakhs in 2011-12 and received twenty five lakhs during 2013-15. CHMKL and KUCL have not recorded any UGC grants during these periods. As state grants, CHMKL received about sixteen lakhs and KUCL one crore in 2010-11, in 2011-12 CHMKL received 122 lakhs and MGUL 320 lakhs and in 2014-15 CHMKL received seven lakhs and MGUL 40 lakhs. KUL received special fund for modernisation from 2012-15.

5.2.4.1 Expenditure on print resources

- Expenditure on books was fluctuating for the libraries during the given period of study. KUL spent the highest amount for books in 2013-14, CHMKL and MGUL spent the highest in 2011-12 whereas KUCL spent the highest amount in 2012-13. There was a decline in the amount spent by KUL in 2011 & 2014, CHMKL showed very less in 2012 & 2014, MGUL showed a steady increase whereas KUCL showed a decrease in the amount spent. It is to be noted that the sudden hike in the amount spent by MGUL in 2011-12 was may be due to the International book fair conducted by the university in the same year.
• KUL showed a hike in the amount spent for journals, magazines and newspapers in 2012-13, but in the subsequent years there was a decline, whereas CHMKL showed a steady increase in the amount spent except in 2014-15 which showed a slight decline. In MGUL, there was a slight decline in 2012-13 following which there was an increase and in KUCL there was a steady increase from 2010-2014.

5.2.4.2 Expenditure on e-Resources

• The findings reveal that KUL spent 25 lakhs for e-Books in 2013-14, CHMKL spent 19 lakhs plus in 2011-12 but there was a decline after that. MGUL spent the highest amount of 57 lakhs plus in 2011-12 and five lakhs in 2014-15 whereas KUCL has not spent any amount.

• For e-Journals, KUL spent 12 lakhs in 2013 and 50 lakhs in 2014 whereas MGUL spent 51 lakhs ninety four thousand plus in 2013-14.

• For e-Databases, MGUL spent 4 lakhs sixty eight thousand in 2010 which reached 13 lakhs in 2014, which showed a steady increase in the amount spent by MGUL except in 2012 when a slight decline was witnessed and in 2012 KUCL spent 12 lakhs, whereas only seven lakhs fifty thousand was spent in 2014 which showed a decrease in the amount spent.

5.2.4.3 Adequacy of budget

• The budget allocation was found to be inadequate for print and e-Resources in KUL, CHMKL and KUCL whereas in MGUL the allocation was adequate. It was also found that KUL and CHMKL divided the fund uniformly for departments and periodic review of budget allocation was done by CHMKL, MGUL and KUCL.

5.2.5 Committees

• All libraries have a Library Committee, Purchase Committee is absent in CHMKL and only KUL has a Collection Development Committee.
5.2.6 Collection Development Policy

- Formal collection development policy is absent in all libraries except CHMKL. A formal order regarding policy exists in CHMKL, but here also a comprehensive policy is absent.

5.2.7 Collection status

- The print books collection of KUL is above two lakhs, CHMKL above one lakh, MGUL above fifty thousand and KUCL thirty eight thousand. KUL and MGUL have a collection of above two hundred and fifty print journals and CHMKL and KUCL have above 175. All the libraries maintain bound volumes of periodicals with KUL having a collection of above fifty thousand bound volumes. The special collection of KUL includes Kerala Studies, Women Studies, Govt. Publications, General biographies, Bound volumes of newspapers, UN & WB Publications, Closed reference (Rare books) etc. whereas KUCL has a special Malabar collection. KUL has a collection of patents and standards and KUCL has a small thaliyola (manuscript) collection of twenty six numbers.

5.2.7.1 Growth of print resource collection

- The Average Annual Growth Rate of printed books in Kerala University Library (KUL) was 1.3%, 1.93% in C.H. Mohammed KoyaLibrary (CHMKL), 5.15% in M.G. University Library (MGUL) and 11.48% in Kannur University Central Library (KUCL). Negative growth trend was found for foreign journals at KUL and foreign and Indian journals at MGUL. CHMKL showed zero growth rate whereas KUCL registered a high growth of 5.4%. For theses, average annual growth rate found for KUL was 3.15%, 2.5% for CHMKL, 7.68% for MGUL and 25.89% for KUCL, which is the highest growth rate among four universities.

5.2.8 Selection tools

- Selection tools like publishers/vendors catalogues and user suggestions record book were used by all libraries for selecting print resources whereas books in print, library acquisition lists and Inter Library Loan requests were not used by any of the libraries. Trial before use was the only tool opted by all the four
university libraries for selecting e-Resources. Vendor exhibits, faculty/patron suggestions, and published reviews were used only by KUL while none of the libraries used discussion lists and peer library websites as selection tools.

5.2.9 Acquisition mode

- KUL acquired print book materials by appointing vendors, CHMKL acquired through Publication Division of University and MGUL and KUCL through quotations/bids. KUL acquired serials both from subscription agents and publishers while CHMKL, MGUL and KUCL purchased directly from publishers. e-Resources were acquired by four libraries directly from publishers. KUL also acquired through vendor subscription and CHMKL through aggregator.

5.2.10 Criteria for evaluating and continuing/cancelling e-Resources

- Perpetual access, reputation, ease of access, pricing methods and cost effectiveness were the criteria adopted by all libraries for evaluating e-Resources. All other criteria like licensing terms, content evaluation, completeness, performance, currency, quality of end-user interface, availability of back files for e-Journals, technical support and publisher preservation arrangements were considered by KUCL only.
- Usage statistics, user feedback and budget status were considered by all libraries for continuing subscription of e-Resources, access was considered by KUL and KUCL, subject coverage and relevance only by KUL, uniqueness by KUCL and cost benefit analysis by KUL and MGUL.

