

CHAPTER- 8

CONCLUSION

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Information need is one of the most important requirements for any research which is fulfilled by the Library. Further, information use pattern by the scientists applies to the methods of choice to know the necessities required by the scientists to accelerate research activities in their respective fields and this required phenomenon of information has changed from users perspectives taking into the present electronic environment which prevails in the library. The Library under study provides a befitting environment both traditional and electronic which not only accelerates the research but also enhances the knowledge with update information. Due to the change in the information requirements, the Knowledge Resource Centre's (KRC's) of the selected CSIR Laboratories of Northeast and Eastern India have been provided its Science and Technology professionals, Research Scholars with latest electronic facilities which is the need of the hour and demand of the day. This is especially being disseminated for giving satisfaction to the users. For this, the library needs to be equipped to face the challenging demands of the users. Keeping in view the varied information requirements of the Science and Technology persons and based on the responses of the Scientists, Research Scholars and other users as a whole, the scholar has put forth the following conclusions.

The seven CSIR Laboratories of Northeast and Eastern India were North East Institute of Science and Technology (NEIST), Jorhat; Central Glass and Ceramic Research Institute (CGCRI), Kolkata; Indian Institute of Chemical Biology (IICB), Kolkata; Central Mechanical Engineering Research Institute (CMERI), Durgapur; CIMFR (Central Institute of Mining and Fuel Research (CIMFR), Dhanbad; National Metallurgical Laboratory (NML), Jamshedpur and Institute of Minerals and Materials Technology (IMMT), Bhubaneswar. It could be visualized from the study that, most of the laboratories work in the field of Chemistry was predominant from among the other areas. However, works done in the areas of Biological Science, Geo-Science, Engineering

Sciences, Metallurgy, Minerals and Material Sciences also keeps a important position in the field of research and development.

In the present study *"Information Use Pattern by Scientists Working at Selected CSIR Laboratories of Northeast and Eastern India: A Study"* the scholar has conducted a study to find out the information needs and information use pattern by the scientists, their area of specialization, study their information needs, use pattern, frequency of library visit, purpose of visit to the KRC, type of documents mostly searched, their Internet use pattern, use of Electronic Resources, use of Consortium based resources, their rate of satisfaction regarding library services, difficulties faced while using information and also to suggest for the improvement of the services and facilities of the KRC. The research scholar has adopted survey method by using structured questionnaire which was also supplemented by using interview method and observing to some extent for collecting data from the Scientists and Librarian/ Librarian In- charge and also bibliometrics study has been conducted to find out the publication trend of the scientists. For data analysis MS Office Excel has been used for tabulation, illustration and ANOVA test of the hypotheses and for bibliometrics study the data have been exported from the SCOPUS Database.

The KRC's under study have huge and healthy collection of both national and international journals, books, Indian and foreign patents, standards, reports, etc which allows the researchers to have a depth study in their respective fields. Mention may be made that the amount of budget allocation for all the KRC's were satisfactory. The budget allocated for procuring books is, however, not satisfactory as compared to journal subscription. It was seen that journals of national and importance provide a major chunk of information to the Scientists and Research Scholars and KRC disseminates the most useful information to its users for proliferation of research. But, due to information explosion and budgetary constraints, it could not be possible for KRC's to provide the needful information to its clientele even if these have sound collection of both print and non-print materials. Still the library could judiciously use its resources by subscribing highly required titles and by way of deleting less used journal titles. Hence, the library under study needs to adopt a mechanism to review the current subscription list as the area of interest of users' shifts from time to time. Preparation of union catalogue of titles subscribed by the neighboring libraries and establishing a resource sharing network will be more helpful to fulfill the users demand. The

percentages of satisfaction of information from journals available in the KRC for some groups of users are considerably low. It was probably because of higher rejection rate of referred journal in these areas. Further, the budget of the library was also a factor by not including all newly demanded titles from time to time. To solve these problems, the management of all the laboratories should develop a method for mobilization of funds from all externally funded projects and deposit the same in one head of accounts, so that it can be utilized by the KRC for acquisition of its resources. It will reduce dependence on the regular budget and also enable to avoid addition of new journals at the cost of existing ones, due to budgetary constraints. Further, the KRC requires going for subscription of Current contents with abstracts and e-content services along with such other services available on CD- ROM in the relevant area of interest of the users so as to gain a higher percentage of needs for current information and satisfaction among the user's communities.

As noticed by present study, the existing collections of KRC were not satisfactory to meet the increasing demand of the scientific community. Research scholars were found using the library less frequently; the reason may be of the inconvenience due to library timings.

