CHAPTER VI- FINDINGS, SUMMARY & CONCLUSION

The main findings of the research study based on analysis and interpretation have been given below:

Findings

- All the 9 CSIR libraries i.e. CDRI, NBRI, ITRC, CIMAP, NISCAIR, NPL, NISTADS, CRRI and IGIB have collection development policy which is being revised and updated periodically.

- One of the wonderful findings of the study is related with the allocation of budget. Surprisingly, there is no uniform and consistent policy for the allocation of budget as in some of the years, libraries have received inadequate funds while in some cases the fund have increased sharply. This variation is witnessed from library to library and year to year and also the same library started receiving fewer budgets for some years and then increase in subsequent years as happened in the case of ITRC and NISTADS.

- The findings revealed that all the libraries consult Ulrich International Periodical directory and identify documents for selection through scientists and student recommendations.

- Another wonderful finding of the study is related with the preference with respect to document format. As has been claimed and to some extent acknowledged, that we are slowly moving towards a paperless Information system and society, notwithstanding this fact, in all the
surveyed CSIR libraries, still, published books are given preference for procurement over electronic format.

- Though the increase in collection in these libraries is not significant but still majority of the libraries are facing space problem. This problem apparently might have been persisting ever since the libraries have come into being. In other words, it might be concluded that space allotted for the library has never been appropriate and sufficient and thus need serious attention for the expansion of library building.

- The study has revealed no library has started the process of digitization of books. Only NISCAIR have started digitization of some patents/theses/dissertations/project reports.

- Findings of the study also suggest that in almost all the surveyed libraries, users’ say is also given due consideration, so far the collection building, is concerned.

- This study also revealed that though CSIR laboratories libraries are employing competent professional staff, nevertheless, the strength of the staff is not satisfactory barring CDRI and NISCAIR.

- One of the significant findings of the study is related with the slow growth in the collection of books. More importantly, in some of the instances such as CDRI, the growth in number of books is very less despite the considerable increase in the budget particularly during 2004-06.
As far as the numbers of subscribed journals are concerned, all nine libraries may be categorized into three groups. First group may be represented by CDRI CIMAP, NISCAIR and NPL, where almost a consistent growth has been witnessed while on the other hand there is a group of libraries such as ITRC, NISTADS, CRRI, IGIB where surprisingly the number of subscribed journals have been decreased and also there is a case of NBRI where for four years growth is almost static and then have increased relatively faster.

All the surveyed libraries have provided elementary level of computer training which is not sufficient particularly in the ever changing world of Information Technology (IT).

An interesting finding related to the users is that in the collection building process, they actively participate in CSIR libraries. Surprisingly, a thin minority, however, is still ignorant about their useful role in this process.

Users are enjoying the day to day normal services of library but even in the special type of libraries such as CSIR, a substantial portion of the users are not aware of specialized services like Selective Dissemination Services (SDI), Current Awareness Services (CAS) etc.

Despite the fact that few surveyed libraries of CSIR have started subscribing less number of journals, there was no resentment on the part of user community.
➢ Yet another wonderful finding suggests that users are primarily satisfied with the infrastructural facilities of libraries as well as library collections.

➢ For the retrieval of bibliographic information about the documents, the majority of the users are using OPAC module of the Library Automation Software Package but still there are some users who find themselves comfortable with printed form of catalogue. This trend is seen in almost all the automated library system of India be they are university or high rated institutes as has been confirmed in other related studies.

➢ The rating of attitude of library staff is also satisfactory as these users belong to core members of the institutes and obviously library staff who are much inferior in the position and status will try to give them best services.

**Tenability of Hypotheses**

The tenability of the hypotheses can be checked in the light of the above findings.

**HYPOTHESIS-I**

*Need based up-to date and balanced collection is being built up in CSIR Libraries.*

According to the result of this study, all the nine surveyed libraries in building of the collection are done as per the need of the users.
HYPOTHESIS-II

*CSIR Libraries are catering the needs of Scientist with E-documents in addition to books.*

E-journals have become the largest and fastest growing areas of the digital collections for most of our libraries. Over the past 10 years there has been substantial increase in the production of E-journals the world over. The user community also has been influenced by these technologies to such an extent that there has been demand from users for providing such electronic information services in the libraries. So librarians are prompted to work together for forming consortia for subscription to e-journals. Notably all the CSIR Libraries i.e. CDRI, NBRI, ITRC, CIMAP, NISCAIR, NPL, NISTADS, CRRI and IGIB are member of CSIR E-journal Consortium. Thus the findings support the hypothesis.

HYPOTHESIS-III

*CSIR Libraries are maintaining their traditional services and collections even as they use technology.*

CSIR Libraries despite the availability of information in online and electronic formats are providing services such as SDI, CAS etc.

HYPOTHESIS- IV

*Majority of the users in all nine surveyed libraries are using OPAC; nevertheless some users are still using Manual Card Catalogue system.*
A high majority of the users are searching material through OPAC, but findings also revealed that some of them are still dependent upon present Catalogue Cards.