5.2.11 Faculty-Librarian collaboration

- It was found that the faculty- librarian collaboration in surveyed universities were quite good. CHMKL reported having ‘Excellent’ collaboration with faculty, whereas KUL and MGUL with ‘Very Good’ and KUCL with ‘Good’ collaboration.
5.2.12 Impediments in collection development

- Lack of policy and planning was the main hurdle for collection development in MGUL whereas lack of adequate funds hampered collection development in KUL, CHMKL and KUCL. Lack of storage space was a major hurdle faced by KUL and lack of faculty participation by KUCL.

5.2.13 Collection assessment

- CHMKL and KUCL assessed their collections; while CHMKL used both collection based and user centred methods for assessment, KUCL used user-centred method of assessment.

5.2.14 Stock verification and weeding

- MGUL and KUCL conducted stock verification once in three years whereas KUL and CHMKL did random verification. While KUL considered all the criteria for weeding, CHMKL considered low usage and obsolescence. KUCL considered poor physical condition and obsolescence whereas MGUL did not consider any particular criteria. For treating rarely used and less used documents, KUL adopted weeding policy, KUCL adopted off-site storage, CHMKL maintained a secondary collection, on the other hand MGUL did not follow any of these. And also, CHMKL and MGUL had weeding policy whereas KUL and KUCL did not have any.

5.2.15 Digitisation

- KUL is digitising its rare collection of books and reports. Theses is being digitised by all the libraries and KUL and CHMKL have digitised their institutional repository whereas CHMKL and KUCL have digitised question papers.
- DSpace is used by CHMKL and KUCL for digitising their collections. KUL uses LIDAS (Library Digitisation & Archiving Systems) developed in-house by CDIT (Centre for Development of Imaging Technology) for digitising its rare collection of books, periodicals and newspapers and MGUL uses NityaD’Arch for creating its unique database of research theses.
5.2.16 Membership in consortia and networks

- UGC-INFONET is the only consortia where all the libraries have membership for sharing e-Resources and also MGUL and KUCL have membership with DELNET for Inter Library Loan facility.

5.2.17 ICT application

- ICT applications were used by all libraries in acquisition work: KUL, CHMKL and KUCL applied ICT for user surveys and usage statistics, CHMKL and MGUL applied ICT in their selection work whereas none of the libraries used ICT for evaluation and weeding.

5.2.18 Users view point on collection

5.2.18.1 Socio-Demographic factors

- It was found that highest percentage of respondents from KUCL (85.71%), CHMKL 72(74.22%), KUL and MGUL 61(64.21%) were females. Out of 357 total respondents, female respondents were greater in number 253(70.87%) when compared with male respondents who constituted 28.85% only.

- It was witnessed that majority of the respondents from four universities were Post Graduates, CHMKL had an equal representation 9(9.28%) of M.Phil. and Ph.D. scholars; respondents with other qualifications were absent in CHMKL and KUCL. Overall, (70.31%) were Post Graduates, 14.57% M.Phil. and (9.80%) Ph.D. scholars while the lowest percentage was found from other qualifications.

- Majority of the respondents from all the four universities were from rural background followed by second highest respondents from semi-urban and lowest from urban areas. Out of the total 357 respondents, (45.38%) were from rural background, (34.73%) from semi-urban and only (19.89%) from urban background.

- The highest number of respondents in CHMKL (58.76%) and an equal percentage in KUL and MGUL (36.84%) were from Science faculty whereas in KUCL, highest percentage (40%) was from Arts faculty. Overall, (41.18%)
of the respondents were from Science faculty, (21.85%) from Arts, (19.05 %) from Social Sciences and lowest (17.93%) from Humanities.

5.2.18.2 Use of university library resources

- **Purpose of library visit:** Majority of the respondents in KUL (51.58%) visited library for research purpose whereas in CHMKL (60.82%), MGUL(47.37%) and half of the respondents from KUCL(50%) visited for reference purpose. Excluding MGUL, in other libraries the least preferred purpose was availing internet facility whereas in MGUL, it was for general reading. Overall, a little less than half of the respondents (49.02%) visited library for reference purpose, (36.41%) for research, (30.25%) for general reading and (16.25%) for internet facility.

- **Preference of resources:** Majority of the respondents in MGUL indicated that only 26-50% of their information needs were met by print resources whereas 51-75% needs were met by electronic resources. Out of the 349 respondents who preferred print resources, 136(38.97%) of them opined that 26-50% of their information needs were fulfilled by print resources, 125(35.82%) opined 51-75%, 48(13.75%) opined above 75% and 40(11.46%) responded below 25% of their information needs were met. Out of 309 respondents, who preferred electronic resources, 96(31.07%) responded with 51-75%, 88(28.48%) opined with 26-50%, 83(26.86%) opined above 75% and 42(13.59%) responded below 25% for meeting their electronic information needs.

- **Users’ role in collection development:** The highest participation from users 36(37.11%) in building library collection was found in CHMKL followed by MGUL 33(34.74%) out of which (18.56%) and (22.11%) reported non-availability whereas in KUL (24.21%) and KUCL (21.43%), highest number of participants played their role by providing requests and suggestions. Out of 109(29.97%) who confirmed their role in collection development (15.41%) reported non-availability, (14.29%) provided suggestions and (9.52%) pointed out weak areas in collection.
• **Status of suggestions:** Equal respondents from KUL and MGUL (20%) and almost same from CHMKL reported their requests were accepted and items procured whereas more or less same from CHMKL (15.46%) and KUCL(14.29%) reported their requests were accepted but items not procured and 1 respondent from MGUL and KUCL reported request was not accepted whereas none of the respondents from KUL and CHMKL reported that their requests were not accepted. Overall out of 125(35.01%) who had provided suggestions, items were procured for (19.33%), not procured for (10.36%) and request not accepted for (0.56%).