It has been seen that there were few numbers of departmental library in the laboratories. Therefore, the users of these institutes mostly use KRC for accessing their required documents. Besides this, it has been found that some of the users were regularly visit the library and most of the users were found to use KRC occasionally. The reason may be of the inconvenience due to library timings as most of the libraries were open only office hours when the scientists and the research scholars were engaged in their laboratory works. This may be significant factor responsible for their irregular use of the library.

Most of the scientists and research scholars preferred to use current periodicals to keep them up to date in the knowledge of their interest field. Science and technology users were very sensitive user of the institution; they were only interested in specific field of knowledge. Therefore they need current up to date information of their interest. Due to the lack of sufficient number of recent books and print journals in the KRC, users were not found to be interested to visit the library regularly. Majority of the users were mainly concerned with the textbooks, basic references, theses and dissertations.

But satisfaction of users in these circumstances was shown less frequency due to limited number of library collection with up to date information. It has been revealed that the most of the books and reference books collections were outdated.

Computerization of library service very much essential in present day context when library is becoming really a work house for the different R & D programmes in the science and technology institutes, and also on one side there is an increasing demand for processing of data and retrieval of information in the easiest and quickest possible time. Scientific communities are very much interested to fully computerization of library with online resource sharing facilities for immediate storing and retrieval of information. These facilities exist in KRC, but still it was not fully computerized. The automation works of most of the KRC's were on the process. With the advent of Science and Technology (S & T), all the branches of science are also developed enormously with the invention of new phenomenon. Therefore current up to date information is most essential for continuing R & D activities. Documentation is most essential for scholars to keep up to date information in their field of interest. The KRC's provides documentation services on the demand of users.

The information sources generally used by the users of the KRC's are books, references, patents, standards, abstracts, reviews, conference/seminar proceedings, newsletters, bibliographies, research reports, theses and dissertations. Micrographics, indexes, etc. are not popular among them. They were commonly used Reference books, textbooks and periodicals. This was one of the objectives of the present study. Scientists and other users were generally making use of the library attached to their parent institution. But some of them are not satisfied with the collection as well as the services provided by the KRC. From the study it has been found that some of the users does not use the library regularly, they depends mainly on access the internet from their own department. The science and technology personnel were faced with difficulty in getting the right information at the right time.

The purpose of information need or use was another aspect of KRC visit by the users. Analysis shows the purpose of library visit by the users were generally visit the library to access information for writing an article/paper, writing a book, to update knowledge, starting a project, to browse internet, etc. The analysis also reflects that scientists came to the KRC for seeking information mainly to update their knowledge, for borrow books, for supporting research investigation , for writing books, for starting a project, for workshop and seminar presentation,

for patent design, guiding researchers and other similar purposes. The percentages of satisfaction of information from journals available in the library for some groups were considerably low because they always tend to explore new journals for publication of their papers. It is probably because of higher rejection rate of referred journals in these areas. Also, the library budget was also a factor by not including all newly demanded titles from time to time.

From the study it also found that all the KRC does have provided online information access like access e-books, e-journals, abstracting database, open access journals and in-house R & D publications. The KRC's have provided Current content, new arrivals, Newspaper clipping services, alert services and E-SID services to its users. Besides this, increased digitization of information products invariably prompted the libraries to be familiar with the advance tools and techniques as well as searching for the options and means for accessing and gathering information of sources, so that the user's community may be served to a maximum possible extend. Library automation is the first step for building a digital library. The use of technological devices such as computers, barcode scanners and its software in circulation helps in performing the routine operations easily and quickly. Transaction process of the collections in the KRC should be faster through the means of digital library environment. The KRC's were the special library and their main objectives have to satisfy its users including scientists and other science and technological persons. To fulfill such objective the KRC requires to complete depend upon the implications of Information and Communication Technology including Computer, Internet which not only lessen the burden of managing the information by the library but also will facilitate for instituting innovative services to its clientele. The empowerment of library and information professionals with ICT skills is aimed at providing services that are expected of from the clientele in the new environment. To ascertain the extent of current information needs and their uses by the scientists, it is essential to make KRC a fully automated library. The above study further reveals that, although, some significant developments in the use of ICT in the KRC have been seen recently, but still much more initiatives need to be adopted in the selected KRC's of the CSIR laboratories of Northeast and Eastern India for the benefit of the users' communities.

Therefore from the above discussions the present study could be concluded that the both CSIR central body and the government should provide facilities, supports and

necessary funds for the improvement of the CSIR- KRC's of Northeast and Eastern India. And Librarian/ Librarian- In- charge and the other Library professionals working in the KRC's should come forward for implementing latest technologies as well as improving the existing library services and facilities for the greater benefit of the scientists in terms of satisfying their increasing information demands and make them aware about the latest technologies that have been implanted in all the KRC's of the selected areas.