**HYPOTHESIS-V**

*The study assumes that selected libraries are using collection development pattern in terms of authority and responsibilities and revision of policy.*

All the CSIR Libraries under study has own collection development policy except IGIB. Collection development policy is essential for a balanced and robust collection. All the libraries have individual advisory committee to discuss all the important issues related to the library. Only IGIB library respondents reiterated that there is no such collection development policy. All the libraries revise their collection development policy as well while the CIMAP, NISCAIR and NISTADS do not have any fixed periodicity of revision. Thus the findings support the hypothesis.

**HYPOTHESIS-VI**

*Overall assessment towards user’s responses for infrastructure, library collection, organization of collection, attitude of library staff service and IT based services is satisfactory.*

As shown in the findings of the study, user community had shown satisfaction towards infrastructural facilities as well as existing services of all the surveyed libraries of CSIR.
HYPOTHESIS-VII

All the surveyed libraries are digitizing their collection.

As proved through the study only NISCAIR had started the process of digitization of select material while no efforts, so far, have been made in any other surveyed library. Hence, this hypothesis has been partially proved.

Summary and Conclusion

Council of Scientific & Industrial Research (CSIR) is the premier Industrial Research Organisation. It was formed in 1942 by a resolution of the Central Legislative Assembly. It is funded mainly by the Science and Technology, Ministry of India and is one of the world’s largest publicly funded Research & Development Organizations, having linkages to academia, other organizations and industries. Although CSIR is mainly funded by Science and Technology Ministry, Government of India, it operates as an autonomous body registered under the Registration of Societies Act of 1860. It has a country-wide network of thirty eight Laboratories and eighty Field Centers covering fundamental and applied R&D in all the areas of science and technology barring atomic research, developing and nurturing S&T human resource for the country.

The Research and Development (R & D) activities of CSIR include various fields such as aerospace engineering, structural engineering, ocean sciences, molecular biology, metallurgy, chemicals, mining, food, petroleum, leather, and environment. The mission of CSIR is to provide
scientific and industrial R & D that maximizes the economic, environmental and societal benefits for the people of India. The function assigned to CSIR was all embracing in the matter of initiation, promotion and co-ordination of scientific and technological research in India. CSIR expertise and experience is embodied in its- 4,600 Scientists and 8,000 scientific and technical support personnel apart from-7000 research studies. Over the years, this unique organization has served as a springboard for scientific and technological activities in a wide variety of S&T domains. It has helped India usher in a scientific milieu, creating and nurturing talent in science, innovation and technology. The study based on 9 CSIR libraries i.e. NISCAIR, NPL, NISTADS, CRRI and IGIB at Delhi and CDRI, NBRI, ITRC, CIMAP at Lucknow.

National Institute of Science Communication and Information Resources (NISCAIR) came into existence on 30 September 2002 with the merger of National Institute of Science Communication (NISCOM) and the Indian National Scientific Documentation Centre (INSDOC). Both NISCOM and INSDOC, the two premier institutes of the Council of Scientific and Industrial Research (CSIR), were devoted to dissemination and documentation of S&T information. The mission of NISCAIR is to become the prime resource centre of all information resources on current and traditional knowledge systems in science and technology in the country. CSIR e-Journals Consortium is a CSIR Network project with
NISCAIR as the implementing institute. It aims at providing electronic access to international S&T journals to CSIR S&T personnel.

The National Physical Laboratory (NPL) is the premier CSIR research laboratory in India in the field of physical sciences, established on 4th January, 1947. The main aim of the laboratory is to strengthen and advance physics-based research and development for overall development of science and technology in the country.

National Institute of Science, Technology and Development Studies (NISTADS), New Delhi is devoted to study of various aspects of interaction among science, society and state and exploring continuously the Interface between Science, Technology and Society. The research activity of the institute can be grouped under the broad programmes such as Intellectual Property Right (IPR) & development studies; Information technology and biotechnology (ITBT): Policy matters and ethical concerns; Innovation policy (InnP): Innovation & knowledge society (INKS); Technology & Integrated Assistance to Rural Artisans (TIARA); Sustainable development (SD); Science-technology-education valuation studies (STEVS); History & Philosophy of Science & Public Awareness of Science (HPS). The roots of NISTADS go back to August 1973, when the Council of Scientific and Industrial Research (CSIR) set up at its headquarters, a Centre for the Study of Science, Technology and Development.
The Central Road Research Institute (CRRI) was established in the year 1948 with the very mission to deliver high quality and globally acceptable research as well as consultancy services to the profession in the major areas of road and road transportation technology. The major areas are (i) Pavement Engineering (ii) Geotechnical Engineering (iii) Bridge Engineering (iv) Traffic and Transportation Engineering including Safety and Environment (v) Highway Planning and Management (vi) Instrumentation for Highways and Bridges.

The Institute of Genomics and Integrative Biology (IGIB), a CSIR laboratory is a premier Institute carrying out research leading to generation of new knowledge and development of technologies in various areas of Biotechnology with a special focus on Genomics and Genome Informatics. The mandate of IGIB is "Developing commercially viable knowledge and technologies for the new millennium."