5.2.18.3 Rating of print resources

• **Print books:** Highest number of respondents in KUL (36.84%), CHMKL (44.33%) and MGUL (37.89%) rated printed books as ‘Very Good’ whereas in KUCL it was rated ‘Good’ and ‘Very Good’ by equal number of respondents. (7.14%) from KUCL, the highest from all universities rated printed books as ‘Poor’. Overall, most of the respondents rated books from ‘Very Good’ to ‘Excellent’ and (9.8%) rated as ‘Average’ and ‘Poor’.

• **Print journals:** Most of the respondents in KUL (44.21%), almost same percentage in CHMKL(40.21%) and MGUL (41.05%) rated print journals as ‘Very Good’ while in KUCL (44.29%) rated ‘Good’. Rounding up, majority of respondents rated from ‘Excellent’ to ‘Good’ and only (13.2%) rated from ‘Average’ to ‘Poor’.

• **Theses and dissertations:** Highest percentage of respondents in KUL (41.05%), MGUL (43.16%) and KUCL (45.71%) rated theses as ‘Good’ whereas in CHMKL (32.99%) rated ‘Very Good’. Only few respondents have rated theses as ‘Average’ and ‘Poor’. From the four universities a total of (39.78%) rated ‘Good’, (29.41%) ‘Very Good’, (15.69%) ‘Excellent’ and (15.12%) ‘Average’ and ‘Poor’.

• **Reference collection:** Majority from CHMKL (35.05%) and KUL (33.68%) rated reference collection as ‘Very Good’, (37.89%) from MGUL rated ‘Good’ and equal percentage from KUCL (28.57%) rated ‘Good’ and ‘Very
Good’ respectively. Sizeable number of respondents also rated ‘Average’ and very few rated ‘Poor’. Totally (31.65%) from all universities rated ‘Very Good’ followed by (30.53%) rated‘Good’ and (19.61%) rated‘Average’ to ‘Poor’.

- **General material:** More or less same percentage of respondents in KUL(45.26%), MGUL(46.32%) and KUCL(44.29%) rated general materials collection as ‘Good’ whereas in CHMKL (39.18%) rated ‘Very Good’. None of the respondents in KUL rated ‘Poor’. Overall majority of the respondents rated from ‘Good’ to ‘Excellent’ and (16.25%) rated ‘Average’ and ‘Poor’.

- **Opinion on print resources:** Highest number of respondents in CHMKL (39.18%), KUL (36.84%) and MGUL (33.68%) were of the opinion that core text books/ course books in subject/discipline were ‘Very Good’ whereas more or less same number of respondents in KUCL opined ‘Good’ and ‘Very Good’ respectively. Overall highest from all universities (34.73%) followed by (29.97%) opined ‘Very Good’ and ‘Good’ respectively and least respondents opined ‘Average’ and ‘Poor’.

- **Document range:** Most of the respondents from KUL(49.47%), MGUL(38.95%) and KUCL (35.71%) opined that range of documents for background study in subject/ disciplinewere ‘Good’ and in CHMKL(38.14%) opined ‘Very Good’. Sizeable number of respondents opined ‘Average’ and less number opined ‘Excellent’ and ‘Poor’. Totally (39.5%) opined ‘Good, (30.81%) ‘Very Good’, (18.21%) ‘Average’, only (7.56%) opined ‘Excellent’ and (3.92%) ‘Poor’.

- **Core journals:** In all four universities, majority of the respondents opined ‘Good’ for availability of core journals in subject/discipline, sizeable number of respondents rated ‘Average’ and less respondents from each university opined ‘Excellent’ and ‘Poor’.

- **Currency:** Highest number of respondents from KUL 44(46.32%), CHMKL 34(35.05%), MGUL 39(41.05%) and KUCL 25(35.71%) opined that current and up-to-date documents in subject/discipline were ‘Good’ and (24.93%) of
the total respondents opined ‘Average’ whereas less percentage opined ‘Excellent’ and ‘Poor’.

- **Relevance:** Excluding KUCL, majority of the respondents in other universities were of the opinion that relevant titles in their subject area were ‘Good’ whereas in KUCL majority felt it to be ‘Average’. Less than 10% of the respondents from each university opined ‘Excellent’ and very few opined ‘Poor’.

- **Speedy acquisition:** Majority of the respondents in all universities opined that speedy acquisition of materials was ‘Good’ followed by 20(21.05%) from KUL and 31(31.96%) from CHMKL opined ‘Very Good’ and equal number of respondents 21(22.11%) in MGUL expressed ‘Very Good’ and ‘Average’. (8.68%) of the total respondents opined ‘Excellent’ while (10.64%) opined ‘Poor’.

- **Improvement of print resources:** For improving print resources, 41(43.16%) and 30(42.86%) from MGUL and KUCL considered that academic collection should be improved whereas less than 35% from KUL and CHMKL felt the same.

- With regard to reference collection, more or less same percentage 37 (38.95%) and 27(38.57%) from KUL and KUCL suggested to improve the reference collection whereas response rate for improving the reference collection was found less in MGUL.

- For print journals, the strongest wish for improvement was seen in CHMKL 24(24.74%) whereas less than 17% from other universities suggested improving the print collection.

- Regarding government publication, the highest percentage (13.68%) in MGUL, equal percentage in KUL and CHMKL and slightly greater in KUCL also wished improvement.

- In the case of general material, while (25.77%) and (21.05%) from CHMKL and MGUL wished to improve the collection, less than (15%) from KUCL and KUL wished so.
• Regarding all collection, 24(34.29%) in KUCL wished for improvement whereas less than (30%) in other libraries wished for improvement in all materials.

• It was found that satisfaction with print collection was highest in KUL(70.53%) followed by MGUL (68.42%), CHMKL (67.01%) and KUCL (57.14%). Only (2.11%) from KUL and MGUL and (5.71%) from KUCL was found to be ‘Very Less Satisfied’ whereas none of the users were ‘Very Less Satisfied’ with the print collection in CHMKL.

