Information is an important resource, which can be used by organizations to deliver more appropriate products or services to customers, and to enable the organization to be the core competitive in the market place. Information need incorporates a full range of theories, concepts, and issues regarding the users requiring information in their work domains. This rapidly evolving sub facet of Library and information science derives a number of issues and challenges before the library professionals, which required to be implemented to improve the current library services.

The present study outlines those aspects of information needs of scientists and engineers with a particular emphasis on the vital domain of technical, managerial, and techno-managerial jurisprudence of various operations of oil and gas industry. Information needs of scientists and engineers of ONGC are being used for decision for present research in LIS with these assumptions, that include: (1) Information framework and knowledge base in oil and gas industry, (2) the possible components of information seeking experience of scientists, engineers and technologists, (3) Predominant characteristics of users groups and hierarchies in ONGC, (4) bridging the gap between the scientists, engineers and experts of ONGC and the information resources available within the organization and in the market place, and (5) the implications for the future prospects and projections to be delineated based on the present investigations and studies.

Information needs arise out of a desire to meet one or other of the three basic human needs: physiological needs (food, shelter, clothing, etc.); psychological needs (domination, security, etc.); and cognitive needs (to plan, learn, skills, etc.). This does not mean that information needs are any less important, because success in meeting the one (the primary need) is dependent on meeting the other (information need). In this increasingly information-dependent age, the lack of information could certainly have
serious consequences for the individual users—general or specialist. There are instances and occasions to assess the information needs of individual scientists, engineers, technologists and experts in their areas while interacting with their peers, colleagues, subordinates and mentors at offices, work places, common places, conferences and meetings.

There are various forms of information needs—dormant need, unexpressed needs, information wants, information demands, information use, etc. It is far more difficult to describe the characteristics of information need than other needs. Information need does not have a constant feature. It is known that information needs are highly personal. In general, they are affected by factors like, subject or field of study; range of information sources available; use to which information is put; background; motivation; professional orientation, and other individual characteristics of users; the social and economical system surrounding the user population; the consequences of information, etc. Moreover, information needs of a specific community of users are based on human behaviour, which is a complicated phenomenon. Therefore, any research on this topic has to take all these conditions into consideration. The present work on information needs of scientists and technologists of ONGC has been designed on the basis of all these aspects. Maximum care and efforts have been taken to collect information from the scientists and technologists working in the organization. Under the macro level (strategic) and micro level (operational), the study of information needs can assist the organization to:

- plan and make appropriate decisions,
- better utilize resources and identify inappropriate use,
- monitor quality and performance,
- meet legitimate and regulatory requirements,
- recognize what the competitors are doing,
- understand the mix products and services, and
- prioritize the corporate image building of the company
The present study is organized into five main chapters. The 1st chapter of this thesis introduces about the basic concept of Information, its definition, types of information needs, information users, information needs of industries and scientific community, and roles of libraries and information centres. Apart from all these, there is exhaustive elaboration and state-of-the-art presentation of literature review falling within the purview of information needs concentrating on: historical studies, Information seeking behaviour of users, organizational change, information needs of geoscientists and engineers, information needs in electronic era, and users' needs assessment. The scope and objectives of this investigatory study are also illustrated within the framework of ONGC's perspectives.

The organizational set-up of ONGC is portrayed in chapter-2 implying the genesis and growth of ONGC, vision and mission, work centres & infrastructures, corporate restructuring scenario, R&D institutes and projects, ONGC libraries, IT and information generation in ONGC, and manpower strength and schema of information flows. The chapter-3 purports about the materials and methodology used in this study that exuberate about the choice of the sample, characteristics of the sample, sample selection strategy, methods of data collections, and designing and components of questionnaire.

The core matrix of the study are described in chapter-4 invokes the analysis and findings of the entire project at various levels and variables. The findings on personal attributes are provided with age, experience and qualifications of target samples. Knowledge of languages, membership of professional societies/ associations, diversity of information requirements, Individual subscriptions, exposures to seminars/ conferences, production of technical publications, awards and honours received, etc. are also investigated very meticulously. In the area of basic information needs of scientists and engineers of ONGC, the investigation conversed is also presented with frequency, currency, and subjects of information needs, reasons for needs of information, needs of formal & informal sources of information, electronic
sources of information, and use of journals in other languages. Library use pattern as determined to correlate the information needs and personal attributes, the study presents various aspects of information use behaviour such as: purpose and frequency of library visits, convenient timings, techniques and extent of library use, use of electronic information resources of library, frequently referred journals, measuring users' satisfaction, and adequacy of library collection.

Finally, the chapter-5 provides a summery of the whole work and conclusions with suggestions, which are derived on the basis of the observations. The last chapter is followed by references and annexure. The pattern of bibliographic references is adopted on the basis of international practice being followed in LIS publications, with needful modifications and variations. At the end it is expected that in spite of the limitations of this study, the work will be useful in organizing the high esteemed services of ONGC libraries for percolating its greater benefits to scientists, engineers, and executives of ONGC. The study may also be helpful in designing and instituting an information system for petroleum industry at national level, and also may act as a guideline for others, who aspire to organize the library for a specialised group of users in a digital environment.

(BHAGWAN DAS)