Central Drug Research Institute (CDRI) is one of the few laboratories that were established in India right after its independence. CDRI was formally inaugurated on 17th Feb 1951 by the Prime Minister of India, Pandit Jawahar Lal Nehru. Research activities are broadly divided into three subgroups: Drug Discovery & Development; Regulatory Studies; Infrastructural Support Groups.

National Botanical Research Institute (NBRI) is the premier national plant research center for India. CSIR took over National Botanic Garden in 1953 and expanded the scope of the institute into
multidisciplinary plant research centre and renamed it as the National Botanical Research Institute in 1978. NBRI is now an internationally well-known research center in India and it focuses on both basic and applied aspects of plant sciences. The work on mainly Biodiversity, Bioinformatics, Biomass Biology, Biotechnology, Conservation, Ethnopharmacology, Floriculture, Plant Physiology, Genetics & Plant Breeding, Molecular Biology & Genetic Engineering, Natural Product development, etc., it caters to the need of almost every aspect of plant research in South Asian Region in general and the country in particular. Its main research areas are National/Societal Missions on drinking water, environmental biotechnology, hazardous waste management, modeling and optimization.

Indian Institute of Toxicology Research (IITR) (formerly: Industrial Toxicology Research Centre), Lucknow, a constituent laboratory of the Council of Scientific & Industrial Research, was established in 1965. IITR undertakes research in niche areas of toxicology. These include the impact of industrial and environmental chemicals on human health and ecosystem, and environmental monitoring of pollutants in air, water and soil. The institute also helps regulatory bodies formulate/amend guidelines for safe use of chemicals/products, and ensures benefits that the common man. The motto of the laboratory is "Safety to Environment & Health and Service to Industry."
Central Institute of Medicinal and Aromatic Plants (CIMAP) is a multi-disciplinary R & D Institute dedicated to the cause of medicinal and aromatic plant research, cultivation and business. The mission of the institute is to be the ultimate in green technologies for better health and life.

The term "collection development" refers to the process of systematically building library collections to serve study, teaching, research, recreational, and other needs of library users. The process includes selection and deselection of current and retrospective materials, the planning of strategies for continuing acquisition, and evaluation of collections to determine how well they serve user needs. Overall, collection development encompasses many library operations ranging from the selection of individual titles for purchase to the withdrawal of expendable materials.

The study was carried out through survey. The study based on 9 CSIR libraries i.e. CDRI, NBRI, ITRC, CIMAP, NISCAIR, NPL, NISTADS, CRRI and IGIB. The main purpose of the study is to find the development and use of library collection in CSIR Libraries in Delhi and Lucknow. This study is based on primary data which has been collected from the library professionals as well as users through the distribution of questionnaires. The questionnaires were tested before finally administering them to the respective population groups. Questionnaires were distributed personally and sent both by post and e-mail.
attachments. The sample size for the survey relating to 2 groups of questionnaires was chosen on the basis of their estimated strength and the practical constraints of space, time and economy in administering the questionnaires.

**Conclusion** - CSIR is a network of 38 laboratories/institutions, 80 field stations and extension centres spread over the country. These laboratories cover a large spectrum of science and technology. CSIR is a world class source of technology and technology services for the Indian industry. The range of technological services and support includes resource surveys, problem diagnostics, testing, calibration and certification and manpower training. CSIR contributed significantly to the dissemination of scientific research results and spread of scientific temper and a culture of creativity in the country.

The libraries of different institutes of CSIR are the major supporting services to achieve the targeted goals. The library of a research institute has collection of books, journals, technical trade literature, government documents, patents, standards, specifications, dissertations and theses, research reports, photocopies of research documents, microfilms and clippings etc. These materials are organized in scientific and helpful manner to serve the needs of scientist engaged in developing new technologies. A research supporting library provides effective and efficient services to its users.
Libraries of CSIR institutes are special in nature with the objective to cater to specific informational needs of scientists and to maintain updated scientific literature. CSIR built performance-based budgeting systems for the laboratories. However, as per the findings of the study, it would perhaps more in the benefits of users if these libraries should develop the collection. Also, it would be in the interest of Scientist Community if a range of IT-based services should be introduced. There is no doubt that if required some awareness on the part of user community as well. But if sincere attention is paid towards these useful points, ultimately, research output of the whole country will be improved.

**Recommendations**

- Library should insist for more grants in order to develop their collection both books as well as journals.
- There should be efforts to join some more consortium consortia along-with the CSIR.
- Emphasis should be given to procure more e-documents.
- Modules such as Article-Indexing of Libsys Software should begin to use for more efficient services.
- Library staff should be given periodical training on the recent advances of Information Technology.
- Extensive training is also required to be received by all the staff of the library on Libsys Automation Software Package.
User community should be encouraged to use of Selective Dissemination of Information (SDI) and Current Awareness Services (CAS).

**Scope for further Research**

The present study is an attempt to study, “Collection development and use in CSIR libraries of Delhi and Lucknow”. Since it was not possible to cover all the libraries of CSIR, the similar kind of study may be taken up regarding other CSIR laboratories libraries. Other Investigators may delimit the scope of their studies region-wise. Furthermore, researchers may also chose the topic related to Collection Development and use in University Libraries as well as any group of Specialized Libraries.