• **Satisfaction with Print Collection:** The highest percentages (70.53%) in KUL, (68.42%) in MGUL, (67.01%) in CHMKL and (57.14%) in KUCL were ‘Satisfied’ with the print resources. Almost an equal percentage in KUL (14.74%) and CHMKL (14.43%) were ‘Highly Satisfied’ and an equal percentage (2.11%) in KUL and MGUL were ‘Very Less Satisfied’. Overall (66.39%) of the total respondents were ‘Satisfied’, (10.64%) were ‘Highly Satisfied’ and (22.41%) of the total respondents were ‘Less Satisfied’ and ‘Very Less Satisfied’ with the print resources.

**5.2.18.4 Electronic resources**

• **Orientation programmes:** Most of the users in all four universities have not attended any orientation programmes organised by the library to get awareness about various resources and services in the library. Out of 357 respondents only (30.53%) have attended, the highest participation was from KUCL (37.14%) whereas lowest was from KUL (21.05%).

• **Place of access to e-Resources:** Majority of the users preferred university libraries for accessing e-Resources, the second preferred location was residence in KUL and KUCL and department libraries for CHMKL and MGUL. The highest percentage of non-use of electronic resources was found in KUCL (25.71%) and lowest in CHMKL (1.03%).

• **Appeal of e-Resources:** Regarding criteria of e-Resources which makes it more appealing than print, it was found that in KUL speed of access secured
first rank, subject relevance second rank and currency of information third rank. Ease of access, volume of information, availability of retrospective information and coverage secured fourth, fifth, sixth and seventh rank respectively.

- In CHMKL, ease of access secured first rank, speed of access second, subject relevance third, currency of information fourth, volume of information, coverage and availability of information fifth, sixth and seventh respectively.

- In MGUL, ease of access secured first rank, subject relevance second, speed of access third, volume of information fourth, coverage fifth, currency and availability of retrospective information sixth and seventh respectively.

- In KUCL, ease of access, subject relevance and speed of access secured first, second and third rank respectively. Currency, volume of information, coverage and availability of retrospective information secured fourth, fifth, sixth and seventh ranks respectively.

- **Rating of e-Resources:** Majority of the respondents in KUL and MGUL rated e-Books as ‘Good’ while CHMKL rated ‘Very Good’ and KUCL ‘Average’. Rating of ‘Excellent’ was highest 28(28.87%) in CHMKL and lowest 2 (2.86%) in KUCL, whereas rating of ‘Poor’ was highest in KUCL 10(14.29%) and lowest in CHMKL 1(1.03%). Overall majority of them rated e-Books from ‘Good’ to ‘Excellent’, (8.77%) rated ‘Average’ and (7.14%) ‘Poor’.

- **e-Journals:** Highest percentage of respondents in CHMKL 45(46.39%) and MGUL 36(37.89%) rated e-Journals as ‘Very Good’, in KUL 33(34.74%) rated ‘Good’ and in KUCL 19(27.14%) ‘Average’. While 8(11.43%) in KUCL rated ‘Poor’, none of the respondents in CHMKL and MGUL rated e-Journals as ‘Poor’. Overall (37.66%) rated ‘Very Good’, (20.45%) ‘Excellent’ and the least preferred were ‘Average’ and ‘Poor’.

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• **e-Full text databases:** Majority of the respondents in CHMKL rated ‘Very Good’ and KUCL rated ‘Average’ whereas highest respondents in KUL and MGUL rated ‘Good’. Rating of ‘Excellent’ was less than 10% in all universities except CHMKL. Rating of ‘Poor’ was highest in KUCL (11.43%), less than 1% in KUL and CHMKL and nil in MGUL. Overall (41.89%) rated e-Full text databases as ‘Good’ and 23(7.47%) and 11(3.57%) rated ‘Excellent’ and ‘Poor’.

• **e-Bibliographic databases:** Most of the respondents in KUL, CHMKL and MGUL rated ‘Good’ whereas in KUCL majority rated ‘Average’. None of the respondents in MGUL rated ‘Poor’ whereas in KUL 1(1.05%) and KUCL 10(14.29%) rated ‘Poor’. Out of the total, majority rated from ‘Good’ to ‘Average’ and (9.42%) rated ‘Excellent, and ‘Poor’.

• **e-Theses and dissertation:** Highest number of respondents in KUL, CHMKL and KUCL rated e-Theses ‘Good’ whereas in MGUL rated ‘Very Good’. The highest and lowest rating of ‘Excellent’ was for CHMKL 12(12.37%) and KUCL 1(1.43%) respectively. Out of the total, the highest and the second highest rated ‘Good’ and ‘Very Good’ and the lowest number rated ‘Poor’.

• **e-Reference sources:** An equal percentage 38(40%) in KUL and MGUL and 21(30%) in KUCL rated e-Reference sources as ‘Good’ whereas majority in CHMKL 37(38.14%) rated ‘Very Good’. (21.04%) of the total respondents rated ‘Average’ whereas more or less same percentage (7.79%) and (8.12%) rated ‘Excellent’ and ‘Poor’ respectively.

• **e-Magazines:** Majority from KUL 36(37.89%), CHMKL 32(32.99%) and MGUL 32(33.68%) rated e-Magazines as ‘Good’ whereas in KUCL 20(28.57%) rated ‘Average’. An equal percentage in KUL 12(12.63%) rated ‘Average’ and ‘Poor’ respectively. Overall (36.68%) rated e-Magazines as ‘Good’, (21.43%) ‘Very Good’, 58(18.83%) ‘Average’, 45(14.61%) ‘Poor’ and 26(8.44%) ‘Excellent’.  

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• **Rating on e-Resource features: Adequacy:** Highest percentage (46.39%) in CHMKL opined ‘Very Good’ whereas the majority in KUL (41.05%), MGUL (43.16%) and KUCL (34.29%) opined ‘Good’. In CHMKL 14 (14.43%) opined ‘Excellent’ whereas 2 (2.11%) in KUL opined ‘Excellent’ and ‘Poor’ respectively. Out of total 308 respondents majority opined from ‘Good’ to ‘Excellent’ and (9.41%) opined ‘Average’ and ‘Poor’.

• **Quality:** Majority of the respondents in all the four libraries opined ‘Good’ with regard to quality of e-Resources followed by the second highest percentage opined ‘Very Good’. An equal percentage in CHMKL and MGUL opined ‘Excellent’ while none of the respondents opined ‘Poor’ and ‘Average’ in CHMKL and Poor in MGUL. Overall, (43.51%) opined ‘Good’, (15.58%) ‘Excellent’ and (8.12%) opined ‘Average’ and ‘Poor’ respectively.

• **Currency:** All the four libraries opined ‘Good’ regarding the currency of e-Resources and none of the respondents opined ‘Poor’ in CHMKL and MGUL. The highest 12 (12.37%) in CHMKL opined ‘Excellent’ whereas only 1 (1.43%) in KUCL did so. Overall, half of the respondents (49.67%) opined ‘Good’ and less than (10%) opined ‘Excellent’ and ‘Poor’.

• **Relevance:** It was found that in CHMKL highest percentage 39 (40.21%) opined that relevance of e-Resources was ‘Very Good’, 29 (30.53%) in KUL, 37 (38.95%) in MGUL and 16 (22.86%) in KUCL opined ‘Good’. The highest rating of ‘Excellent’ was for CHMKL 16 (16.49%) whereas lowest was for KUL 6 (6.32%). None of the respondents opined ‘Poor’ in CHMKL and MGUL. Totally (38.63%) opined ‘Good’, more or less same percentage opined ‘Excellent’ and ‘Average’ and 8 (2.6%) ‘Poor’.

• **Coverage:** Majority of the respondents in all the libraries opined that coverage was ‘Good’ followed by second highest opined ‘Very Good’ in all libraries except KUCL where it was rated ‘Average’. The highest percentage of ‘Excellent’ was scored by CHMKL 12 (12.37%) where none of the respondents rated ‘Poor’. Overall, majority opined ‘Good’ and ‘Very Good’, 54 (17.53%) ‘Average’, 22 (7.14%) ‘Excellent’ and 9 (2.92%) ‘Poor’.
• **Completeness:** Majority of the respondents in KUL 35(36.84%), CHMKL 48(49.48%) and KUCL 17(24.29%) opined ‘Good’ about completeness whereas equal percentage 33 (34.74%) in MGUL opined ‘Very Good’ and ‘Good’ respectively. In CHMKL and MGUL none of the respondents opined ‘Poor’. Out of the total, (43.18%) opined ‘Good’, (20.45%) ‘Average’, (6.17%) ‘Excellent’ and (2.92%) ‘Poor’.

• **Accuracy:** Most of the respondents 41(42.27%) in CHMKL opined that accuracy of e-Resources was ‘Very Good’ whereas the highest respondents from KUL 42(44.21%), MGUL 37(38.95%) and KUCL 23(32.86%) opined ‘Good’. None of the respondents in CHMKL opined ‘Poor’. Totally 136(44.16%) opined ‘Good’, 94(30.52%) ‘Very Good’, 45(14.61%) ‘Average’, 24(7.79%) ‘Excellent’ and 9(2.92%) ‘Poor’.

• **Priority of e-Resources:** Based on the ranking assigned to the priority of usage of e-Resources, it was found that in KUL, CHMKL and MGUL users preferred e-Journals first followed by e-Books, e-Theses and e-Reference whereas in KUCL while e-Journals was the first priority, e-Theses stood second, e-Books third and e-Reference fourth. e-Magazine was the least preferred among the e-Resources.

• **Problems faced while accessing e-Resources:** In KUL and KUCL, slow speed was the main problem faced by majority of respondents while accessing e-Resources, in CHMKL more than half of the respondents indicated that they had difficulty in retrieving relevant information and in MGUL (36.84%) said periodic network down was their main problem. Overall, (36.41%) and (35.55%) of the respondents stated difficulty in finding relevant information and slow speed as the major problems followed by (27.73%) and (20.73%) reported periodic network down and lack of professional help as the major problems experienced by the respondents.
• **Satisfaction with Library Professional’s role**: Majority of the respondents in all four universities stated that they were ‘Partially Satisfied’ with the library professional’s role in satisfying their information needs. Overall, majority of the respondents (61.62%) from all the four surveyed universities were ‘Partially Satisfied’ followed by 119 (33.33%) and 18 (5.04%) ‘Highly Satisfied’ and ‘Not Satisfied’ respectively.

• **Overall Satisfaction with Collection**: Majority of the respondents from CHMKL 57(58.76%) and MGUL 48(50.53%) followed by slightly less than 50% in KUL 46 (48.42%) were satisfied to ‘Large Extent’ and again second highest respondents in CHMKL, MGUL and KUL opined that they were satisfied to ‘Some Extent’. ‘Very Large Extent’ and ‘Less Extent’ were opted by least number of respondents and except KUCL, none of the respondents from other three universities opted for ‘Very Less Extent’.

5.3. Hypothesis test results

The established four hypotheses are tested with t-test and one-way ANOVA and a note of the results are given below.

**Test results of established Null Hypothesis (H0) 1:**

Null Hypothesis (H0) 1: Null hypothesis: There is no significant difference between the basic variables such as gender, age, qualification, etc. with rating on print resources by the respondents of the surveyed university libraries.

A note on the test results of the above null hypothesis listed below.

**T Test result**

5.3.1 **Null Hypothesis (H0): There is no significant difference between respondents gender with rating on print resources.**

T test was used to test the above null hypothesis and the test results showed that no significant difference existed between the respondents gender with books, theses and dissertations, reference collection and special collections, government publications and general materials because the calculated “P” value was more than the accepted level of 0.05 whereas significant difference witnessed with respondents gender with journals and conference and seminar proceedings.
ANOVA Test results

5.3.2 H0: There is no significant difference between the respondents faculty with rating on print resources.

ANOVA results revealed that no significant difference was found between faculty (Arts, Science, Humanities, Social Science) with rating of journals, theses & dissertations, special collection, conference/seminar proceedings, government publication as the calculated ‘P’ value was greater than the accepted level of 0.05. On the other hand, significant difference was found between the respondents faculty with rating on books, reference collection and general materials as the calculated ‘P’ value was less than the accepted level of 0.05.

5.3.3 H0: There is no significant difference between the respondents university with rating on print resources.

When compared the respondents university with rating on print resources, significant difference was found with books, journals, reference collection, government publication and general materials as the calculated ‘P’ value was less than the accepted level of 0.05. On the other hand, no significant difference was found with theses & dissertations, special collection and conference/seminar proceedings as the calculated ‘P’ value was greater than the accepted level of 0.05.

5.3.4 H0: There is no significant difference between respondent’s qualifications with rating on print resources.

The ANOVA results reveal that the calculated ‘P’ value of all the variables was greater than the accepted level of 0.05. Hence, there was no significant difference found between the respondents qualification with rating on books, journals, theses & dissertations, reference collection, special collection, conference/seminar proceedings, government publication and general material. Hence the null hypothesis is accepted.

Test results of Null Hypothesis (H0) 2:
Null Hypothesis (H0) 2: There is no significant difference between the basic variables such as gender, age, qualification, etc. with rating on e-Resources by the respondents of the surveyed university libraries
A note of the test results of the above null hypothesis is given below.
T Test result

5.3.5 H0: There is no significant difference between gender with rating on electronic resources.

T-Test results showed that there was no significant difference between respondents gender with rating on electronic resources since the calculated ‘P’ value was greater than the accepted significant value of 0.05 for these resources and hence the null hypotheses is accepted.

ANOVA Test results

5.3.6 H0: There is no significant difference between faculty with rating on e-Resources.

From the ANOVA results it is interpreted that significant difference was found between faculty (Arts, Science, Humanities, Social Science) and rating one-bibliographic databases, e-reports, e-Theses & dissertations and e-Reference sources as the calculated ‘P’ value was less than the accepted value of 0.05 and so the null hypothesis is rejected whereas no significant difference was found for e-Books, e-Journals, e-Full text databases and e-Magazines as the calculated ‘P’ value was greater than the accepted level of 0.05 and hence the null hypothesis is accepted here.

5.3.7 H0: There is no significant difference between respondents university with rating on e-Resources.

From the ANOVA results it is known that significant difference was found between university and rating of e-Reports, e-Reference sources and e-Magazines as the calculated ‘P’ value was less than the accepted level of 0.05 and so null hypothesis is rejected and no significant difference was found for e-Books, e-Journals, e-Full text databases, e-Bibliographic databases and e-Theses & dissertations as the calculated ‘P’ value was greater than the accepted level of 0.05 and hence null hypothesis is accepted.

5.3.8 H0: There is no significant difference between respondents qualification and rating of e-Resources.

From the ANOVA results it is interpreted that the calculated ‘P’ value of all the variables is greater than the accepted level of 0.05 and so the null hypothesis is accepted. Hence we conclude that there is no significant difference between

**Test results of Null Hypothesis (H0) 3:**

Null Hypothesis: There is no significant difference between the basic variables such as gender, age, qualification, etc. with respondents satisfaction with library professionals in providing information services.

A note on the above null hypothesis test results are displayed below.

**T Test result**

There is no significant difference found between the respondents gender with satisfaction level on library professionals in providing information services.

**ANOVA results**

Since ‘P’ value for faculty with satisfaction on library professionals is 0.824821, which is more than the accepted level. There is no significant difference found between the respondents faculty with satisfaction with library professionals.

From the analysis, it is found that the ‘P’ value for respondents university with satisfaction on library professionals is 0.037178, which is less than the accepted level. Therefore, significant difference found between the respondents university with satisfaction with library professionals.

It is found from the analysis that ‘P’ value for the respondents qualification with satisfaction with library professionals is less than the accepted significant level, the established null hypothesis is rejected and based on the rejection, there is no significant difference found between the respondents qualification with satisfaction on library professionals.

**Test results of Null Hypothesis (H0) 4:**

Null Hypothesis: There is no significant difference between the basic variables such as gender, age, qualification, etc. with the respondents overall satisfaction with library collection in the surveyed universities.

A note on the above test null hypothesis test results are displayed below.
T test results

It is noticed from the analysis that there is no significant difference found between the respondents gender with overall satisfaction with library collection, since the calculated ‘P’ value was 0.10045, which is higher than the accepted significant level of 0.05.

ANOVA results

Significant difference found between the respondents faculty with overall satisfaction is found since the ‘P’ value calculated is less than the accepted level.

There is no significant difference between the respondents university with overall satisfaction with library collection since the calculated ‘P’ value is more than the \( \alpha = 0.5 \).

Since the calculated ‘P’ value for respondents qualification with overall satisfaction with library collection was more than the accepted significant level i.e. 0.05, no significant difference found between the respondents qualification with overall satisfaction with the library collection.

5.4 Suggestions

Following are the suggestions drawn from the study based on the findings:

1. For effective functioning of any library, adequate budget is important. From the study it is found that budget allocated to most of the surveyed university libraries were inadequate. Since prices for books, journals and other electronic resources are escalating quite frequently, it is very important to provide adequate fund for acquiring all types of resources.

2. Committees play a significant role in the development of resources of any library. The study revealed absence of a Collection Development Committee in most of the libraries. In addition to the Library Committee, it is suggested that all the university libraries should have a Collection Development Committee to coordinate the various collection development functions in the library.
3. The study revealed that formal Collection Development Policy is absent in all libraries except CHMKL. Even CHMKL does not have a comprehensive policy, but only a formal order regarding policy. Since collection development policy is a written document for the development of libraries, the university libraries which do not have collection development policy, should develop a well-written policy for selection, acquisition, storage, preservation, weeding, discarding stock etc. for both print as well as electronic resources.

4. The collection status of the surveyed libraries revealed absence of special collection in some libraries. It is suggested that special collection related to local literature and history should be developed by the libraries to cater to the needs of the local user community.

5. For selection of materials, different tools are being used by libraries. From the study, it is found that university libraries have not considered some of the tools such as inter library loan requests, acquisition lists etc. for selecting print resources and discussion lists and peer library websites for selecting e-Resources. Considering all types of selection tools including faculty/patron suggestions, vendor exhibits, published reviews, ILL requests and lists of other libraries would help in developing a broader range of collections and also will enhance core collections. So the university libraries should consider all types of selection tools while selecting print and e-Resources.

6. To select best e-Journals, well-defined evaluation criteria have to be followed. Hence the university libraries have to consider all possible evaluation criteria before finalising selection of e-Resources. The university libraries may also consider criteria like cost benefit analysis, duplication/overlap checking, subject coverage and relevance in addition to usage statistics and user feedback before renewal/ cancellation decisions of e-Resources are made.

7. Faculty-librarian collaboration is very important in building and updating academic collections. Therefore, efforts should be made to improve communication between librarian and faculty by visiting departments frequently, informing regularly about new arrivals and publications and holding meetings to discuss about book selection and collection development activities.
8. Periodic assessment of the collection must be done in academic libraries to identify strengths and weaknesses of the collection. In order to ensure balanced collection, user needs and requirements should be studied. In this study, it is found that evaluation and assessment of library collection is not being done in all the libraries. Hence, collection evaluation should be made as compulsory part of collection development work.

9. A Collection Analysis Project may be taken up by the libraries to assess the collection development strategies and to ensure that libraries are catering to the users' needs and adequately meeting the impact of digital technology. A team of four or five library staff may be engaged in this project who can be entrusted to find out and develop the collection development goals and objectives of the library, to analyse the strengths and weaknesses of the collections as well as external factors like resource sharing activities which affect collection development. Based on this analysis, recommendations can be made for further improving different aspects of the library's collection development program.

10. The study revealed that all the surveyed libraries do not have a policy to weed out aged and out-dated documents. Weeding is necessary to overcome space problems and to maintain live collections. Since administrative agencies may disapprove discarding items for which money has been spent, it is of utmost importance that a detailed policy incorporating all the criteria for weeding may be developed by all the libraries.

11. Institutional repository is the intellectual output of an organisation and preserving it is very important. It is found that due importance is not given by all the libraries for digitising this collection. It is therefore necessary that in addition to theses and dissertations, all the work of faculty, students and staff including articles, papers, books, reports, conference proceedings, symposia, lectures etc. are to be digitized and preserved.

12. Consortia and resource sharing play major role in collection development in libraries. Developing a network of university libraries in the state for sharing resources including inter library loan facility in addition to web-based online catalogues would be a big help to researchers all over the state.
13. Information and communication technologies (ICT) can be applied in all activities of collection development. It is found that libraries do not apply ICT in evaluation and weeding process and sometimes in selection work also. Usage statistics generated by library systems, acquisition reports, annual expenditure statements, online user surveys etc. can be used for evaluating the status of a collection. The information provided by circulation systems like frequency of use, age of item, use by class number etc. can be used for weeding process also. Libraries should therefore apply ICTs in all activities to enhance the collection development of resources.

14. Among many hurdles faced by libraries in developing a balanced collection of resources, lack of funds was found to be the most common one. Authorities should therefore ensure provision of adequate and separate funding for print and electronic resources. The libraries should also have systematic planning, develop a comprehensive policy, engage more teaching staff in selection and collection development activities and ensure sufficient space through periodic weeding.

15. Reference was the main purpose for visiting university library by users in CIHKML, MGUL and KUCL. Considering lack of a separate reference section in MGUL, it is suggested that a separate reference area with a heterogeneous collection of reference sources in all branches of knowledge and study materials for all types of competitive exams to be made available in MGUL.

16. Majority of the respondents in all the four surveyed libraries indicated that only 26-50% of their information needs were met by print resources. Therefore there is a need for improving the quality and quantity of print resources in all these libraries.

17. The University Librarian should encourage users’ participation in building library collection. Since the collection is primarily meant for the user community, they should play a proactive role by providing more suggestions for improving their area of study along with pointing out the gap areas in the subject and also the non-availability of core and essential titles.
18. The user community should be encouraged to involve in collection evaluation activities, feedback about their needs through user survey, discussions with research scholars and other users to address their needs and steps should be taken to ensure optimum utilisation of user suggestions record book and online suggestion facility. This can be effected only through continuous monitoring and constant reminders. Library staff should be deployed for communicating with all types of user community, conducting surveys and assessments, gathering feedback from users and ensuring that users’ requirements are met.

19. Recommendations and suggestions provided by experts in various disciplines form the very foundation of building academic collections. The library may have good collection in different subjects, but steps should also be taken to acquire core journals, core text books/course books, current and relevant titles and documents for background study in various subjects/disciplines. Necessary care should also be taken to ensure speedy acquisition of materials requested by users.

20. Reference collection is one of the most important collections in any library providing factual information. It was found that majority of users wished to improve reference collection along with the academic collection. Since the university libraries provide Graduate membership, a good collection of general materials is also very important. Sizeable number of respondents wished to improve general materials and print journals also. Therefore, to cater to the needs of all types of user community, steps should be taken to strengthen all these collections.

21. Even though most of the libraries have plenty of resources, many users are unaware of variety of services and facilities available, which is the main reason for not utilising the resources effectively. Therefore, for optimum utilisation of resources, initiatives should be taken to encourage users’ to participate in orientation programmes.

22. e-Resources constitute a major share of the resources in the library. It was found that the highest rating of ‘Poor’ for e-Resources was in KUCL. Hence steps may be taken by KUCL to improve the e-Resource services and facilities in the library.
23. Slow speed, difficulty in retrieving relevant information and periodic network down were the main problems faced by the respondents while accessing e-Resources. Hence steps should be taken to address the above mentioned issues.

24. The attitude, commitment and professionalism of the staff have a significant role in the development of resources as well as assisting users in fulfilling their information needs. The professionals involved should have technical knowledge of search retrieval systems, management skills, sound knowledge in dealing with electronic resources etc. which require continuous skill development. Therefore training programs should be arranged regularly to equip staff to deal with handling e-Resources.

5.4.1 Suggestions from users

User community from each university have provided the following suggestions and recommendations regarding the resources and services of the library:

5.4.1.1 Kerala University Library (KUL)

1. KUL has a vast collection of books which need to be properly maintained and updated.
2. Increase the availability of latest books on subjects.
3. Provide two to three copies of fast moving books, keep more copies of important books on a subject.
4. Provide more copies of books of engineering and science subject areas and improve collection of books on angiosperms.
5. Number of books issued to a person has to be increased.
6. Provision of a section for PSC-Bulletin in the library could be very helpful for PSC aspirants.
7. Texts of famous authors meant for subject reference are not available even in reference section. Upcoming fields of study like International Relations and Communicative English need to be updated for enhancing academic resources.
8. Improve availability of specified books on each subject.
10. Provide more journals in economics, eg. NSSO related CD’s (databases), Sarvekshana journal, other government collection etc.

11. Select books which are more useful to Research Scholars and students.

12. Academic collection has to be improved.

13. KUL is a vast source of knowledge, but most students are not utilising the resources properly, hence measures have to be taken to include more participation from users.

5.4.1.2 C H Mohammed Koya Library (CHMKL)

1. Improve collection of books on Para-psychology and political science related books especially media, human rights etc., thought related books are rare.

2. If the amount of fiction and novels increase, number of readers coming to UL will surely increase.

3. Subject related books are very less in number, incorporate more relevant books especially in botany.

4. Improve reference section, provide printed versions of taxonomic journals, add more international text books.

5. Try to include very old research papers in the collection.

6. If print outs of old literature available online are kept in the library year wise, it will be more helpful when internet facilities are not available.

7. In UL e-Resources consist of Infonet journals, however costly journals like Sage, Wiley etc. are not getting full access through Infonet which is a major limitation. Major achievement of UL is its Union Catalogue online. Need to concentrate on building reference collection of e-Books which will be more useful.

8. Librarians should take classes about e-Resources and library facilities; have to start blogs like ‘BOTLIS’- Botanical Library Information System which is very useful for research work.

9. In spite of plenty of resources, students and scholars are not using these resources competently due to absence of orientation.

10. Include more books for general reading and reference.

11. Need more access to scientific journals, must improve government publication.
12. Many e-Resources in science field are not available. eg. Wiley, some journals of Royal Chemical Society, the most important journal ‘Science’ etc.
13. Add more copies of books that are in huge demand.
14. Provide more references in core subject areas.
15. Include collections of international journals having high impact factor.
16. Widen the coverage of collection, subject-wise improvement is highly required and improve the availability of books, articles and journals.

5.4.1.3 Mahatma Gandhi University Library (MGUL)

1. Improve range of documents for background reading, study materials in literature.
2. Procure books of latest edition and books of Indian publishers in polymer science.
3. Suggestions book for students to be properly displayed and periodic validation of suggestions are to be made.
4. Ensure student’s participation in the programmes organised by UL.
5. Provide more Malayalam Kerala historical digital archives especially missionary archives.
6. Ask departments/ Research Scholars to provide a list of books they need in the specialised area of their research.
7. Improve study material collection by providing relevant reference books.
8. Improve reference collection and provide more journals in education.
9. Improvement in collection of books especially in botany & plant science, eg. algae, fungi, pteridophytes, gymnosperms and taxonomy.
10. Communication with students who use the library necessary to improve collection of books according to their needs in their subject area.
11. Proceed recommendation by students as soon as possible. Need more collaborative platform organised by foreign universities.
12. Systematic arrangement and proper maintenance of books required as books are misplaced and difficult to locate.
13. Expand collection of books and government publication in the field of economics.

15. Non availability of critical texts to be resolved, more relevant books on subject areas to be added and more books and journals in new subjects required.

16. Make available fast and better internet Wifi.

5.4.1.4 Kannur University Central Library (KUCL)

1. Improve academic collection of books and reference books in various subjects.

2. Need more primary and secondary materials regarding various subjects and areas of research.

3. Provide new books and reference materials, more computer systems required for e-Reference and more databases to access new ideas.

4. Ask Research scholars to give the list of relevant books which will be beneficial to the whole student community.

5. Keep available recent books published by well-known authors in all fields.

6. UL should have a Good collection of language books for reference especially grammar and literature books.

7. Improve collections in history, books related with local history, world civilization and collections of important Hindi writers.

8. Reference collection to be improved and latest editions of books to be made available.

9. Provide more scientific journals and magazines.

10. More professional help required to find out books and reference, change the attitude of library staff.

5.5 Conclusion

The present study has given a useful summary of various collection development practices and procedures followed by four Arts and Science universities in Kerala and also the users' opinion and rating of the resources of the libraries. The study revealed that in most libraries adequate funds were not available for the development of resources in addition to the absence of a comprehensive collection development policy. The study also pointed out the lack of a weeding policy which resulted in serious space issues in libraries. Faculty-Librarian collaboration was quite
good in all libraries, but assessment activities were carried out by half of the libraries only. Information and communication technologies have taken over most of the traditional work in all the libraries and consortia and resource sharing activities have enhanced access to resources. The users were of the opinion that a good percentage of their information needs were met by electronic resources and there was a need for improving academic and reference collection in libraries. The study also stressed the need for active involvement of the user community in the collection development activities. It is hoped that the study would help in addressing and solving various collection development issues and problems.